

**FUNDING AGREEMENT NO. 002-DMV-07/08-BOS
WITH EL DORADO COUNTY DEPARTMENT OF TRANSPORTATION...**

This Agreement No. 002-DMV-07/08-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**, a political subdivision of the State of California (hereinafter referred to as "COUNTY");

W I T N E S S E T H:

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

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

NOW, THEREFORE, AQMD and COUNTY mutually agree as follows:

1. PROJECT

COUNTY shall perform all activities and work necessary to complete the Countdown Pedestrian Signals Project (hereinafter referred to as "Project"); set forth in the fully described "Proposal" attached hereto as Exhibit A and incorporated herein by this reference. COUNTY 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. COUNTY represents that COUNTY 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. To the text of this Agreement;
2. Proposal to this Agreement; and
3. To the "Motor Vehicle Emission Reduction Projects Request for Proposals" (RFP) released to Interested Parties by the AQMD and dated 2007-2008.

2. PERIOD OF PERFORMANCE/TIMETABLE

COUNTY shall commence performance of work and produce all work products in accordance with the 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, COUNTY 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. COUNTY 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.

3. TERM

The term of this Agreement shall be for the period of July 1, 2007 through June 30, 2008 unless terminated earlier in accordance with Article 7, Termination.

4. COMPENSATION

AQMD will pay the COUNTY the sum of TWENTY TWO THOUSAND, TWO HUNDRED THIRTY THREE DOLLARS (\$22,233) as follows:

COUNTY 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 COUNTY, AQMD reserves the right to terminate or renegotiate this Agreement. In accordance with Section 44233 of the California Health and Safety Code, COUNTY agrees to limit expenditure of funds for the purpose of administration to not more than five percent of the monies distributed to COUNTY. The AQMD is not obligated to pay COUNTY 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 **Twenty Two Thousand, Two Hundred and Thirty Three Dollars and 00/100 (\$22,233)**.

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 COUNTY quarterly, in arrears, after receipt and verification submitted to El Dorado County Air Quality Management District, Attention: Marcella McTaggart. Payment shall be made to COUNTY by the AQMD upon submission and evaluation of the COUNTY'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 COUNTY has satisfactorily completed the work for which compensation is sought and that the work is in accordance with the Exhibit Summary Sheet attached hereto, AQMD will issue payment to COUNTY within thirty (30) calendar days of verification.

The amount to be paid to COUNTY 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 COUNTY. The COUNTY 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, COUNTY 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 COUNTY'S performance of services under this Agreement shall be borne exclusively by COUNTY.

In no event shall compensation paid by the AQMD to the COUNTY for the performance of all services and activities under this Agreement exceed the amount set forth in paragraph 4 COMPENSATION.

B. Surplus Funds: Any compensation under this agreement, which is not expended by COUNTY 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 COUNTY 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 COUNTY 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.

5. 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 COUNTY thirty (30) days prior written notice.

6. INDEPENDENT CONTRACTOR LIABILITY

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

7. 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 paragraph 4, 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.

8. 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.

9. INDEMNIFICATION

COUNTY 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 COUNTY'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 COUNTY to indemnify and save AQMD harmless includes the duties to defend set forth in California Civil Code, Section 2778.

AQMD shall indemnify COUNTY against and hold it harmless from any loss, damage, and liability for damages, including attorney fees and other costs of defense incurred by COUNTY, whether for damage to or loss of property, or injury to or death of COUNTY'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 COUNTY.

10. AUDITS AND INSPECTIONS

COUNTY shall at any time during regular business hours, and as often as AQMD may deem necessary, make available to AQMD for examination all of COUNTY'S records and data with respect to the matters covered by this Agreement. COUNTY shall, and upon request by AQMD, permit AQMD to audit and inspect all of such records and data necessary to ensure COUNTY'S compliance with the terms of this Agreement. COUNTY shall be subject to an audit by AQMD or its authorized representative to determine if the revenues received by COUNTY 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 COUNTY pursuant to this Agreement were not spent in conformance with this Agreement, or AB 2766 or any other applicable provisions of law, COUNTY agrees to immediately reimburse AQMD all funds determined to have been expended not in conformance with said provisions.

COUNTY 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), COUNTY 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).

11. 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:

COUNTY

El Dorado County
Department of Transportation
2850 Fairlane Court
Placerville, CA 95667
Attn: Richard Shepard
Director, Department of Transportation

AQMD

El Dorado County
Air Quality Management District
2850 Fairlane Court
Placerville, CA 95667
Attn: Marcella McTaggart,
Air Pollution Control Officer

12. TIME IS OF THE ESSENCE

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

13. COMPLIANCE WITH APPLICABLE LAWS

COUNTY 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 COUNTY 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.

14. 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.

15. 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. COUNTY waives any removal rights it might have under Code of Civil Procedure section 394.

16. 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.

17. AGREEMENT ADMINISTRATOR

The AQMD Officer or employee with responsibility for administration of this Agreement is Marcella McTaggart, Air Pollution Control Officer or her successor. The CONTRACTOR Officer or employee with responsibility for administration of this Agreement is Richard Shepard, Director, Department of Transportation or his successor.

18. 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.

19. 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: Marcella McTaggart

**Marcella McTaggart
Air Pollution Control Officer**

Dated: 4-27-07

By: Gerri Silva

**Gerri Silva, M.S., R.E.H.S
Director, El Dorado County Environmental Management Department**

Dated: April 30, 2007

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

COUNTY
EL DORADO COUNTY
DEPARTMENT OF TRANSPORTATION

AQMD
EL DORADO COUNTY
AIR QUALITY MANAGEMENT DISTRICT

Date: 5/13/07

Date: _____

By: 

Richard Shepard
Director, Department of Transportation

By: _____

Helen Baumann,
Chair

Attest:
Cindy Keck,
Clerk of the Board

Date: _____

By: _____

EXHIBIT SUMMARY SHEET (COVER)

Applicant: **El Dorado County Department of Transportation**
 Contact Person: **Anne Novotny, Senior Planner**
 Address: **2850 Fairlane Court, Placerville, CA 95667**
 Telephone #: **(530) 621-5931** Fax #: **(530) 626-0387** E-mail: **anovotny@edcgov.us**

Project Title: **Countdown Pedestrian Signals**

Project Budget	AB 2766 Funds	\$ Matching Funds	In-Kind Match	Total Project Costs
Materials	\$ 20,730	\$	\$	\$ 20,730
Personnel	\$	\$	\$ 2,772	\$ 2,772
Other (7.25% Sales Tax)	\$ 1,503	\$	\$	\$ 1,503
TOTAL	\$ 22,233	\$	\$ 2,772	\$ 25,005

Estimated Emission Reductions/Cost-Effectiveness	As Proposed	Alternate Funding Level
	Useful Life of Project (years)	20
Total Lifetime Emissions Reduced (lbs. Of ROG, Nox, PM-10)	2,520	N/A
Annualized Cost-Effectiveness (total project costs)*	\$ 13.89	N/A
Annualized Cost-Effectiveness (AQMD Funded project costs)*	¹² \$ 13.35 CAC	N/A

*: See Appendix 3 for instructions

Brief Project Description:

Upgrade 17 of the 36 existing signalized intersections in western El Dorado County with countdown pedestrian state-of-the-art LED-based traffic signal technology. The LED signals provide pedestrians with countdown digits of the number of seconds before the traffic signal turns red, letting pedestrians know how much time they have to cross the intersection.

RECEIVED
 APR 17 2007
 AQMD

REQUEST FOR PROPOSAL CONTENTS CHECKLIST

Applicant: El Dorado County Department of Transportation

Please complete and attach this checklist with your application.

- Exhibit Summary Sheet (Cover) – page 1
 - Request for Proposal Contents Checklist (Second Page) – page 2
 - Authorization Letter/Resolution page 3
 - Project Description – page 4
 - Project Organization/Background – page 5
 - Emission Benefits/Cost Effectiveness – pages 6-7
 - Work Statement – page 8
 - Funding Request/Cost Breakdown – page 9
 - Matching Funds – page 9
 - Schedule of Deliveries/Self-Monitoring Program – page 10
 - Local TPA Review (When Applicable) – Not Applicable
 - 3 Copies of Proposal – attached
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AUTHORIZATION LETTER

COUNTY OF EL DORADO

DEPARTMENT OF TRANSPORTATION



MAINTENANCE DIVISION
2441 Headington Road
Placerville CA 95667
Phone: (530) 642-4909
Fax: (530) 642-9238

RICHARD W. SHEPARD, P.E.
Director of Transportation

Internet Web Site:
<http://co.el-dorado.ca.us/dot>

MAIN OFFICE:
2850 Fairlane Court
Placerville CA 95667
Phone: (530) 621-5900
Fax: (530) 626-0387



April 17, 2007

Kerri Williams
EDCAQMD
2850 Fairlane Court
Placerville, CA 95667

RE: AB2766 Grant Application – FY2007/08
El Dorado County Department of Transportation

Dear Ms. Williams,

I hereby authorize Anne Novotny, Senior Planner, to submit a grant application for FY2007-08 AB2766 DMV Surcharge funds for the El Dorado County Department of Transportation Countdown Pedestrian Signals project.

The Department is requesting AB2766 DMV Surcharge funding to procure countdown pedestrian timers to be installed at seventeen busy intersections located primarily in El Dorado Hills, and in Cameron Park. We are requesting \$22,233 grant funding to be matched with an in-kind non-monetary contribution valued at \$2,772 for a total estimated project cost of \$25,005.

If this grant is awarded, it will aid in the reduction of vehicle emissions by enhancing the perceived pedestrian safety at these intersections with close proximity to major activity centers such as schools, community services, and shopping centers.

Thank you for your consideration of this application. If you have any questions, please contact Anne Novotny by phone at (530) 621-5931 or e-mail at anovotny@edcgov.us.

Sincerely,

A handwritten signature in cursive script, appearing to read "J. Ware".

James W. Ware, P.E.
Deputy Director, Transportation Planning and Land Development

PROJECT DESCRIPTION

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

The El Dorado County Department of Transportation (DOT) is currently developing an Intelligent Transportation System (ITS) Master Plan. Included in the plan is upgrading the signalized intersections in western El Dorado County with countdown pedestrian state-of-the-art LED-based traffic signal technology. The LED signals provide pedestrians with countdown digits of the number of seconds before the traffic signal turns red, letting pedestrians know how much time they have to cross the intersection.

There are currently 36 signalized intersections located in western El Dorado County. The Traffic Operations Unit within the County's Department of Transportation have identified seventeen (17) of these intersections as excellent candidates for countdown pedestrian timers. These 17 intersections were selected based on the proximity to key activity centers such as schools, libraries, community centers/parks, commercial/retail shopping centers, and senior centers. Other criteria for selection included crosswalk distance, traffic congestion, and observed pedestrian activity levels. These seventeen signalized intersections are shown on the attached location maps (Exhibits A-1 through A-5) and listed on Exhibit B.

The Traffic Operations Unit has purchased a sample countdown pedestrian product, manufactured by Dialight Corporation (part number 430-6479-001), which meets the County's specifications and is compatible with the existing traffic signals. The current unit cost of this Dialight product is about \$220 (plus sales tax and shipping). A product data sheet for Dialight countdown pedestrian signals is attached (Exhibit D).

Dialight is the first manufacturer to offer a comprehensive line of LED yellow circular signals and yellow arrows that are fully compliant to the new ITE specifications for luminous intensity standards up to 74°C. Additionally, Dialight devices use 90 percent less energy and last 10 times longer than incandescent lamps.

This grant application is requesting funding to cover the costs of purchasing 94 Dialight countdown pedestrian timers, estimated at \$22,233. The County will provide an in-kind match for the labor to install the units at the specified 17 intersections, estimated at \$2,772. The objective of this proposal is to improve the perceived pedestrian safety at these intersections, resulting in the replacement of auto trips with walking to/from the activity centers, ultimately resulting in emission reductions.

PROJECT ORGANIZATION/BACKGROUND

Provide a very 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.

The EDCDOT is committed to delivering transportation projects that improve traffic circulation and mobility within the County. The EDCDOT recognized the importance of pedestrian mobility, particularly in more urbanized areas of the County such as El Dorado Hills and Cameron Park. This proposed project is currently unbudgeted and the AB2766 DMV Surcharge Funding requested in this proposal is needed to purchase the specified countdown pedestrian timer signal equipment.

Please indicate if your agency has successfully completed a similar project.

The EDCDOT has a Traffic Operations Unit within the Maintenance Division that has highly competent staff trained and skilled in installing, programming, and maintaining traffic signal equipment.

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.

Not Applicable. The County will use its own staff to install the countdown pedestrian timers in the existing traffic signals.

EMISSION BENEFITS/COST EFFECTIVENESS

Pedestrian Facilities

Project definition: The proposed Countdown Pedestrian Signals project is defined as a pedestrian facility that is targeted to replace auto trips by providing or improving pedestrian access to adjacent/nearby activity centers.

How emissions are reduced: Pedestrian facilities reduce emissions when auto trips are replaced by walking.

The EDCDOT Traffic Operations Unit does not track pedestrian activity at intersections. To determine the cost effectiveness for this proposed project, the schools located within proximity to three of the intersections identified as E, G and H on Exhibit A-1 were contacted for student population and estimated number of students who walk to school. The data obtained is summarized in the table on Exhibit C. Since pedestrian data was unavailable for the other intersections not located near the schools, it is assumed that there will be some increase in pedestrian activity after the proposed countdown pedestrian timers are installed that will result in a reduction in auto trips, but not as many as the intersection near schools. Therefore, the cost effectiveness is actually understated by an indeterminate amount. Since this is a relatively low-cost project (\$1,112 annualized over the 20 life of the project), the EDCDOT believes that all seventeen of the intersections identified in Exhibit B should be funded through this grant.

Inputs to Calculate Cost Effectiveness:

Inputs	Default	Units	Comments
Funding Dollars (Funding)	\$22,233	Dollars	
Effectiveness Period (Life)	20	Years	Life – pedestrian projects
No. of Operating Days (D)	180	Days of use/year	No. of days in the BUSD and EDUHSD school year
Auto Trips (T) eliminated	160	Trips one-way/day	Number of auto trips eliminated per day (see Exhibit C).
Length (L) of Auto Trips eliminated	1	Miles per trip (one direction)	Maximum walking distance for K-8 grades per BUSD Board policy; also, the average distance of auto trip to adjacent activity center, as suggested on page 39 of <i>Methods to Find the Cost-Effectiveness of Funding Air quality Projects, May 2005</i> .

Emission Factor Inputs for Auto Travel (From Table 3 for a 16–20 year Project Life):

Factor	Default Auto Trip End Factor	Units	Default Auto VMT Factor	Units
ROG	0.866	grams/trip	0.229	grams/mile
NOx	0.387	grams/trip	0.269	grams/mile
PM10	0.016	grams/trip	0.219	grams/mile

Source: *Methods to Find the Cost-Effectiveness of Funding Air Quality Projects, May 2005, Table 3, pg. 50*

EMISSION BENEFITS/COST EFFECTIVENESS**Calculations:**

$$\begin{aligned} \text{Annual Auto Trip Reduced} &= (D) * (T) \\ &= (180) * (160) \\ &= 28,800 \end{aligned}$$

$$\begin{aligned} \text{Annual Auto VMT Reduced} &= (\text{Auto Trips}) * (L) \text{ miles/one-way trip} \\ &= (28,800) * (1) \\ &= 28,800 \end{aligned}$$

$$\begin{aligned} \text{Annual Emission Reductions (ROG, NOx, and PM10) in lbs./year} \\ &= [(\text{Annual Auto Trips Reduced}) * (\text{Auto Trip End Factor}) + (\text{Annual Auto VMT Reduced}) \\ & * (\text{Auto VMT Factor})] / 454 \end{aligned}$$

$$\text{ROG: } [(28,800 * (0.866 + 0.229)) / 454 = 31,536/454 = 69 \text{ lbs. per year}$$

$$\text{NOx: } [(28,800 * (0.387 + 0.269)) / 454 = 18,893/454 = 42 \text{ lbs. per year}$$

$$\text{PM10: } [(28,800 * (0.016 + 0.219)) / 454 = 6,768/454 = 15 \text{ lbs. per year}$$

Emission Reductions (ROG, NOx, and PM10) in lbs./20 years (life of the project)

$$\text{ROG} + \text{NOx} + \text{PM10 lbs. per year} * 20 = (69 + 42 + 15) * 20 = 2,520 \text{ lbs.}$$

$$\begin{aligned} \text{Capital Recovery Factor (CRF)} &= \frac{(1+i)^n (i)}{(1+i)^n - 1} = \frac{(1+0.03)^{20} (0.03)}{(1+0.03)^{20} - 1} = 0.07 \\ &\text{(From Table 8)} \end{aligned}$$

Where n = project life (20 years)

Where: i = discount rate (assume 3%)

$$\begin{aligned} \text{Cost-Effectiveness of Funding Dollars} &= (\text{CRF} * \text{Funding}) / (\text{ROG} + \text{NOx} + \text{PM10}) \\ &\text{(As Proposed)} \\ &= (0.07 * \$22,233) / (69 + 42 + 15) \\ &= \$1,556.31 / 126 \\ &= \mathbf{\$13.35 \text{ dollars per lb.}} \end{aligned}$$

$$\begin{aligned} \text{Cost-Effectiveness of Total Project} &= (\text{CRF} * \text{Total Project}) / (\text{ROG} + \text{NOx} + \text{PM10}) \\ &\text{(As Proposed)} \\ &= (0.07 * \$25,005) / (69 + 42 + 15) \\ &= \$1,750.35 / 126 \\ &= \mathbf{\$13.89 \text{ dollars per lb.}} \end{aligned}$$

WORK STATEMENT

Describe separately each phase of the work to be performed.

The proposed project will entail procuring the specified countdown pedestrian timer signal equipment and installing the equipment in the existing traffic signals located at the intersections listed on Exhibit B.

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

The County approved procurement process will be followed to purchase the countdown pedestrian timer signal equipment. Qualified staff in the Traffic Operations Unit with the EDCDOT Maintenance Division will install the equipment in the existing traffic signals located at the intersections listed on Exhibit B.

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.

- 1) Procurement of Specified Equipment – within 90 days of contract execution date
- 2) Installation of Specified Equipment – within 90 to 120 days of receipt of procured equipment

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

The technology pertains to state-of-the-art countdown pedestrian traffic signal technology. The project involves the El Dorado County DOT contracts administration support staff to execute the contract. The designated EDCDOT project engineer will coordinate with the Traffic Operations Unit to procure and install the equipment.

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.)?

A press release will be issued and distributed, acknowledging that this project was partially funded with AB2766 DMV Surcharge Funds, after the countdown pedestrian timers have been installed.

FUNDING REQUEST/COST BREAKDOWN/MATCHING FUNDS

Briefly describe the proposal to be funded. Include the amount of money requested from the AB2766 DMV Surcharge fund. All applicants are also strongly encouraged to submit alternative funding levels in their proposals. Include total project costs, including, but not limited to the following: Estimate cost by task and identify source of funding for each task; itemized list of equipment and the proportion of the cost of each piece of equipment to be paid with AB2766 DMV Surcharge funds.

This proposal is requesting **\$ 22,233** which is the estimated cost to procure 94 countdown pedestrian timers to be installed at 17 intersections located in western El Dorado County as listed in Exhibit B. The County will provide an in-kind match to install the equipment which is estimate to cost \$2,772. This in-kind local match is approximately 11 percent of the estimated total project cost of \$25,000.

The following table details the total estimated project costs, broken down by task and fiscal year. The second table identifies the revenue sources by fiscal year.

Cost Estimates by Task (as of 04/17/2007)

Task	FY 07/08	FY 08/09	Total
Equipment Procurement (includes sales tax)	\$ 22,233	\$	\$ 22,233
Equipment Installation	\$ 2,772	\$	\$ 2,772
Total Estimated Project Costs	\$ 25,005	\$	\$ 25,005

Revenue Source (as of 04/17/2007)

	FY 07/08	FY 08/09	Total
AB2766 DMV Surcharge funds requested	\$ 22,233	\$	\$ 22,233
Matching Funds (Source)			
Other Funds (In-Kind, Road Fund Budget)	\$ 2,772	\$	\$ 2,772
Total Revenue	\$ 25,005	\$	\$ 25,005

Matching Funds

Clearly indicate if the matching funds are monetary or in-kind (non-dollar) contributions along with their source. Provide proof (letter of commitment, resolution, CIP Project Summary) that the matching funds are currently available from each funding source.

The matching funds are in-kind (non-dollar) contributions that will be absorbed by the EDCDOT Road Fund account in the FY 2007/08 budget. (See attached Exhibit E).

SCHEDULE OF DELIVERABLES/SELF-MONITORING PROGRAM

Provide a list of all work products or deliverable items and their anticipated dates of delivery. The schedule must not extend beyond one year of the date of the executed contract

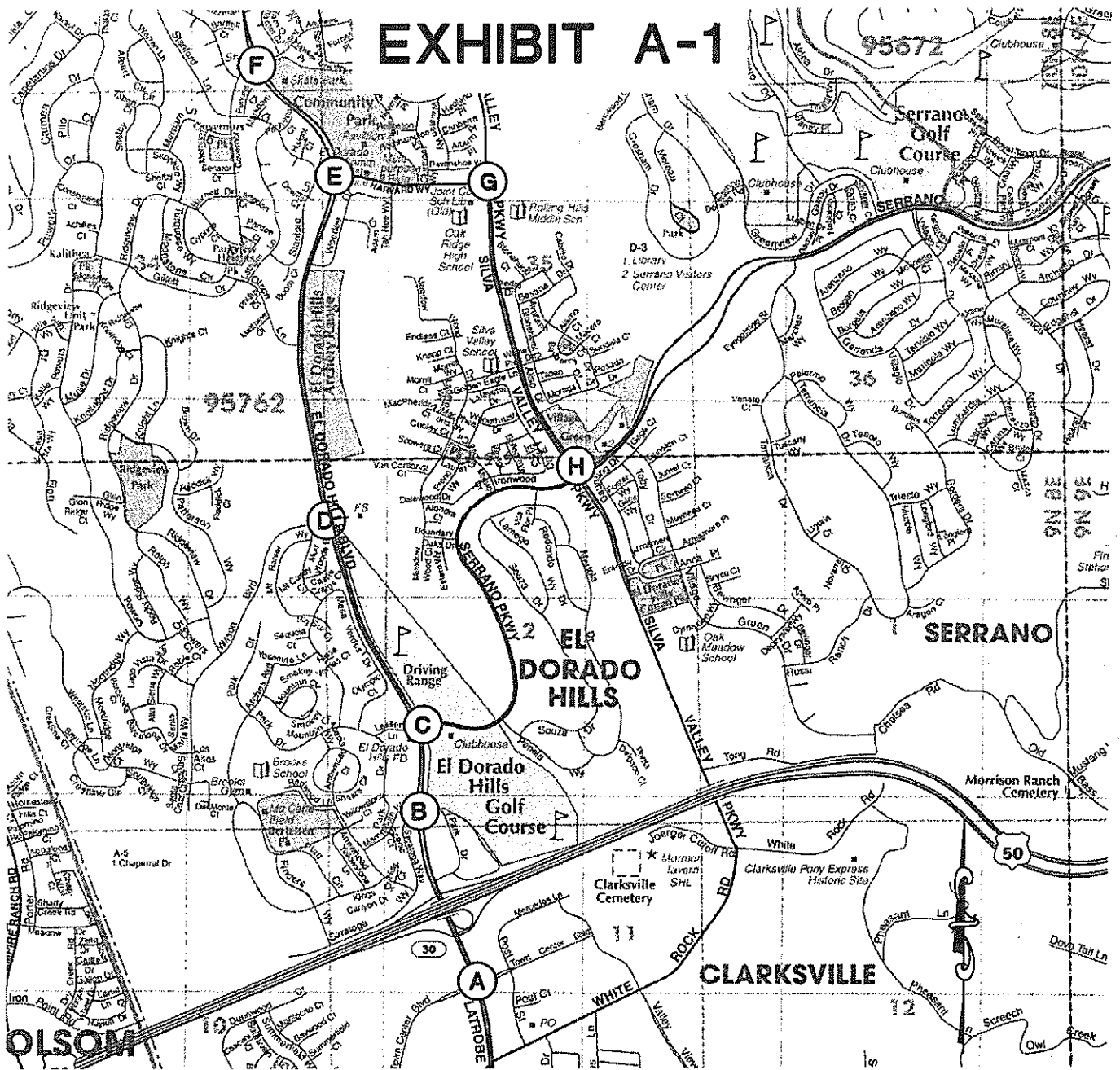
Work Products/Deliverables	Delivery Date
1. Procurement of Countdown Pedestrian Timer Equipment	FY 07/08
2. Installation of Countdown Pedestrian Timer Equipment.....	FY 07/08
3. Project Complete.....	FY 07/08

Self-Monitoring Program

Describe how the project objectives will be measured and reported to the District on a quarterly basis.

The EDCDOT project manager for this project will provide the District, if requested and at intervals determined by the District, with project progress reports 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. A comprehensive final written report, documenting the work performed, will be provided to the District prior to the end of the Agreement term.

EXHIBIT A-1

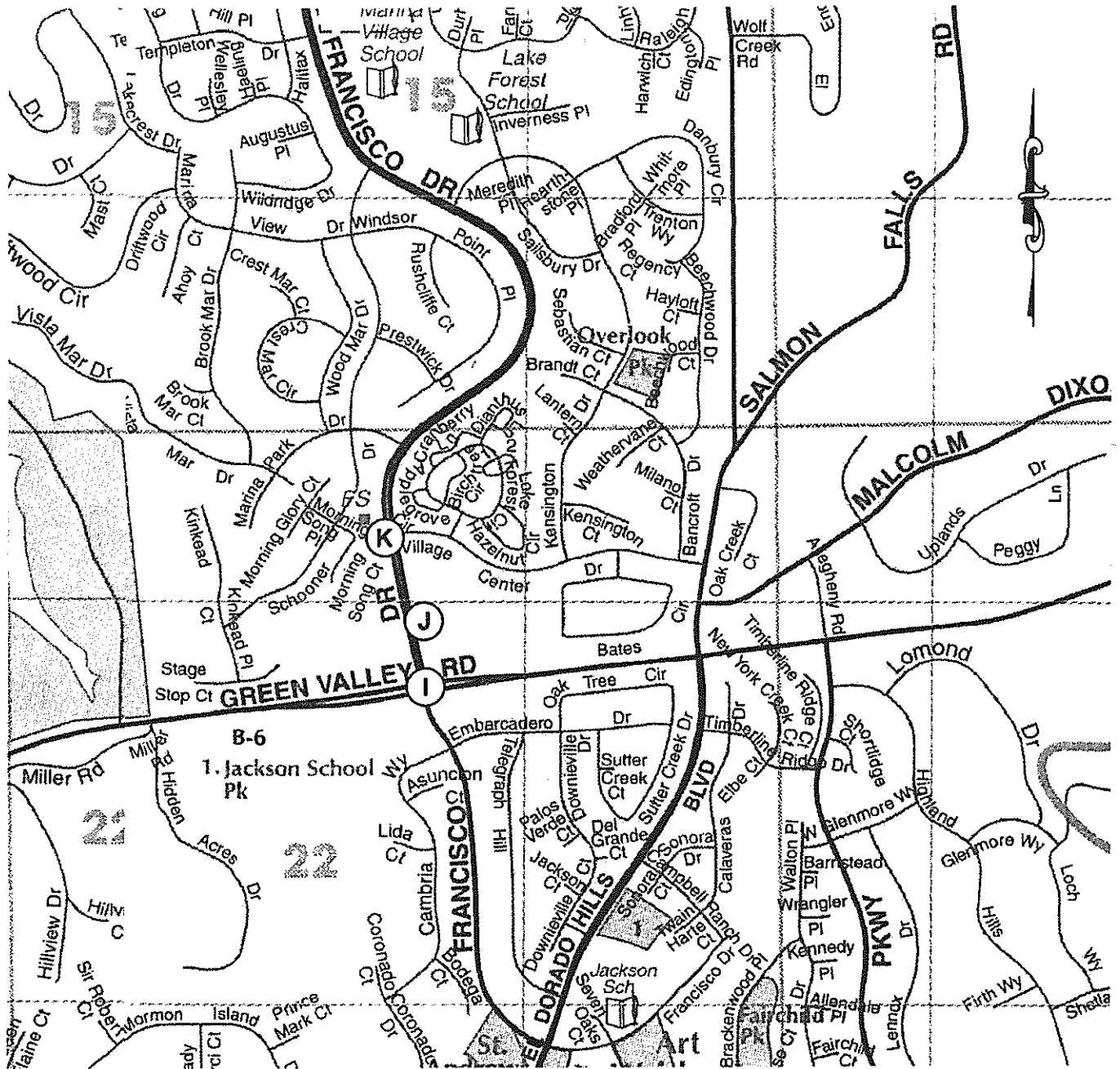


SYMBOL	INTERSECTION	NO. OF UNITS
A	LATROBE RD / TOWN CENTER BLVD	6
B	EL DORADO HILLS BLVD / PARK DR	8
C	EL DORADO HILLS BLVD / SERRANO PKWY / LASSEN LN	4
D	EL DORADO HILLS BLVD / WILSON BLVD	6
E	EL DORADO HILLS BLVD / HARVARD WAY	6
F	EL DORADO HILLS BLVD / ST. ANDREWS DR	6
G	SILVA VALLEY PKWY / HARVARD WAY	6
H	SILVA VALLEY PKWY / SERRANO PKWY	8

LOCATION MAP PROPOSED COUNTDOWN PEDESTRIAN SIGNALS, EL DORADO COUNTY

NOT TO SCALE

EXHIBIT A-2

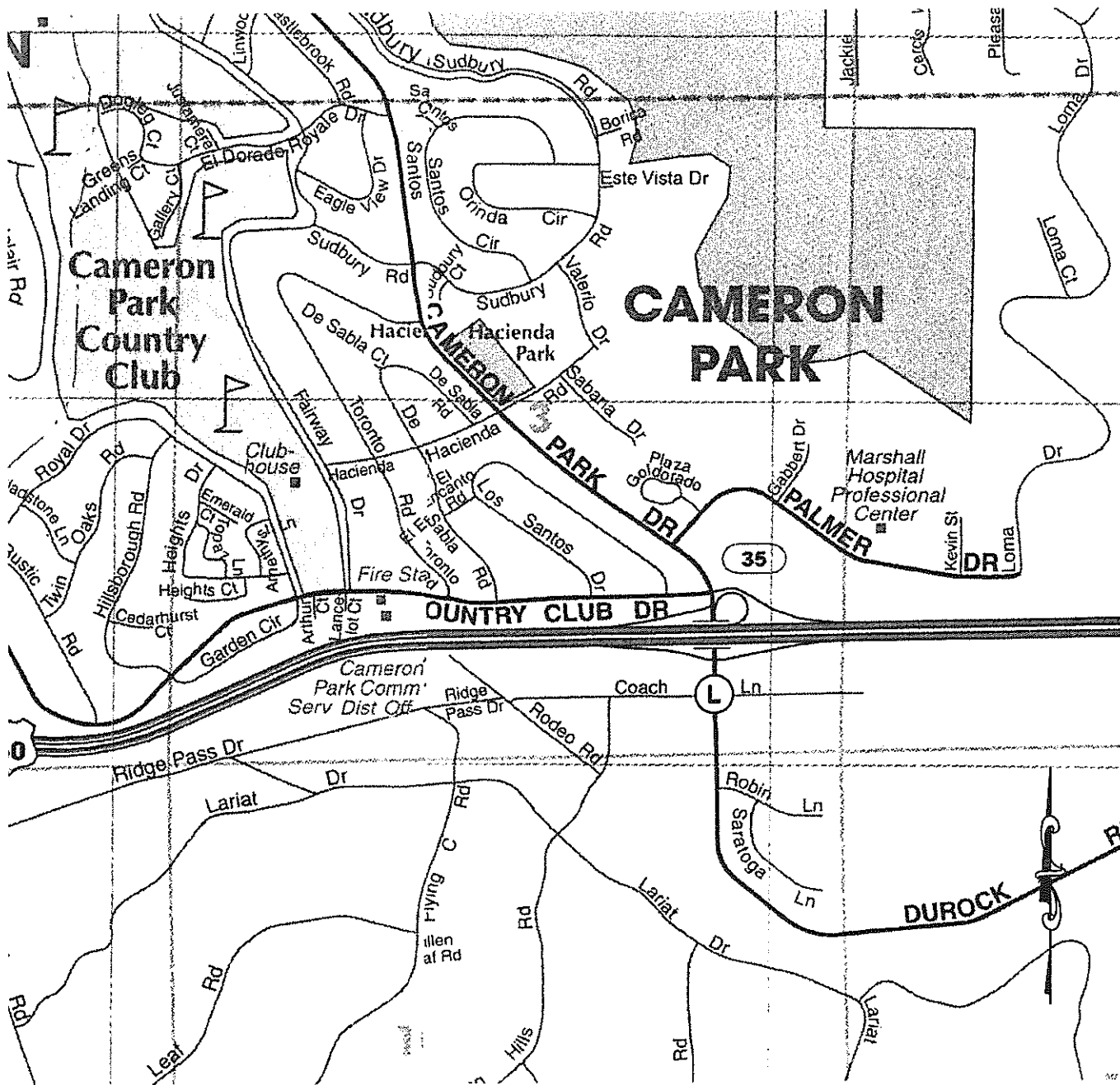


SYMBOL	INTERSECTION	NO. OF UNITS
I	FRANCISCO DR / GREEN VALLEY RD	6
J	FRANCISCO DR / GREEN VALLEY MARKETPLACE	2
K	FRANCISCO DR / VILLAGE CENTER DR	4

LOCATION MAP PROPOSED COUNTDOWN PEDESTRIAN SIGNALS, EL DORADO COUNTY

NOT TO SCALE

EXHIBIT A-3

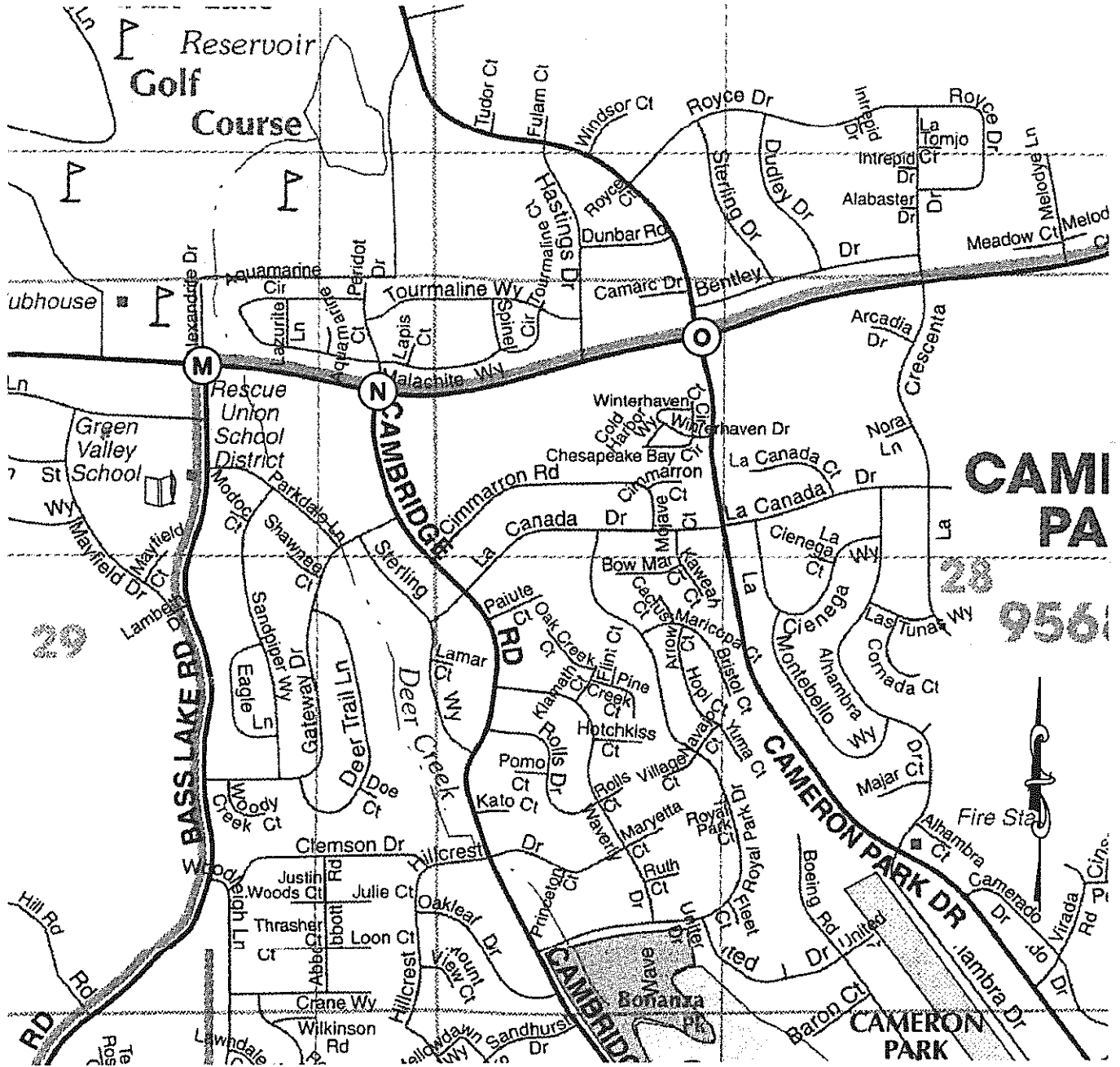


SYMBOL	INTERSECTION	NO. OF UNITS
L	CAMERON PARK_DR / COACH LN	6

LOCATION MAP PROPOSED COUNTDOWN PEDESTRIAN SIGNALS, EL DORADO COUNTY

NOT TO SCALE

EXHIBIT A-4

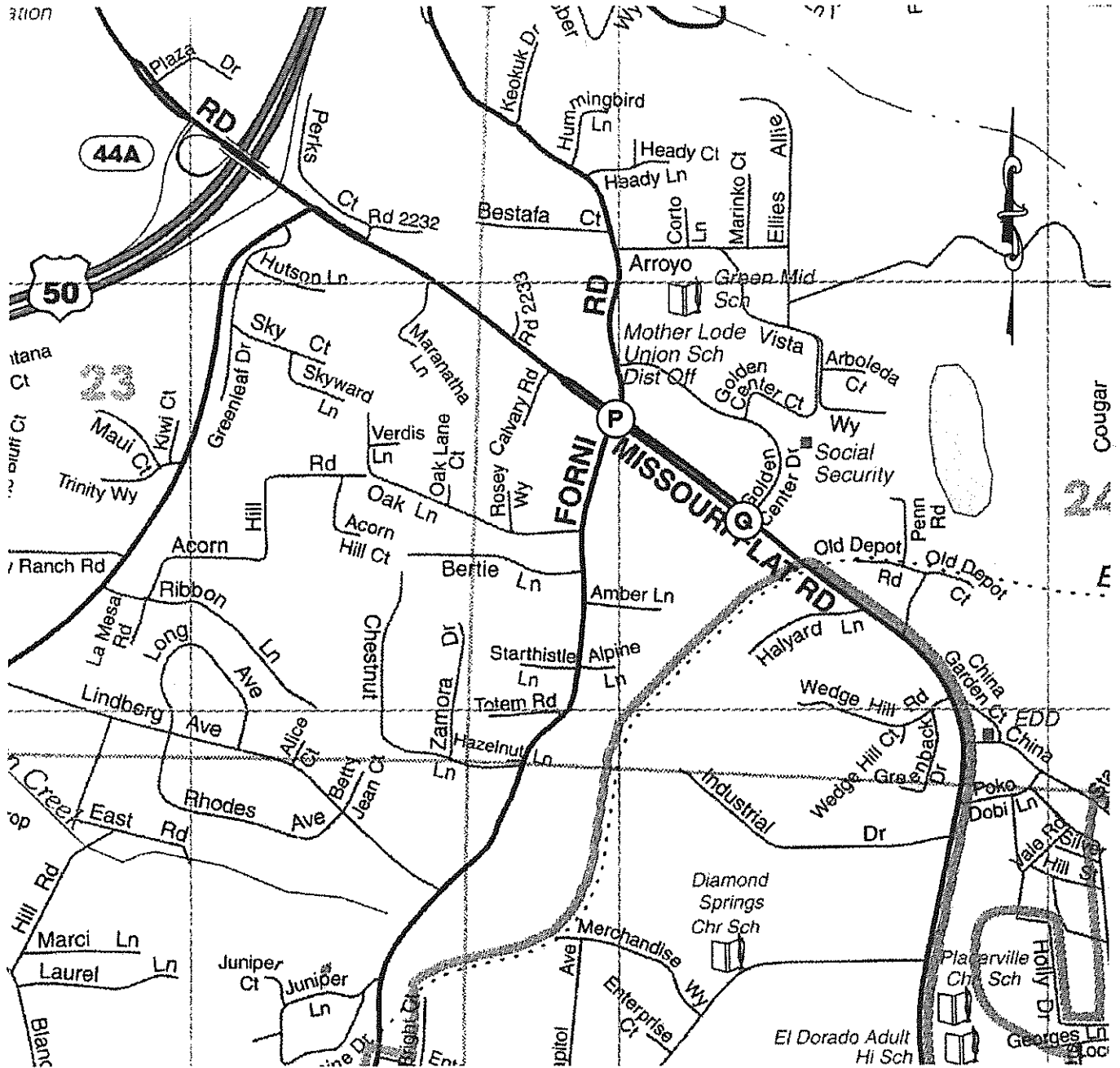


SYMBOL	INTERSECTION	NO. OF UNITS
M	GREEN VALLEY RD / BASS LAKE RD	4
N	GREEN VALLEY RD / CAMBRIDGE RD	4
O	CAMERON PARK DR / GREEN VALLEY RD	8

LOCATION MAP PROPOSED COUNTDOWN PEDESTRIAN SIGNALS, EL DORADO COUNTY

NOT TO SCALE

EXHIBIT A-5



SYMBOL	INTERSECTION	NO. OF UNITS
P	MISSOURI FLAT RD / FORNI RD	8
G	MISSOURI FLAT RD / GOLDEN CENTER DR	2

LOCATION MAP PROPOSED COUNTDOWN PEDESTRIAN SIGNALS, EL DORADO COUNTY

NOT TO SCALE

EXHIBIT B - Detailed Project Cost Estimate
Proposed Countdown Pedestrian Signals, El Dorado County

EDCAQMD FY 07/08 Call for Applications, April 17, 2007
 Motor Vehicle Emission Reduction Projects (AB2766 DMV Surcharge Funding)

Map Key	Signalized Intersection	Location	Activity Centers Generators	Trip	No. of Units	Equipment Cost Estimate	Labor Cost Estimate (Local Match)	Total Cost Estimate
EL DORADO HILLS								
A	Latrobe Road	Town Center Boulevard	El Dorado Hills Town Center, El Dorado Hills Business Park		6	\$1,323.18	\$173.24	\$1,496.42
B	El Dorado Hills Boulevard	Park Drive	Raleys Center, La Borgia, Park Drive business center		8	\$1,764.24	\$216.55	\$1,980.79
C	El Dorado Hills Boulevard	Serrano Parkway/Lassen Lane	El Dorado Hills Senior Center		4	\$882.12	\$129.93	\$1,012.05
D	El Dorado Hills Boulevard	Wilson Boulevard	high-density apartment housing		6	\$1,323.18	\$173.24	\$1,496.42
E	El Dorado Hills Boulevard	Harvard Way	El Dorado Hills Community Services District/Park, Oak Ridge High School		6	\$1,323.18	\$173.24	\$1,496.42
F	El Dorado Hills Boulevard	St. Andrews Drive	EDHCSD/Park; EDH professional business center		6	\$1,323.18	\$173.24	\$1,496.42
G	Silva Valley Parkway	Harvard Way	Rolling Hills Middle School, Oak Ridge High School, Silva Valley Elementary School		6	\$1,323.18	\$173.24	\$1,496.42
H	Silva Valley Parkway	Serrano Parkway	EDH Library, Serrano Park, Oak Meadows Elementary School		8	\$1,764.24	\$216.55	\$1,980.79
I	Francisco Drive	Green Valley Road	new Safeway Center (northeast), existing commercial/retail (northwest/southeast)		6	\$1,323.18	\$173.24	\$1,496.42
J	Francisco Drive	Green Valley Marketplace	new Safeway Center		2	\$441.06	\$86.62	\$527.68
K	Francisco Drive	Village Center Drive	high-density apartment housing, new Safeway Center		4	\$882.12	\$129.93	\$1,012.05
CAMERON PARK								
L	Cameron Park Drive	Coach Lane	commercial/retail (all corners)		6	\$1,323.18	\$173.24	\$1,496.42
M	Green Valley Road	Bass Lake Road	Green Valley Elementary School, Pleasant Grove Middle School		4	\$882.12	\$129.93	\$1,012.05
N	Green Valley Road	Cambridge Road	new Longs Drugs retail center		4	\$882.12	\$129.93	\$1,012.05
O	Cameron Park Drive	Green Valley Road	commercial/retail (three corners), high-density single-family and multi-family housing		8	\$1,764.24	\$216.55	\$1,980.79

EXHIBIT B - Detailed Project Cost Estimate
Proposed Countdown Pedestrian Signals, El Dorado County

EDCAQMD FY 07/08 Call for Applications, April 17, 2007
 Motor Vehicle Emission Reduction Projects (AB2766 DMV Surcharge Funding)

Map Key	Signalized Intersection	Location	Activity Centers Generators	Trip	No. of Units	Equipment Cost Estimate	Labor Cost Estimate (Local Match)	Total Cost Estimate
PLACERVILLE								
P	Missouri Flat Road	Forni Road	Wal-Mart (southwest), El Dorado Transit Bus Stop		8	\$1,764.24	\$216.55	\$1,980.79
Q	Missouri Flat Road	Golden Center Drive	new Golden Center retail/ commercial (eastside of Missouri Flat Road)		2	\$441.06	\$86.62	\$527.68
						\$20,729.82		
						\$1,502.91		
							\$2,772	
					94	\$22,233	11%	\$25,005
						89%		100%
TOTALS								
Assumptions: Estimated unit cost for a Dialight part #430-6479-001 = \$220.53 Estimated installation labor cost per hour: \$86.62 Estimated labor hours to install two (2) units: 1.0 Estimated labor hours to install four (4) units: 1.5 Estimated labor hours to install six (6) units: 2.0 Estimated labor hours to install eight (8) units: 2.5								

Revised: 4/17/2007

EXHIBIT C

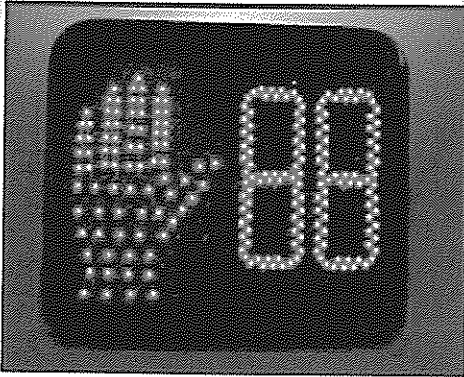
Schools	Location	Student Enrollment (Rounded)	Estimated No. of Students Walking to School	Percent %	Est. Increase (after project)
Buckeye Union School District					
Oak Meadows Elementary School	On Silva Valley Parkway (east side) south of Serrano Parkway	700	100	14%	6
Silva Valley Elementary School	On Silva Valley Parkway (west side) between Serrano Parkway and Harvard Way	700	100	14%	6
Rolling Hills Middle School	On Silva Valley Parkway (east side) at Harvard Way	1000	400	40%	28
El Dorado Union High School District					
Oak Ridge High School	On Harvard Way (south side) between El Dorado Hills Boulevard and Silva Valley Parkway	2100	800	38%	40
Totals		4500	1400	31%	80

Notes: About 350 Rolling Hills students are typically dropped off by their parents in the morning; assumption is that 50 walk both ways, and 350 only walk home from school.

EXHIBIT D

Dialight

COUNTDOWN PEDESTRIAN SIGNALS



FEATURES / BENEFITS

- ▲ 2-Row 9" high countdown digits are MUTCD compliant for crosswalks over 100 ft.
- ▲ Full preemption compatibility... Reverts to it's previous timing immediately following a preemption call
- ▲ Unique memory feature allows countdown time to remain stored internally, even when power is removed for extended periods of time
- ▲ Up to 4 units can be connected in parallel without disturbing the monitoring of the Hand/Person
- ▲ Automatically adjusts to traffic controller interval changes
- ▲ 90% reduction in power vs. incandescent
- ▲ Long life; up to 10 times longer than incandescent
- ▲ Sealed moisture resistant enclosure
- ▲ Lens available to fit most pedestrian heads
- ▲ Lens has a textured surface to reduce glare
- ▲ Easy to install into existing signal enclosure

SPECIFICATIONS

- ▲ Operating Voltage Range: 80VAC to 135VAC (120VAC nominal)
- ▲ Fuse and transient suppressor incorporated for line and load protection
- ▲ Power Factor > 0.9
- ▲ Total Harmonic Distortion < 20%
- ▲ Turn-on/Turn-off Time for Hand/Person = 75 msec max
- ▲ Operating Temperature Range: -40°C to +74°C
- ▲ Meets FCC Title 47, Subpart B, Section 15 Regulations for electrical noise
- ▲ Provided with quick connect terminals and spade adapters
- ▲ Written manufacturer's warranty available on request
- ▲ All products traceable by serial number
- ▲ LED Colors:
 Countdown Numerals - Portland Orange
 Hand - Portland Orange
 Walking Person - Lunar White

TYPICAL OPERATING CHARACTERISTICS

Part Number	Housing Size (inches)	SYMBOL			TYPICAL WATTAGE @ 25°C		
		Countdown	Hand	Person	Countdown	Hand	Person
430-6479-001	16 x 18	2-Row	Filled	Filled	5	6	6
430-7773-001	12 x 12	2-Row	N/A	N/A	5	N/A	N/A



Dialight Corporation

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 Tel: (1) 732-919-3119 • Fax: (1) 732-751-5778 • www.dialight.com



MDTSPCDX001_F

EXHIBIT E

Michele Smith/PV/EDC
04/17/2007 04:29 PM

To Anne M Novotny/PV/EDC@TCP
cc
bcc
Subject In-kind Non-monetary Contribution-Countdown Pedestrian
Signals

Please note that the in-kind non-monetary contribution valued at \$2,772 as the local match for the EDCDOT's grant application for countdown pedestrian signals will be absorbed by the DOT Road Fund in the Maintenance Division's budget for FY 2007/08.

Michele Smith
Administrative Services Officer
El Dorado County Department of Transportation
extension 4937