FORM APPROVED COUNTY COUNSEL
BY: MARSHA L. VICTOR DATE 7/13/09

Departmental Concurrence

SUBMITTAL TO THE BOARD OF SUPERVISORS
COUNTY OF RIVERSIDE, STATE OF CALIFORNIA

722 A

FROM: TLMA - Transportation Dept.

SUBMITTAL DATE: July 13, 2009

SUBJECT: Amendment No. 1 to the Engineering Services Agreement for the Van Buren Boulevard / Interstate 215 Interchange Project.

RECOMMENDED MOTION: That the Board of Supervisors:

1. Ratify Amendment No. 1 to the Engineering Service Agreement between the County of Riverside and Kimley-Horn and Associates, Inc. and;

2. Authorize the Chairman to execute the same.

BACKGROUND: On July 1, 2008, the Board of Supervisors approved an agreement with Kimley-Horn and Associates, Inc. to prepare 30% design plans and studies for improvements to the Van Buren Boulevard/I-215 Interchange Project. The March Joint Powers Authority (March

Juan C. Perez
Director of Transportation

BEC
(Continued on next page)

FINANCIAL DATA				
	Current F.Y. Total Cost:	$2,013,504	In Current Year Budget:	Yes
	Current F.Y. Net County Cost:	$ 0	Budget Adjustment:	No
	Annual Net County Cost:	$ 0	For Fiscal Year:	2009/2010

SOURCE OF FUNDS: March Redevelopment Agency (40%) and TUMF – WRCOG Northwest Zone (60%)

Positions To Be Deleted Per A-30 ☐

Requires 4/5 Vote ☐

C.E.O. RECOMMENDATION: APPROVE

BY: Michael R. Shetler
Michael R. Shetler

County Executive Office Signature

Dep't Recomm.: ☒ Policy ☐ Consent
Per Exec. Ofc.: ☐ Policy ☐ Consent

2009 JUL 22 AM 11:38

Prev. Agn. Ref. 07/01/08, Item 3.97 | **District:** 1 & 5 | **Agenda Number:** 3.84

ATTACHMENTS FILED
WITH THE CLERK OF THE BOARD

Form 11 (Rev 07/2007)

JPA) has provided funding for this agreement and the entire environmental phase of the project. The original agreement was set to expire on January 31, 2009; however the budget was not expended by that time. Amendment No. 1 is required in order to proceed with the remaining tasks to deliver the project and increase the budget authority up to the 65% design phase.

The Van Buren/I-215 Interchange Expansion Project will upgrade the interchange for one of the County's major arterials in order to improve current operations, provide for future traffic growth, and allow for the expansion of the Meridian Business Park, which is expected to generate 15,000 jobs.

On July 1, 2008 the Board approved the Project Baseline Agreement with the California Transportation Commission (CTC) for the Van Buren/I-215 Interchange Expansion Project. This Project Baseline agreement provided eligibility for $10 million in Transportation Corridor Improvement Funds (TCIF) from the State's Prop 1B Bonds Goods Movement Program. As part of this agreement, the CTC and its Project Delivery Council monitors the progress of the Van Buren/I-215 Interchange Expansion Project. Delays to this project may jeopardize $10 million in TCIF that have been identified for this project.

The scope of this project is significant with an overall estimated cost of $85.55 million, of which $65 million is for construction. In addition, the accelerated schedule has added to the significant amount of effort required to deliver this project. The capital construction costs will be part of a separate future agreement.

The cost to complete the tasks up to construction is estimated at $4,416,793. In an effort to keep this project on track, available funding will be used to take the project from 30% to 65% design at a cost of $2,463,347, which includes $2,013,504 in consultant fees and $449,843 in County design and survey support costs. Currently, $1,463,347 will be provided by WRCOG through TUMF Northwest Zone and an additional $1 million will be provided by March RDA. It is expected that funding from March RDA will be approved on July 15, 2009. The available funding will be sufficient for the consultant and associated staff costs to complete 65% design plans. March JPA and the Transportation Department are actively seeking additional funding sources to fund the remaining scope to complete the project.

The Amendment to the Agreement between the March Joint Powers Authority, March Joint Powers Redevelopment Agency and the County of Riverside, to provide an additional $1 million in funding for the Van Buren/I-215 Interchange Project, will be submitted to the Board of Supervisors for approval concurrently with this submittal.

Amendment No. 1 to the Engineering Services Agreement, between the County of Riverside and Kimley-Horn and Associates, for the Van Buren Boulevard/Interstate 215 Interchange Project, outlines the scope and cost for the consultant to take the project from 30% to 65% design.

This amendment also extends the covenants set forth in the original agreement to December 31, 2014.
Project No. B70798.

Contract No. 08-06-001A1
Riverside Co. Transportation

AMENDMENT 1

AMENDMENT TO AGREEMENT BETWEEN

THE COUNTY OF RIVERSIDE AND KIMLEY-HORN AND ASSOCIATES, INC.

FOR ENGINEERING SERVICES ON THE VAN BUREN BOULEVARD / INTERSTATE 215 INTERCHANGE PROJECT

THIS AMENDMENT 1 (hereinafter the "Amendment") to an agreement is made and entered into as of this _____ day of _____, 2009, by and between the County of Riverside, a political subdivision of the State of California (hereinafter the "COUNTY"), and Kimley-Horn and Associates, Inc. (hereinafter "ENGINEER").

RECITALS

A. COUNTY and ENGINEER have entered in an agreement entitled " Engineering Services Agreement f Van Buren Boulevard / Interstate 215 Interchange between the County of Riverside • Transpo Department and Kimley-Horn and Associates, Inc.," that is dated July 1, 2008 (hereinafter the "Agreen The Agreement provides the terms and conditions, scope of work, schedule and budget for the perfor of professional and technical services necessary to prepare project reports, plans, specification estimates.

B. The parties desire to supplement the current Agreement to extend the expiration date, modify the scope of services to be provided by the ENGINEER, modify insurance limits and increase the contract budget.

AGREEMENT

NOW, THEREFORE, in consideration of the mutual covenants hereinafter contained, effective January 31, 2009, the parties agree as follows:

1. The current contract budget shall be increased by $2,013,504 to $3,018,623 as provided below:
   Increase the Phase II budget by the amount of $2,013,504 for engineering services necessary to complete from 30% to 65% design. Detailed descriptions of the extra work and summaries of the requested and recommended budget adjustments are provided in Attachment "A" of this Amendment.
2. The existing Engineering Services Agreement shall be extended to December 31, 2014. All covenants set forth in the amended Agreement shall be completed by the said date unless extended by another supplemental agreement.
3. The Insurance limits shall be increased as provided below:
   Increase Commercial General Liability by $1,000,000 to $2,000,000 per occurrence combined single limit and

4. Except to the extent specifically modified or amended hereunder, all of the terms, covenants and conditions of the Agreement as approved on dated July 1, 2008 shall remain in full force and effect between the parties hereto.

IN WITNESS HEREOF, the parties hereto have caused this Amendment to the Agreement to be duly executed this day and year first written above.

ARTICLE VIII • APPROVALS

COUNTY Approvals

RECOMMENDED FOR APPROVAL:

_____ Dated: 9/10/09

JUAN C. PEREZ

Director of Transportation

APPROVED AS TO FORM:

M R Victor, Deputy Dated: 7/13/09
Marsha L. Victor

PAMELA J. WALLS

County Counsel

APPROVAL BY THE BOARD OF SUPERVISORS

_____ Dated: _____

_____
PRINTED NAME

Chairman, Riverside County Board of Supervisors

ATTEST:

_____ Dated: _____

KECIA HARPER-IHEM
Clerk, Board of Supervisors

Clerk to the Board

ENGINEER Approvals

ENGINEER:

_____ Dated: 2/4/09

Dennis Landaal, PE
PRINTED NAME

Vice President
TITLE

ENGINEER:

_____ Dated: 1/30/09

Richard Cook
PRINTED NAME

Secretary
TITLE

ATTACHMENT A

CONTRACT 65% PS&E

ARTICLE AII • PROJECT ADMINISTRATION

A. PROJECT MANAGEMENT

This task includes the day-to-day management of the PROJECT. Project Development Team (PDT) meetings with the COUNTY PROJECT MANAGER, the California Department of Transportation (CALTRANS) staff and other representatives from affected agencies will be held once a month. The subconsultants will attend PDT meetings as appropriate. The ENGINEER shall coordinate PDT meetings, prepare meeting notes for each meeting and have these available for review at least one week prior to each succeeding meeting. Action items are to be tracked and reviewed at PDT meetings.

The ENGINEER's Project Management Plan will include a communication plan. The communication plan will consist of a roster of staff involved in the PROJECT and multiple forms of contact for each team member (address, telephone number, e-mail, etc.). The communication plan will also identify lines of communication with levels of responsibility/authority for development of the PROJECT.

A risk management plan is to be developed and maintained in order to address the major project risks to scope, cost and schedule.

Assumptions:

- Effort and deliverables associated with the PDT meetings will be part of Article AIII Task B Project Development Team Meeting of this Agreement.
- First draft of the Communication Plan and Risk Management Plan will be delivered within 30 days of NTP and updated monthly, if required. The Communication and Risk Management Plan will be distributed at the PDT meetings.
- Project duration is assumed to be 18 months (up to 65% PS&E Submittal).
- Affected agencies include: March Air Reserve Base (ARB), March JPA, RCTC (assume all railroad coordination will be with RCTC), COUNTY and CALTRANS.

B. BUDGETING

The ENGINEER will prepare budgets for each task and milestone for the PROJECT. Such budgets will be entered in to the ENGINEER's Management Information System along with actual costs incurred and used as a basis for cost monitoring and control.

Assumptions:

- The ENGINEER will set up and monitor the project on a schedule, task and overall budget basis.

C. COST ACCOUNTING

The ENGINEER will prepare monthly reports of expenditures for the PROJECT by task and milestone. Expenditures include direct labor costs, other direct costs and subconsultant costs. These reports will be prepared per COUNTY's guidelines and will be included as supporting data for invoices presented to the COUNTY every month.

Assumptions:

- Prior to sending out monthly reports, the ENGINEER Project Accounting staff will meet with Riverside COUNTY once to review the COUNTY guidelines. ENGINEER to obtain example of an acceptable invoice format from the COUNTY website. ENGINEER to follow COUNTY accounting processes documented on COUNTY website.

D. SCHEDULING

Within one month from the Notice to Proceed (NTP), the ENGINEER will provide a detailed project schedule, which indicates milestones, major activities and deliverables, to the COUNTY for review and comments. This schedule will reflect assumed review times necessary by all of the agencies involved. Review of the schedule will occur at subsequent trend meetings. Adjustments will be made, if necessary, due to changing circumstances.

Assumptions:

- The schedule will be prepared using Primavera Project Planner/Suretrak and/or Microsoft Project.
- The schedule will be updated monthly as necessary.

E. PROGRESS REPORTING

Progress reports shall be prepared in accordance with COUNTY guidelines. Reports will be required monthly and shall be accompanied by an invoice.

Assumptions:

- ENGINEER to obtain example of an acceptable Progress Report from the COUNTY website. ENGINEER to follow COUNTY accounting processes documented on COUNTY website.

F. CONTRACT ADMINISTRATION

The ENGINEERING PROJECT MANAGER shall maintain ongoing liaison with the COUNTY PROJECT MANAGER, CALTRANS Project Manager, AGENCY contacts and utility companies to promote effective coordination during the course of project development. Progress meetings with ENGINEER's staff, subconsultants and the COUNTY PROJECT MANAGER shall be held regularly. Engineer is to provide project scope, schedule, budget, photos, and various project details to the COUNTY web master for posting on the COUNTY website.

Assumptions:

- Phone calls and unscheduled meetings are to be part of project management activities.
- Meetings will be held with each of the following utility companies: Southern California Gas for the HP gas line, Southern California Edison for the OH electrical and Western Municipal Water , and any other utility company, as required.
- PS&E close out will be part of this task. Activities associated with the close out include verification that all contract requirements have been completed, identify lesson learned (memorandum), update and archive project hardcopy and electronic files and close the project.

ARTICLE AIII • PLANNING AND PROJECT DEVELOPMENT

A. RESEARCH AND DATA GATHERING

Existing topographic mapping, photos, bridge reports, maintenance reports, right of way maps, "as-built" plans, record maps and surveys, study reports, assessor maps, contract documents, utility index maps, local street improvement/development plans and other pertinent data will be obtained and reviewed by the ENGINEER.

B. PROJECT DEVELOPMENT TEAM

A Project Development Team (PDT) including representatives from the COUNTY, CALTRANS, CALTRANS Division of Structures (DOS) and other relevant agencies/stakeholders shall be established within fifteen days after NTP. PDT meetings shall be held monthly to resolve issues and to apprise the affected agencies/stakeholders of the progress of the PROJECT. A kick off meeting with the PDT shall be held within 30 days after the NTP.

Assumptions:

- Up to 18 PDT meetings are assumed.
- ENGINEER to provide agendas, and if necessary discussion materials for each meeting. After each meeting the ENGINEER will provide a meeting summary memorandum that will include an action item matrix and documentation for all project decisions. The meeting summaries will be distributed to all meeting attendees for review and comment.

C. PERMITS

The ENGINEER shall identify additional locations outside the State right of way where it will be necessary to obtain specific rights of entry from affected property owners. A listing of candidate right of entry locations shall be furnished by the ENGINEER. The COUNTY with the assistance from the ENGINEER will obtain rights of entry for properties outside the State right of way.

Assumptions:

- ❖ Right-of-entry permits to be obtained from CALTRANS, RCTC (railroad right-of-way), March JPA, March ARB, Riverside National Cemetery and LNR (Meridian Redevelopment), as required.
- ❖ This Task includes obtaining environmental permits. Permits include 401 RWQCB, 404 U.S. Army Corps of Engineer, 1601 Fish and Game.

E. DESIGN DRAINAGE REPORT

The Design Drainage Report will be completed to document hydrologic and hydraulic calculations necessary to complete drainage improvement plans related to the interchange improvement project. Prior to developing hydrology calculations, a field reconnaissance will be conducted. The ENGINEER shall obtain readily available documents pertinent to this Design Drainage Report from the COUNTY and CALTRANS, and other sources for review. The ENGINEER's analysis will be closely coordinated with the affected agencies, including the Riverside County Flood Control & Water Conservation District (RCFC&WCD). The Design Drainage Report will quantify the magnitude and frequency of design flows from adjacent areas to the PROJECT area, as well as the volumes attributable to the proposed improvements.

Assumptions:

- ❖ Meetings – The following list is the anticipated meetings required for preparation of the PS&E Drainage Report. Assume meetings with the following:
  - o CALTRANS District 8 Hydraulic Staff
  - o Meridian JPA
  - o Riverside COUNTY Flood Control and Water Conservation District (RCFCWCD)
  - o March Air Reserve Base
- ❖ Field Reconnaissance
  - o Site visits will be made to assist in the preparation of the drainage plans.

- The purpose will be to document the current site conditions and determine if any drainage assumptions (direction of flow, new work along interstate) need to be updated.
- Prominent visible drainage features will be documented.
- Constraints will be noted for the proposed improvements.

❖ PS&E Drainage Report

- The approved Drainage report prepared for the PR report will be used as the basis for the PS&E Design Drainage Report. The model used will be updated for the PS&E report. Assumptions made in the PR drainage study will be verified during the final design task.
- The Design Drainage Report will be prepared in general accordance with the latest CALTRANS Design Requirements, District 8 Project Development Policies, and the current CALTRANS Standard Plans.
- Off-site flows that enter the project area will be addressed to verify adequate conveyance facilities are proposed to handle these flows. A pre-project and post project inundation map will be prepared to show the impacts of flooding before and after the project. The intent is to verify there is no adverse impact to any existing facilities occurring at the project site.
- Hydraulic calculations will be updated for the PS&E drainage report using the methodology and hydraulic models used in the PS/PR report. The analysis will be used to verify assumptions made during the PR report and update the calculations for the PS&E report.

❖ The analysis will include all necessary calculations to obtain an approved Drainage Report and will include the following:

- Hydraulic calculations to verify interstate drainage system culvert size
- Hydraulic calculations for inlets including spread calculations
- Headwater analysis at headwalls to confirm ponded depth.

- The Van Buren Boulevard Culvert
  - The PS&E drainage report will show the proposed location and size of the Meridian Business Center Van Buren Blvd cross culvert. The Van Buren culvert is being designed by others, however, the ENGINEER shall coordinate with the designers of the culvert to ensure compatibility between the projects.
- The Design Drainage Report calculations will be prepared in conjunction with preparing drainage improvement plans for the project.
- Document Retrieval and Review
  - Readily available drainage documents for the area will be obtained and reviewed to confirm general conformance to the overall planning level drainage improvements for the area.
  - These documents will consist of the following:
    - Meridian Business Center Drainage Studies
    - Perris Valley Master Plan Drainage Study
    - Any other March Air Reserve Base or JPA studies that are readily available
    - COUNTY/CALTRANS drainage studies
- Water Quality Studies
  - ENGINEER shall research and prepare Water Quality studies (WQMPs) that are consistent with established, documented, and current COUNTY/CALTRANS procedures. ENGINEER shall meet with the CA Water Quality Resources Control Board as necessary.

G. RIGHT OF WAY MAPPING AND ACQUISITION

MAPPING

The ENGINEER shall complete a preliminary right of way requirements map during this final PS&E Phase. All right of way map preparation will follow CALTRANS procedures. The

ENGINEER shall coordinate with CALTRANS District 8 Right of Way Department to insure that requirements are followed.

The ENGINEER shall prepare the right of way requirement maps and obtain COUNTY and CALTRANS approval. It is anticipated that the ENGINEER will use the approved right of way requirement maps to prepare the Right of Way Maps, Legal Descriptions and Plats to acquire the necessary right of way. . The COUNTY will be responsible for completion of land acquisition activities.

ACQUISITION

The ENGINEER'S Team will provide support to the COUNTY/CALTRANS for completion of land acquisition activities. The ENGINEER'S Team will submit appropriate documentation to the COUNTY Right of Way Department for approval.

The ENGINEER'S Team will work in cooperation with the COUNTY to provide title, appraisal, and right of way acquisition services for the Van Buren Interchange project. It is understood that the ENGINEER'S Team will be acting in lieu of staff from the COUNTY and will be administering its program under the general oversight of the COUNTY. In addition, because the project involves work on the State Right of Way, the ENGINEER'S Team will also be administering its program under the general oversight of CALTRANS insofar as certain properties will ultimately be transferred to CALTRANS. The ENGINEER'S Team's Right of Way program includes the following scope of work and limitations:

Program & Project Management Services

Preparation of a comprehensive project planning worksheet designed so that project elements are considered and the work plan and client's policies are clearly understood.

Comprehensive initial project planning, including policy and budget analysis and participation in informational meetings with the public and official representatives.

Tracking and managing all budgetary-related aspects of the project associated with this work.

Assisting with the development of administrative policies, procedures and forms necessary to carry out this work.

Ongoing general consultation and project coordination with the client, social service agencies, governmental entities and project team members.

Representation of the client at public meetings, hearings and litigation related matters.

Preparation of tracking reports that monitor the completion of project milestones of the various disciplines involved on the project.

Preparation and presentation of a monthly written status report based on the agreed-upon guidelines on information to be provided. Confer weekly with client verbally on general status, problem areas, and progress.

Coordination with federal and state oversight agencies such as CALTRANS, HUD, FHWA, FAA, and FTA.

Title Investigation Services

Secure vesting deeds, property profile, and tax map for each property.

Secure preliminary title reports for each property which will remain valid for a minimum of 6 months or until there is an ownership change.

Secure copies of recorded back-up documents as needed.

Share preliminary title information with right of way engineer, surveyor, and real estate appraisers for their use on the project.

Prepare list of title exceptions to be cleared; confirm manner of disposition is consistent with approved project plan.

Facilitate changes to preliminary title reports after the preparation of the legal descriptions if necessary for partial acquisition projects.

Appraisal Services

Mail a notification letter and acquisition policies brochure to the property owner, requesting permission to conduct an on-site inspection of the property, advising them of their right to accompany the appraiser at the time of the inspection, and requesting information regarding the property appraised which could influence the appraised value.

Review title information pertaining to respective ownerships and will review drawings and other pertinent information relative to the parcel.

Inspect each property personally with the owner (if possible) and document the inspection with photographs for use in the report.

Inventory all improvements affected by the proposed taking including notes on their manner of disposition (i.e., pay-for and remove vs. move back).

Perform market research to support the selected appraisal methodologies and will document and confirm comparable sales information.

Prepare a narrative appraisal report that conforms to the Uniform Standards of Professional Appraisal Practice (USPAP). The appraisal study and report are intended to serve as an acquisition appraisal and will be prepared in a summary format consistent with the specifications for narrative appraisal reports.

Receive and analyze the completed appraisal reports and will reconcile the real estate and fixtures and equipment conclusions as necessary.

Each real estate appraisal reviewed consistent with CALTRANS policy for work on

the State Highway system.

Acquisition Services – Fee Owner

Establish and maintain a complete and current record file for each ownership in a form acceptable to the client.

Receive and analyze title information, approved appraisal reports and legal descriptions in sufficient detail to negotiate with property owners and other parties.

Prepare all offer letters, summary statements, and lists of compensable items of fixtures and equipment, in accordance with state or federal regulations and approval of client.

Present written purchase offers to owners or their representatives in person, when possible. Secure receipt of delivery of offer as practical and present and secure tenant information statements, as applicable.

Follow-up and negotiate with each property owner, as necessary; prepare and submit recommended settlement justifications to COUNTY for review and approval; review any independent appraisal secured by property owner and coordinate reimbursement of appraisal fees (up to $5,000) with COUNTY. Ongoing negotiations and settlement discussions will continue for 8 weeks after the initial offer or until we reach settlement or impasse.

Prepare and assemble acquisition contracts, deeds and related acquisition documents required for the acquisition of necessary property interests. Legal descriptions to accompany easements or to accompany partial acquisition deeds are not included in this Scope of Work.

Maintain a diary report of all contacts made with property owners or representatives and a summary of the status of negotiations indicating attitude of owners, problem

areas, and other pertinent information. Copies of all applicable written correspondence will be maintained in files.

Prepare an impasse letter for any parcel where, after diligent attempts to settle by negotiation, it appears eminent domain will be needed or prudent to acquire the needed interest.

Transmit executed acquisition documents to COUNTY. Each transmittal package shall include a fully executed and properly notarized deed(s), fully executed acquisition contract with attachments, and a brief settlement memorandum which summarizes the pertinent data relative to the transaction.

Escrow Coordination or Eminent Domain Coordination Services

If by Negotiated Settlement: Assist the escrow/title company in the following:

Open escrow and coordinate execution of closing instructions providing for title insurance coverage at the settlement amount.

Provide escrow officer with fully executed acquisition contract and notarized deed.

Review settlement statement for accuracy.

Coordinate deposit of acquisition price and estimated closing costs with escrow.

After the closing, review the title insurance policy for accuracy.

Prepare and mail a letter to COUNTY Assessor requesting cancellation of taxes if appropriate.

If Settlement by Eminent Domain: Assist eminent domain counsel with the following:

Prepare a letter for the client signature, to eminent domain counsel requesting proceeding to condemnation.

Provide eminent domain counsel with available right of way maps and legal descriptions, preliminary title reports and title review documents, and information on how to contact each owner or interest holder.

Provide eminent domain counsel with a duplicate copy of the parcel file, together with a copy of the appraisal, offer to purchase, correspondence, acquisition contract, and deed as presented.

Convert preliminary title reports to litigation guarantees for eminent domain counsels' use. Title company fees (based of the value of the interest required) are additional.

Title Clearance Services

Work in conjunction with escrow officer to facilitate the clearance of title matters as set forth in the settlement memorandum and escrow instructions.

Coordinate payment of taxes due and release of liens.

Secure full or partial reconveyance instruments from lien holders of record.

Coordinate lost instrument bonds as may be necessary.

Coordinate and facilitate recordation of corrective deeds to clear vesting issues.

Secure subordination agreements from conflicting easement holders.

Right of Way Certification Services

Attend certification planning meeting with CALTRANS Right of Way Local Assistance Coordinator and project team.

Prepare real estate components of right of way data sheet and provide current and escalated costs for acquisition and relocation; incorporate engineers' construction and utility information.

Ensure appraisal maps/right of way maps and legal descriptions are all properly identified and prepared in conformance with approved right of way numbering system.

Oversee utility relocation activities as required for completion of certification form including compiling utility notices and submittal of hi-low risk utility sheet prepared by engineers for CALTRANS Right of Way Local Assistance Coordinator review.

Ensure that all interests necessary for the project have been secured and all relocation activities have been performed in compliance with applicable law and regulations.

Prepare certification forms in coordination with engineer and client to include the compilation of all necessary back-up documents required including; deed, final order of condemnation, access easements, cooperative agreements, permits, right of entries, etc.

Attend and coordinate pre and post-audit submittal meetings.

Assumptions:

- Preliminary right-of-way requirements maps are anticipated to be provided for the following impacted owners:
  - LNR - Van Buren Widening on the north side through the Meridian Project
  - Riverside National Cemetery – Van Buren Widening on the south side
  - RCTC – Van Buren Widening over the BNSF railroad
  - March JPA – Extension of Van Buren to the south through the Museum area.
  - March ARB - Along the east side of I-215 between Van Buren and Cactus

H. AGREEMENTS

The ENGINEER will provide technical and administrative support to the COUNTY/CALTRANS as required for obtaining cooperative agreements, freeway agreements, development agreements, and escrow agreements, etc.

Assumptions:

- COUNTY will be the lead on all of the agreements, however, it is expected that this will be a "turn key" operation with the ENGINEER providing the necessary resources in getting the agreements processed.

I. UTILITY COORDINATION

The intent of the COUNTY is that the services of the ENGINEER shall be complete and "turn-key" with respects to utility coordination matters, except for those procedures that must be performed by COUNTY.

ENGINEER shall coordinate with utility owners and COUNTY and State of California Department of Transportation (CALTRANS) utility coordination staff with respect to utility related matters, including but not limited to:

a. Requests for utility as-built plans and inventory maps.

b. Request for property rights information.

c. Design coordination meetings and communications.

d. Notices to owner to initiate design.

e. Notices to owner and agreements to pothole including submissions to CALTRANS for encroachment permits.

f. Inclusion of utility information, including sub-surface engineering data, on improvement plans.

g. Notices to owner to relocate conflicting utilities.

h. Coordination and communication with respect to utility facilities that are to be installed within planned bridge structures including preparation of agreements as required.

i. Coordination and communication with respect to utility facilities that are to be installed prior to or concurrent with COUNTY's construction project, including preparation of agreements as required.

j. No conflict letters.

k. Other procedures and communications as required.

ENGINEER shall provide copies of all correspondence with utility companies and other utility related information to the COUNTY and CALTRANS as required.

ENGINEER shall act as extension of staff to implement utility coordination and relocation in accordance with CALTRANS Right of Way Manual, Chapter 13 and necessary COUNTY procedures, including but not limited to:

a. Preparation of letters to owners of utilities

Many letters will require signature by COUNTY's utility coordination or project management staff. ENGINEER shall prepare letters for COUNTY signature as required. ENGINEER shall prepare and send correspondence under ENGINEER's signature when feasible and appropriate.

b. Phone, email and office communication

ENGINEER shall communicate effectively as needed to achieve necessary and required utility coordination and relocations via all communication methods.

c. Meetings

ENGINEER shall set up utility coordination meetings as needed.

d. Agreements

ENGINEER shall prepare Agreements utilizing CALTRANS format and language, modified as necessary for execution by the COUNTY of Riverside.

e. Submittals

ENGINEER shall submit letters, notices to owner, agreements, and other documents to COUNTY and CALTRANS for reviews and approvals.

f. CALTRANS procedures, general

ENGINEER shall comply with CALTRANS utility coordination procedures, as outlined in Chapter 13 of the CALTRANS Right of Way manual. ENGINEER shall be knowledgeable in the required procedures, and shall coordinate with COUNTY and CALTRANS as required. ENGINEER shall maintain files in accordance with CALTRANS filing requirements, and shall provide CALTRANS with duplicate files and shall provide COUNTY with original files upon completion of construction.

Other and related duties of ENGINEER are as follows, as appropriate and as required:

ENGINEER shall obtain record copies of utility maps from each utility owner within the project limits for known existing and/or proposed utility facilities. ENGINEER shall include mapping and/or exhibits that clearly define the project limits as part of the requests for utility information. ENGINEER shall identify utility companies affected by the project and

delineate utilities within the project's sphere of influence on the plans. ENGINEER shall prepare preliminary plans, which shall include known existing utilities (above ground and below ground) identified by location, size, type, and owner, as appropriate. ENGINEER shall check horizontal and vertical clearances for utilities and coordinate design with the various utility companies to address conflicts. In addition to information provided by the owning utility companies and through research of other record maps, field surveys shall be used to locate utility features such as manholes, valves, fire hydrants, poles, risers, etc., which shall be reflected on the plans.

If it is necessary to pothole existing utilities at critical locations, ENGINEER shall coordinate with COUNTY and CALTRANS staff to arrange with the respective utility owner to pothole its facility. ENGINEER shall coordinate the use field survey crews to locate potholed utilities by coordinates and elevations based on the project's survey controls.

Known utility conflicts shall be shown on the plans with construction notes indicating action to be taken and by whom. Inventory numbers of poles, vaults and other surface facilities shall be shown on the plans for those facilities that have such numbers attached to the facility and as provided on the owner's inventory maps.

ENGINEER shall send preliminary design plans to owning utility companies within the project limits with request for review and comments on the plans relevant to their respective facilities, and other project specific information.

ENGINEER shall monitor responses of utility notices received and make recommendations for mitigating conflicts. ENGINEER shall provide written responses to utility companies with regard to stated concerns and conduct design coordination meetings with utility companies as needed. Unresolved issues shall be brought to the attention of the COUNTY PROJECT MANAGER as early as practical. Utility conflict issues shall be resolved prior to the completion of the final design plans as follows:

- ENGINEER, through COUNTY staff, shall request and obtain a written acknowledgement of any conflicts from the respective utility owners.

- Reasonable efforts shall be taken to accommodate utility company requests for minor design changes to accommodate their facilities. ENGINEER understands that the utility companies are generally operating within the COUNTY or CALTRANS right-of-way, but may have prior rights to that of the COUNTY / CALTRANS or may have rights prescribed by Master Utility Agreements between CALTRANS and utility companies.
- ENGINEER shall coordinate inclusion of special provisions in COUNTY's bid documents for adjustments and relocations of utility facilities as alternate bid items, if requested by the owning utility. Said work may require that cooperative agreements be prepared between the COUNTY of Riverside and the owning utility companies. Engineer shall prepare agreements and shall provide information and exhibits as required to support the preparation of cooperative agreements, if needed.

ENGINEER shall conduct utility coordination meetings, as needed, regarding adjustments and relocations, to resolve conflict issues, and with respect to performing work for utility companies by COUNTY contractors.

For utility conflicts that require relocating, ENGINEER shall prepare notices to owner relocate conflicting facilities. However, it is expected that COUNTY staff will sign the orders. ENGINEER shall make recommendations for special provision language with regard to utility issues, recommendations for construction windows of time for utility relocation activities, recommendations for inclusion of utility bid items, etc.

ENGINEER shall coordinate with COUNTY survey and utility companies as required with respect to prior rights claims and determinations.

If new electrical service will be needed, ENGINEER shall provide support as directed by COUNTY. Such support includes, but is not limited to, the following responsibilities:

- Obtain approved electrical service point from the serving electric company for each service equipment enclosure to be installed, and identify requirements that the serving electric company has for the provision of service. Fulfill serving electric company requirements as appropriate, including preparation of applications for

service and other required documents, some of which may require COUNTY or CALTRANS signatures.

- Serving electric company shall be notified that Electrical Safety Orders clearance requirements must be met (10' radial clearance between 12kv overhead electrical facilities and signal poles and mast arms, and greater clearance for higher voltage electrical facilities). Show such clearance conflicts on the plans with construction notes.
- Submit plans indicating proposed service connection locations to serving electric company for approval (service equipment enclosure, conduit runs, riser quadrant, pole number, and connections to vaults as appropriate).
- Provide detailed load calculations to serving electric company, with a copy to the COUNTY, which provides calculations of the normal and maximum expected loads.

ENGINEER shall assist with the resolution of utility related issues that may arise during the bidding process and during construction, including design modifications as needed and as approved by the COUNTY PROJECT MANAGER.

Specific issues, CALTRANS requirements and utility company requirements may result in deviation from the procedures outlined herein.

Assumptions:

- ❖ Utility Easement Acquisition to be performed by the COUNTY with "Turn Key" support provided by the ENGINEER.
- ❖ High/Low risk assessment per CALTRANS requirements will be performed as part of this task.

ARTICLE AIV • STRUCTURES

C. STRUCTURAL DESIGN AND CALCULATIONS

Structural design calculations will be prepared in conformance with CALTRANS design specifications and procedures.

Plans and calculations shall conform to CALTRANS' requirements and shall be made available for review upon request.

The Bridge Design Specifications, California Department of Transportation, DOS current editions shall be used as design criteria.

Bridge Plans shall be prepared in accordance with the Bridge Design Details Manual, Bridge Design Aids Manual and Bridge Memos to Designers, California Department of Transportation, DOS current editions.

The scope of this work shall include but not be limited to:

- Construction details for each design shall be prepared on DOS format plan sheets. Blank reproducible sample plan sheets will be provided. DOS will supply the COUNTY with the needed standard drawings as shown in Section 20 of the Bridge Design Details Manual and the current Standard Plans. These standard drawings and Standard Plans shall be incorporated into the Contract Plans where applicable.
- Each plan sheet shall be signed and stamped by the responsible design engineer who is registered in the State of California. Each design shall be independently checked by a Professional Engineer registered in the State of California.

Assumptions:

- Bridge type based on approved APS dated 9/7/07: two span Bridge over I-215 (Overcrossing) approximately 95 feet wide by 293 feet long and single span Bridge over the RCTC/BNSF railroad (Overhead) 164 feet wide by 140 feet long.
- It is anticipated both structures will be a pre-stressed concrete box girder structure.
- It is anticipated that the abutments for both structures will be supported by driven pile foundations.
- Design per AASHTO LRFD specifications with California amendments.
- Seismic design based on SDC 1.4 for standard, ordinary bridges.

- ❖ Architectural Treatment per the guidelines established during the Project Report phase of the project will be integrated into the design.
- ❖ Construction Staging design of the Van Buren Overhead will include two primary phases and a closure pour.
- ❖ Demolition plans for existing Van Buren will be developed as part of this task.

D. INDEPENDENT CHECK REVIEW AND QUALITY CONTROL

An Independent Check review shall be conducted at the 90% Structures PS&E stage. Checking shall include the preparation of an independent set of structural design check calculations and review of the plans and details. The checker and the designer will resolve any disagreements and concur on any revisions to the contract plans.

E. STRUCTURE SPECIFICATIONS & ESTIMATES

CALTRANS Standard Special Provisions (SSPs) shall be utilized to prepare a set of Structure Special Provisions specific to the PROJECT which will be incorporated in the final PS&E. These Structure Special Provisions shall be prepared, signed and stamped by a Professional Engineer registered in the State of California.

The ENGINEER shall prepare quantity calculations for bid items and prepare the bridge cost estimate. All contract items used shall be substantiated by calculations. Quantity calculations shall be neat and orderly and shall show sketches, diagrams and dimensions necessary to allow them to be independently used by field inspectors. All quantity calculations shall be independently checked and substantiated with calculations. The Construction Cost Estimate will be prepared using the latest available CALTRANS cost data, COUNTY cost data and actual recent construction costs in the PROJECT area.

F. INITIAL STRUCTURE PS&E (65% UNCHECKED PLANS)

The (65%) structure PS&E will be compiled and submitted for review to the COUNTY and CALTRANS DOS.

ARTICLE AV • ROADWAY

The title sheet for specifications and reports, and each sheet of plans, shall bear the professional seal, certificate number, registration classification, expiration date of the certificate and signature of the Professional Engineer responsible for their preparation. All roadway plans shall also use single sheet files.

The following is a summary listing of drawing types that shall be prepared as part of the roadway PS&E:

A. BASIC ROADWAY PLANS

- Title Sheet
- Typical Cross Sections
- Key Map and Line Index
- Layouts
- Profile and Superelevation Diagrams
- Construction and Intersection Details
- Erosion Control Plan
- Erosion Control Details and Quantities

Assumptions:

- ❖ The roadway design plans shall be based upon the Draft Project Report – Alternative 2E

B. CALCULATIONS

The following calculations will be provided:

- Grid Grades
- Slope Staking Notes
- Earthwork Quantities
- Other Quantities

Assumptions:

- ❖ Cross sections and slope stake notes will be every 50 feet and will include key stations in between. The cross-sections and slope stake notes will be prepared per CALTRANS standards.

C. DRAINAGE PLANS

ENGINEER shall perform hydrology and hydraulic studies to obtain and provide design solutions, which will remove surface runoff from the area of the improvements. Cross culverts that convey runoff flows across the freeway and through the interchange will be extended to the extent necessary required by the proposed improvements. Studies and designs shall be performed in accordance with Chapter 800 of the current Highway Design Manual, District 8 Project Development Policy Memos and the current CALTRANS Standard Plans.

The following list of drawing types shall include:

- Drainage Layouts
- Drainage Profiles
- Drainage Details
- Drainage Quantities

o *Assumptions:*

- ❖ The following drainage facilities are assumed:
  - o Extending or replacing existing 15 culvert locations (size varies from 24" to 36"; length varies from 15 feet to 70 feet)
  - o Adding an additional 5 culverts at:
    - Approximate station 1821+74 – 18 inch at 100 feet long
    - Approximate station 1817+75 – 18 inch at 50 feet long
    - Approximate station 1801 to 1803 – 4 foot by 2 foot RCB at 170 feet long
    - Approximate station 1802+75 – 24 inch at 580 feet long
    - Approximate station 1794+50 – 36 inch at 200 feet
  - o Grading approximately 3200 feet of an earthen channel. 4 to 20 feet wide
  - o Approximately 1600 feet of bio swales

- ❖ Drainage details that will include
  - o Special details for non-standard facilities that may be needed such as headwall modifications, inlet modifications, etc.
  - o Connection details for proposed pipes that connect to existing pipes
  - o Construction notes for these details
- ❖ Drainage Plan and Profiles
  - o Profiles for each storm drain pipe will be prepared showing flowline elevations, size, slope, length, material, cover and flow
  - o Each storm drain and drainage element will be shown on the drainage sheets of the plans and will include:
    - ▪ Station location
    - ▪ Size
    - ▪ Pipe ID for reference to the profile
- ❖ Drainage Quantities
  - o Quantities of each drainage element will be determined including:
  - o Linear footage of all storm drain pipe
  - o Linear footage of all channels
  - o Number and type of inlets, headwalls, overside drains, etc.
  - o Number of any special drainage structures that will be needed.

D. TRAFFIC PLANS

The following list of drawing types shall include:

- Construction Area Signs
- Stage Construction and Traffic Handling
- Detours
- Pavement Delineation
- Roadside Sign Plan
- Highway Lighting and Sign Illumination

- Signal and Lighting
- Ramp Metering System

Assumptions:

- Detour Plans- Two types of detour plans are required for this project. One type that provides detours for the traffic shift on the northbound ramp in the northeast corner of the interchange. This detour is required to shift traffic due to a gap between existing and proposed as a temporary detour. The second type of detour is an area wide detour map that provides detours to other interchanges during construction. Detour Plans include I-215 mainline shift construction staging, traffic handling, and detours.
- Sign Plans- An inventory of existing signs will be performed and included in the sign plans along with the proposed new signs. Additionally, it is assumed two overhead sign structures will be required. This task assumes the following sheets:
  - Sign Plan Sheets
  - Overhead Sign Details Sheets
- Signal - There are two traffic signals proposed for the interchange.
- Staged Construction Plans – Stage construction plans are assumed to be consistent with the concept developed during the Project Report phase of the project: there will be six primary stages of construction.
- Traffic Handling- Traffic Handling sheets will be prepared for each stage of construction.
- Pavement delineation- Final pavement delineation sheets will be prepared for each layout sheet.
- Highway Lighting and Sign Illumination- It is assumed that highway lighting will be provided throughout the limits of the project.
- Ramp Metering System- The project has two ramp meters proposed for the entrance ramps to the freeway.
- Quantities Plan Sheets - The following sheets will also be prepared for the following sets of plans:
  - Construction Area Sign Quantities

- Detour Quantities
- Sign Plan Quantities
- Traffic Handling Quantities
- Pavement Delineation Quantities

❖ Communication Layout Plans and Communication Details- Although not requested in the detail list of plan sheets, CALTRANS will require communications between the ramp meters and traffic signals back to the traffic management center. This task assumes that there is an existing communication system on the mainline and that we will be able to access that communication system at a vault located at the interchange and that no additional vaults will be required.

❖ Irrigation Controller Electrical- It is assumed that two separate plan sheets will be required for the electrical service conduit to the irrigation controllers.

E. MISCELLANEOUS PLANS

ENGINEER shall also be responsible to prepare PS&E for the Airbase thematic streetscape/landscape and aesthetic treatments for the structures. The details of the conceptual design are provided in the Draft Project Report.

- Utility Plan
- Summary of Quantities
- Retaining Wall Plan and Elevation
- Retaining Wall Details and Quantities
- Streetscaping/Landscaping/Irrigation

Assumptions:

❖ Utility plan sheets identifying existing, abandoned, relocated, etc utilities will be prepared.

❖ All of the proposed retaining walls will be CALTRANS standard walls – Type 1. Each sheet will have a layout, elevation showing footing and top of wall elevations and typical section. The following are the walls that will be included in the PS&E:

- Van Buren/northbound ramps – retaining wall along the east side of Van Buren. Approximately 350 feet long.
- Southbound entrance ramp – retaining wall along the west side – approximately 550 feet long. Retaining wall along the east side – approximately 150 feet long.
- Southbound exit ramp – retaining wall along the west side – approximately 250 feet long. Retaining wall along the east side 600 feet long.
- Northbound Entrance Ramp (diamond) – retaining wall along the east side – approximately 400 feet long.
- Van Buren west of the interchange – retaining wall along the south side – approximately 450 feet long. Retaining wall along the north side – approximately 450 feet long.

❖ ENGINEER will prepare construction documents (in English units) and cost projections for the highway planting and irrigation identified for the project. The construction documents will follow CALTRANS Highway Planting Policy and will include plans for 3 years of plant establishment. The planting plan will be based on the approved Project Report planting plan.

❖ Aesthetics Coordination. ENGINEER to incorporate the aesthetics specified in the PA/ED phase into the construction documents for the project walls, structures and other features. Color, texture, finish, etc consistent with the approved landscape concept plan and environmental documents prepared previously.

F. INTERMEDIATE REVIEWS

Roadway, drainage, traffic and miscellaneous plans shall be submitted for review to the COUNTY/CALTRANS and other affected agencies/stakeholders at the 65% complete stage. The ENGINEER will submit up to 40 sets of plans reduced to 11" x 17" size and up to 5 full size sets of all plans as required. Roadway cross sections, grid grades and slope staking notes will be submitted only at the 100% complete submittal stage. Also, the ENGINEER

should submit electronic samples of all plan sheet groups on a compact disc to CALTRANS at intermediate reviews.

Assumptions:

- The "skeletal" layouts will be based on the Geometric Approval Drawings (previously completed by the ENGINEER).
- The 65% Submittal will include the following plan sheets:
  - Title Sheet
  - Key Map & Line Index
  - Typical Cross-Sections
  - Layouts
  - Profiles & Superelevation
  - Construction Details
  - Water Pollution Control Details
  - Erosion Control
  - Contour Grading
  - Drainage Plans
  - Drainage Profiles
  - Drainage Details
  - Drainage Quantity
  - Utility Plans
  - Construction Area Signs
  - Stage Construction Plans
  - Detour Plans
  - Traffic Handling Plans
  - Traffic Handling Quantities
  - Pavement Delineation Plans
  - Pavement Delineation Quantities

- Summary of Roadway Quantities
- Signing Plans
- Overhead Sign Plans
- Sign Quantity
- Retaining Wall Plans
- Landscape & Irrigation Plans
- Lighting Plans
- Ramp Metering Plans
- Signal Plans
- Van Buren Overcrossing General Plan & Foundation Plan
- Van Buren Overhead General Plan & Foundation Plan

❖ The submittals will follow the CALTRANS District 8 Oversight Guidelines dated June 2006.

❖ Includes one review process. Focused meetings with specific functional units are to be held to discuss review comments, as required

❖ Comments to 65% submittal to be incorporated in the 95 % submittal.

G. SPECIFICATIONS AND ESTIMATE

Specifications and Special Provisions will be prepared for items not covered by the CALTRANS Standard Specifications or Standard Special Provisions.

The Roadway Construction Cost Estimate will be prepared using the latest available CALTRANS cost data, COUNTY cost data and readily available actual recent construction costs in the PROJECT area. Cost estimates are to be provided with the appropriate submittals and updated on a quarterly basis.

Assumptions:

- ❖ It is assumed that the construction contract will be administered by the COUNTY. As such, the front end "boilerplate" will be per COUNTY standards and will be provided by the COUNTY.
- ❖ Technical specifications will be prepared per CALTRANS' standards and format.
- ❖ CALTRANS requires that the latest version of their SSPs be utilized. As such, technical specifications will be updated as necessary, prior to the 95% and 100% submittal.

H. QUALITY CONTROL

The Plans, Specifications and Estimate (PS&E) will be subject to quality control reviews before submittal. These reviews will be in conformance with CALTRANS and COUNTY standards and criteria as well as minimize typographical omissions.

ARTICLE AVIII • COMPUTER FACILITIES

A. CALCULATIONS

All roadway calculations will be performed using COGO PC and InRoads or Road Calc. The structural analyses and design will be performed by using STAADIII, GTSTRUDL, SEISAB, PCBRIDGE, PCYIELD, PCFOOT, PCBENT and PCABUT programs. The data files and the results will be submitted electronically on compact discs along with a hard copy.

B. COMPUTER AIDED DRAFTING AND DESIGN (CADD)

All plans will be prepared using MicroStation format in conformance with the latest CALTRANS CADD Users Manual and the CALTRANS Drafting Manual to assure complete compatibility.

ARTICLE AIX • VALUE ENGINEERING

A value engineering review has been completed, and a copy will be provided to the successful ENGINEER. The results of the VE Study are to be incorporated into the design where practical and feasible.

ARTICLE AX • QUALITY CONTROL PLAN

A Quality Control Plan will be established for this PROJECT in accordance with the provisions of Article IV, Section H of the Agreement. It will be provided to the COUNTY within two (2) weeks after NTP for review and approval.

END OF SCOPE

Van Buren / I-215 Interchange Project		PS&E PHASE II	Bidding PHASE III	Construct. PHASE IV	TOTALS
Kimley-Horn and Associates, Inc.		$1,278,823.07			$1,278,823.07
Aguirre & Associates	DBE				
Geocon Consultants, Inc.					
Helix Environmental Planning, Inc.		$79,598.65			$79,598.65
Butsco (Utility)		$42,136.48			$42,136.48
Simon Wong Engineering	DBE	$342,681.14			$342,681.14
Overland, Pacific and Cutler, Inc. (ROW)		$87,218.41			$87,218.41
Contingency (10%)		$183,045.78			$183,045.78
TOTALS		$2,013,503.53			$2,013,503.53

Phase I: N/A
Phase II: Final Plans, Specs & Estimate
Phase III:
Phase IV:
Phase V: <not used>

COMPANY:	SCOPE OF WORK	DATE:	REV:
Kimley-Horn and Associates, Inc.	Project Summary	6/24/2009	1
PROJECT:		**MILESTONE/PHASE/PROJ SUMMARY:**	
Van Buren Boulevard Interchange on I-215 Reconstruction Project		All Phases	

DIRECT LABOR

PERSONNEL	FUNCTION	HOURS		RATE	AMOUNT
Dennis Landaal, PE	Project Manager	398	@	$67.00	$26,686.10
Alan Tubosnick	Senior Engineer	569	@	$50.00	$28,465.00
Mike Ross, PE	QC/ Senior Engineer	417	@	$58.00	$24,186.00
Darren Adrian	QC/ Senior Engineer	338	@	$52.00	$17,576.00
Sam McWhorter, PE	Senior Drainage Engineer	155	@	$45.00	$6,975.00
Jon Collins, PE	Senior Traffic Engineer	194	@	$46.00	$8,924.00
Jason Valencia, PE	Project Engineer	1224	@	$45.00	$55,098.00
	Engineer	1131	@	$36.00	$40,716.00
	Assistant Engineer	1708	@	$32.00	$54,656.00
	CADD Designer	2651	@	$38.00	$100,738.00
	Admin Support	301	@	$23.00	$6,923.00

TOTAL HOURS 9087 TOTAL DIRECT LABOR $370,943.10

MULTIPLIERS

ESCALATION @		(Rate)	
OVERHEAD @	196.76%	(of Total Direct Labor + Escalation)	$729,867.64
PAYROLL ADDITIVES @		(of Total Direct Labor + Escalation)	

TOTAL MULTIPLIERS $729,867.64

OTHER DIRECT EXPENSES ••• Billed at Actual Cost •••

ITEM	QUANTITY	UNIT		UNIT COST	AMOUNT
Reproduction					$23,780.04
Travel/Per Diem					$4,800.00
Mileage	13000	miles	@	$0.49	$6,370.00
Deliveries					$8,000.00
Misc					
Office					$24,981.22

TOTAL OTHER DIRECT EXPENSES $67,931.26

OUTSIDE SERVICES (w/o fee)

COMPANY		LABOR	MULTIPLIER	EXPENSES	TOTAL
Aguirre & Associates	DBE				
Geocon Consultants, Inc.					
Helix Environmental Planning, Inc.		$22,212.56	$43,308.94	$7,525.00	$73,046.50
Butsco (Utility)		$13,967.60	$23,465.57	$960.00	$38,393.17
Simon Wong Engineering	DBE	$120,368.20	$172,523.74	$20,500.00	$313,391.94
Overland, Pacific and Cutler, Inc. (ROW)		$23,268.08	$36,913.99	$21,018.13	$81,200.20

TOTAL OUTSIDE SERVICES $506,031.81

FEES

OUTSIDE SERVICES ADMIN FEE @		(of Total Outside Services & Outside Services Fees	
KIMLEY-HORN AND ASSOCIATES,	010.00%	(of Total Direct Labor + Total Multipliers)	$110,081.07
OUTSIDE SERVICES @	010.00%	(of Total Labor + Total Multiplier for Outside Servic	$45,602.87

TOTAL FEES $155,683.94

TOTAL COST $1,830,457.75

COMPANY:	SCOPE OF WORK	DATE:	REV:
Kimley-Horn and Associates, Inc.	Final Plans, Specs & Estimate	6/24/2009	1
PROJECT:		**MILESTONE/PHASE/PROJ SUMMARY:**	
Van Buren Boulevard Interchange on I-215 Reconstruction Project		Phase II	

DIRECT LABOR

PERSONNEL	FUNCTION	HOURS		RATE	AMOUNT
Dennis Landaal, PE	Project Manager	398	@	$67.00	$26,686.10
Alan Tubosnick	Senior Engineer	569	@	$50.00	$28,465.00
Mike Ross, PE	QC/ Senior Engineer	417	@	$58.00	$24,186.00
Darren Adrian	QC/ Senior Engineer	338	@	$52.00	$17,576.00
Sam McWhorter, PE	Senior Drainage Engineer	155	@	$45.00	$6,975.00
Jon Collins, PE	Senior Traffic Engineer	194	@	$46.00	$8,924.00
Jason Valencia, PE	Project Engineer	1224	@	$45.00	$55,098.00
	Engineer	1131	@	$36.00	$40,716.00
	Assistant Engineer	1708	@	$32.00	$54,656.00
	CADD Designer	2651	@	$38.00	$100,738.00
	Admin Support	301	@	$23.00	$6,923.00
	TOTAL HOURS	9087		TOTAL DIRECT LABOR	$370,943.10

MULTIPLIERS

ESCALATION @	(Rate)		
OVERHEAD @	196.76% (of Total Direct Labor + Escalation)	$729,867.64	
PAYROLL ADDITIVES @	(of Total Direct Labor + Escalation)		
		TOTAL MULTIPLIERS	$729,867.64

OTHER DIRECT EXPENSES ••• Billed at Actual Cost •••

ITEM	QUANTITY	UNIT		UNIT COST	AMOUNT
Reproduction					
Drainage Report (2 submittals plus Final)	25	Report	@	$100.00	$2,500.00
TMP	25	Report	@	$50.00	$1,250.00
SWDR	25	Report	@	$50.00	$1,250.00
~~Type Selection~~		Report		$50.00	
Specifications (300 pages)	50	SSP	@	$30.00	$1,500.00
Quality Control Plan	25	Report	@	$50.00	$1,250.00
~~30% PSE&E Plans (150 sheets)~~		Set		$30.00	
60% PS&E (280 sheets -11"x17")	50	Set	@	$56.00	$2,800.00
95% PS&E (354 sheets - 11"x 17")	50	Set	@	$71.00	$3,550.00
Final PS&E (354 Sheets - 11"x17")	50	Set	@	$71.00	$3,550.00
Final PS&E (354 Sheets - mylar full size)	1	Set	@	$2,124.00	$2,124.00
Misc. Reproduction	1	LS	@	$4,006.04	$4,006.04
Mileage	13000	mile	@	$0.49	$6,370.00
Deliveries	1	LS	@	$8,000.00	$8,000.00
Travel/Per Diem					
Airfare	8	Round trip	@	$250.00	$2,000.00
Hotel	8	Night	@	$200.00	$1,600.00
Meals	8	Day	@	$50.00	$400.00
Car Rental	8	Day	@	$100.00	$800.00
Office Expense	1	LS	@	$24,981.22	$24,981.22
				TOTAL OTHER DIRECT EXPENSES	$67,931.26

OUTSIDE SERVICES (w/o fee)

COMPANY		LABOR	MULTIPLIER	EXPENSES	TOTAL
Aguirre & Associates	DBE				
Geocon Consultants, Inc.					
Helix Environmental Planning, Inc.		$22,212.56	$43,308.94	$7,525.00	$73,046.50
Butsco (Utility)		$13,967.60	$23,465.57	$960.00	$38,393.17
Simon Wong Engineering	DBE	$120,368.20	$172,523.74	$20,500.00	$313,391.94
Overland, Pacific and Cutler, Inc. (R(		$23,268.08	$36,913.99	$21,018.13	$81,200.20
				TOTAL OUTSIDE SERVICES	$506,031.81

FEES

OUTSIDE SERVICES ADMIN FEE (	(of Total Outside Services & Outside Services Fees		
KIMLEY-HORN AND ASSOCIATES	10.00% (of Total Direct Labor + Total Multipliers)	$110,081.07	
OUTSIDE SERVICES @	10.00% (of Total Labor + Total Multiplier for Outside Servic	$45,602.87	
		TOTAL FEES	$155,683.94
		TOTAL COST	**$1,830,457.75**

COMPANY:	SCOPE OF WORK	DATE:	REV:
Helix Environmental Planning, Inc.	Landscape Architecture Services	6/24/2009	1
PROJECT:		**MILESTONE/PHASE/PROJ SUMMARY:**	
Van Buren Boulevard Interchange on I-215 Reconstruction Project		All Phases	

DIRECT LABOR

PERSONNEL	FUNCTION	HOURS		RATE	AMOUNT
Justin Palmer	CADD / GIS	300	@	$30.00	$9,000.00
Kevin Mock	Landscape Designer	200	@	$20.00	$4,000.00
Amy Hoffman	Landscape Architect	241	@	$23.00	$5,543.00
R. Brad Lewis, ASLA	Sr Landscape Architect	96	@	$48.00	$4,608.00
Tammy Ching	QA-QC	24	@	$57.69	$1,384.56

TOTAL HOURS 861 — TOTAL DIRECT LABOR $24,535.56

MULTIPLIERS

ESCALATION @	3.50%	(Rate)	$858.74
OVERHEAD @	185.00%	(of Total Direct Labor + Escalation)	$46,979.46
PAYROLL ADDITIVES @		(of Total Direct Labor + Escalation)	

TOTAL MULTIPLIERS $47,838.21

OTHER DIRECT EXPENSES ••• Billed at Actual Cost •••

ITEM	QUANTITY	UNIT		UNIT COST	AMOUNT
Plots	250	EA	@	$20.50	$5,125.00
Deliveries	1	LS	@	$500.00	$500.00
Reproduction	1	LS	@	$500.00	$500.00
Milage Cost - Phase II	1	LS	@	$1,000.00	$1,000.00
Milage Cost - Phase III	1	LS	@	$100.00	$100.00
Milage Cost - Phase IV	1	LS	@	$500.00	$500.00

TOTAL OTHER DIRECT EXPENSES $7,725.00

OUTSIDE SERVICES (w/o fee)

COMPANY	LABOR	MULTIPLIER	EXPENSES	TOTAL
Landscape Soil Testing	$200.00		$200.00	$400.00

TOTAL OUTSIDE SERVICES $400.00

FEES

OUTSIDE SERVICES ADMIN FEE @		(of Total Outside Services & Outside Services Fee	
HELIX ENVIRONMENTAL PLA	10.00%	(of Total Direct Labor + Total Multipliers)	$7,237.38
OUTSIDE SERVICES @		(of Total Labor + Total Multiplier for Outside Servic	

TOTAL FEES $7,237.38

TOTAL COST **$87,736.14**

COMPANY:	SCOPE OF WORK	DATE:	REV:
Butsco (Utility)	Utility	6/24/2009	1

PROJECT:	MILESTONE/PHASE/PROJ SUMMARY:
Van Buren Boulevard Interchange on I-215 Reconstruction Project	All Phases

DIRECT LABOR

PERSONNEL	FUNCTION	HOURS		RATE	AMOUNT
Alfredo Felix	Project Manager	160	@	$40.97	$6,555.20
Alicia Diederichs	Designer	140	@	$35.38	$4,953.20
Erin Galvery	Project Support	80	@	$30.74	$2,459.20

TOTAL HOURS	380	TOTAL DIRECT LABOR	$13,967.60

MULTIPLIERS

ESCALATION @		(Rate)	
OVERHEAD @	168.00%	(of Total Direct Labor + Escalation)	$23,465.57
PAYROLL ADDITIVES @		(of Total Direct Labor + Escalation)	
		TOTAL MULTIPLIERS	$23,465.57

OTHER DIRECT EXPENSES ••• Billed at Actual Cost •••

ITEM	QUANTITY	UNIT		UNIT COST	AMOUNT
Milage	2000	Mi	@	$0.48	$960.00

TOTAL OTHER DIRECT EXPENSES	$960.00

OUTSIDE SERVICES (w/o fee)

COMPANY	LABOR	MULTIPLIER	EXPENSES	TOTAL

TOTAL OUTSIDE SERVICES	

FEES

OUTSIDE SERVICES ADMIN FEE @		(of Total Outside Services & Outside Services Fee	
BUTSCO (UTILITY) @	10.00%	(of Total Direct Labor + Total Multipliers)	$3,743.32
OUTSIDE SERVICES @		(of Total Labor + Total Multiplier for Outside Servic	
		TOTAL FEES	$3,743.32
		TOTAL COST	**$42,136.48**

COMPANY:	SCOPE OF WORK	DATE:	REV:
Simon Wong Engineering	Bridge Engineering Services	6/24/2009	1
PROJECT:		**MILESTONE/PHASE/PROJ SUMMARY:**	
Van Buren Boulevard Interchange on I-215 Reconstruction Project		All Phases	

DIRECT LABOR

PERSONNEL	FUNCTION	HOURS		RATE	AMOUNT
Mark Creveling	Project Manager	94	@	$88.30	$8,300.20
Andrew Sanford	Senior Bridge Engineer	680	@	$55.98	$38,066.40
James Frost	Senior Bridge Engineer	92	@	$66.10	$6,081.20
Craig Shannon	Associate Bridge Engineer	690	@	$43.04	$29,697.60
Ty Brittan	Senior Tech	730	@	$52.36	$38,222.80
	TOTAL HOURS	2286		TOTAL DIRECT LABOR	$120,368.20

MULTIPLIERS

ESCALATION @	(Rate)		
OVERHEAD @	102.17%	(of Total Direct Labor + Escalation)	$122,980.19
PAYROLL ADDITIVES @	41.16%	(of Total Direct Labor + Escalation)	$49,543.55
		TOTAL MULTIPLIERS	$172,523.74

OTHER DIRECT EXPENSES ••• Billed at Actual Cost •••

ITEM	QUANTITY	UNIT		UNIT COST	AMOUNT
Reproduction Costs	1	LS	@	$17,000.00	$17,000.00
Milage Costs	1	LS	@	$1,500.00	$1,500.00
				TOTAL OTHER DIRECT EXPENSES	$18,500.00

OUTSIDE SERVICES (w/o fee)

COMPANY	LABOR	MULTIPLIER	EXPENSES	TOTAL
			TOTAL OUTSIDE SERVICES	

FEES

OUTSIDE SERVICES ADMIN FEE @	(of Total Outside Services & Outside Services Fee		
SIMON WONG ENGINEERING	10.00%	(of Total Direct Labor + Total Multipliers)	$29,289.19
OUTSIDE SERVICES @		(of Total Labor + Total Multiplier for Outside Servic	
		TOTAL FEES	$29,289.19
		TOTAL COST	**$340,681.14**

COMPANY:	SCOPE OF WORK	DATE:	REV:
Overland, Pacific, and Cutler (ROW)	Phase II - PS&E	6/24/2009	1
PROJECT:		**MILESTONE/PHASE/PROJ SUMMARY:**	
Van Buren Boulevard Interchange on I-215 Reconstruction Project		All Phases	

DIRECT LABOR

PERSONNEL	FUNCTION	HOURS		RATE	AMOUNT
Ray Armstrong	Principal	8	@	$63.94	$511.52
Joey Mendoza, SR/WA	Sr. Project Manager	8	@	$46.90	$375.20
Michael Green, SR/WA	Sr. Project Manager	8	@	$42.45	$339.60
Larry Steven, SR/WA	Sr. Project Manager	36	@	$42.00	$1,512.00
Kim Reed	R/W Project Manager	128	@	$40.86	$5,230.08
Jeff Welcome	R/W Consultant	240	@	$25.55	$6,132.00
Aaron Schavira	R/W Consultant	240	@	$16.83	$4,039.20
Inez Garcia	Project Support	304	@	$16.87	$5,128.48

TOTAL HOURS 972 TOTAL DIRECT LABOR $23,268.08

MULTIPLIERS

ESCALATION @	3.50% (Rate)	$814.38	
OVERHEAD @	107.70% (of Total Direct Labor + Escalation)	$25,936.81	
PAYROLL ADDITIVES @	42.20% (of Total Direct Labor + Escalation)	$10,162.80	
		TOTAL MULTIPLIERS	$36,913.99

OTHER DIRECT EXPENSES ••• Billed at Actual Cost •••

ITEM	QUANTITY	UNIT		UNIT COST	AMOUNT
Mileage	2000	miles	@	$0.48	$960.00
Copies	1	LS	@	$58.13	$58.13

TOTAL OTHER DIRECT EXPENSES $1,018.13

OUTSIDE SERVICES (w/o fee)

COMPANY	LABOR	MULTIPLIER	EXPENSES	TOTAL
Subcontracted Real Estate Appraiser	$20,000.00			$20,000.00

TOTAL OUTSIDE SERVICES $20,000.00

FEES

OUTSIDE SERVICES ADMIN FEE @	(of Total Outside Services & Outside Services Fees		
OVERLAND, PACIFIC, AND CU	10.00% (of Total Direct Labor + Total Multipliers)	$6,018.21	
OUTSIDE SERVICES @	(of Total Labor + Total Multiplier for Outside Service		
		TOTAL FEES	$6,018.21

TOTAL COST **$87,218.41**

COMPANY:	SCOPE OF WORK	DATE:	REVISION:
Kimley-Horn and Associates, Inc.		6/24/2009	1
PROJECT:		MILESTONE/PHASE/PROJECT SUMMARY:	
Van Buren Boulevard Interchange on I-215 Reconstruction Project		Project Summary	

Kimley-Horn and Associates, Inc. Summary

TASK		Project Manager	Senior Engineer	QC/ Senior Engineer	QC/ Senior Engineer	Senior Drainage Engineer	Senior Traffic Engineer	Project Engineer	Engineer	Assistant Engineer	CADD Designer	Admin Support								TOTAL
		$67.00	$50.00	$58.00	$52.00	$45.00	$46.00	$45.00	$36.00	$32.00	$38.00	$23.00								
Phase 1 Subtotal																				
Phase 2 Subtotal		398	569	417	338	155	194	1,224	1,131	1,708	2,651	301								9,087
Phase 3 Subtotal																				
Phase 4 Subtotal																				
Phase 5 Subtotal																				
Totals		398	569	417	338	155	194	1,224	1,131	1,708	2,651	301								9,087

Aguirre & Associates Summary

																				TOTAL

Geocon Consultants, Inc. Summary

																				TOTAL

Helix Environmental Planning, Inc. Summary

	CADD / GIS	Landscape Designer	Landscape Architect					Sr Landscape Architect	QA-QC											TOTAL
	$30.00	$20.00	$23.00					$48.00	$57.69											
	300	200	241					96	24											861

Butsco (Utility) Summary

	Project Manager	Designer	Project Support																	TOTAL
	$40.97	$35.38	$30.74																	
	160	140	80																	380

Simon Wong Engineering Summary

	Project Manager	Senior Bridge Engineer	Senior Bridge Engineer					Associate Bridge Engineer	Senior Tech											TOTAL
	$88.30	$55.98	$66.10					$43.04	$52.36											
	94	680	92					690	730											2,286

Overland, Pacific, and Cutler (ROW) Summary

	Principal	Sr. Project Manager	Sr. Project Manager					Sr. Project Manager	R/W Project Manager	R/W Consultant	R/W Consultant	Project Support								TOTAL
	$63.94	$46.90	$42.45					$42.00	$40.86	$25.55	$16.83	$16.87								
	8	8	8					36	128	240	240	304								972

COMPANY:		SCOPE OF WORK	DATE:	REVISION:
Kimley-Horn and Associates, Inc.		Final Plans, Specs & Estimate	6/24/2009	1
PROJECT:			MILESTONE/PHASE/PROJECT SUMMARY:	
Van Buren Boulevard Interchange on I-215 Reconstruction Project			Phase 2	

TASK	Project Manager	Senior Engineer	QC/ Senior Engineer	QC/ Senior Engineer	Senior Drainage Engineer	Senior Traffic Engineer	Project Engineer	Engineer	Assistant Engineer	CADD Designer	Admin Support					TOTAL
Total Manhours	398	569	417	338	155	194	1,224	1,131	1,708	2,651	301					**9,087**
ARTICLE AII - PROJECT ADMINISTRATION																
A. Project Management																
Project Management Services	21	21									28					**70**
B. Budgeting																
Project Budgeting	4	4									6					**14**
C. Cost Accounting																
Project Cost Accounting	25	25									64					**113**
D. Scheduling																
Project Scheduling	4	4					29				11					**49**
E. Progress Reporting																
Progress Reporting	10	10					63				11					**94**
F. Contract Administration																
Contract Administration Services	84	84					39				17					**224**
PS&E Component Close Out	6	6					17				17					**45**
ARTICLE AIII - PLANNING AND PROJECT DEVELOPMENT																
A. Research and Data Gathering																
Obtain Updated Project Information																

COMPANY:	SCOPE OF WORK	DATE:	REVISION:
Kimley-Horn and Associates, Inc.	Final Plans, Specs & Estimate	6/24/2009	1
PROJECT:		**MILESTONE/PHASE/PROJECT SUMMARY:**	
Van Buren Boulevard Interchange on I-215 Reconstruction Project		Phase 2	

TASK	Project Manager	Senior Engineer	QC/ Senior Engineer	QC/ Senior Engineer	Senior Drainage Engineer	Senior Traffic Engineer	Project Engineer	Engineer	Assistant Engineer	CADD Designer	Admin Support					TOTAL
B. Project Development Team																
Monthly PDT Meetings	40	40					78				20					**178**
C. Permits																
~~Encroachment and Right of Entry Permits~~																
Environmental Permit - 404	2	4					24		50		36					**116**
Environmental Permit - 1602	2	4					24		50		16					**96**
Environmental permit - 401	2	4					24		40		16					**86**
Mitigation Plan (add services)																
D. Not used																
E. Design Dralnage Report																
Prepare Draft Final Design Drainage Report	12	12			50			90		10	10					**184**
Field Reconnaissance and Documentation		1			3			4	20		3					**31**
Drainage Design Coordination and Meetings	4	4			6			10	5		5					**34**
F. (Not Used																
G. Right of Way Maps																
Right of Way Coordination	16	20	16				43									**95**
Right of Way Requirements Maps	4	8	8				16	12	60	24						**132**
H. Agreements																
Agreements Support Services	6	6	6				20			10	6					**54**

COMPANY:	SCOPE OF WORK	DATE:	REVISION:
Kimley-Horn and Associates, Inc.	Final Plans, Specs & Estimate	6/24/2009	1
PROJECT:		**MILESTONE/PHASE/PROJECT SUMMARY:**	
Van Buren Boulevard Interchange on I-215 Reconstruction Project		Phase 2	

TASK	Project Manager	Senior Engineer	QC/ Senior Engineer	QC/ Senior Engineer	Senior Drainage Engineer	Senior Traffic Engineer	Project Engineer	Engineer	Assistant Engineer	CADD Designer	Admin Support					TOTAL
~~FAA Coordination~~																
I. Utility Coordination																
Utility Relocation Management and Coordination	2	2					4		10	10	2					**30**
ARTICLE AIV - STRUCTURES																
A. Not Used																
B. Not Used																
C. Structural Design and Calculations																
Complete Structural Design																
D. Independent Check and Quality Control																
Perform Structures Independent Checks and QC																
E. Structures Specifications & Estimate																
Develop Preliminary Specs and Estimate																

COMPANY:	SCOPE OF WORK	DATE:	REVISION:
Kimley-Horn and Associates, Inc.	Final Plans, Specs & Estimate	6/24/2009	1
PROJECT:		**MILESTONE/PHASE/PROJECT SUMMARY:**	
Van Buren Boulevard Interchange on I-215 Reconstruction Project		Phase 2	

TASK	Project Manager	Senior Engineer	QC/ Senior Engineer	QC/ Senior Engineer	Senior Drainage Engineer	Senior Traffic Engineer	Project Engineer	Engineer	Assistant Engineer	CADD Designer	Admin Support					TOTAL
F. Initial Structure PS&E (65% Unchecked Plans)																
Prepare 65% Unchecked PS&E	4	4		4			16									**28**
G. Intermediate Structure PS&E (90% Checked Plans)																
Prepare 90% Checked PS&E	4	4		4			16									**28**
H. Draft Final Structure PS&E (95%)																
Prepare 95% PS&E	4	4		4			16									**28**
I. Final Structure PS&E																
Prepare Final PS&E																
ARTICLE AV - ROADWAY																
Draft Final PS&E (~65% Complete)																
A. Basic Roadway Plans																
Title Sheet	1						1	2		16						**20**
Index of Sheets	1						1	5		24						**31**
Typical Cross Sections	2	2		2			10	20	20	40						**96**
Key Map & Line Index							1	2	8	12						**23**
Layout	4	6		10			30	40	40	60						**190**
Profile and Superelevation Diagram	4	4		4			31	41	60	80						**224**
Construction Details	8	8		20			32	40	80	120						**308**
Temp Water Pollution Control Plan	1	1			4		24	24	61	140						**255**
Temp Water Pollution Control Details					1		5	7	13	80						**106**

COMPANY:		SCOPE OF WORK	DATE:	REVISION:
Kimley-Horn and Associates, Inc.		Final Plans, Specs & Estimate	6/24/2009	1
PROJECT:			MILESTONE/PHASE/PROJECT SUMMARY:	
Van Buren Boulevard Interchange on I-215 Reconstruction Project			Phase 2	

TASK	Project Manager	Senior Engineer	QC/ Senior Engineer	QC/ Senior Engineer	Senior Drainage Engineer	Senior Traffic Engineer	Project Engineer	Engineer	Assistant Engineer	CADD Designer	Admin Support					TOTAL
Temp Water Pollution Control Quantities					1		4	13	18	24						**60**
B. Calculations																
Grid Grade Calculations	4	6		2			24	36	60	80						**212**
Earthwork Calculations		6		2			24	40	60	80						**212**
Slope Stake Notes		4		2			8	40	60	80						**194**
Other Quantities	4	6		4			8	32	60	80						**194**
C. Drainage Plans																
Countour Grading	8	8		16	6		20	24	50	68						**200**
Drainage Plan	8	12			16		30	36	59	80						**241**
Drainage Profiles		12			12		24	12	61	120						**241**
Drainage Details		2			4		18	22	44	120						**210**
Drainage Quantities					2		13	20	40	80						**155**
D. Traffic Plans																
Transportation Management Plan		9					13		24	50						**96**
Stage Construction and Traffic Handling Plan	20	20				54	54	60	108	243						**559**
Pavement Delineation Plan		10				20	20	28	30	80						**188**
Pavement Delineation Quantities							4	16	18	9						**47**
Sign Plans		10				16	24	30	36	100						**216**
Sign Details		1					8	8	16	30						**63**
Sign Quantities							4	8	10	20						**42**
Overhead Sign Details		10				8	22	44	16	80						**180**

COMPANY:	SCOPE OF WORK	DATE:	REVISION:
Kimley-Horn and Associates, Inc.	Final Plans, Specs & Estimate	6/24/2009	1
PROJECT:		**MILESTONE/PHASE/PROJECT SUMMARY:**	
Van Buren Boulevard Interchange on I-215 Reconstruction Project		Phase 2	

TASK	Project Manager	Senior Engineer	QC/ Senior Engineer	QC/ Senior Engineer	Senior Drainage Engineer	Senior Traffic Engineer	Project Engineer	Engineer	Assistant Engineer	CADD Designer	Admin Support					TOTAL
Overhead Sign Quantities							8	20	16	40						**84**
Signal and Lighting	8	12				8	4	8	18	26						**84**
Lighting and Sign Illumination	8	12				8	30	40	40	60						**198**
Structure Lighting Plan	6	6				4	20	30	30	80						**176**
Ramp Metering System	6	6				8	24	40	60	80						**224**
Communication Conduit		4				4	18	24	30	60						**140**
Electrical Service (Irrigation)		4				5	2	9	9	15						**44**
Electrical Details		4				9	20	30	50	80						**193**
E. Miscellaneous Plans																
Plant List		2	4				8	2								**16**
Planting Plans	1	2	4				7	2								**16**
Irrigation Plan	1	2	4				7		2							**16**
Sprinkler Schedule and Details		2	4				8		2							**16**
Irrigation Quantities		2	5				7		2							**16**
Summary of Quantities	1	2	4				7		2							**16**
F. Intermediate Reviews																
See Sections for 30%, 65%, and 95% submittals																
G. Specifications and Estimate																
Prepare 65% Complete Specifications	10	20	34		40	40	40	80	80	80	4					**428**
Prepare 65% Complete Cost Estimate	10	20	14		10	10	40	80	80	80	4					**348**
H. Quality Control																

COMPANY:	SCOPE OF WORK	DATE:	REVISION:
Kimley-Horn and Associates, Inc.	Final Plans, Specs & Estimate	6/24/2009	1
PROJECT:		**MILESTONE/PHASE/PROJECT SUMMARY:**	
Van Buren Boulevard Interchange on I-215 Reconstruction Project		Phase 2	

TASK	Project Manager	Senior Engineer	QC/ Senior Engineer	QC/ Senior Engineer	Senior Drainage Engineer	Senior Traffic Engineer	Project Engineer	Engineer	Assistant Engineer	CADD Designer	Admin Support					TOTAL
Quality Control Plan	11	11	4				30				8					**64**
QC Review Planning & Project Development Deliverables	4	11	30	24			10				5					**84**
QC Review 30% Plans																
QC Review 65% PS&E Documents	4	16	120	80			16				4					**240**
QC Review 95% PS&E Documents	4	16	80	80			16				4					**200**
QC Review Final PS&E Documents	4	8	80	80			16				4					**192**

COMPANY:	SCOPE OF WORK	DATE:	REVISION:
Helix Environmental Planning, Inc.	Landscape Architecture Services	6/24/2009	1
PROJECT:		**MILESTONE/PHASE/PROJECT SUMMARY:**	
Van Buren Boulevard Interchange on I-215 Reconstruction Project		All Phases	

TASK	CADD / GIS	Landscape Designer	Landscape Architect	Sr Landscape Architect	QA-QC													TOTAL
Total Manhours	300	200	241	96	24													**861**
ARTICLE AV - ROADWAY																		
E. Miscellaneous Plans																		
Landscape Plans/Specs/Estimate	300	200	140	96	24													**760**
ARTICLE AVI - CONSTRUCTION BIDDING PHASE																		
Respond to Contractor RFIs (20 RFIs)			45															**45**
ARTICLE AVII - CONSTRUCTION SUPPORT PHASE																		
Respond to Contractor RFIs			16															**16**
Shop Drawing Review			20															**20**
Job Site Visits (5)			20															**20**

COMPANY:	SCOPE OF WORK	DATE:	REVISION:
Butsco (Utility)	Utility	6/24/2009	1
PROJECT:		**MILESTONE/PHASE/PROJECT SUMMARY:**	
Van Buren Boulevard Interchange on I-215 Reconstruction Project		All Phases	

TASK	Project Manager	Designer	Project Support															TOTAL
Total Manhours	160	140	80															**380**
ARTICLE AIII - PLANNING AND PROJECT DEVELOPMENT																		
I. Utility Coordination																		
Utility Location/Coordination	160	140	80															**380**

COMPANY:	SCOPE OF WORK	DATE:	REVISION:
Simon Wong Engineering	Bridge Engineering Services	6/24/2009	1
PROJECT:		**MILESTONE/PHASE/PROJECT SUMMARY:**	
Van Buren Boulevard Interchange on I-215 Reconstruction Project		All Phases	

TASK	Project Manager	Senior Bridge Engineer	Senior Bridge Engineer	Associate Bridge Engineer	Senior Tech													TOTAL
Total Manhours	94	680	92	690	730													**2,286**
ARTICLE AIV - STRUCTURES																		
A. Not Used																		
C. Structural Design and Calculations																		
Complete Structural Design	20	170	14	150	170													**524**
D. Independent Check and Quality Control																		
Perform Structures Independent Check and QC	24	150	60	380	220													**834**
E. Structures Specifications & Estimate																		
Develop Preliminary Specs and Estimate	20	180	8	60	120													**388**
F. Initial Structure PS&E (65% Unchecked Plans)																		
Prepare 65% Unchecked PS&E	30	180	10	100	220													**540**
G. Intermediate Structure PS&E (90% Checked Plans)																		
Prepare 90% Checked PS&E																		
H. Draft Final Structure PS&E (95%)																		
Prepare 95% PS&E																		
I. Final Structure PS&E																		
Prepare Final PS&E																		
ARTICLE AVI - CONSTRUCTION BIDDING PHASE																		
Respond to Contractor RFIs (20 RFIs)																		
ARTICLE AVII - CONSTRUCTION SUPPORT PHASE																		
Respond to Contractor RFIs																		
Shop Drawing Review																		

COMPANY:	SCOPE OF WORK	DATE:	REVISION:
Overland, Pacific and Cutler, Inc. (ROW)	Phase II - PS&E	6/24/2009	1
PROJECT:		**MILESTONE/PHASE/PROJECT SUMMARY:**	
Van Buren Boulevard Interchange on I-215 Reconstruction Project		All Phases	

TASK	Principal	Sr. Project Manager	Sr. Project Manager	Sr. Project Manager	R/W Project Manager	R/W Consultant	R/W Consultant	Project Support										TOTAL
Total Manhours	8	8	8	36	128	240	240	304										**972**
Right of Way Acquisition																		
Project Management	8	8	8	36	35	16	16	16										**143**
Title Invest. Services					10	40	40	18										**108**
Appraisal Coord.					9	40	40	30										**119**
Acquisition Negotiations					40	48	48	45										**181**
Escrow/ED Coord.					20	48	48	45										**161**
Title Clearance Services					14	48	48	150										**260**

ATTACHMENT B

CONTRACT 100% PS&E

ARTICLE AII • PROJECT ADMINISTRATION

A. PROJECT MANAGEMENT

This task includes the day-to-day management of the PROJECT. Project Development Team (PDT) meetings with the COUNTY PROJECT MANAGER, the California Department of Transportation (CALTRANS) staff and other representatives from affected agencies will be held once a month. The subconsultants will attend PDT meetings as appropriate. The ENGINEER shall coordinate PDT meetings, prepare meeting notes for each meeting and have these available for review at least one week prior to each succeeding meeting. Action items are to be tracked and reviewed at PDT meetings.

The ENGINEER's Project Management Plan will include a communication plan. The communication plan will consist of a roster of staff involved in the PROJECT and multiple forms of contact for each team member (address, telephone number, e-mail, etc.). The communication plan will also identify lines of communication with levels of responsibility/authority for development of the PROJECT.

A risk management plan is to be developed and maintained in order to address the major project risks to scope, cost and schedule.

Assumptions:

- Effort and deliverables associated with the PDT meetings will be part of Article AIII Task B Project Development Team Meeting of this Agreement.
- First draft of the Communication Plan and Risk Management Plan will be delivered within 30 days of NTP and updated monthly, if required. The Communication and Risk Management Plan will be distributed at the PDT meetings.
- Affected agencies include: March Air Reserve Base (ARB), March JPA, RCTC (assume all railroad coordination will be with RCTC), COUNTY and CALTRANS.

B. BUDGETING

The ENGINEER will prepare budgets for each task and milestone for the PROJECT. Such budgets will be entered in to the ENGINEER's Management Information System along with actual costs incurred and used as a basis for cost monitoring and control.

Assumptions:

- The ENGINEER will set up and monitor the project on a schedule, task and overall budget basis.

C. COST ACCOUNTING

The ENGINEER will prepare monthly reports of expenditures for the PROJECT by task and milestone. Expenditures include direct labor costs, other direct costs and subconsultant costs. These reports will be prepared per COUNTY's guidelines and will be included as supporting data for invoices presented to the COUNTY every month.

Assumptions:

- Prior to sending out monthly reports, the ENGINEER Project Accounting staff will meet with Riverside COUNTY once to review the COUNTY guidelines. ENGINEER to obtain example of an acceptable invoice format from the COUNTY website. ENGINEER to follow COUNTY accounting processes documented on COUNTY website.

D. SCHEDULING

Within one month from the Notice to Proceed (NTP), the ENGINEER will provide a detailed project schedule, which indicates milestones, major activities and deliverables, to the COUNTY for review and comments. This schedule will reflect assumed review times necessary by all of the agencies involved. Review of the schedule will occur at subsequent trend meetings. Adjustments will be made, if necessary, due to changing circumstances.

Assumptions:

- The schedule will be prepared using Primavera Project Planner/Suretrak and/or Microsoft Project.
- The schedule will be updated monthly as necessary.

E. PROGRESS REPORTING

Progress reports shall be prepared in accordance with COUNTY guidelines. Reports will be required monthly and shall be accompanied by an invoice.

Assumptions:

- ENGINEER to obtain example of an acceptable Progress Report from the COUNTY website. ENGINEER to follow COUNTY accounting processes documented on COUNTY website.

F. CONTRACT ADMINISTRATION

The ENGINEERING PROJECT MANAGER shall maintain ongoing liaison with the COUNTY PROJECT MANAGER, CALTRANS Project Manager, AGENCY contacts and utility companies to promote effective coordination during the course of project development. Progress meetings with ENGINEER's staff, subconsultants and the COUNTY PROJECT MANAGER shall be held regularly. Engineer is to provide project scope, schedule, budget, photos, and various project details to the COUNTY web master for posting on the COUNTY website.

Assumptions:

- Phone calls and unscheduled meetings are to be part of project management activities.
- Meetings will be held with each of the following utility companies: Southern California Gas for the HP gas line, Southern California Edison for the OH electrical and Western Municipal Water , and any other utility company, as required.
- PS&E close out will be part of this task. Activities associated with the close out include verification that all contract requirements have been completed, identify lesson learned (memorandum), update and archive project hardcopy and electronic files and close the project.

ARTICLE AIV • STRUCTURES

G. INTERMEDIATE STRUCTURE PS&E (90% CHECKED PLANS)

The (90%) structure PS&E will be compiled and submitted for review to the COUNTY and CALTRANS DOS.

H. DRAFT FINAL STRUCTURE PS&E (95%)

The draft (95%) structure PS&E shall be compiled and submitted for review to the COUNTY and CALTRANS DOS. This will include for each bridge:

One set of reproducible and seven sets of "blueline" plans, two copies of design calculations and design check calculations, three sets of quantity calculations and Marginal Estimates and three sets of edited Structure Special Provisions. (One copy of each will be returned with comments). The package will be accompanied by a Structures PS&E checklist.

I. FINAL STRUCTURE PS&E

The final structure PS&E will incorporate review comments from the COUNTY, CALTRANS DOS and other affected agencies. The ENGINEER will provide all necessary documents in a bid-ready form. It is assumed that the COUNTY will advertise, award and administer the construction contract for this PROJECT.

The ENGINEER shall deliver the following documents to COUNTY and CALTRANS:

- 1 set of original tracings of final design plans
- 1 set of vellums of final design plans
- 1 set of "blue-lines" of final design plans
- 1 set of final Structure Special Provisions
- 1 copy of final quantity calculations and estimate
- 1 copy of final design calculations
- 1 copy of design check calculations (upon request)
- 1 vellum and 2 "blue-lines" of bridge full-scale plans in accordance with Memo to Designers 2-2.
- 2 Resident Engineer's Files (structures information)

2 copies of Environmental Constraint Areas (if required by Environmental Document)

ARTICLE AV • ROADWAY

The title sheet for specifications and reports, and each sheet of plans, shall bear the professional seal, certificate number, registration classification, expiration date of the certificate and signature of the Professional Engineer responsible for their preparation. All roadway plans shall also use single sheet files.

The following is a summary listing of drawing types that shall be prepared as part of the roadway PS&E:

A. BASIC ROADWAY PLANS

- Title Sheet
- Typical Cross Sections
- Key Map and Line Index
- Layouts
- Profile and Superelevation Diagrams
- Construction and Intersection Details
- Erosion Control Plan
- Erosion Control Details and Quantities

Assumptions:

❖ The roadway design plans shall be based upon the Draft Project Report – Alternative 2E

B. CALCULATIONS

The following calculations will be provided:

- Grid Grades
- Slope Staking Notes
- Earthwork Quantities
- Other Quantities

Assumptions:

- ❖ Cross sections and slope stake notes will be every 50 feet and will include key stations in between. The cross-sections and slope stake notes will be prepared per CALTRANS standards.

C. DRAINAGE PLANS

ENGINEER shall perform hydrology and hydraulic studies to obtain and provide design solutions, which will remove surface runoff from the area of the improvements. Cross culverts that convey runoff flows across the freeway and through the interchange will be extended to the extent necessary required by the proposed improvements. Studies and designs shall be performed in accordance with Chapter 800 of the current Highway Design Manual, District 8 Project Development Policy Memos and the current CALTRANS Standard Plans.

The following list of drawing types shall include:

- Drainage Layouts
- Drainage Profiles
- Drainage Details
- Drainage Quantities

o *Assumptions:*

- ❖ The following drainage facilities are assumed:
  - o Extending or replacing existing 15 culvert locations (size varies from 24" to 36"; length varies from 15 feet to 70 feet)
  - o Adding an additional 5 culverts at:
    - Approximate station 1821+74 – 18 inch at 100 feet long
    - Approximate station 1817+75 – 18 inch at 50 feet long
    - Approximate station 1801 to 1803 – 4 foot by 2 foot RCB at 170 feet long
    - Approximate station 1802+75 – 24 inch at 580 feet long
    - Approximate station 1794+50 – 36 inch at 200 feet

- Grading approximately 3200 feet of an earthen channel. 4 to 20 feet wide
- Approximately 1600 feet of bio swales

❖ Drainage details that will include

- Special details for non-standard facilities that may be needed such as headwall modifications, inlet modifications, etc.
- Connection details for proposed pipes that connect to existing pipes
- Construction notes for these details

❖ Drainage Plan and Profiles

- Profiles for each storm drain pipe will be prepared showing flowline elevations, size, slope, length, material, cover and flow
- Each storm drain and drainage element will be shown on the drainage sheets of the plans and will include:
  - Station location
  - Size
  - Pipe ID for reference to the profile

❖ Drainage Quantities

- Quantities of each drainage element will be determined including:
- Linear footage of all storm drain pipe
- Linear footage of all channels
- Number and type of inlets, headwalls, overside drains, etc.
- Number of any special drainage structures that will be needed.

D. TRAFFIC PLANS

The following list of drawing types shall include:

- Construction Area Signs
- Stage Construction and Traffic Handling
- Detours
- Pavement Delineation

- Roadside Sign Plan
- Highway Lighting and Sign Illumination
- Signal and Lighting
- Ramp Metering System

Assumptions:

- Detour Plans- Two types of detour plans are required for this project. One type that provides detours for the traffic shift on the northbound ramp in the northeast corner of the interchange. This detour is required to shift traffic due to a gap between existing and proposed as a temporary detour. The second type of detour is an area wide detour map that provides detours to other interchanges during construction. Detour Plans include I-215 mainline shift construction staging, traffic handling, and detours.
- Sign Plans- An inventory of existing signs will be performed and included in the sign plans along with the proposed new signs. Additionally, it is assumed two overhead sign structures will be required. This task assumes the following sheets:
  - Sign Plan Sheets
  - Overhead Sign Details Sheets
- Signal - There are two traffic signals proposed for the interchange.
- Staged Construction Plans – Stage construction plans are assumed to be consistent with the concept developed during the Project Report phase of the project: there will be six primary stages of construction.
- Traffic Handling- Traffic Handling sheets will be prepared for each stage of construction.
- Pavement delineation- Final pavement delineation sheets will be prepared for each layout sheet.
- Highway Lighting and Sign Illumination- It is assumed that highway lighting will be provided throughout the limits of the project.
- Ramp Metering System- The project has two ramp meters proposed for the entrance ramps to the freeway.

- ❖ Quantities Plan Sheets - The following sheets will also be prepared for the following sets of plans:
  - o Construction Area Sign Quantities
  - o Detour Quantities
  - o Sign Plan Quantities
  - o Traffic Handling Quantities
  - o Pavement Delineation Quantities
- ❖ Communication Layout Plans and Communication Details- Although not requested in the detail list of plan sheets, CALTRANS will require communications between the ramp meters and traffic signals back to the traffic management center. This task assumes that there is an existing communication system on the mainline and that we will be able to access that communication system at a vault located at the interchange and that no additional vaults will be required.
- ❖ Irrigation Controller Electrical- It is assumed that two separate plan sheets will be required for the electrical service conduit to the irrigation controllers.

E. MISCELLANEOUS PLANS

ENGINEER shall also be responsible to prepare PS&E for the Airbase thematic streetscape/landscape and aesthetic treatments for the structures. The details of the conceptual design are provided in the Draft Project Report.

- Utility Plan
- Summary of Quantities
- Retaining Wall Plan and Elevation
- Retaining Wall Details and Quantities
- Streetscaping/Landscaping/Irrigation

Assumptions:

- ❖ Utility plan sheets identifying existing, abandoned, relocated, etc utilities will be prepared.

- All of the proposed retaining walls will be CALTRANS standard walls – Type 1. Each sheet will have a layout, elevation showing footing and top of wall elevations and typical section. The following are the walls that will be included in the PS&E:
  - Van Buren/northbound ramps – retaining wall along the east side of Van Buren. Approximately 350 feet long.
  - Southbound entrance ramp – retaining wall along the west side – approximately 550 feet long. Retaining wall along the east side – approximately 150 feet long.
  - Southbound exit ramp – retaining wall along the west side – approximately 250 feet long. Retaining wall along the east side 600 feet long.
  - Northbound Entrance Ramp (diamond) – retaining wall along the east side – approximately 400 feet long.
  - Van Buren west of the interchange – retaining wall along the south side – approximately 450 feet long. Retaining wall along the north side – approximately 450 feet long.
- ENGINEER will prepare construction documents (in English units) and cost projections for the highway planting and irrigation identified for the project. The construction documents will follow CALTRANS Highway Planting Policy and will include plans for 3 years of plant establishment. The planting plan will be based on the approved Project Report planting plan.
- Aesthetics Coordination. ENGINEER to incorporate the aesthetics specified in the PA/ED phase into the construction documents for the project walls, structures and other features. Color, texture, finish, etc consistent with the approved landscape concept plan and environmental documents prepared previously.

F. INTERMEDIATE REVIEWS

Roadway, drainage, traffic and miscellaneous plans shall be submitted for review to the COUNTY/CALTRANS and other affected agencies/stakeholders at the 95% and 100% complete stage. The ENGINEER will submit up to 40 sets of plans reduced to 11" x 17" size

and up to 5 full size sets of all plans as required. Roadway cross sections, grid grades and slope staking notes will be submitted only at the 100% complete submittal stage. Also, the ENGINEER should submit electronic samples of all plan sheet groups on a compact disc to CALTRANS at intermediate reviews.

G. SPECIFICATIONS AND ESTIMATE

Specifications and Special Provisions will be prepared for items not covered by the CALTRANS Standard Specifications or Standard Special Provisions.

The Roadway Construction Cost Estimate will be prepared using the latest available CALTRANS cost data, COUNTY cost data and readily available actual recent construction costs in the PROJECT area. Cost estimates are to be provided with the appropriate submittals and updated on a quarterly basis.

Assumptions:

- It is assumed that the construction contract will be administered by the COUNTY. As such, the front end "boilerplate" will be per COUNTY standards and will be provided by the COUNTY.
- Technical specifications will be prepared per CALTRANS' standards and format.
- CALTRANS requires that the latest version of their SSPs be utilized. As such, technical specifications will be updated as necessary, prior to the 95% and 100% submittal.

H. QUALITY CONTROL

The Plans, Specifications and Estimate (PS&E) will be subject to quality control reviews before submittal. These reviews will be in conformance with CALTRANS and COUNTY standards and criteria as well as minimize typographical omissions.

I. DRAFT PS&E (95% COMPLETE)

The roadway plans, revised to incorporate Quality Control review comments, will be submitted to the COUNTY, CALTRANS and other affected agencies/stakeholders for review and comments. These will include:

- Roadway Plans
- Special Provisions
- Design Calculations
- Roadway Quantities and Cost Estimate

One safety/constructability review meeting will be held at the 95% PS&E stage.

Assumptions:

- ❖ Includes one review process. Focused meetings with specific functional units are to be held to discuss review comments, as required.
- ❖ Comments to 95% submittal to be incorporated to the 100 % submittal.

J. FINAL PS&E (100% COMPLETE)

The final PS&E will incorporate applicable comments from the draft PS&E received from the COUNTY, CALTRANS and other affected agencies/stakeholders. The ENGINEER will provide the necessary final PS&E documents in a bid-ready form. PROJECT files and the Project Engineer's/Resident Engineer's file will also be submitted with the final PS&E. The entire PROJECT, which will be prepared in MicroStation format, will be submitted upon final approval of the PS&E.

Assumptions:

- ❖ Up to 2 review cycles. Focused meetings with specific functional units are to be held to discuss review comments, as required.
- ❖ It is assumed that the COUNTY will be the lead agency for Advertising, Awarding, and Administering the contract.

ARTICLE AVI • CONSTRUCTION BIDDING PHASE

Bidding procedures will be the responsibility of the COUNTY. Coordination with CALTRANS District Office Engineer (OE) can be expected and to be included in the scope of services. Although, the project will be administered by the COUNTY, electronic plan submittals meeting CALTRANS electronic bid requirements will be required for CALTRANS records. While the PROJECT is being advertised for bids, all questions concerning the intent shall be referred to COUNTY for resolution. In the event that the items requiring interpretation in the drawings or specifications are discovered during the bidding period, said items shall be analyzed by the ENGINEER for decision by COUNTY as to the proper procedure required. Corrective action taken will either be in the form of a memo prepared by the ENGINEER and issued by COUNTY or by covering change order after the award of the construction contract.

ARTICLE AVII • CONSTRUCTION SUPPORT PHASE

A. ENGINEER shall attend the pre-construction meeting with the successful construction contractor upon notification by the COUNTY.

B. Upon award of the construction contract, ENGINEER will proceed with the Construction Support Phase services required by this contract.

C During construction, the ENGINEER shall furnish necessary additional drawings for correcting and change orders required by errors and omissions of ENGINEER. Such drawings will be requested in writing from the ENGINEER by COUNTY and shall be at no additional cost to the COUNTY. The original tracing(s) of the drawings and contract wording for change orders shall be submitted to the COUNTY for duplication and distribution.

D. ENGINEER shall review shop drawings and RFIs submitted by the construction contractor (falsework review is not included) as requested by the COUNTY as determined necessary by the ENGINEER. ENGINEER shall complete shop plan reviews within two weeks of receipt.

Contract change order and RFI reviews shall be completed between two working days and two working weeks of receipt, depending on the complexity of the issue.

E. Drawings and change orders required due to actions of the COUNTY,CALTRANS, or Contractor which are beyond the scope of the ENGINEER's responsibilities, shall be considered extra services.

F. ENGINEER shall be available to visit to the jobsite for on-site review of construction and other visits to the jobsite as requested by the COUNTY or CALTRANS to resolve any discrepancies in the contract documents. ENGINEER shall bring to the attention of the COUNTY/CALTRANS Resident Engineer defects or deficiencies in the work by the construction contractor, which the ENGINEER may observe. ENGINEER shall have no authority to issue instructions on behalf of the COUNTY or to deputize another to do so. All agreements shall be between the COUNTY and its construction contractor. These provisions shall not be construed as making the ENGINEER responsible for failure of the construction contractor to carry out the work in accordance with the contract documents nor the construction means or methods or techniques, sequences, procedures or safety programs in connection with the work.

G. ENGINEER shall prepare and deliver to the COUNTY and CALTRANS the "As-Built" plans within two months of completion of structure construction.

ARTICLE AVIII • COMPUTER FACILITIES

A. CALCULATIONS

All roadway calculations will be performed using COGO PC and InRoads or Road Calc. The structural analyses and design will be performed by using STAADIII, GTSTRUDL, SEISAB, PCBRIDGE, PCYIELD, PCFOOT, PCBENT and PCABUT programs. The data files and the results will be submitted electronically on compact discs along with a hard copy.

B. COMPUTER AIDED DRAFTING AND DESIGN (CADD)

All plans will be prepared using MicroStation format in conformance with the latest CALTRANS CADD Users Manual and the CALTRANS Drafting Manual to assure complete compatibility.

ARTICLE AIX • VALUE ENGINEERING

A value engineering review has been completed, and a copy will be provided to the successful ENGINEER. The results of the VE Study are to be incorporated into the design where practical and feasible.

ARTICLE AX • QUALITY CONTROL PLAN

A Quality Control Plan will be established for this PROJECT in accordance with the provisions of Article IV, Section H of the Agreement. It will be provided to the COUNTY within two (2) weeks after NTP for review and approval.

END OF SCOPE

Van Buren / I-215 Interchange Project		PS&E PHASE II	Bidding PHASE III	Construct. PHASE IV	TOTALS
Kimley-Horn and Associates, Inc.		$879,405.20	$50,580.92	$101,969.24	$1,031,955.35
Aguirre & Associates	DBE				
Geocon Consultants, Inc.					
Helix Environmental Planning, Inc.			$3,458.29	$4,679.21	$8,137.50
Butsco (Utility)					
Simon Wong Engineering	DBE	$201,660.19	$9,190.26	$24,774.04	$235,624.50
Overland, Pacific and Cutler, Inc. (ROW)					
Contingency (10%)		$108,106.54	$6,322.95	$13,142.25	$127,571.73
TOTALS		$1,189,171.93	$69,552.42	$144,564.73	$1,403,289.08

Phase I: N/A
Phase II: Final Plans, Specs & Estimate
Phase III: Bid / Award Support
Phase IV: Construction Support
Phase V: <not used>

COMPANY:	SCOPE OF WORK	DATE:	REV:
Kimley-Horn and Associates, Inc.	Project Summary	6/24/2009	1
PROJECT:		**MILESTONE/PHASE/PROJ SUMMARY:**	
Van Buren Boulevard Interchange on I-215 Reconstruction Project		All Phases	

DIRECT LABOR

PERSONNEL	FUNCTION	HOURS		RATE	AMOUNT
Dennis Landaal, PE	Project Manager	220	@	$67.00	$14,719.90
Alan Tubosnick	Senior Engineer	394	@	$50.00	$19,685.00
Mike Ross, PE	QC/ Senior Engineer	51	@	$58.00	$2,958.00
Darren Adrian	QC/ Senior Engineer	133	@	$52.00	$6,916.00
Sam McWhorter, PE	Senior Drainage Engineer	54	@	$45.00	$2,430.00
Jon Collins, PE	Senior Traffic Engineer	181	@	$46.00	$8,326.00
Jason Valencia, PE	Project Engineer	1115	@	$45.00	$50,157.00
	Engineer	1038	@	$36.00	$37,368.00
	Assistant Engineer	1844	@	$32.00	$59,008.00
	CADD Designer	2769	@	$38.00	$105,222.00
	Admin Support	260	@	$23.00	$5,980.00
	TOTAL HOURS	8058		TOTAL DIRECT LABOR	$312,769.90

MULTIPLIERS

ESCALATION @		(Rate)	
OVERHEAD @	196.76%	(of Total Direct Labor + Escalation)	$615,406.06
PAYROLL ADDITIVES @		(of Total Direct Labor + Escalation)	
		TOTAL MULTIPLIERS	$615,406.06

OTHER DIRECT EXPENSES ••• Billed at Actual Cost •••

ITEM	QUANTITY	UNIT	UNIT COST	AMOUNT
Reproduction				$2,000.00
Travel/Per Diem				
Mileage	18200	miles		
Deliveries				$2,500.00
Misc				$3,000.00
Office				$913.80
			TOTAL OTHER DIRECT EXPENSES	$8,413.80

OUTSIDE SERVICES (w/o fee)

COMPANY		LABOR	MULTIPLIER	EXPENSES	TOTAL
Aguirre & Associates	DBE				
Geocon Consultants, Inc.					
Helix Environmental Planning, Inc.		$2,323.00	$4,529.27	$600.00	$7,452.27
Butsco (Utility)					
Simon Wong Engineering	DBE	$87,656.68	$125,638.32	$1,000.00	$214,295.00
Overland, Pacific and Cutler, Inc. (ROW)					
				TOTAL OUTSIDE SERVICES	$221,747.27

FEES

OUTSIDE SERVICES ADMIN FEE @		(of Total Outside Services & Outside Services Fees	
KIMLEY-HORN AND ASSOCIATES,	010.00%	(of Total Direct Labor + Total Multipliers)	$92,817.60
OUTSIDE SERVICES @	010.00%	(of Total Labor + Total Multiplier for Outside Servic	$22,014.73
		TOTAL FEES	$114,832.32
		TOTAL COST	**$1,273,169.35**

COMPANY:	SCOPE OF WORK	DATE:	REV:
Kimley-Horn and Associates, Inc.	Final Plans, Specs & Estimate	6/24/2009	1

PROJECT: Van Buren Boulevard Interchange on I-215 Reconstruction Project

MILESTONE/PHASE/PROJ SUMMARY: Phase II

DIRECT LABOR

PERSONNEL	FUNCTION	HOURS		RATE	AMOUNT
Dennis Landaal, PE	Project Manager	184	@	$67.00	$12,307.90
Alan Tubosnick	Senior Engineer	308	@	$50.00	$15,385.00
Mike Ross, PE	QC/ Senior Engineer	51	@	$58.00	$2,958.00
Darren Adrian	QC/ Senior Engineer	133	@	$52.00	$6,916.00
Sam McWhorter, PE	Senior Drainage Engineer	54	@	$45.00	$2,430.00
Jon Collins, PE	Senior Traffic Engineer	181	@	$46.00	$8,326.00
Jason Valencia, PE	Project Engineer	801	@	$45.00	$36,027.00
	Engineer	1038	@	$36.00	$37,368.00
	Assistant Engineer	1544	@	$32.00	$49,408.00
	CADD Designer	2465	@	$38.00	$93,670.00
	Admin Support	200	@	$23.00	$4,600.00
	TOTAL HOURS	6958		TOTAL DIRECT LABOR	$269,395.90

MULTIPLIERS

ESCALATION @	(Rate)		
OVERHEAD @	196.76% (of Total Direct Labor + Escalation)	$530,063.37	
PAYROLL ADDITIVES @	(of Total Direct Labor + Escalation)		
		TOTAL MULTIPLIERS	$530,063.37

OTHER DIRECT EXPENSES ••• Billed at Actual Cost •••

ITEM	QUANTITY	UNIT	UNIT COST	AMOUNT
Reproduction				
Drainage Report (2 submittals plus Final)	25	Report		
TMP	25	Report		
SWDR	25	Report		
~~Type Selection~~		Report		
Specifications (300 pages)	50	SSP		
Quality Control Plan	25	Report		
~~30% PSE&E Plans (150 sheets)~~		Set		
60% PS&E (280 sheets -11"x17")	50	Set		
95% PS&E (354 sheets - 11"x 17")	50	Set		
Final PS&E (354 Sheets - 11"x17")	50	Set		
Final PS&E (354 Sheets - mylar full size)	1	Set		
Misc. Reproduction	1	LS		
Mileage	13000	mile		
Deliveries	1	LS		
Travel/Per Diem				
Airfare	8	Round trip		
Hotel	8	Night		
Meals	8	Day		
Car Rental	8	Day		
Office Expense	1	LS		
			TOTAL OTHER DIRECT EXPENSES	

OUTSIDE SERVICES (w/o fee)

COMPANY		LABOR	MULTIPLIER	EXPENSES	TOTAL
Aguirre & Associates	DBE				
Geocon Consultants, Inc.					
Helix Environmental Planning, Inc.					
Butsco (Utility)					
Simon Wong Engineering	DBE	$75,341.08	$107,986.37		$183,327.45
Overland, Pacific and Cutler, Inc. (R					
				TOTAL OUTSIDE SERVICES	$183,327.45

FEES

OUTSIDE SERVICES ADMIN FEE @	10.00% (of Total Outside Services & Outside Services Fees		
KIMLEY-HORN AND ASSOCIATES,	10.00% (of Total Direct Labor + Total Multipliers)		$79,945.93

COMPANY:	SCOPE OF WORK	DATE:	REV:
Kimley-Horn and Associates, Inc.	Final Plans, Specs & Estimate	6/24/2009	1
PROJECT:		**MILESTONE/PHASE/PROJ SUMMARY:**	
Van Buren Boulevard Interchange on I-215 Reconstruction Project		Phase II	

DIRECT LABOR

PERSONNEL	FUNCTION	HOURS		RATE	AMOUNT
Dennis Landaal, PE	Project Manager	184	@	$67.00	$12,307.90
Alan Tubosnick	Senior Engineer	308	@	$50.00	$15,385.00
Mike Ross, PE	QC/ Senior Engineer	51	@	$58.00	$2,958.00
Darren Adrian	QC/ Senior Engineer	133	@	$52.00	$6,916.00
Sam McWhorter, PE	Senior Drainage Engineer	54	@	$45.00	$2,430.00
Jon Collins, PE	Senior Traffic Engineer	181	@	$46.00	$8,326.00
Jason Valencia, PE	Project Engineer	801	@	$45.00	$36,027.00
	Engineer	1038	@	$36.00	$37,368.00
	Assistant Engineer	1544	@	$32.00	$49,408.00
	CADD Designer	2465	@	$38.00	$93,670.00
	Admin Support	200	@	$23.00	$4,600.00

TOTAL HOURS 6958 — TOTAL DIRECT LABOR $269,395.90

MULTIPLIERS

ESCALATION @		(Rate)	
OVERHEAD @	196.76%	(of Total Direct Labor + Escalation)	$530,063.37
PAYROLL ADDITIVES @		(of Total Direct Labor + Escalation)	

TOTAL MULTIPLIERS $530,063.37

OTHER DIRECT EXPENSES ••• Billed at Actual Cost •••

ITEM	QUANTITY	UNIT	UNIT COST	AMOUNT
Reproduction				
Drainage Report (2 submittals plus Final)	25	Report		
TMP	25	Report		
SWDR	25	Report		
~~Type Selection~~		Report		
Specifications (300 pages)	50	SSP		
Quality Control Plan	25	Report		
~~30% PSE&E Plans (150 sheets)~~		Set		
60% PS&E (280 sheets -11"x17")	50	Set		
95% PS&E (354 sheets - 11"x 17")	50	Set		
Final PS&E (354 Sheets - 11"x17")	50	Set		
Final PS&E (354 Sheets - mylar full size)	1	Set		
Misc. Reproduction	1	LS		
Mileage	13000	mile		
Deliveries	1	LS		
Travel/Per Diem				
Airfare	8	Round trip		
Hotel	8	Night		
Meals	8	Day		
Car Rental	8	Day		
Office Expense	1	LS		

TOTAL OTHER DIRECT EXPENSES

OUTSIDE SERVICES (w/o fee)

COMPANY		LABOR	MULTIPLIER	EXPENSES	TOTAL
Aguirre & Associates	DBE				
Geocon Consultants, Inc.					
Helix Environmental Planning, Inc.					
Butsco (Utility)					
Simon Wong Engineering	DBE	$75,341.08	$107,986.37		$183,327.45
Overland, Pacific and Cutler, Inc. (R					

TOTAL OUTSIDE SERVICES $183,327.45

FEES

OUTSIDE SERVICES ADMIN FEE @		(of Total Outside Services & Outside Services Fees	
KIMLEY-HORN AND ASSOCIATES	10.00%	(of Total Direct Labor + Total Multipliers)	$79,945.93
OUTSIDE SERVICES @	10.00%	(of Total Labor + Total Multiplier for Outside Servic	$18,332.74

TOTAL FEES $98,278.67

TOTAL COST $1,081,065.40

COMPANY:	SCOPE OF WORK	DATE:	REV:
Kimley-Horn and Associates, Inc.	Bid / Award Support	6/24/2009	1
PROJECT:		**MILESTONE/PHASE/PROJECT SUMMAR**	
Van Buren Boulevard Interchange on I-215 Reconstruction Project		Phase III	

DIRECT LABOR

PERSONNEL	FUNCTION	HOURS		RATE	AMOUNT
Dennis Landaal, PE	Project Manager	10	@	$67.00	$670.00
Alan Tubosnick	Senior Engineer	36	@	$50.00	$1,800.00
Mike Ross, PE	QC/ Senior Engineer				
Darren Adrian	QC/ Senior Engineer				
Sam McWhorter, PE	Senior Drainage Engineer				
Jon Collins, PE	Senior Traffic Engineer				
Jason Valencia, PE	Project Engineer	118	@	$45.00	$5,310.00
	Engineer			$36.00	
	Assistant Engineer	140	@	$32.00	$4,480.00
	CADD Designer	44	@	$38.00	$1,672.00
	Admin Support	36	@	$23.00	$828.00
	TOTAL HOURS	384		TOTAL DIRECT LABOR	$14,760.00

MULTIPLIERS

ESCALATION @		(Rate)	
OVERHEAD @	196.76%	(of Total Direct Labor + Escalation)	$29,041.78
PAYROLL ADDITIVES @		(of Total Direct Labor + Escalation)	
		TOTAL MULTIPLIERS	$29,041.78

OTHER DIRECT EXPENSES ••• Billed at Actual Cost •••

ITEM	QUANTITY	UNIT		UNIT COST	AMOUNT
Mileage	1200	Mile	@	$0.49	$588.00
Deliveries	1	LS	@	$500.00	$500.00
Misc	1	LS	@	$1,000.00	$1,000.00
Office	1	LS	@	$310.96	$310.96
				TOTAL OTHER DIRECT EXPENSES	$2,398.96

OUTSIDE SERVICES (w/o fee)

COMPANY		LABOR	MULTIPLIER	EXPENSES	TOTAL
Aguirre & Associates	DBE				
Geocon Consultants, Inc.					
Helix Environmental Planning, Inc.		$1,035.00	$2,017.99	$100.00	$3,152.99
Butsco (Utility)					
Simon Wong Engineering	DBE	$3,358.80	$4,814.17	$200.00	$8,372.97
Overland, Pacific and Cutler, Inc. (R(					
				TOTAL OUTSIDE SERVICES	$11,525.96

FEES

OUTSIDE SERVICES ADMIN FEE @		(of Total Outside Services & Outside Services Fees	
KIMLEY-HORN AND ASSOCIATES,	10.00%	(of Total Direct Labor + Total Multipliers)	$4,380.18
OUTSIDE SERVICES @	10.00%	(of Total Labor + Total Multiplier for Outside Servic	$1,122.60
		TOTAL FEES	$5,502.77
		TOTAL COST	**$63,229.47**

COMPANY:	SCOPE OF WORK	DATE:	REV:
Kimley-Horn and Associates, Inc.	Construction Support	6/24/2009	1
PROJECT:		**MILESTONE/PHASE/PROJ SUMMARY:**	
Van Buren Boulevard Interchange on I-215 Reconstruction Project		Phase IV	

DIRECT LABOR

PERSONNEL	FUNCTION	HOURS		RATE	AMOUNT
Dennis Landaal, PE	Project Manager	26	@	$67.00	$1,742.00
Alan Tubosnick	Senior Engineer	50	@	$50.00	$2,500.00
Mike Ross, PE	QC/ Senior Engineer				
Darren Adrian	QC/ Senior Engineer				
Sam McWhorter, PE	Senior Drainage Engineer				
Jon Collins, PE	Senior Traffic Engineer				
Jason Valencia, PE	Project Engineer	196	@	$45.00	$8,820.00
	Engineer			$36.00	
	Assistant Engineer	160	@	$32.00	$5,120.00
	CADD Designer	260	@	$38.00	$9,880.00
	Admin Support	24	@	$23.00	$552.00
	TOTAL HOURS	716		TOTAL DIRECT LABOR	$28,614.00

MULTIPLIERS

ESCALATION @		(Rate)	
OVERHEAD @	196.76%	(of Total Direct Labor + Escalation)	$56,300.91
PAYROLL ADDITIVES @		(of Total Direct Labor + Escalation)	
		TOTAL MULTIPLIERS	$56,300.91

OTHER DIRECT EXPENSES ••• Billed at Actual Cost •••

ITEM	QUANTITY	UNIT		UNIT COST	AMOUNT
Reproduction	1	LS	@	$2,000.00	$2,000.00
Mileage	4000	Mile	@	$0.49	$1,960.00
Deliveries	1	LS	@	$2,000.00	$2,000.00
Misc	1	LS	@	$2,000.00	$2,000.00
Office	1	LS	@	$602.84	$602.84
				TOTAL OTHER DIRECT EXPENSES	$8,562.84

OUTSIDE SERVICES (w/o fee)

COMPANY		LABOR	MULTIPLIER	EXPENSES	TOTAL
Aguirre & Associates	DBE				
Geocon Consultants, Inc.					
Helix Environmental Planning, Inc.		$1,288.00	$2,511.28	$500.00	$4,299.28
Butsco (Utility)					
Simon Wong Engineering	DBE	$8,956.80	$12,837.78	$800.00	$22,594.58
Overland, Pacific and Cutler, Inc. (R(					
				TOTAL OUTSIDE SERVICES	$26,893.86

FEES

OUTSIDE SERVICES ADMIN FEE @		(of Total Outside Services & Outside Services Fees	
KIMLEY-HORN AND ASSOCIATES,	10.00%	(of Total Direct Labor + Total Multipliers)	$8,491.49
OUTSIDE SERVICES @	10.00%	(of Total Labor + Total Multiplier for Outside Service	$2,559.39
		TOTAL FEES	$11,050.88
		TOTAL COST	**$131,422.48**

COMPANY:	SCOPE OF WORK	DATE:	REV:
Simon Wong Engineering	Bridge Engineering Services	6/24/2009	1
PROJECT:		**MILESTONE/PHASE/PROJ SUMMARY:**	
Van Buren Boulevard Interchange on I-215 Reconstruction Project		All Phases	

DIRECT LABOR

PERSONNEL	FUNCTION	HOURS		RATE	AMOUNT
Mark Creveling	Project Manager	94	@	$88.30	$8,300.20
Andrew Sanford	Senior Bridge Engineer	740	@	$55.98	$41,425.20
James Frost	Senior Bridge Engineer	24	@	$66.10	$1,586.40
Craig Shannon	Associate Bridge Engineer	297	@	$43.04	$12,782.88
Ty Brittan	Senior Tech	450	@	$52.36	$23,562.00

TOTAL HOURS 1605 TOTAL DIRECT LABOR $87,656.68

MULTIPLIERS

ESCALATION @	(Rate)		
OVERHEAD @	102.17%	(of Total Direct Labor + Escalation)	$89,558.83
PAYROLL ADDITIVES @	41.16%	(of Total Direct Labor + Escalation)	$36,079.49

TOTAL MULTIPLIERS $125,638.32

OTHER DIRECT EXPENSES ••• Billed at Actual Cost •••

ITEM	QUANTITY	UNIT		UNIT COST	AMOUNT
Reproduction Costs	1	LS	@	$17,000.00	$17,000.00
Milage Costs	1	LS	@	$1,500.00	$1,500.00

TOTAL OTHER DIRECT EXPENSES $18,500.00

OUTSIDE SERVICES (w/o fee)

COMPANY	LABOR	MULTIPLIER	EXPENSES	TOTAL

TOTAL OUTSIDE SERVICES

FEES

OUTSIDE SERVICES ADMIN FEE @	(of Total Outside Services & Outside Services Fee		
SIMON WONG ENGINEERING	10.00%	(of Total Direct Labor + Total Multipliers)	$21,329.50
OUTSIDE SERVICES @		(of Total Labor + Total Multiplier for Outside Servic	

TOTAL FEES $21,329.50

TOTAL COST **$253,124.50**

COMPANY:	SCOPE OF WORK	DATE:	REVISION:
Kimley-Horn and Associates, Inc.		6/24/2009	1
PROJECT:		**MILESTONE/PHASE/PROJECT SUMMARY:**	
Van Buren Boulevard Interchange on I-215 Reconstruction Project		Project Summary	

Kimley-Horn and Associates, Inc. Summary

TASK		Project Manager	Senior Engineer	QC/ Senior Engineer	QC/ Senior Engineer	Senior Drainage Engineer	Senior Traffic Engineer	Project Engineer	Engineer	Assistant Engineer	CADD Designer	Admin Support								TOTAL
		$67.00	$50.00	$58.00	$52.00	$45.00	$46.00	$45.00	$36.00	$32.00	$38.00	$23.00								
Phase 1 Subtotal																				
Phase 2 Subtotal		184	308	51	133	54	181	801	1,038	1,544	2,465	200								6,958
Phase 3 Subtotal		10	36					118		140	44	36								384
Phase 4 Subtotal		26	50					196		160	260	24								716
Phase 5 Subtotal																				
Totals		220	394	51	133	54	181	1,115	1,038	1,844	2,769	260								8,058

Aguirre & Associates Summary

																				TOTAL

Geocon Consultants, Inc. Summary

																				TOTAL

Helix Environmental Planning, Inc. Summary

	CADD / GIS	Landscape Designer	Landscape Architect					Sr Landscape Architect	QA-QC											TOTAL
	$30.00	$20.00	$23.00					$48.00	$57.69											

Butsco (Utility) Summary

	Project Manager	Designer	Project Support																	TOTAL
	$40.97	$35.38	$30.74																	

Simon Wong Engineering Summary

	Project Manager	Senior Bridge Engineer	Senior Bridge Engineer					Associate Bridge Engineer	Senior Tech											TOTAL
	$88.30	$55.98	$66.10					$43.04	$52.36											
	94	740	24					297	450											1,605

Overland, Pacific, and Cutler (ROW) Summary

	Principal	Sr. Project Manager	Sr. Project Manager					Sr. Project Manager	R/W Project Manager	R/W Consultant	R/W Consultant	Project Support								TOTAL
	$63.94	$46.90	$42.45					$42.00	$40.86	$25.55	$16.83	$16.87								

COMPANY:	SCOPE OF WORK	DATE:	REVISION:
Kimley-Horn and Associates, Inc.	Final Plans, Specs & Estimate	6/24/2009	1
PROJECT:		**MILESTONE/PHASE/PROJECT SUMMARY:**	
Van Buren Boulevard Interchange on I-215 Reconstruction Project		Phase 2	

TASK	Project Manager	Senior Engineer	QC/ Senior Engineer	QC/ Senior Engineer	Senior Drainage Engineer	Senior Traffic Engineer	Project Engineer	Engineer	Assistant Engineer	CADD Designer	Admin Support					TOTAL
Total Manhours	184	308	51	133	54	181	801	1,038	1,544	2,465	200					**6,958**
ARTICLE AII - PROJECT ADMINISTRATION																
A. Project Management																
Project Management Services	9	9									12					**30**
B. Budgeting																
Project Budgeting	2	2									2					**6**
C. Cost Accounting																
Project Cost Accounting	11	11									28					**49**
D. Scheduling																
Project Scheduling	2	2					13				5					**21**
E. Progress Reporting																
Progress Reporting	4	4					27				5					**40**
F. Contract Administration																
Contract Administration Services	36	36					17				7					**96**
PS&E Component Close Out	2	2					7				7					**19**
I. Draft PS&E (95% Complete)																
Respond to Agency Review Comments	2	4	6		2	2	24		40		4					**84**
Title Sheet								1		8						**9**

COMPANY:		SCOPE OF WORK	DATE:	REVISION:
Kimley-Horn and Associates, Inc.		Final Plans, Specs & Estimate	6/24/2009	1
PROJECT:			MILESTONE/PHASE/PROJECT SUMMARY:	
Van Buren Boulevard Interchange on I-215 Reconstruction Project			Phase 2	

TASK	Project Manager	Senior Engineer	QC/ Senior Engineer	QC/ Senior Engineer	Senior Drainage Engineer	Senior Traffic Engineer	Project Engineer	Engineer	Assistant Engineer	CADD Designer	Admin Support					TOTAL
Index of Sheets							1	2		12						**15**
Typical Cross Sections			4				6	12	15	30						**67**
Key Map & Line Index								1		8						**9**
Layout	2	4		4	2		17	24	30	40						**123**
Profile and Superelevation Diagram	1	2		2			17	23	40	40						**125**
Construction Details	4	8			4	4	20	40	60	80						**220**
Temp Water Pollution Control Plan	1	1			3		11	18	30	60						**124**
Temp Water Pollution Control Details					1		2	4	8	20						**35**
Temp Water Pollution Control Quantities							2	8	12	24						**46**
Countour Grading	4	8	16				11	20	30	40						**129**
Drainage Plan	4	8			14		16	20	33	22						**117**
Drainage Profiles					10		12	6	28	55						**111**
Drainage Details		2					8	10	20	60						**100**
Drainage Quantities							6	18	24	12						**60**
Transportation Management Plan						4	6		10	20						**40**
Stage Construction and Traffic Handling Plan	10	16				24	30	30	60	135						**305**
Construction Area Signs		8				4	20		32	64						**128**
Pavement Delineation Plan		8				8	11	12	17	55						**111**
Pavement Delineation Quantities							2	6	8	4						**20**
Summary of Quantities	2	4		4			10	30	30	20						**100**
Sign Plans		8		8			18	18	30	56						**138**

COMPANY:	SCOPE OF WORK	DATE:	REVISION:
Kimley-Horn and Associates, Inc.	Final Plans, Specs & Estimate	6/24/2009	1
PROJECT:		**MILESTONE/PHASE/PROJECT SUMMARY:**	
Van Buren Boulevard Interchange on I-215 Reconstruction Project		Phase 2	

TASK	Project Manager	Senior Engineer	QC/ Senior Engineer	QC/ Senior Engineer	Senior Drainage Engineer	Senior Traffic Engineer	Project Engineer	Engineer	Assistant Engineer	CADD Designer	Admin Support					TOTAL
Sign Details							2	2	4	12						**20**
Sign Quantities							1	3	4	2						**10**
Overhead Sign Details		8		8			10	20	14	40						**100**
Overhead Sign Quantities							2	6	8	4						**20**
Retaining Wall Plans	8	16		22			38	50	77	173						**384**
Retaining Wall Details		3					10	13	26	77						**129**
Retaining Wall Quantites							6	19	26	13						**64**
Plant List							4	8		4						**16**
Planting Plans							4	16		8						**28**
Irrigation Plan							4	16		8						**28**
Sprinkler Schedule and Details							4	8		4						**16**
Irrigation Quantities								8		4						**12**
Signal and Lighting	2	2				8	2	8	8	12						**42**
Lighting and Sign Illumination	4	12				14	6	22	22	33						**113**
Structure Lighting Plan	2	2				4	1	4	4	6						**23**
Ramp Metering System	2	4				10	2	8	8	12						**46**
Communication Conduit		2				2	2	8	6	20						**40**
Electrical Service (Irrigation)		2				2	1	4	4	7						**20**
Electrical Details		2				4	2	8	8	16						**40**
Updated Technical Reports	2	2		8			16	24	40	24	24					**140**
Updated Specifications	4	8		20			16	16			20					**84**

COMPANY:		SCOPE OF WORK	DATE:	REVISION:
Kimley-Horn and Associates, Inc.		Final Plans, Specs & Estimate	6/24/2009	1
PROJECT:			MILESTONE/PHASE/PROJECT SUMMARY:	
Van Buren Boulevard Interchange on I-215 Reconstruction Project			Phase 2	

TASK	Project Manager	Senior Engineer	QC/ Senior Engineer	QC/ Senior Engineer	Senior Drainage Engineer	Senior Traffic Engineer	Project Engineer	Engineer	Assistant Engineer	CADD Designer	Admin Support					TOTAL
Updated Construction Cost	4	8					24	40	40	24						140
Constructability Review / Coordination	15	15	10	20			24			4	4					92
Drafting Standard and CADD Compliance							5			40						45
J. Final PS&E (Final Documents for RTL)																
Respond to Agency Review Comments	2	4	6		2	2	24		40		8					88
Title Sheet								1		4						5
Index of Sheets							1	2		8						11
Typical Cross Sections	2						5	10	12	20						49
Key Map & Line Index								1		4						5
Layout	2	2	2	2			13	18	22	30						91
Profile and Superelevation Diagram	1	1	1	2			14	18	32	30						99
Construction Details	2	4	2	4	2	2	16	24	40	64						160
Temp Water Pollution Control Plan	2	3					9	9	22	44						89
Temp Water Pollution Control Details							2	2	5	20						29
Temp Water Pollution Control Quantities							2	5	6	3						16
Countour Grading	2	4	4	6			9	13	22	26						86
Drainage Plan	2	4			9		13	16	26	18						88
Drainage Profiles		4			5		9	4	22	50						94
Drainage Details		2					6	8	16	50						82
Drainage Quantities							5	14	19	10						48
Transportation Management Plan		3					5		8	16						32

COMPANY:	SCOPE OF WORK	DATE:	REVISION:
Kimley-Horn and Associates, Inc.	Final Plans, Specs & Estimate	6/24/2009	1
PROJECT:		**MILESTONE/PHASE/PROJECT SUMMARY:**	
Van Buren Boulevard Interchange on I-215 Reconstruction Project		Phase 2	

TASK	Project Manager	Senior Engineer	QC/ Senior Engineer	QC/ Senior Engineer	Senior Drainage Engineer	Senior Traffic Engineer	Project Engineer	Engineer	Assistant Engineer	CADD Designer	Admin Support					TOTAL
Stage Construction and Traffic Handling Plan	8	16				18	24	24	60	108						**258**
Construction Area Signs		2				1	5		8	16						**32**
Pavement Delineation Plan		4		1		8	9	9	13	44						**88**
Pavement Delineation Quantities							2	5	6	3						**16**
Summary of Quantities	2	4		2			8	24	24	16						**80**
Sign Plans		4		1		8	9	9	13	44						**88**
Sign Details							1	2	3	10						**16**
Sign Quantities							1	2	3	2						**8**
Overhead Sign Details		4				8	8	16	12	32						**80**
Overhead Sign Quantities							2	5	6	3						**16**
Retaining Wall Plans	2			10			10	12	19	43						**96**
Retaining Wall Details				1			3	3	6	19						**32**
Retaining Wall Quantites							2	5	6	3						**16**
Plant List							1	2		6						**9**
Planting Plans							9	18		62						**89**
Irrigation Plan							9	18		62						**89**
Sprinkler Schedule and Details							1	2		6						**9**
Irrigation Quantities							2	3		11						**16**
Signal and Lighting	2					6	2	6	6	10						**32**
Lighting and Sign Illumination	5					18	4	18	18	26						**89**
Structure Lighting Plan	1					3	1	3	3	5						**16**

COMPANY:	SCOPE OF WORK	DATE:	REVISION:
Kimley-Horn and Associates, Inc.	Final Plans, Specs & Estimate	6/24/2009	1
PROJECT:		**MILESTONE/PHASE/PROJECT SUMMARY:**	
Van Buren Boulevard Interchange on I-215 Reconstruction Project		Phase 2	

TASK	Project Manager	Senior Engineer	QC/ Senior Engineer	QC/ Senior Engineer	Senior Drainage Engineer	Senior Traffic Engineer	Project Engineer	Engineer	Assistant Engineer	CADD Designer	Admin Support					TOTAL
Ramp Metering System	4					6	2	6	6	10						**34**
Communication Conduit						3	2	6	5	16						**32**
Electrical Service (Irrigation)						3	1	3	3	6						**16**
Electrical Details						3	2	6	6	13						**30**
Updated Specifications		2		4		2	8				24					**40**
Updated Construction Cost				4			8	20	40	8						**80**
Construction Staking Package		4					16	40	90	24	8					**182**
Resident Engineer's Pending File		4					8		16	8	40					**76**
Contract Documents Ready to Advertise	6						8	12	24	40	2					**92**

COMPANY:	SCOPE OF WORK	DATE:	REVISION:
Kimley-Horn and Associates, Inc.	Bid / Award Support	6/24/2009	1
PROJECT:		**MILESTONE/PHASE/PROJECT SUMMARY:**	
Van Buren Boulevard Interchange on I-215 Reconstruction Project		Phase 3	

TASK		Project Manager	Senior Engineer	Project Engineer	Engineer	Assistant Engineer	CADD Designer	Admin Support										TOTAL
Total Manhours		10	36	118		140	44	36										**384**
ARTICLE AVI - CONSTRUCTION BIDDING PHASE																		
Caltrans OE/County Coordination		2	8	24				4										**38**
Respond to Contractor RFIs (20 RFIs)		2	4	24		40	20	8										**98**
Prepare Addendum Packages (5 Addendums)		2	8	10		40	24	8										**92**
Prepare Quality Management Plan		2	8	40		40		8										**98**
Prepare Source Inspection Quality Management Plan		2	8	20		20		8										**58**

COMPANY:	SCOPE OF WORK	DATE:	REVISION:
Kimley-Horn and Associates, Inc.	Construction Support	6/24/2009	1
PROJECT:		**MILESTONE/PHASE/PROJECT SUMMARY:**	
Van Buren Boulevard Interchange on I-215 Reconstruction Project		Phase 4	

TASK		Project Manager	Senior Engineer	Project Engineer	Engineer	Assistant Engineer	CADD Designer	Admin Support										TOTAL
Total Manhours		26	50	196		160	260	24										**716**
ARTICLE AVII - CONSTRUCTION SUPPORT PHASE																		
Pre-Construction Meeting		6	6															**12**
Respond to Contractor RFIs		4	40	80		120	120	4										**368**
Shop Drawing Review			4	24		40												**68**
Job Site Visits (12)				48				4										**52**
As-Built Plans		8		24			120											**152**
Construction Component Close Out		8		20			20	16										**64**

COMPANY:	SCOPE OF WORK	DATE:	REVISION:
Kimley-Horn and Associates, Inc.	<not used>	6/24/2009	1
PROJECT:		MILESTONE/PHASE/PROJECT SUMMARY:	
Van Buren Boulevard Interchange on I-215 Reconstruction Project		Phase 5	

Total Manhours

TASK		Project Manager	Senior Engineer	Project Engineer	Engineer	Assistant Engineer	CADD Designer	Admin Support										TOTAL

COMPANY:	SCOPE OF WORK	DATE:	REVISION:
Simon Wong Engineering	Bridge Engineering Services	6/24/2009	1
PROJECT:		**MILESTONE/PHASE/PROJECT SUMMARY:**	
Van Buren Boulevard Interchange on I-215 Reconstruction Project		All Phases	

TASK	Project Manager	Senior Bridge Engineer	Senior Bridge Engineer	Associate Bridge Engineer	Senior Tech													TOTAL
Total Manhours	94	740	24	297	450													**1,605**
ARTICLE AIV - STRUCTURES																		
A. Not Used																		
C. Structural Design and Calculations																		
Complete Structural Design																		
D. Independent Check and Quality Control																		
Perform Structures Independent Check and QC																		
E. Structures Specifications & Estimate																		
Develop Preliminary Specs and Estimate																		
F. Initial Structure PS&E (65% Unchecked Plans)																		
Prepare 65% Unchecked PS&E																		
G. Intermediate Structure PS&E (90% Checked Plans)																		
Prepare 90% Checked PS&E	40	240	8	155	220													**663**
H. Draft Final Structure PS&E (95%)																		
Prepare 95% PS&E	30	140	8	82	110													**370**
I. Final Structure PS&E																		
Prepare Final PS&E	24	140	8	60	120													**352**
ARTICLE AVI - CONSTRUCTION BIDDING PHASE																		
Respond to Contractor RFIs (20 RFIs)		60																**60**
ARTICLE AVII - CONSTRUCTION SUPPORT PHASE																		
Respond to Contractor RFIs		80																**80**
Shop Drawing Review		80																**80**