

# CONTRACT ROUTING SHEET

173-F1211

Date Prepared: 08/02/2011

Need Date: \_\_\_\_\_

**PROCESSING DEPARTMENT:**

Department: EMD for AQMD  
Dept. Contact: Michele Weimer  
Phone #: 5670  
Department  
Head Signature: *Michele Weimer*

**CONTRACTOR:**

Name: EDC DOT  
Address: \_\_\_\_\_  
Phone: \_\_\_\_\_

**CONTRACTING DEPARTMENT:** AQMD - charge 433200

Service Requested: AB2766 - motor vehicle emission reduction project

Contract Term: 1 year Contract/Amendment Value: \$119,489.00

Compliance with Human Resources requirements? Yes:  No:

Compliance verified by: NA

**COUNTY COUNSEL:** (Must approve all contracts and MOU's)

Approved:  Disapproved:  Date: 8/8/11 By: *P. Shanley*  
Approved:  Disapproved:  Date: \_\_\_\_\_ By: \_\_\_\_\_

EL DORADO COUNTY COUNSEL  
2011 AUG -14 PM 12:59

**RISK MANAGEMENT:** (All contracts and MOU's except boilerplate grant funding agreements)

Approved:  Disapproved:  Date: \_\_\_\_\_ By: \_\_\_\_\_  
Approved:  Disapproved:  Date: \_\_\_\_\_ By: \_\_\_\_\_

**OTHER APPROVAL:** (Specify department(s) participating or directly affected by this contract).

Departments:  
Approved:  Disapproved:  Date: \_\_\_\_\_ By: \_\_\_\_\_  
Approved:  Disapproved:  Date: \_\_\_\_\_ By: \_\_\_\_\_



**Funding Agreement 005A-DMV-11/12-BOS  
Between  
El Dorado County Air Quality Management District  
and  
El Dorado County Department of Transportation**

---

**This Agreement No. 005A-DMV-11/12-BOS** made and entered by and between the **EL DORADO COUNTY AIR QUALITY MANAGEMENT DISTRICT**, a county air pollution control district formed pursuant to California Health and Safety Code section 40100, et seq. (hereinafter referred to as "AQMD"); and El Dorado County Department of Transportation. (hereinafter referred to as "CONTRACTOR");

**WITNESSETH:**

**WHEREAS**, the California Clean Air Act requires local air pollution control districts to reduce emissions from motor vehicles; and

**WHEREAS**, AB 2766, codified in California Health and Safety Code section 44220, et seq., authorizes districts to impose a fee of up to four dollars upon certain registered motor vehicles within the AQMD, and the Governing Board of the AQMD has imposed said fee; and

**WHEREAS**, said legislation requires the AQMD to use said funds for activities related to reducing air pollution from motor vehicles and for related planning, monitoring, enforcement, and technical studies necessary for the implementation of the California Clean Air Act of 1988; and

**WHEREAS**, CONTRACTOR has proposed a Project that meets the eligibility criteria of the AQMD and that has been approved by AQMD for funding; and

**WHEREAS**, CONTRACTOR represents that it is willing and able to perform the activities set forth herein.

**NOW, THEREFORE**, AQMD and CONTRACTOR mutually agree as follows:

## **SCOPE OF WORK**

CONTRACTOR shall perform all activities and work necessary to complete the design and construction of a Class II Bikeway on Cameron Park Drive (hereinafter referred to as "Project") set forth in the fully described "Project Description" attached hereto as Exhibit A (hereinafter referred to as "Proposal") and incorporated herein by this reference. CONTRACTOR agrees to furnish all labor, materials, equipment, licenses, permits, fees, and other incidentals necessary to perform and complete, per schedule, in a professional manner, the services described herein. CONTRACTOR represents that CONTRACTOR has the expertise necessary to adequately perform the Project specified in said Proposal.

In the event of any conflict between or among the terms and conditions of this Agreement, the Proposal incorporated herein, and the documents referred to and incorporated herein, such conflict shall be resolved by giving precedence in the following order of priority:

1. The text of this Agreement;
2. Proposal to this Agreement; and
3. The "Motor Vehicle Emission Reduction Projects Request for Proposals" (RFP) released to Interested Parties by the AQMD and dated 2011-2012.

## **1. PERIOD OF PERFORMANCE/TIMETABLE**

CONTRACTOR shall commence performance of work and produce all work products in accordance with the Project Description, Work Statement and deadlines for performance identified in the Proposal of this Agreement, unless this Agreement is terminated sooner as provided for elsewhere in this Agreement.

If requested by the AQMD, CONTRACTOR shall submit regular progress reports, at intervals determined by the AQMD, detailing the work performed during the current reporting period; work planned for the next reporting period; problems identified, solved, and/or unresolved; and the percentage of each task completed. CONTRACTOR shall provide AQMD with a comprehensive final written report prior to the end of Agreement term. Said final report shall be complete and shall document the work performed under this Agreement.

## **2. TERM**

The term of this Agreement shall be effective upon final execution by all parties and shall expire on June 30, 2012 unless terminated earlier in accordance with Article 6, Termination. This

Agreement may be extended upon the same terms and conditions if mutually agreed upon in writing at least sixty (60) days prior to the expiration of the Agreement.

### **3. COMPENSATION**

AQMD will pay the CONTRACTOR the sum of **One Hundred Nineteen Thousand Four Hundred Eighty Nine Dollars and 00/100 (\$119,489)** as follows:

CONTRACTOR shall obtain through other sources sufficient additional monies to fund the total cost of the Project as outlined in the Proposal. Satisfactory written evidence of such funding commitments shall be provided to AQMD prior to the release by AQMD of any funds under this Agreement. In the event funding from other sources for the total cost of the Project is not received by CONTRACTOR, AQMD reserves the right to terminate or renegotiate this Agreement. In accordance with Section 44233 of the California Health and Safety Code, CONTRACTOR agrees to limit expenditure of funds for the purpose of administration to not more than five percent of the monies distributed to CONTRACTOR. The AQMD is not obligated to pay CONTRACTOR for administrative costs exceeding five percent of the actual total cost of the Project.

The total obligation of the AQMD under this Agreement SHALL NOT EXCEED **One Hundred Nineteen Thousand Four Hundred Eighty Nine Dollars and 00/100 (\$119,489)**.

- a. **Payments:** Advance payments shall not be permitted. Payments will be permitted only at which time an equivalent service has been completed. The AQMD shall reimburse CONTRACTOR quarterly, in arrears, after receipt and verification submitted to El Dorado County Air Quality Management District, Attention: Mike Applegarth or his successor. Payment shall be made to CONTRACTOR by the AQMD upon submission and evaluation of the CONTRACTOR'S invoice of claim. Said invoice of claim shall set forth the work completed pursuant to this Agreement.

Upon receipt of proper documentation, and verification that CONTRACTOR has satisfactorily completed the work for which compensation is sought, AQMD will issue payment to CONTRACTOR within forty five (45) calendar days of verification.

The amount to be paid to CONTRACTOR under this Agreement includes all sales and use taxes incurred pursuant to this Agreement, if any, including any such taxes due on

equipment purchased by the CONTRACTOR. The CONTRACTOR shall not receive additional compensation for reimbursement of such taxes and shall not decrease work to compensate therefore.

Concurrently with the submission of any claim for payment, CONTRACTOR shall certify (through copies of invoices issued, checks, receipts, and the like) that complete payment has been made to any and all subcontractors as provided.

It is understood that all expenses incidental to CONTRACTOR'S performance of services under this Agreement shall be borne exclusively by CONTRACTOR.

In no event shall compensation paid by the AQMD to the CONTRACTOR for the performance of all services and activities under this Agreement exceed the amount set forth in Article 3, Compensation.

- b. Surplus Funds:** Any compensation under this agreement, which is not expended by CONTRACTOR pursuant to the terms and conditions of this Agreement by the Project completion date shall automatically revert to the AQMD. Only expenditures incurred by the CONTRACTOR in the direct performance of this Agreement will be reimbursed by the AQMD. Allowable expenditures under this Agreement are specifically established and included in the Proposal.
  
- c. Closeout Period:** All final claims shall be submitted by CONTRACTOR within sixty (60) days following the final month of activities for which payment is claimed. No action will be taken by AQMD on claims submitted beyond the 60-day closeout period.

#### **4. NON-ALLOCATION OF FUNDS**

The terms of this Agreement and the services to be provided thereunder are contingent on the approval of funds by the appropriating government agency. Should sufficient funds not be allocated, the services provided may be modified or this Agreement terminated at any time by giving the CONTRACTOR thirty (30) days prior written notice.

## 5. INDEPENDENT CONTRACTOR LIABILITY

CONTRACTOR is, and shall be at all times, deemed independent and shall be wholly responsible for the acts of CONTRACTOR'S employees, associates, and subcontractors, in connection with the installation, operation, use and maintenance of the Project.

## 6. TERMINATION

**a. Breach of Agreement:** AQMD may immediately suspend or terminate this Agreement, in whole or in part, where in the determination of the AQMD there is:

1. An illegal or improper use of funds;
2. A failure to comply with any term of this Agreement;
3. A substantially incorrect or incomplete report submitted to the AQMD; or
4. Improperly performed services.

In no event shall any payment by the AQMD constitute a waiver by the AQMD of any breach of this Agreement or any default, which may then exist on the part of the CONTRACTOR. Neither shall such payment impair or prejudice any remedy available to the AQMD with respect to the breach or default. The AQMD shall have the right to demand of the CONTRACTOR the repayment to the AQMD of any funds disbursed to the CONTRACTOR under this Agreement which in the judgment of the AQMD were not expended in accordance with the terms of this Agreement. The CONTRACTOR shall promptly refund any such funds upon demand.

In addition to immediate suspension or termination, AQMD may impose any other remedies available at law, in equity, or otherwise specified in this Agreement.

**b. Without Cause:** Either party may terminate this Agreement at any time upon giving the other party at least thirty (30) days advance, written notice of intention to terminate. In such case, the AQMD shall, subject to Article 3, pay its pro rata share of the reasonable value of all services satisfactorily rendered and actual, reasonable costs incurred up to the time of the termination. Upon such termination, all the work product produced by CONTRACTOR shall be promptly delivered to the AQMD.

## **7. CHANGES TO AGREEMENT**

This Agreement may be amended by mutual consent of the parties hereto. Said amendments shall become effective only when in writing and fully executed by duly authorized officers of the parties hereto.

## **8. INDEMNIFICATION**

CONTRACTOR shall defend, indemnify, and hold the AQMD harmless against and from any and all claims, suits, losses, damages and liability for damages of every name, kind and description, including attorneys fees and costs incurred, brought for, or on account of, injuries to or death of any person, including but not limited to workers, AQMD employees, and the public, or damage to property, or any economic or consequential losses, which are claimed to or in any way arise out of or are connected with the CONTRACTOR'S activities and work necessary to complete the Project unless such claim, loss, damage, injury or death is the result of the sole or active negligence of the AQMD. This duty of CONTRACTOR to indemnify and save AQMD harmless includes the duties to defend set forth in California Civil Code, Section 2778.

AQMD shall indemnify CONTRACTOR against and hold it harmless from any loss, damage, and liability for damages, including attorney fees and other costs of defense incurred by CONTRACTOR, whether for damage to or loss of property, or injury to or death of CONTRACTOR'S officer's, agents, or employees which shall in any way arise out of or be connected with AQMD's performance of its obligations hereunder, unless such damage, loss, injury, or death shall be caused by the sole or active by negligence of the CONTRACTOR.

## **9. AUDITS AND INSPECTIONS**

CONTRACTOR shall at any time during regular business hours, and as often as AQMD may deem necessary, make available to AQMD for examination all of CONTRACTOR'S records and data with respect to the matters covered by this Agreement. CONTRACTOR shall, and upon request by AQMD, permit AQMD to audit and inspect all of such records and data necessary to ensure CONTRACTOR'S compliance with the terms of this Agreement. CONTRACTOR shall be subject to an audit by AQMD or its authorized representative to determine if the revenues received by CONTRACTOR were spent for the reduction of pollution as provided in AB 2766 and to determine whether said funds were utilized as provided by law and this Agreement. If, after audit, AQMD makes a determination that funds provided CONTRACTOR pursuant to this Agreement were not spent in conformance with this

Agreement, or AB 2766 or any other applicable provisions of law, CONTRACTOR agrees to immediately reimburse AQMD all funds determined to have been expended not in conformance with said provisions.

CONTRACTOR shall retain all records and data for activities performed under this Agreement for at least three (3) years from the date of final payment under this Agreement or until all state and federal audits are completed for that fiscal year, whichever is later.

Because this Agreement exceeds Ten Thousand Dollars (\$10,000), CONTRACTOR shall be subject to the examination and audit of the Auditor General for a period of three (3) years after final payment under Agreement (Government Code Section 10532).

#### **10. NOTICES TO PARTIES**

All notices to be given by the parties hereto shall be in writing and served by depositing same in the United States Post Office, postage prepaid and return receipt requested. Notices to AQMD shall be in duplicate and addressed as follows:

#### **CONTRACTOR**

El Dorado County DOT  
2850 Fairlane Court  
Placerville, CA 95667  
Attn: James W. Ware, P.E.  
Director of Transportation

#### **AQMD**

El Dorado County  
Air Quality Management District  
2850 Fairlane Court  
Placerville, CA 95667  
Attn: Mike Applegarth,  
Interim Air Pollution Control Officer

#### **11. TIME IS OF THE ESSENCE**

It is understood that for CONTRACTOR'S performance under this Agreement, time is of the essence. The parties reasonably anticipate that CONTRACTOR will, to the reasonable satisfaction of the AQMD, complete all activities provided herein within the time schedule outlined in the Proposals to this Agreement.



## **12. COMPLIANCE WITH APPLICABLE LAWS**

CONTRACTOR will comply with all federal, State, and local laws and ordinances which are or may be applicable to the PROJECT to be undertaken by the CONTRACTOR including but not limited to California Health and Safety Code sections 44220 et seq, all Air Resources Board and AQMD criteria there under, prevailing wage and work day definitions where applicable, contracting license requirements and permits.

## **13. NO THIRD-PARTY BENEFICIARIES**

Nothing in this Agreement shall be construed to create any rights of any kind or nature in any other party not a named party to this Agreement.

## **14. VENUE**

Any dispute resolution action arising out of this Agreement, including but not limited to litigation, mediation, or arbitration, shall be brought in El Dorado County, California, and shall be resolved in accordance with the laws of the State of California. CONTRACTOR waives any removal rights it might have under Code of Civil Procedure section 394.

## **15. ENTIRE AGREEMENT**

This document and the documents referred to herein or exhibits hereto are the entire Agreement between the parties and they incorporate or supersede all prior written or oral Agreements or understandings.

## **16. AGREEMENT ADMINISTRATOR**

The AQMD Officer or employee with responsibility for administration of this Agreement is Mike Applegarth, Interim Air Pollution Control Officer or his successor. The CONTRACTOR Officer

or employee with responsibility for administration of this Agreement is James W. Ware, Director of Transportation, or his successor.

#### **17. AUTHORIZED SIGNATURES**

The parties to this Agreement represent that the undersigned individuals executing this Agreement on their respective behalf are fully authorized to do so by law or other appropriate instrument and to bind upon said parties to the obligations set forth herein.

#### **18. PARTIAL INVALIDITY**

If any provision of this Agreement is held by a court of competent jurisdiction to be invalid, void, or unenforceable, the remaining provisions will continue in full force and effect without being impaired or invalidated in any way.

**REQUESTING DEPARTMENT CONCURRENCE:**

By: Mike Applequist Date: 8/18/11

**Air Pollution Control Officer**


**IN WITNESS WHEREOF**, the parties hereto have caused this Agreement to be executed as of the day and year first herein above written.

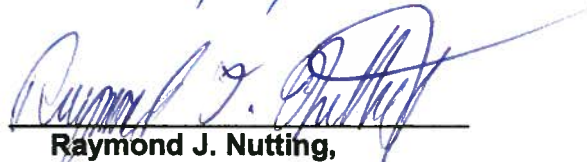
**CONTRACTOR  
EL DORADO COUNTY  
DEPARTMENT OF TRANSPORTATION**

**AQMD  
EL DORADO COUNTY  
AIR QUALITY MANAGEMENT DISTRICT**

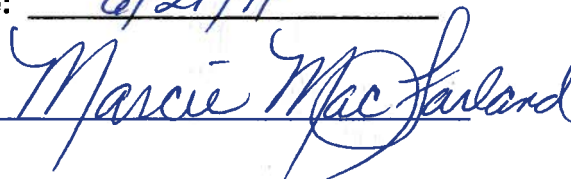
Date: 8/11/11

Date: 6/21/11

By:   
**James W. Ware, P.E.  
Director of Transportation**

By:   
**Raymond J. Nutting,  
Chair**

**Attest:  
Clerk of the Board**

Date: 6/21/11  
By: 

## PROJECT DESCRIPTION

*Identify the objective(s) of the proposal and describe the scope of work of the proposed project.*

The primary objectives of this proposed bicycle transportation facility are to:

1. Provide a non-motorized alternative transportation option for Cameron Park residents to use to commute to work/school.
2. To improve safety for bicyclists by providing a bicycle facility that is marked with pavement legends and posted "Bike Lane" signs that are highly visible for motorists on Cameron Park Drive.
3. To reduce auto trips replaced by bicycle trips resulting in reduced emissions/improved air quality.

This project proposal for FY 11/12 Motor Vehicle Emission Reductions AB2766 DMV Surcharge Fees funding is to design and construct Class II bike lanes along Cameron Park Drive from Palmer Drive to Sudbury Road on the east side (3,140 linear feet or 0.6 miles) and to Toronto Road on the west side (2,670 linear feet or 0.5 miles). The proposed alternative project is for a shorter segment from Palmer Drive to Hacienda Road (1,677 linear feet or 0.32 miles). This project is proposed as Phase 1 of the ultimate project to construct a Class II Bikeway the entire length of Cameron Park Drive (approximately 3 miles).

The scope of work will include preliminary engineering/design as part of the Project Approval and Environmental Documentation (PA&ED) phase, the preparation of Plans, Specs and Estimates (PS&E) which includes advertising for construction bids and awarding the construction contract, and managing the construction contract. The construction phase of work will involve constructing 4-foot wide Class II bike lanes in the existing shoulders along Cameron Park Drive. The proposed project will also include shoulder widening, pavement striping with 6" thermoplastic traffic stripe and thermoplastic pavement markings with bicycle symbols, and the installation of "Bike Lane" roadside signs.

If this proposed project is selected for AB2766 funding, El Dorado County DOT plans to submit an application next year for State Bicycle Transportation Account (BTA) funding to complete Phase 2 which is proposed to extend the Class II bike lanes from the existing north terminus just south of La Canada Drive to Meder Road. Having the first phase funded and/or constructed, will increase the likelihood of the Phase 2 project being selected for a BTA grant.

This project is included in the *El Dorado County Bicycle Transportation Plan (BTP)* adopted in November 2010. It is one of the Tier 1 priority bikeway projects in the Cameron Park/Shingle Springs Area. The BTP is a collaborative planning effort with El Dorado County, El Dorado County Transportation Commission, and the El Dorado County Bicycle Advisory Committee, along with public participation and support.

This project is not included in the County DOT's Capital Improvement Program because of lack of funding. The County DOT relies on grants such as AB2766 funding to complete bicycle facility projects. If this proposed project is selected for AB2766 funding, completion of this first phase of the Cameron Park Drive Class II Bikeway will increase the likelihood that future phases will be selected for other grant opportunities such as the State Bicycle Transportation Account funding program.

## PROJECT ORGANIZATION/BACKGROUND

*Provide a brief description (one page or less: no resumes) of your organization, its need for AB2766 DMV Surcharge Funding for the proposal and its qualifications to successfully carry out the proposed project.*

El Dorado County Department of Transportation (DOT) currently has 232 full-time filled positions in the following functional units: Maintenance & Operations, Roadway Design, Construction, Facilities Engineering, Transportation Planning & Land Development, Program Management/Services, Office Engineer/Contracts, and Administration. DOT is committed to delivering transportation projects that improve traffic circulation and mobility within the County. Since 1992, DOT has delivered 87 projects worth approximately \$211 million. The current DOT 2010 10-Year West Slope/Bridge Capital Improvement Program (CIP) includes 56 transportation projects at a total cost over \$700 million.

The County DOT recognizes the importance of bicycle and pedestrian mobility and has a Bicycle Transportation Plan (BTP) that was updated in 2010 and adopted by the County Board of Supervisors in November 2010. The proposed project is consistent with the goals and objectives of the BTP. The BTP's overall goal and vision statement is to "Provide a safe, efficient and convenient network of bicycle facilities that establish alternative transportation as a viable option in El Dorado county and neighboring regions." The objective is to "increase bicycling and walking as a transportation mode to reduce congestion, improve air quality and improve public health."

The Cameron Park Drive Class II Bikeway project is identified in the BTP as one of the Tier I projects in the Cameron Park/Shingle Springs Area. Cameron Park Drive is a north-south two-lane undivided arterial that extends from Green Valley Road three miles south to Robin Lane, south of the US 50/Cameron Park Drive Interchange. The average daily traffic (ADT) volumes range from about 10,000 to 26,000. The ADT 300 yards south of Hacienda Drive is 18,000. The posted speed limit is 45 miles per hour. Currently, bicyclists must share the road with vehicular traffic or ride adjacent to traffic in the shoulder. The shoulder width varies from two to four feet wide. The proposed project would provide a safer and more visible on-road bicycle facility for Cameron Park residents who live in the high density single family residential neighborhoods located adjacent to Cameron Park Drive with an alternative commute option to jobs clustered on both sides of the US 50/Cameron Park Drive Interchange (*see Attachments A and B*).

*Indicate if your agency has successfully completed a similar project.*

The County DOT has successfully completed several bicycle and pedestrian facility projects that have been partially funded through various grant programs. In 2009, the County completed the paving and striping of a 2.7 mile segment of the El Dorado Trail from Missouri Flat Road to Forni Road, which included improvements to the trestle bridge over Weber Creek. In 2008, County engineering staff designed a concrete sidewalk and grade-separated asphalt path that was constructed along Green Valley Road from Bass Lake Road to Pleasant Grove Middle School; this project was funded by a federal Safe Routes to School grant. In 2007, Class II bike lanes were added on Green Valley Road from Cameron Park Drive in Cameron Park to Pleasant Grove Middle School in Rescue; this project was funded with State Bicycle Transportation Account grant funding and the work was performed by County DOT road maintenance staff. In 1999, the County DOT also delivered a grade-separated bicycle and pedestrian crossing of US 50 in the Placerville/Camino area east of the Placerville city limit.

The County DOT has received prior AB2766 DMV grants that have been successfully delivered including: the environmental phase of work for the US50/El Dorado Hills Boulevard Interchange Pedestrian Overcrossing, installation of countdown pedestrian signals, and procurement of a waterless/dustless broom street sweeper. The County is currently in the environmental phase of the SMUD Corridor Class I Bike Path, which is being partially funded with an AB2766 DMV grant.

*If sub-contractors are to be used on the project, please identify and state their qualifications, or if sub-contractors have not yet been identified, state the specific qualifications that must be met.*

The Project Approval and Environmental Documentation (PA&ED); Plans, Specifications and Estimates (PS&E) and Right-of-Way (R/W) phases of pre-construction work will be performed by highly experienced County DOT engineering staff. The construction work will be performed by a qualified construction contractor that will be selected following the County's standard construction competitive bid process.

**EMISSION BENEFITS/COST EFFECTIVENESS**

**Bicycle Facilities**

**Project definition:** The Cameron Park Drive Class II Bike Lanes project is a non-motorized bicycle facility that is targeted to reduce commute and other non-recreational auto trail. This Class 2 facility will provide striped bicycle lanes giving preferential use to bicycles. The facility will be built to Caltrans standards for bicycle facilities.

**How emissions are reduced:** Emission reductions will result from the decrease in emissions associated with auto trips replaced by bicycle/walking trips for commute or other non-recreational purposes.

**Inputs to Calculate Cost Effectiveness:**

Inputs	Default	Units	Comments
Funding Dollars (Funding)	\$267,000	Dollars	Requested Amount
Funding Dollars (Alternative)	\$157,000	Dollars	Alternate Requested Amount
Effectiveness Period (Life)	15	Years	Life - Class 2 projects
No. of Operating Days (D)	280	Days of use/year	Based on local climate (average number of clear days in Placerville was 287.5 for 4-yr period 2007-10. Source: <a href="http://www.eldoradocountyweather.com">www.eldoradocountyweather.com</a> )
Average length of bicycle trips	1.8	Miles per trip (one direction)	Default is based on the National Personal Transportation Survey Estimate
Annual Average Daily Traffic (ADT)	22,800	Trips per day	Average ADT of traffic counts 300 yds south of Hacienda Dr and 100 ft north of Coach Ln. Source: El Dorado County DOT Five Year Traffic Summary 2006-10.
Adjustment (A) on ADT for auto trips replaced by bike trips from the bike facility.	.0014		Default is from the Adjustment Factors table for Class 2 (bike lane), ADT < 12,000 vehicles per day, Length of Bike Project (one direction) ≤ 1 miles, and non-university town pop. < 250,000
Credit (C) for Activity Centers near the project.	.003		Default is from Activity Centers Credits table for "7 or more within 1/4 mile" (See Attachment B)

**Emission Factor Inputs for Auto Travel (From Table 3 for 11–15 year Project Life):**

Factor	Default Auto Commute Trip End Factor	Units	Default Auto VMT Factor	Units
ROG	0.738	grams/trip	0.200	grams/mile
NOx	0.315	grams/trip	0.220	grams/mile
PM10	0.017	grams/trip	0.221	grams/mile

Source: Methods to Find the Cost-Effectiveness of Funding Air Quality Projects, Emissions Factors Tables, March 2010, Table 3, Average Auto Emissions Factors

**EMISSION BENEFITS/COST EFFECTIVENESS**

**Calculations:**

**Annual Auto Trip Reduced** = (D) \* (ADT) \* (A + C) trips/year  
 = (280) \* (22,800) \* (0.0014 + 0.003)  
 = **28,090** (6,384,000 \* 0.0044)

**Annual Auto VMT Reduced** = (Auto Trips) \* (L) miles/year  
 = (28,090) \* (1.8)  
 = **50,562**

**Annual Emission Reductions (ROG, NOx, and PM10) in lbs./year**  
 = [(Annual Auto Trips Reduced)\*(Auto Trip End Factor) + (Annual Auto VMT Reduced)  
 \*(Auto VMT Factor)]/454

ROG: [(28,090 \* 0.738) + (50,562 \* 0.200)] / 454 =  
 (20730.42) + (10112.4) = 30,842.82 / 454 = **68 lbs. per year**

NOx: [(28,090 \* 0.315) + (50,562 \* 0.220)] / 454 =  
 (8848.35) + (11123.64) = 19971.99 / 454 = **44 lbs. per year**

PM10: [(28,090 \* 0.017) + (50,562 \* 0.221)] / 454 =  
 (477.53) + (11174.20) = 11651.73 / 454 = **26 lbs. per year**

**Capital Recovery Factor (CRF) =**  $\frac{(1+i)^n (i)}{(1+i)^n - 1}$   $\frac{(1+0.03)^{20} (0.03)}{(1+0.03)^{20} - 1}$  = **0.08**

(From Table 8)

Where n = project life (15 years)

Where: i = discount rate (assume 3%)

**Annualized Cost-Effectiveness of Funding Dollars (As Proposed)** = (CRF \* Funding) / (ROG + NOx + PM10)  
 = (0.08 \* \$267,000) / (68 + 44 + 26)  
 = **\$154.78 dollars per lb. (21,360 / 138)**

**Annualized Cost-Effectiveness of Funding Dollars (Alternative)** = (CRF \* Funding) / (ROG + NOx + PM10)  
 = (0.08 \* \$157,000) / (68 + 44 + 26)  
 = **\$91.01 dollars per lb. (12,560 / 138)**



## WORK STATEMENT

*Describe separately each phase of the work to be performed.*

The following four phases of work will be performed: 1) Project Approval and Environmental Documentation (PA&ED), 2) Plans, Specifications & Estimates (PS&E), 3) Right-of-Way Certification (R/W), and 4) Construction. The PA&ED phase includes project planning, environmental documentation and CEQA clearance. The PS&E phase entails project design and preparation of plans, specifications and cost estimates, and the preparation of the bid package. The R/W phase involves property owner negotiations and right-of-way exhibits to secure rights of entry required for the project's construction. The Construction phase involves the actual installation of the Class II bike lanes, striping, pavement markings, and signs. County DOT engineering staff will be involved in the oversight of the construction contract and construction inspections.

*List tasks within each phase of work and describe as necessary.*

**Project Approval and Environmental Documentation (PA&ED)** – This project entails minor paving, shoulder enhancement and striping within the County's right of way and will be approved with a CEQA Categorical Exemption. The tasks within this phase are:

- 1) Preparation of the CEQA Categorical Exemption environmental document
- 2) Filing the CEQA Notice of Exemption with the County Recorder-Clerk's Office.

**Plans, Specifications & Estimates (PS&E)** – This phase involves the following tasks:

- 1) Engineering design of a Class II bikeway per Caltrans Highway Design Manual standards set forth in Chapter 1000 (Bikeway Planning and Design).
- 2) Engineering plans depicting the engineering design through layouts, profiles, cross sections, drainage, structure and construction details sheets.
- 3) Writing of specifications instructing the contractor regarding contract, construction materials and construction methods in conjunction with Caltrans Standard Specifications; includes preparing contract documents for the construction bid package.
- 4) Engineers Estimate based on quantities and anticipated unit prices based on prior contracts for identified bid items.

**Right-of-Way Certification (R/W)** – Since this proposed project is within the County's right of way, property appraisals or acquisitions is not required. The R/W phase will entail the following tasks:

- 1) Property negotiations for right to enter permits in a few minor shoulder enhancements or possible driveway crossings that the County would conform during construction.
- 2) R/W Exhibits will not require new legal maps since work is within the County R/W.

**Construction** – The Construction phase entails advertising the project, awarding the contract, and administering the contract as follows:

- 1) The project will be advertised to solicit bids following state and local agency public work regulations.
- 2) A contract will be awarded to the lowest responsive bidder and a Notice To Proceed issued.
- 3) The construction contract will be administered by County DOT engineering staff highly experienced with construction management and will included on-site inspections.

*State the sequence of work activities, including a starting date, this date should not be sooner than the contract execution date between the District and Grantee, and a completion date within one year of executed contract.*

**Start Date**

1. Project Approval and Environmental Documentation (PA&ED)...July 2011
2. Construction Bid Package .....October 2011
3. Right-of-Way Certification (R/W) .....January 2012
4. Construction .....March 2012
5. Project Complete or Open for Use .....July 2012

*Include all relevant information regarding the technology involved, and the parties directly connected with the project.*

The technology used is typical transportation engineering, environmental planning/CEQA compliance and standard Right-of-Way procedures. The project involves the El Dorado County DOT engineering/ environmental/planning staff and Caltrans staff.

*All grant recipients must provide some type of public acknowledgment that their project was funded by the District utilizing AB2766 DMV Surcharge Funds. How will this be accomplished for this project (e.g. logo/placard on equipment, include acknowledgment in a public education address or pamphlets, etc.)?*

Acknowledgement that this project was partially funded by the El Dorado County AQMD utilizing AB2766 DMV Surcharge Funds will be included in news releases issued and on signage placed at the construction site. In addition, acknowledgments will be included in press releases and publicity packets distributed at groundbreaking and ribbon cutting ceremonies.