MEMORANDUM

APPROVED

DEPARTMENT OF PUBLIC WORKS
County of Placer

TO: BOARD OF SUPERVISORS

DATE: May 7, 2013

FROM: KEN GREHM / PETER KRAATZ

SUBJECT: **AUBURN FOLSOM ROAD WIDENING PROJECT; NORTH PHASE CONTRACT NO. 1151**

ACTION REQUESTED / RECOMMENDATION

1. Adopt a Resolution approving the project plans and specifications for the Auburn Folsom Road Widening North Phase Project, authorizing the Chair of the Board to sign the cover sheet.
2. Authorize the Department of Public Works to advertise for bids for the Auburn Folsom Road Widening North Phase construction project. There is no net County cost.

BACKGROUND / SUMMARY

This construction contract is for the North Phase of the Auburn Folsom Road Widening project which will improve Auburn Folsom Road from Bell Drive to Douglas Blvd in Granite Bay, CA. See Location Map.

This is the final phase of the project that will widen Auburn Folsom Road from two lanes to four lanes from Douglas Boulevard to the County Line to handle increasing traffic between the Folsom area, Granite Bay, and Roseville. The City of Folsom constructed a corresponding widening south of the County Line to Folsom Dam Road. Completion of this project will complete the four-lane roadway from Douglas Blvd. to Highway 50. The County's project was divided into three phases: North Phase (Douglas Blvd. to Bell Dr.), Middle Phase (Bell Dr. to Woodchase Dr.) completed in 2011, and the South Phase (County Line to Woodchase Dr.) completed in 2009. Also, as part of the project, a signal was installed at Auburn-Folsom Road and Fuller Drive in 2006.

The proposed improvements for the construction of the North Phase include: widen Auburn-Folsom Road to 4 lanes from the Bell Drive to Douglas Boulevard, construct drainage improvements and replace the San Juan Water District water line through the project area; Construction is expected to begin in late Summer 2013 and will take two construction seasons to complete.

ENVIRONMENTAL

The Board of Supervisors certified and approved the Final Environmental Impact Report with findings on June 22, 2004.

FISCAL IMPACT

The total estimated construction cost of the Auburn Folsom Road Widening North Phase Project is estimated $7,450,000; approximately $850,000 will be reimbursed by San Juan Water District for the costs related to their water line improvements. The North Phase is partially funded by the State Local Partnership Program of the State Proposition 1B grant program ($1,000,000) with the remainder funded by the Countywide Traffic Mitigation Fees and South Placer Regional Transportation Authority (SPRTA) fees ($5,600,000) with no net county cost. The department has budgeted for this contract and funding is available in the FY 2013-14 and the anticipated FY 2014-15 budgets.

Attachments: Resolution
Location Map

A copy of the Plans, Specifications, and Estimate is on File with the Clerk of the Board.

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Before the Board of Supervisors
County of Placer, State of California

In the matter of:

Resol. No: 2013-082

A RESOLUTION APPROVING THE PROJECT PLANS AND SPECIFICATIONS; AUTHORIZING THE CHAIR OF THE BOARD TO SIGN THE COVER SHEET OF THE PLANS; AND AUTHORIZING THE DEPARTMENT OF PUBLIC WORKS TO ADVERTISE FOR BIDS TO CONSTRUCT THE AUBURN FOLSOM ROAD WIDENING NORTH PHASE PROJECT, CONTRACT NO. 1151.

THE FOREGOING INSTRUMENT IS A CORRECT COPY OF THE ORIGINAL ON FILE IN THIS OFFICE
ATTEST
ANN HOLMAN
Clerk of the Board of Supervisors, County of Placer, State of California
Deputy Clerk

The following Resolution was duly passed by the Board of Supervisors of the County of Placer at a regular meeting held on May 7, 2013 by the following vote on roll call:

Ayes: DURAN, WEYGANDT, UHLER, MONTGOMERY, HOLMES

Noes: NONE

Absent: NONE

Signed and approved by me after its passage.

Jim Holmes

Chair, Board of Supervisors

Attest:
Clerk of said Board

Ann Holman

NOW, THEREFORE, BE IT RESOLVED by the Board of Supervisors of the County of Placer, State of California, that this Board approves the project plans and specifications for the Auburn Folsom Road Widening North Phase Project.

BE IT FURTHER RESOLVED AND ORDERED , by the Board of Supervisors of the County of Placer, State of California, that this Board approves and authorizes the chair to sign the cover sheet.

BE IT FURTHER RESOLVED AND ORDERED, by the Board of Supervisors of the County of Placer, State of California, that this Board authorizes the Public Works Department to advertise for bids to construct the Auburn Folsom Road Widening North Phase Project, Contract No. 1151, at no net cost to the County.

MEMORANDUM

DEPARTMENT OF PUBLIC WORKS
County of Placer

TO: BOARD OF SUPERVISORS DATE: JUNE 22, 2004

FROM: TIM HACKWORTH/RICK DONDRO

SUBJECT: **AUBURN FOLSOM ROAD WIDENING PROJECT**

ACTION REQUESTED / RECOMMENDATION

1) Conduct a public hearing and certify the Final Environmental Impact Report (EIR) for the Auburn Folsom Road Widening Project with findings (Attachment X).
2) Approve the project alignment, components and phasing to allow the final design on Phase 1 to proceed and to purchase Right of Way for all phases of the project.
3) Authorize advertisement for construction bids of Phase 1A (Traffic Signal at Fuller Drive.)

BACKGROUND/SUMMARY

The project as proposed would widen Auburn Folsom Road in three phases from two lanes to four lanes from south of Douglas Boulevard to the County Line (See Attachment 1 – Project Location Map). The main purpose of the project is to provide additional roadway capacity to handle increasing traffic levels. Staff has solicited public comments through workshops, MAC meetings, property owner meetings, and the EIR process. Based upon this input, staff has developed a recommended project, which includes landscaped medians, a new traffic signal (Fuller Drive), bike lanes, a multi-purpose trail, and other roadway features. Please refer to Attachment 2 for a more detailed project description and to Attachment 3 for a summary table of project issues and staff/MAC recommendations.

With approval of the EIR and project components, Dokken Engineering can proceed forward with the base design for the entire project and preparation of bid documents for Phase 1. Phase 1 is broken into two sub-phases Phase 1A (Traffic Signal at Fuller Drive) and Phase 1B (Douglas Blvd. to south of Eureka Road). Construction is planned to begin during spring of 2005 for Phase 1A and summer of 2006 for Phase 1B. Future revisions to key project components in Phase 1 may require costly redesign and may delay the start of construction. In addition to construction of Phase 1 staff is proposing to purchase the necessary rights of way for the full project in order to reduce future costs and facilitate Phases 2 & 3.

ENVIRONMENTAL

A Draft EIR was prepared and released for public review in March of 2003 and the Final EIR in August 2003. Attachment 4 outlines the key impacts and proposed mitigation measures relating to tree loss, noise, and traffic operations. Throughout the EIR process, a great deal of effort has been made to develop alternatives that will mitigate the impacts of the project to the greatest extent possible. The environmental documentation has been submitted to the Board under separate cover.

FISCAL IMPACT

Due to uncertainties in future revenue, staff is proposing a pay as you go approach to implement the project (See Attachment 5). Funding for construction of Phase 1 and right of way for all phases of the project is estimated to cost $7.2 million. The proposed funding for this part of the project is from the Granite Bay Traffic Mitigation Fees which has a current available balance of $6 million and revenue of $600,000 per year. Alternate sources of revenue are being explored for the remaining Phases (2 & 3), but nothing has been secured at this time. The estimated total project cost is $17 million if completed in one phase and $21.3 million (2005 dollars) if completed over three phases.

Attachment X

Placer County Board of Supervisors

Findings of Fact and Statement of Overriding Considerations

for the

Auburn Folsom Road Widening Project

Environmental Assessment/Final Environmental Impact Report

ACRONYMS AND ABBREVIATIONS

CEQA	California Environmental Quality Act
Draft EIR	Environmental Assessment/Draft Environmental Impact Report dated March 2003
Final EIR	Environmental Assessment/Final Environmental Impact Report dated ~~August~~ Sept. 2003
Project	Auburn-Folsom Road Widening Project, including the Recommended Alignment
County	County of Placer
DPW	Placer County Department of Public Works
Recommended Alignment	The "Recommended Alignment" as described in Section B of these Findings

I. FINDINGS OF FACT

SECTION A: INTRODUCTION

The California Environmental Quality Act, Public Resources Code section 21000, *et seq.*, ("CEQA") and the California Code of Regulations, Title 14 (the "CEQA Guidelines") allow a lead agency to approve a project with significant unavoidable effects if the lead agency identifies in writing, based on substantial evidence in the record, specific economic, social, or other benefits that outweigh the significant unavoidable effects.

The Placer County Board of Supervisors ("Board") has reviewed the Project's Final EIR (SCH#2002042036) and the following represents its response to those significant effects that will directly or indirectly result from the Project. (Public Resources Code § 21002.1(d).)

The Board has reviewed the Final EIR and the potentially significant environmental impacts that will directly or indirectly result from approval of the Project, and makes one or more of the following findings for each identified significant impact:

1. Changes or alternatives that avoid or substantially lessen the significant environmental effects as identified in the Final EIR have been required or incorporated into the Project; or

2. Such changes or alternatives are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency; or

3. Specific economic, social or other considerations make infeasible the mitigation measures or Project alternatives identified in the Final EIR.

(CEQA Guidelines §§15091, 15093; Public Resources Code section 21081.)

These findings are made by the Board pursuant to section 15091 of the CEQA Guidelines. The Board also is adopting a "Statement of Overriding Considerations" pursuant to sections 15093 of the CEQA Guidelines. The Board finds that where more than one reason exists for any finding, each reason independently supports these findings. This document presents the Findings of Fact and Statement of Overriding Considerations to allow the Project to proceed, assuming all other necessary permits or approvals are obtained.

SECTION B: PROJECT DESCRIPTION AND PROJECT OBJECTIVES

These findings generally describe the Project as proposed by Placer County DPW and the environmental determinations regarding the Project, as set forth in the Final EIR.

The County has developed the Auburn-Folsom Road Widening Project for the purposes of upgrading Auburn-Folsom Road from the Placer/Sacramento County line to Douglas Boulevard. The Project has been divided into three phases: Phase 1 (south of Douglas Blvd. to approximately 1500' south of Eureka Road), Phase 2 (County Line to approximately 1500' north of Oak Hill Drive) and Phase 3 (1500' south of Eureka Road to 1500' north of Oak Hill Drive). Phase 1 is broken into two sub-phases Phase 1A (Traffic Signal at Fuller Drive) and Phase 1B (Douglas Blvd. to south of Eureka Road). Phase 1 includes right-of-way acquisition for the entire Project.

The Recommended Alignment is a combination of alternatives studied in the Final EIR. The proposed alignment was selected as the preferred alternative due to its compliance with specific Project goals, such as improvement of safety and design speed, while minimizing environmental and social impacts by selecting the best right of way and roadway profile combinations for specific portions of the Project.

The Recommended Alignment incorporates improvements based on a 55 mph design speed, and includes widening Auburn Folsom Road to provide four 12-foot lanes (two in each direction) and 6-foot paved shoulders to accommodate Class II bike lanes on each side. A 14-foot painted and/or raised median will also be incorporated, with two sections (approximately 300 linear feet each) of raised landscaped medians at each end of the project. A granite monument with an inscription welcoming people to Granite Bay will be placed in the southerly landscaped median.

The Recommended Alignment will also incorporate a 4-foot wide multi-purpose trail adjacent to the paved shoulder on the west side from Eureka Road to Oak Hill Drive. From Oak Hill Drive south, a meandering multi-purpose trail will be maintained with some portions relocated to facilitate the proposed improvements. The meandering trail will cross the canal and connect to the Baldwin Reservoir trail using the existing box culvert, which is being extended by the City of Folsom.

Existing signalized intersections (Auburn Folsom Road/Eureka Road and Auburn Folsom Road/Oak Hill Drive) will be modified, and a new signal will be installed at the intersection of Auburn Folsom Road and Fuller Drive. The Fuller Drive signal is proposed to be constructed during Phase 1A, with the remaining widening between Douglas Blvd. and 1500' south of Eureka Road (Phase 1B) being constructed later. Phase 1A is being proposed prior to Phase 1B in an effort to improve access to Fuller Drive.

A concrete block wall will be installed for continuity on the west side of the project from Oak Hill Drive south to connect to the City of Folsom's wall (Phase 2). The Recommended Alignment includes retaining walls, as may be necessary, on the east side of Auburn Folsom Road along the curve just north of Lou Place and on the west side north of Lou Place to reduce right of way requirements (Phase 3). The Recommended Alignment includes additional retaining walls, as may be necessary, to be installed in other locations in order to reduce impacts on environmentally sensitive areas, and/or necessary because of right of way issues.

Access to streets and driveways will be accommodated either through two way left turn lanes, left turn pockets, or u-turn capabilities located in close proximity. The Recommended Alignment is intended to minimize right-of-way acquisition from private property. A majority of the right-of-way acquisition in the Recommended Alignment will be from the Bureau of Reclamation/State Parks. In an effort to limit right-of-way acquisition and reduce the amount of earthwork, a section of the project near Lou Place will utilize a split-profile design. Similarly, near Eureka Road, lane widths and the median width have been reduced to minimize impacts. The Project area will be revegetated in accordance with the requirements specified in the Final EIR.

The primary objectives of the Project are to provide additional roadway capacity to handle increasing traffic levels along Auburn Folsom Road and to provide needed safety, pedestrian and bicycle improvements. Project Objectives are further described in the Executive Summary of the Draft EIR.

SECTION C: PROJECT HISTORY

The County distributed a notice of preparation (NOP) for the EIR in April, 2002 to identify issues of concern regarding the scope and content of the environmental information to be included in the EIR. The NOP was distributed to federal, state and local agencies and interested members of the public for a 30 day review period. The NOP and comment letters are provided in the Final EIR. Public review for EIR documents was conducted in accordance with the CEQA-mandated public review period(s). Public meetings were held as described the Final EIR. Public comment was reviewed by DPW and the County's EIR consultant, and a response was prepared to address each received written comment, as contained in the Final EIR.

SECTION D: THE RECORD

For the purposes of CEQA and the Findings of Fact and Statement of Overriding Considerations hereinafter set forth, the administrative record for the Project consists of the following:

1. All non-privileged relevant staff reports, memoranda, maps, minutes and other planning documents prepared by Placer County DPW staff and consultants relating to the Project and which are available to the public in accordance with the California Public Records Act, Govt. Code section 6250 et seq.;

2. All CEQA documents prepared for the Project and all documents on which the CEQA documents rely by reference, including the Draft EIR and their addenda and all documents collectively representing the Final EIR for the Project;

3. All written comments, responses and testimony concerning the CEQA documents received by the County from public agencies and interested members of the public concerning the Project, up to and during the Board's

hearing on June 22, 2004, and any written comments and responses from thereto;

4. Testimony received by the County at all noticed public hearings, including comments on the Project and/or any draft or final EIR;

5. Documents submitted in association with the Project, describing the Project and/or related projects and supporting or augmenting the environmental documents prepared pursuant to CEQA for the Project and/or related projects;

6. Any documents embodying the County's action on the Project including staff reports, statements of decision and resolutions and the minutes of public hearings, meetings, and workshops on the Project;

7. All other information including documents or testimony submitted to the County supporting or augmenting the environmental documents prepared pursuant to CEQA.

8. These Findings of Fact and Statement of Overriding Considerations adopted in connection with the Project.

SECTION E: DISCRETIONARY ACTIONS

The proposed discretionary actions by the Board involve the Certification of the Final EIR, adoption of these Findings of Fact and Statement of Overriding Considerations, and subsequent approval of the Project, including the Recommended Alignment and phasing as described herein.

SECTION F: TERMINOLOGY OF FINDINGS

Section 15091 of the CEQA Guidelines requires that for each significant environmental effect identified in an EIR for a proposed Project, the approving agency must issue a written finding reaching one or more of three allowable conclusions, including a brief explanation of the rationale for each conclusion. The first is that "[c]hanges or alterations have been required in, or incorporated into, the Project which avoid or substantially lessen the significant environmental effect as identified in the final EIR." The second potential finding is that "[s]uch changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency." The third permissible conclusion is that "[s]pecific economic, social, or other considerations make infeasible the mitigation measures or Project alternatives identified in the Final EIR."

For purposes of these Findings, the term "mitigation measures" shall constitute the "changes or alterations" discussed above. The term "avoid or substantially lessen" will refer to the effectiveness of one or more of the mitigation measures or alternatives to reduce an otherwise significant environmental effect to a less than significant level.

When an impact remains significant or potentially significant with mitigation, the Findings will indicate that the impact is still "significant."

For each mitigation measure, the Board also will decide whether the mitigation proposed in the EIR is "feasible." Pursuant to the CEQA Guidelines, "'[f]easible' means capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors." (CEQA Guidelines section 15364.)

SECTION G: LEGAL EFFECT OF FINDINGS

All feasible Mitigation Measures that avoid or substantially lessen the significant effects of the Project and that are adopted are binding on the County and its assigns or successors in interest at the time of approval of the Project.

SECTION H: FINDINGS ON SIGNIFICANT EFFECTS AND MITIGATION MEASURES

The Final EIR analyzes environmental effects of the Project that would be significant in the absence of mitigation measures for the Project. These effects (or impacts) are set forth in the Final EIR, along with the adopted mitigation measures (changes or alterations) that will avoid or substantially lessen those significant effects. Also set forth are certain significant effect(s) that cannot be avoided or reduced to a less than significant level even with the adoption of all feasible mitigation measures proposed in the Final EIR. In adopting these findings, the Board also adopts a Statement of Overriding Considerations setting forth the economic, social and other benefits of the Project that will render these significant effect(s) acceptable.

The Board is not required by law to adopt mitigation measures for impacts that are less than significant. The voluntary adoption of such mitigation measures with respect to certain impacts, however, does not obligate the Board to similarly adopt measures with respect to other impacts.

The Board is finding whether the impacts remain significant or are reduced to a level of insignificance with the application of feasible mitigation measures. The Board also is finding whether certain other measures that were proposed but not adopted, are infeasible for social, economic or other reasons. Lastly, the Board is identifying measures that are within the jurisdiction and responsibility of other agencies.

Adoption of and Findings Concerning Adopted Mitigation Measures

The Board hereby adopts the mitigation measures applicable to the Project as described in the Auburn Folsom Road Widening Project Mitigation Monitoring Plan on file with the Clerk of the Board of Supervisors. The Board finds that certain mitigation measures as described in the Final EIR will lessen but not necessarily eliminate the potential adverse environmental effect associated with the Project. Thus, these impact(s) are significant and unavoidable. The Board finds that there are no other feasible mitigation measures or alternatives that the Board may adopt at this time which would reduce these impacts to less than significant. To the extent that these adverse

impact(s) will not be substantially lessened or eliminated, the Board finds that the specific, economic, legal, social, technological or other considerations identified in the Statement of Overriding Considerations support approval of the Project.

SECTION I: FINDINGS REGARDING PROJECT ALTERNATIVES

Evaluation of alternatives to the proposed project that could reduce significant impacts is a fundamental objective of the environmental review process. The range of alternatives required in an EIR is governed by the "rule of reason." The EIR must evaluate a sufficient range of alternatives to foster an informed discussion of reasonable choices. The alternatives examined in the Final EIR were developed by the EIR consultant and DPW. Alternatives that were analyzed include:

1. Alternative 1: Widen Roadway to the West
2. Alternative 2: Widen Roadway to the East.
3. Alternative 3: Widen Roadway equally on both sides
4. Alternative 4: County-DPW Preferred Alternative
5. The No-Project alternative.

The Board incorporates by this reference the Alternatives discussion found in Chapter 2 of the Draft EIR and incorporates the findings stated therein. The Board further finds that there is substantial evidence in the record that the Recommended Alignment has been adequately analyzed by Alternatives 1-4, inclusive, and is within the Project limits as described in Chapter 2 of the Draft EIR. The Board further finds that there is substantial evidence in the record that the No-Project alternative is infeasible because it does not allow the Project to feasibly achieve its basic objectives nor accomplish the goals and policies of the County's transportation plans and other adopted County policies.

II. STATEMENT OF OVERRIDING CONSIDERATIONS

The Board specifically finds that to the extent the identified adverse or potentially adverse impacts have not been mitigated to less than significant levels, there are specific economic, social and other considerations that support approval of the Project. Moreover, the Board finds that where more than one reason exists for any particular finding, the Board finds that each reason independently supports that finding.

The Board makes the following Statement of Overriding Considerations in support of its proposed approval of the Project:

CEQA requires a public agency to balance the benefits of a proposed Project, including specific economic, social, planning, land use, or other considerations, against its unavoidable environmental risks in determining whether to approve the Project. The Board has reviewed and considered the information contained in the Final EIR and throughout the record. Based on this information, the Board proposes to approve the

Project despite certain significant unavoidable adverse impacts identified in the Final EIR.

The Board has carefully balanced the benefits of the proposed Project against the unavoidable adverse impacts identified in the Final EIR. Notwithstanding the disclosure of impact(s) identified in the Final EIR as significant and which have not been eliminated or mitigated to a level of insignificance, the Board, acting pursuant to sections 15093 of the CEQA Guidelines, hereby determines that the benefits of approving the Project outweigh the significant unmitigated adverse environmental impacts.

The Final EIR identifies each of the potential adverse impacts that cannot be mitigated to a level of insignificance even if the Project is implemented with adopted mitigation measures. Although the Board concludes that the unavoidable environmental effect(s) identified in the Final EIR, as well as the environmental effects which have not been mitigated to a point of insignificance will be substantially lessened by the mitigation measures incorporated in the proposed Project, it recognizes that implementation of the Project nonetheless introduces certain unavoidable and irreversible environmental impacts.

The following effect cannot be mitigated to a less than significant level:

SECTION A: SIGNIFICANT UNAVOIDABLE IMPACT

1. Degradation of Visual Quality Resulting From Tree Removal; Impact 7.4

Trees and other vegetation will necessarily need to be removed for the construction of the Project. The Final EIR finds that travelers and others would experience diminished visual quality and change in the rural character of the corridor. The Final EIR finds that, even after adoption of identified mitigation measures, there will be a significant and unavoidable impact.

SECTION B: SPECIFIC FINDINGS

1. Project Benefits Outweigh Unavoidable Impacts

The unavoidable and irreversible impacts of the Project detailed above are acceptable in light of the economic, fiscal, social, planning, land use and other considerations set forth herein because the benefits of the Project outweigh any significant and unavoidable or irreversible adverse environmental impacts.

2. Balancing of Competing Goals

The Board finds it is imperative to balance competing goals in considering the reasons and need for the Project and the environmental documentation for

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the Project. Not every environmental impact has been fully eliminated because of the need to satisfy competing concerns. Accordingly, in some instances the Board has chosen to accept certain environmental impacts because to eliminate them would unduly compromise other important economic, social or other goals. The Board thus finds and determines that the transportation, economic, fiscal, social, planning, land use and other benefits to be obtained by approving the Project outweigh the environmental and related potential detriment of the Project.

The Board specifically finds that to the extent an identified adverse impact has not been mitigated to less than significant level, there are specific transportation, economic, social, planning, land use and other considerations which support approval of the Project, as follows. Moreover, where more than one reason exists for any finding, the Board finds that each reason independently supports these findings.

3. **Transportation Improvements**

The Board finds that the proposed Project is necessary and appropriate to improving transportation circulation and access to the citizens of Placer County and the public at large. The Board further finds that the proposed improvements are in the public interest to enhance capacity on an established transportation corridor. Improvements to Auburn Folsom Road enhance public accessibility throughout the region and provide necessary capacity for anticipated increases in traffic volume in the Project area.

4. **Safety**

The Project will improve safety along Auburn Folsom Road by improving sight distances, adding traffic lanes in each direction, signalizing intersections, adding medians, improving alignments and providing pedestrian and bicycle improvements.

5. **Regional Cooperation**

The Project enhances regional cooperation by connecting with improvements being constructed by the City of Folsom. City of Folsom improvements include road widening south of the Project and connections to the Baldwin Reservoir trail.

III. CONCLUSION

The Board has carefully considered the evidence received in the environmental review planning process in arriving at its decision to approve the proposed Project. The Board has concluded that such a decision takes affirmative steps to implement a necessary transportation improvement serving the citizens of Placer County and the public at large. Furthermore, the Board has concluded that adoption of the Project is the most logical and most feasible method of assuring that the necessary transportation

improvements will be provided. The Board also concludes that implementation of the Project with mitigation will result in implementation of the goals and policies for the development of sufficient transportation facilities within the region.

Having balanced the benefits of the Project against the Project's potential unavoidable adverse impacts, the Board hereby determines that the specific overriding transportation, economic, legal, social, technological, or other benefits of the Project outweigh the potential unavoidable adverse effects on the environment, and that the unavoidable adverse effects are therefore acceptable, based on the overriding considerations set forth herein, which are sufficient to outweigh the Project's unavoidable adverse effects.

The Board further finds that:

1. The Final EIR has been completed in compliance with CEQA.

2. The Final EIR was presented to the Board and the Board reviewed and considered the information contained in the Final EIR and any comments received during the public review period prior to approving the Project.

3. The Final EIR reflects the County's independent judgment and analysis.

4. On the basis of the whole record before it, including the initial study and any comments received, there is no substantial evidence that the proposed Project will have a significant effect on the environment, except for those significant and unavoidable impacts described herein for which the Board adopts the Statement of Overriding Considerations as also described herein.

5. The location and custodian of documents and other materials that constitute the record of proceedings upon which the decision to certify the Final EIR is based are as follows: Tim Hackworth, Director of Public Works, 11444 B Avenue, Auburn, CA 95603.

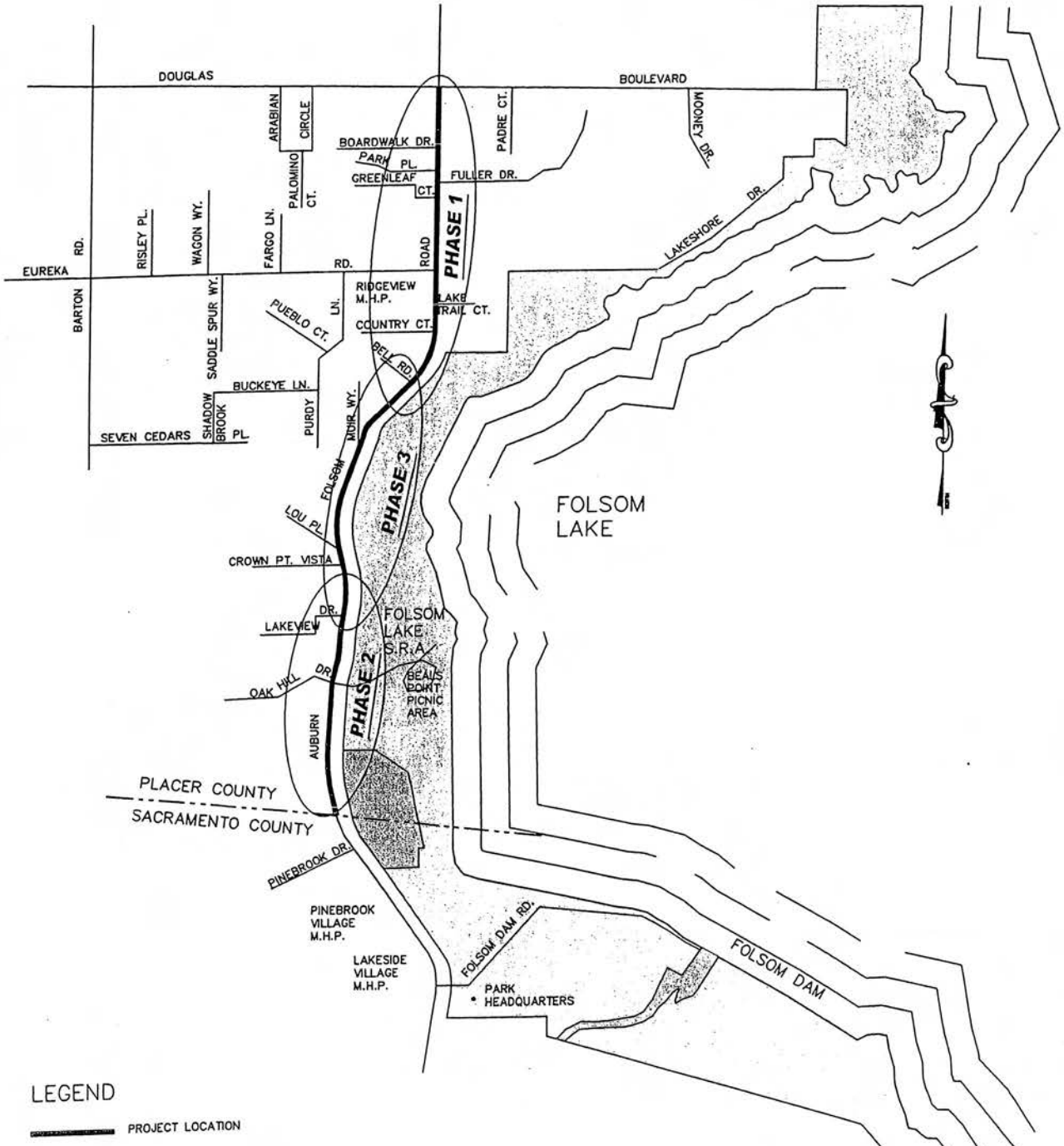
6. Based on the above and the entire record before it, the Board hereby certifies the Auburn Folsom Road Widening Project Environmental Assessment/Final Environmental Impact Report, SCH #2002042036.

7. The Placer County Department of Public Works is directed to file a Notice of Determination with the County Clerk and the State Clearing House within five (5) working days in accordance with Public Resources Code section 21152(a) and CEQA Guidelines section 15094.

Finally, the Board has determined that any remaining effects on the environmental attributable to the Project that are found to be unavoidable in the preceding Findings of Fact are acceptable due to the overriding concerns set forth in this Statement of Overriding Considerations. The Board has concluded that with all environmental, social and economic trade-offs, the Project, with adopted mitigation and including the Recommended Alignment and phasing as described herein, should be approved.

June 22, 2004
Auburn Folsom Road Widening Project
BOS Memo Supplement – Project Location Map

Attachment 1
Project Location Map



LEGEND

PROJECT LOCATION

Attachment 2
Project Description

The Auburn Folsom Road Widening Project is located on Auburn Folsom Road from the Placer/Sacramento County line to Douglas Boulevard. The project has been divided into three phases: Phase 1 (south of Douglas Blvd. to approximately 1500' south of Eureka Road), Phase 2 (County Line to approximately 1500' north of Oak Hill Drive) and Phase 3 (1500' south of Eureka Road to 1500' north of Oak Hill Drive). Phase 1 is broken into two sub-phases Phase 1A (Traffic Signal at Fuller Drive) and Phase 1B (Douglas Blvd. to south of Eureka Road). See Attachment 1 for a Project Location Map.

The staff recommendation is to move forward on Phases 1A and 1B now. In addition, the rights of way for the full project will be acquired with this first phase work. Items of work described below that fall within Phases 2 & 3 will be undertaken at a future date as funding is available and subject to Board of Supervisors approval.

Staff's recommended project is a combination of alternatives studied in the Environmental Impact Report (EIR). The proposed alignment was selected as the preferred alternative due to its compliance with specific project goals, such as improvement of safety and design speed, while minimizing environmental and social impacts by selecting the best right of way and roadway profile combinations for specific portions of the project.

The proposed widening project incorporates improvements based on a 55 mph design speed, and includes widening Auburn Folsom Road to provide four 12-foot lanes (two in each direction) and 6-foot paved shoulders to accommodate Class II bike lanes on each side. A 14-foot painted and/or raised median will also be incorporated, with two sections (approximately 300 linear feet each) of raised landscaped medians at each end of the project. A granite monument with an inscription welcoming people to Granite Bay will be placed in the southerly landscaped median.

The proposed widening project will also incorporate a 4-foot wide multi-purpose trail adjacent to the paved shoulder on the west side from Eureka Road to Oak Hill Drive. From Oak Hill Drive south, a meandering multi-purpose trail will be maintained with some portions relocated to facilitate the proposed improvements. The meandering trail will cross the canal and connect to the Baldwin Reservoir trail using the existing box culvert, which is being extended by the City of Folsom.

Existing signalized intersections (Auburn Folsom Road/Eureka Road and Auburn Folsom Road/Oak Hill Drive) will be modified, and a new signal will be installed at the intersection of Auburn Folsom Road and Fuller Drive. The Fuller Drive signal is proposed to be constructed during the spring of 2005 (Phase 1A), with the remaining widening between Douglas Blvd. and 1500' south of Eureka Road (Phase 1B) being constructed during summer of 2006. We are proposing to construct Phase 1A prior to Phase 1B in an effort to improve access to Fuller Drive.

A concrete block wall will be installed for continuity on the west side of the project from Oak Hill Drive south to connect to the City of Folsom's wall (Phase 2). Retaining walls may be placed on the east side of Auburn Folsom Road along the curve just north of Lou Place and on the west side north of Lou Place to reduce right of way requirements (Phase 3). Additional retaining walls may be installed in other locations in order to reduce impacts on environmentally sensitive areas, and/or right of way issues.

Access to streets and driveways will be accommodated either through two way left turn lanes, left turn pockets, or u-turn capabilities located in close proximity. Right-of-way acquisition from private property has been minimized; a majority of the right-of-way acquisition will be from the Bureau of Reclamation/State Parks. In an effort to limit right-of-way acquisition and reduce the amount of earthwork, a section of the project near Lou Place will utilize a split-profile design. Similarly, near Eureka Road, lane widths and the median width have been reduced to minimize impacts. The project will be revegetated in accordance with the requirements specified in the Environmental Impact Report. All environmental impacts will be mitigated for as specified in the Environmental Impact Report.

Construction is planned to begin during spring of 2005 for Phase 1A and summer of 2006 for Phase 1B. Construction of Phases 2 & 3 shall depend upon the availability of funding. Future revisions to key project components in Phase 1 may require costly redesign and may delay the start of construction.

Attachment 4
Project Environmental Impact Summary

The EIR for the project provides a complete description of project impacts and mitigations. The following is a summary of impacts grouped by Level of Significance. The impact number corresponds to the impacts identified in the Draft Environmental Impact Report.

SIGNIFICANT UNAVOIDABLE IMPACTS

Visual Resources / Aesthetics

7.4 Degradation of Visual Quality Resulting From Tree Removal. The full project roadway widening is anticipated to require the removal of 346 trees. As mitigation for the tree removal, the County will be required to replace an equal amount of tree trunk diameter for all trees removed. A minimum of 50% must be replanted on site and up to 50% may be in the form of contribution to the Placer County Tree Preservation Fund. The County will also be responsible to revegetate and restore all disturbed areas to minimize the visual quality impacts. Although the project will implement these mitigation measures, the tree lose remains a significant unavoidable visual and aesthetic impact to the area.

SIGNIFICANT IMPACTS OR POTENTIAL SIGNIFICANT IMPACTS MITIGATED TO LESS THAN SIGNIFICANT LEVELS

Traffic

3.1 Temporary Disruption of Traffic Conditions During Construction
3.2-3.3 Increased Roadway Capacity and Increased Traffic Volumes compared to "No-Project"
3.3 Potential Inconsistency with Equestrian System Policies
3.5 Potential Inconsistency with Pedestrian and Bicycle Policies

Air Quality

4.1 Temporary Increase in ROG, NOx, and PM 10, Emissions During Construction

Hydrology and Water Quality

5.1 Temporary Degradation of Surface Water Quality During Construction
5.2 Changes in Soil Absorption Rates, Drainage Patterns and the Rate & Amount of Runoff.
5.3 Post-construction Degradation of Surface Water Quality

Noise

6.1 Exposure of Noise-Sensitive Land Uses to Construction Noise
6.2 Exposure of Residences and Campgrounds to Air Blasts and Vibration from Blasting
6.3 Exposure of Noise-Sensitive Land Uses to Increased Traffic Noise Levels

Attachment 3
Project Issues Table

ISSUE NO.	ISSUE	STAFF RECOMMENDATION	MAC RECOMMENDATION	COMMENTS
1	Easterly Alignment	Widening to the east within the existing ROW, where feasible, in order to minimize impacts to existing homes as much as possible.	Widening to the east, within existing ROW, wherever technically feasible & without impacts to wetlands, to minimize impacts to existing homes.	*The alignment has been revised in an effort to minimize impacts to residents on both the east and west sides of the project.*
2	Bike Lanes	Class 2 bikelanes will be included in the 6-foot paved shoulders on both sides, the entire length of the project.	4-foot Class 2 bike lanes on both sides for the entire length.	*6-foot paved shoulders are appropriate for anticipated traffic conditions.*
3	Multi-Use Trail	4-foot wide multi-use trail on the west side of Auburn Folsom Road, adjacent to the paved shoulder, not meandering, not separated.	Meandering trail on the west side of the project from County line to Eureka Road; separated from the roadway (where technically feasible); 4-foot width (greater where topography will allow).	
4	Truck Traffic	No truck restrictions.	Through truck traffic not permitted.	*Truck traffic issues should be evaluated as a separate independent issue, if the Board so desires.*
5	Landscaped Medians	300 feet of drought tolerant landscaped medians at each end of the project (Phases 1 & 2). A granite monument with an inscription welcoming people to Granite Bay will be placed in the southerly landscaped median (Phase 2).	Landscaped Medians from the County line to Oak Hill Drive and from Eureka Road to Fuller Drive.	*The proposed project would not prohibit the installation of additional landscaped medians, as a future separate project.*
6	Medians, Walls, Berms	The proposed project will include 14-foot painted and/or raised medians through out the project. Berms and soundwalls are not required as environmental mitigations, and are not recommended.	Specific design and landscape plans for medians, walls, and berms be submitted to the MAC for review prior to approval.	*Architectural façade treatments for retaining and concrete block walls will be submitted for MAC review and comment.*
7	Undergrounding	Undergrounding of utilities is not economically feasible as part of this project.	County apply for PG&E Rule 20 funds for undergrounding for the entire length.	*Undergrounding with Rule 20 funds may be a possible future project.*
8	Retaining Walls	Retaining walls may be placed near Lou Place and to reduce right-of-way (Phase 3). Additional retaining walls may be installed in other locations in order to reduce potential impacts on environmentally sensitive areas, and/or right of way issues.	Gravity walls (boulders, similar to Hazel Avenue).	*Various types of walls will be considered, . Architectural façade treatments for retaining walls will be submitted for MAC review and comment.*
9	Rural Character	The rural character will be preserved to the maximum extent practicable.	Roadway must maintain & preserve the rural character of the existing road.	
10	Concrete Walls	A concrete block wall is proposed on the west side from Oak Hill Drive south to the City of Folsom's wall for continuity purposes (Phase 2).	"Soundwalls" shall be limited to the west side from Oak Hill Drive south; shall be constructed & landscaped to qualities similar to that required of developers.	*Soundwalls are not required as environmental mitigations The Concrete Block Wall being proposed for continuity purposes will extend the wall being constructed as part of the City of Folsom's Project. Architectural façade treatments for the concrete block wall will be submitted for MAC review and comment.*
11	Wetland & Tree Loss Mitigation	A revegetation plan is included in the base project.	Wetland & tree loss mitigated within Granite Bay.	*Wetland and tree losses will be mitigated for in accordance with the approved environmental documentation.*
12	Design Speed & Speed Limit	The design speed is proposed at 55 mph. The posted speed limit will be determined by the BOS as separate issue.	Design speed & speed limit should be 45 mph for safety (ingress/egress) of Auburn Folsom Road residents.	
13	Future Implementation Plan	Future phases and improvements may be considered as separate projects at a later date, upon funding availability and community desire.	Implementation plan for all amenities that cannot be included as part of the base project. Plan shall be included as part of a project approved by the BOS. Amenities shall be identified & prioritized, in concert with the MAC. Plan shall include a timeline for completion of each feature and will establish a proposed funding method.	
14	Environmental Impacts	Impacts identified by the EIR will be mitigated in complaince with the EIR.	All impacts identified by the EIR as significantly adverse impacts shall be addressed as part of the base project, or if deferred, definitely prioritized within a time certain.	*See Attachment 4 and EIR.*
15	Impacted Property Owners	In order to mitigate for noise, open-grade asphalt is proposed. In addition, the proposed alignment moves the road further away from many residences.	The County shall develop a plan to provide assistance to owners of impacted parcels in the form of soundwalls.	

June 22, 2004
Auburn Folsom Road Widening Project
BOS Memo Supplement – Impact Summary
Attachment 4

Visual Resources / Aesthetics
7.3 Degradation of Views and Increase in Glare

Biological Resources

8.1 Potential Disturbances of Loss of Waters to the United States (Including Wetlands)
8.2 Potential Loss or Disturbance of Valley Foothill Riparian Forest
8.3 Loss or Disturbance of Blue Oak-Digger Pine Woodland and Native Trees
8.4 Potential Mortality of Valley Elderberry Longhorn Beatles or Disturbance of Habitat
8.5 Potential Mortality of Northwestern Pond Turtles
8.6 Potential Disturbance of Nesting Loggerhead Shrike, Oak Titmouse, White-Tailed Kite, and Non-Special-Status Nesting Migratory Birds and Raptors
8.7 Potential Disturbance of Nesting Cliff and Barn Swallows

Earth Resources
9.1 Potential Construction-Related Soil Erosion and Sedimentation

Cultural Resources
10.1 Potential Damage to Previously Unidentified buried Archaeological Resources
10.2 Potential Damage to Previously Unidentified Human Remains

Attachment 5

This supplement explores several aspects of the financing of the Auburn Folsom Road Project including Traffic Fee Revenue, Federal Financing, Regional Traffic Fees (SPRTA) and loans from other fee districts.

The current balance of Traffic Fees available for the project in the Granite Bay District is about $6 million. The seven-year annual average revenue is $834,000 however calendar year 2003 was $580,000. At the time that construction starts on phase 1B (spring of 2006) it is estimated that there will be $7.2 million available for the project based upon an assumption of $600,000 in annual revenue to the fee district. The County is exploring alternate funding sources to supplement the local Traffic Fee program.

Federal funds
Federal funds are being pursued as a part of the Boards Legislative Package. The Auburn Folsom Road project has interactions with Federal property at Folsom Lake State Park and circulation routes around the dam. The Folsom Dam Bridge Project may result in funding opportunities for the project. We are actively working on this source of revenue. It should be noted that further environmental review may be necessary depending on the type of federal funds received. We are requesting $5 million.

Regional Traffic Fee
The second source of revenue is being explored through a regional traffic fee. There is a Joint Powers Authority made up of the jurisdictions of Roseville, Rocklin, Lincoln and Placer County, which was formed to address funding issues for regional transportation projects. This is called South Placer Regional Transportation Authority (SPRTA). A fee program is currently in place for 5 projects. A study was conducted to explore how the Auburn Folsom Road project might be added to the existing program. Traffic modeling was used to estimate the amount of traffic that will use the road in the future from these jurisdictions. The results showed that 27% of the growth in trips are associated with the Granite Bay area and 63% from the other member jurisdictions.

Based upon these results we met with our partner jurisdictions to explore their willingness to support adding the Auburn Folsom Road project to the SPRTA fee program. The Cities of Roseville and Lincoln were willing to explore adding new projects only in the context of a comprehensive review of the Regional Fee program. The SPRTA Board took action on May 26, 2004 to direct staff to begin work on a comprehensive Review and Update of the Fee Program. Included in the review will be revised costs for current projects, updated modeling, revised land use and new projects.

Loans
An option available to the Board is to fund the project with a loan from other Traffic Fee Districts. This has been done successfully with the Bell Road Project. In that case a formal agreement was approved by the Board setting out the specifics of how the loan was to be made and paid back. The lending district would receive interest payments equivalent to what would have been earned so there is no loss. Lending districts would be selected so as to not delay project delivery.

Auburn Folsom Road
June 22, BOS
Memo supplement
Financing
Attachment 5

In the case of the Bell Road project, the Board authorized $3.55 million in loans from 5 lending districts. Currently the balance of the loaned amount stands at $2 million. The project accounting is not complete as there is an outstanding unresolved construction claim by Teichert.

In the case of the Auburn Folsom Road project, it is expected that if the full project were undertaken, construction would be completed in the fall of 2007. Based upon a cash flow projection, at the end of construction a loan of about $8 million would be needed.

The repayment of a loan for the Granite Bay District depends on the rate of development as well as the total land development potential. The update of the Granite Bay Community Plan included an analysis of how many new dwelling units can be constructed until build out of the plan. We have estimated the revenue based upon build out of the land use and raising the fee to reflect increased project costs. The estimated future revenue coming into the Granite Bay District of the fee program is estimated to be $10.5 million.

The analysis above raises the issue of using all the future traffic fee revenues for one project. There are other transportation improvements that are needed in the future in the Granite Bay area. These include intersection widening along Douglas Blvd., improvements to Barton Road, traffic signals and shoulder improvements. It is staff's opinion that the Auburn Folsom Road Project is the highest priority project in the Granite Bay area.

Recommendation

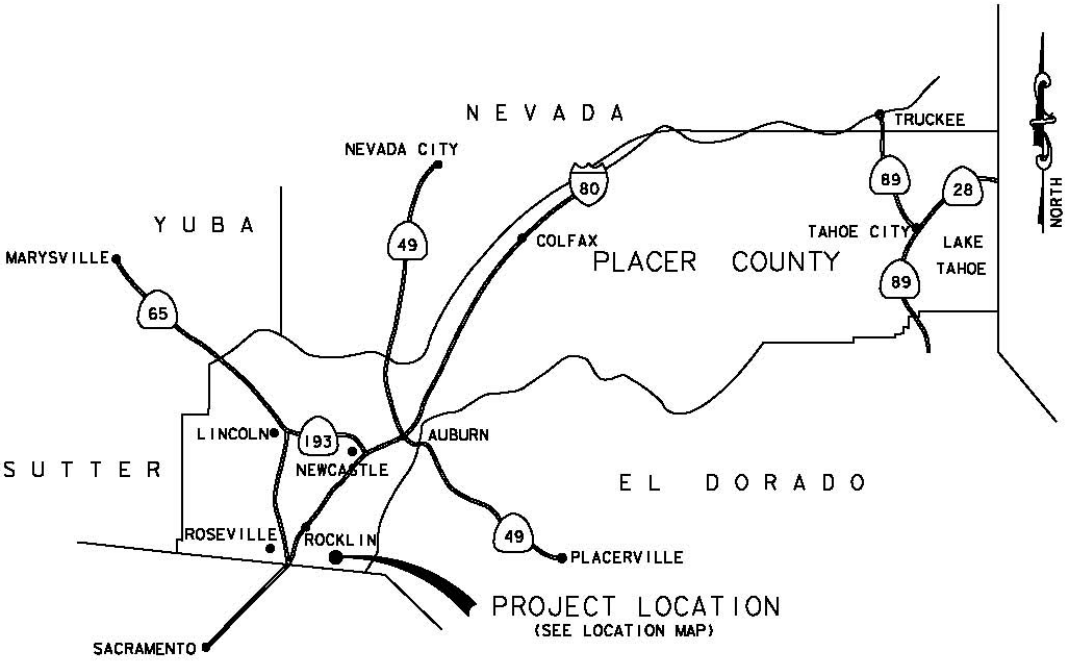
The staff recommendation is to fund the project with Granite Bay Traffic Fee revenue on a pay as you go basis. The proposal to construct Phase 1 plus full project right of way matches the available funds plus two years of revenue. The uncertainty of the Federal funds and regional fees makes it difficult to rely on these funding sources. If the other sources of revenue were to be acquired for the project then the Board could decide how these funds would be allocated. They could be used to supplant traffic fee revenue thus freeing funds for other transportation purposes in the Granite Bay area. On the other hand, the funds could be used to supplement the project by adding enhancements. The Granite Bay traffic fee should be updated as soon as possible to reflect current project costs.

Traffic Mitigation Fees Summary

Granite Bay District available	$5.94 million
Annual revenue 7 yr. Average	$834,000
2001	$1.1 million
2002	$1.43 million
2003	$580,000
2004 annualized	$600,000
Interest earned (and borrowed)	1.84%
Estimated revenue to buildout	$10.5 million
Request for Federal Funds	$5 million
SPRTA request from cities	$7.8 million

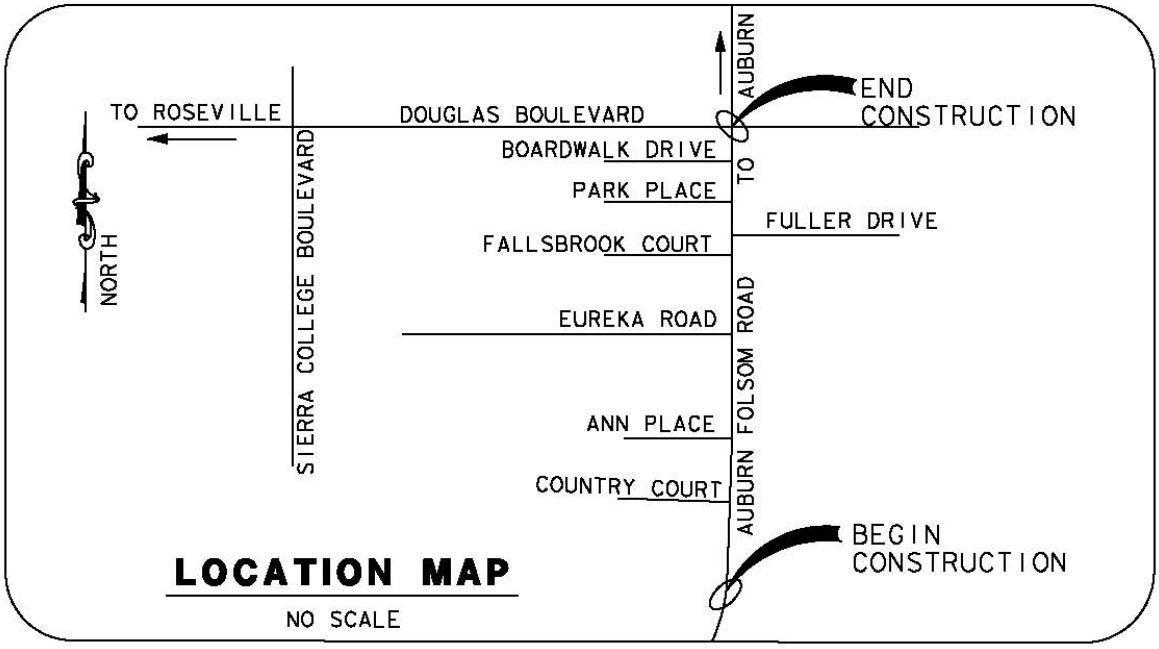
AUBURN FOLSOM ROAD WIDENING, NORTH PHASE

PROJECT LOCATION MAP



VICINITY MAP

NO SCALE



LOCATION MAP

NO SCALE

Auburn-Folsom Road Widening Project

From the Placer County Line North to Douglas Boulevard

Environmental Assessment/ Draft Environmental Impact Report

Volume 1 of 2

Federal Lead Agency:
U.S. Bureau of Reclamation

State Lead Agency:
Placer County

State Clearinghouse Number 2002042036

March 2003

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March 2003

Placer County. 2003. Auburn-Folsom Road widening project environmental assessment/draft environmental impact report. March. (J&S 02-102.) Sacramento, CA. Environmental consultant: Jones & Stokes.

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Acronyms and Abbreviations

A-LAC	Arterial—low access control
A-HAC	Arterial—high access control
ACHP	Advisory Council on Historic Preservation
ADT	average daily traffic
ARB	California Air Resources Board
BA	biological assessment
Basin Plans	Water Quality Control Plans
BMPs	best management practices
BO	biological opinion
Board	California State Geology and Mining Board
CAAAs	Clean Air Act Amendments of 1990
Cal-EPA	California Environmental Protection Agency
California CAA	California Clean Air Act of 1988
Caltrans	California Department of Transportation
CCR	California Code of Regulations
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFR	Code of Federal Regulations
cfs	cubic feet per second
CGS	California Geological Survey
CIP	Capital Improvement Program
CNDDB	California Natural Diversity Database
CNEL	Community noise equivalent level
CNPS	California Native Plant Society
CO	carbon monoxide
Corps	U.S. Army Corps of Engineers
County	Placer County
CRHR	California Register of Historical Resources
dB	decibel
dBA	A-Weighted Decibel
dbh	diameter at breast height
DFG	California Department of Fish and Game
DPR	California Department of Parks and Recreation
DPW	Department of Public Works
DRC	Development Review Committee
DSRC	Design/Site Review Committee
EA	environmental assessment

EA/EIR	Environmental Assessment/Environmental Impact Report
EIR	environmental impact report
EIS	environmental impact statement
EPA	U.S. Environmental Protection Agency
ESA	federal Endangered Species Act
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
FIP	Federal Implementation Plan
FIRMs	Flood Insurance Rate Maps
FONSI	finding of no significant impact
FR	Federal Register
FTA	Federal Transit Administration
GPS	global positioning system
HCM	Highway Capacity Manual
HCP	habitat conservation plan
HEC	Hydraulic Engineering Center
hp	horsepower
Hz	Hertz
I-80	Interstate 80
ISA	International Society of Arboriculture
kph	kilometers per hour
LDM	Land Development Manual
L_{dn}	Day-night level
L_{eq}	Equivalent sound level
L_{max}	Maximum sound level
L_{min}	Minimum sound level
L_{xx}	Percentile-exceeded sound level
MAC	Municipal Advisory Council
MBTA	Migratory Bird Treaty Act
MCAB	Mountain Counties Air Basin
MMIP	Mitigation Monitoring Implementation Plan
MOU	memorandum of understanding
mph	miles per hour
MTIP	Metropolitan Transportation Improvement Program
MTP	Metropolitan Transportation Plan
NAAQS	national ambient air quality standards
NAGPRA	Native American Grave Protection and Repatriation Act
NAHC	Native American Heritage Commission
NCCP	natural communities conservation plan
NEPA	National Environmental Policy Act
NFIP	National Flood Insurance Program
NHPA	National Historic Preservation Act
NMFS	National Marine Fisheries Service

NO_2	nitrogen dioxide
NOP	notice of preparation
NO_x	oxides of nitrogen
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
NWPs	Nationwide Permits
OAP	Ozone Attainment Plan
OGAC	Open-Graded Asphalt Concrete
OHWM	ordinary high-water mark
PCAPCD	Placer County Air Pollution Control District
PCFCWCD	Placer County Flood Control and Water Conservation District
PG&E	Pacific Gas and Electric Company
Plan	Dry Creek Watershed Flood Control Plan
PM10	particulate matter 10 microns or less in diameter
Porter-Cologne Act	Porter-Cologne Water Quality Control Act of 1969
ppd	pounds per day
ppm	parts per million
psi	pounds per square inch
RAS	River Analysis System
Reclamation	U.S. Department of the Interior, Bureau of Reclamation
ROG	reactive organic gases
RTP	Regional Transportation Plan
RV	recreational vehicle
RWQCB	Regional Water Quality Control Board
SACOG	Sacramento Area Council of Governments
SCS	U.S. Soil Conservation Service
SCWA	Sacramento County Water Agency
SHPO	State Historic Preservation Officer
SIP	State Implementation Plan
SMAQMD	Sacramento Metropolitan Air Quality Management District
SO_2	sulfur dioxide
SO_x	oxides of sulfur
SRA	State Recreation Area
SVAB	Sacramento Valley Air Basin
RWQCB	Regional Water Quality Control Board
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TCMs	transportation control measures
TCPs	traditional cultural properties
TIP	Transportation Improvement Program
TMDL	Total Maximum Daily Load
TRB	Transportation Research Board
USBM	U.S. Bureau of Mines
USC	United States Code
USFWS	U.S. Fish and Wildlife Service

USGS	U.S. Geological Survey
V/C	volume to capacity ratio
VEEs	Visible Emission Evaluations
VELB	valley elderberry longhorn beetle
vpd	vehicles per day
WDR	Waste Discharge Requirements
WHR	Wildlife Habitat Relationships
$\mu g/m^3$	micrograms per cubic meter

Executive Summary

Introduction

This executive summary presents a summary of the Environmental Assessment/Draft Environmental Impact Report (EA/Draft EIR) for the Auburn-Folsom Road widening project. This executive summary identifies the purpose of the EA/Draft EIR, provides an overview of the proposed project and project alternatives, and identifies the impacts and mitigation measures of the project and each alternative. This summary also presents other conclusions required by the California Environmental Quality Act (CEQA); the State CEQA Guidelines, Sections 15123 and 15126; the National Environmental Policy Act (NEPA); and the Council on Environmental Quality's Regulations for Implementing NEPA Sections 1501.3 and 1506.5(a)(b). This summary is intended as an overview and should be used in conjunction with a thorough reading of the environmental document.

The project evaluated in this EA/Draft EIR is the widening of Auburn-Folsom Road in Placer County from two to four lanes to meet existing and projected traffic demands through 2020, as described in the Capital Improvement Program.

Purpose of the EA/Draft EIR

General Requirements

The purpose of this EA/Draft EIR is to analyze the environmental effects of Placer County's proposed project, to indicate ways to reduce or avoid potential environmental impacts resulting from the proposed project, and to identify alternatives to the proposed project that could reduce or avoid those environmental impacts while meeting the objectives of the project.

CEQA requires all state and local government agencies to consider the environmental consequences of projects over which they have discretionary authority and requires each public agency to mitigate or avoid, to the extent feasible, the significant environmental effects of projects it approves or implements before taking action on those projects.

NEPA establishes a national environmental policy that makes it the continuing responsibility of the federal government to use all practicable means, consistent with other essential considerations of national policy, to improve and coordinate federal plans, functions, programs, and resources to the end that the nation may assure for all Americans safe, healthful, productive, and aesthetically and culturally pleasing surroundings and attain the widest range of beneficial uses of the environment without degradation, risk to health or safety, or other undesirable and unintended consequences. In meeting the requirements of NEPA, government agencies must share with the public and other agencies the results of their analysis of the effects of projects on the environment.

Project Overview

The project area is located in southeast Placer County, with Folsom Lake immediately to the east and the City of Folsom to the south. The project limits extend from the Placer County/Sacramento County line north to Douglas Boulevard, a distance of approximately 3.2 kilometers (2.0 miles).

Placer County proposes to widen Auburn-Folsom Road from two to four lanes. South of the project limits, the City of Folsom is widening Folsom-Auburn Road from two to four lanes. Placer County's proposed Auburn-Folsom Road Widening Project would ultimately match the City of Folsom's widened roadway to the south, and would continue the widened road to Douglas Boulevard.

Placer County has performed preliminary engineering and design studies on four alternatives that best meet the objectives of the proposed project. The following four alternatives are analyzed at an equal level of detail in this EA/Draft EIR.

- Alternative 1: Widen Roadway to the West
- Alternative 2: Widen Roadway to the East
- Alternative 3: Widen Roadway Equally on Both Sides
- Alternative 4: County DPW-Preferred Alternative

Project Objectives

Placer County has determined that there is a critical need to increase the roadway's capacity to serve the existing traffic circulation needs of the Granite Bay community, and to accommodate projected rapid increases in commuter traffic volumes on Auburn-Folsom Road, from the Placer County/Sacramento County line north to Douglas Boulevard.

The average daily traffic volumes on the project segment of Auburn-Folsom Road ranges from approximately 28,300 to 28,900 vehicles per day, and the segment is rated level of service (LOS) F. In accordance with the Granite Bay Community Plan, a rating of LOS D or worse is considered unacceptable. (Note:

LOS is a term used to describe the quality of traffic operations on a roadway or at an intersection. Letters ranging from A to F denote levels of service, with LOS A describing free-flowing conditions with minimal vehicular delay and LOS F representing severe congestion that results in significant delays for motorists.)

By 2020, average daily traffic volumes are expected to increase to approximately 31,500–43,500 vehicles per day. The peak traffic periods and associated congestion and delays will last longer, and the level of service is anticipated to remain unacceptable (LOS F) without the proposed improvements.

According to traffic modeling results, the proposed project would improve existing traffic conditions to LOS C.

Traffic modeling of "Future Plus Project" conditions shows that level of service would be improved from LOS F to LOS D between the County line and Oak Hill Drive and between Lou Place and Fuller Drive. Between Oak Hill Drive and Lou Place, level of service would be improved to LOS E.

The proposed action would address the following objectives:

- Maintain LOS C, as required by the Granite Bay Community Plan.
- Accommodate local and regional traffic volumes through 2020.
- Improve safety along the Auburn-Folsom Road corridor by:
  - widening the roadway from two to four lanes;
  - signalizing the Fuller Drive intersection and improving the intersection's geometry to address the long delay experienced by drivers on the Fuller Drive approach and to increase safety for pedestrians, including students who attend Wilma E. Cavitt Junior High School to the east of the intersection;
  - improving the vertical sight distance along a portion of Eureka Road west of Auburn-Folsom Road to allow safe use of an existing driveway;
  - adding medians and left-turn lanes; and
  - improving Auburn-Folsom Road's horizontal and vertical alignment.
- Construct a bicycle lane along Auburn-Folsom Road, as identified as the Priority No. 1 Trails project in the Granite Bay Community Plan Recreation Element, adopted by the Board of Supervisors in 1987.

Proposed Improvements Common to All Build Alternatives

The proposed action would widen Auburn-Folsom Road from two lanes to four lanes from the Placer/Sacramento County line to Douglas Boulevard. The road widening would generally follow the existing alignment. Improvements proposed include

- adding a travel lane in each direction, resulting in four 3.6-meter-wide (12-foot-wide) travel lanes;
- adding a 4.2-meter-wide (14-foot-wide) center lane that may include two-way left-turn lanes and/or raised or painted medians in many or all roadway segments;
- providing 1.8-meter-wide (6-foot-wide) shoulders with Class II bicycle lanes on each side of the road;
- redesigning the horizontal and vertical curve north of Lou Place to improve the sight distance to achieve a design speed of 88 kilometers per hour (kph) (55 miles per hour [mph]) (Alternatives 1, 2, and 3) or a design speed of 80 kph (50 mph) (Alternative 4);
- installing curb, gutter, and sidewalk at certain locations;
- constructing/improving a multi-use/equestrian trail on the west side of Auburn-Folsom Road, from the Baldwin Reservoir access road to the Oak Hill Drive intersection;
- constructing a new traffic signal at the Fuller Road intersection;
- improving traffic signal operations at the Eureka Road and Oak Hill Drive intersections;
- restriping Auburn-Folsom Road between Fuller Drive and Douglas Boulevard to accommodate the alignment of Auburn-Folsom Road south of Fuller Drive; and
- implementing sight-distance improvements along Eureka Road approximately 300 meters (980 feet) west of the Auburn-Folsom Road/Eureka Road intersection. Approximately 190 meters (620 feet) would be lowered by approximately 1 meter (3 feet) to improve the vertical sight distance along this portion of Eureka Road. This improvement would allow residents of the Ridgeview Mobile Home Park to use the Eureka Road driveway, which is currently gated.

In addition to these improvements, the County may need to replace or move the entrance sign to Beal's Point and fencing along the SRA. The California Department of Parks and Recreation (DPR) has requested that the County install "no parking" signs on the shoulder of Auburn-Folsom Road and consider assisting State Parks and Reclamation with replacement of the existing t-post and wire fence along the road to improve the visual quality of the corridor (Nakaji pers. comm.).

Project Information Common to All Build Alternatives

The following information is common to all build alternatives.

- Each of the build alternatives includes construction of a 4.2-meter-wide (14-foot-wide) median. The median will be designed either as a two-way left-turn

lane or a painted and/or raised median. It is possible that the design of the median will vary along the project length.

- Three possible temporary construction staging/storage areas have been identified along the project length; one at the south end and two at the north end.
- The anticipated construction schedule is to start construction in 2004–2005. It is anticipated that the project would require 18 months over two construction seasons to construct.
- Placer County will need to acquire some right-of-way along the project alignment. Right-of-way would be acquired under the Uniform Relocation Assistance and Real Property Acquisition Policies Act.

Raised Median Design Option

The County also has identified a raised median design option that consists of the installation of a raised median on Auburn-Folsom Road from Douglas Boulevard to the County line with median openings for left-turns at Boardwalk Drive, Fuller Drive, Eureka Road, Country Court, Lou Place, and Oak Hill Drive. Left turns at other locations, such as Fallsbrook Court, would be eliminated. The raised median design project option is assumed to allow for U-turns only at the signalized intersections on Auburn-Folsom Road. All other project design information for the raised median design option is the same as identified above.

As described in detail in Chapter 3, all intersections would operate at the same LOS with either the project (widening the road) or the raised median project option. The overall intersection delay with the raised median project option would increase at the Auburn-Folsom Road/Fuller Drive, Auburn-Folsom Road/Eureka Road, and Auburn-Folsom Road/Oak Hill Drive intersections compared to the project scenario (widening the road) because of the U-turns that would result from the installation of a raised median, but the levels of service will remain unchanged from "project" conditions. The overall intersection delay will decrease at the Auburn-Folsom Road/Douglas Boulevard intersection, and the worst-case movement and overall intersection delay at the Auburn-Folsom Road/Fallsbrook Court intersection would decrease because left turns would be eliminated at this location.

Queue lengths for each turning movement at the study intersections have been calculated as part of the technical analysis and are included in Appendix P. The raised median project option design shall incorporate turn-pocket lengths that accommodate the projected queues.

Description of Alternatives

In accordance with State CEQA Guidelines, Section 15126(d), a Draft EIR must describe a range of reasonable alternatives to the proposed project or to its location that could feasibly attain the project's basic objectives and reduce

impacts of the project. The purpose of the proposed project is to increase the capacity of this route to meet existing and projected traffic demands through 2020. Placer County has chosen to review four project alternatives at an equal level of detail.

In addition, this report evaluates the potential impacts of the No-Build (also known as No-Project or No-Action) Alternative. The four build alternatives and the No-Build Alternative are described below. The selection of the preferred alternative will take place after the environmental review and public input process is complete. The final alignment will consist of portions of the proposed alternatives. Preliminary design drawings of Alternatives 1–4 are included in Appendix A.

Alternative 1: Widen Roadway to the West

Alternative 1 proposes to widen Auburn-Folsom Road to the west. The existing southbound and northbound travel lanes would become northbound lanes under this alternative. A median/two-way left-turn lane and two southbound lanes would be added to the west. Both the horizontal and vertical elements of the curve north of Lou Place would be redesigned to achieve a design speed of 88 kph (55 mph). The volume of material to be excavated under Alternative 1 is 65,200 cubic meters (85,278 cubic yards). Approximately 2.06 hectares (5.10 acres) of land would need to be acquired from portions of 35 parcels, with an estimated 6.5% of the needed area coming from the U.S. Department of the Interior, Bureau of Reclamation (Reclamation) land. The total estimated project cost of this alternative is $9,950,000.

Alternative 2: Widen Roadway to the East

Alternative 2 proposes to widen Auburn-Folsom Road to the east. The existing southbound and northbound travel lanes would become southbound lanes under this alternative. A median/two-way left-turn lane and two northbound lanes would be added to the east. Both the horizontal and vertical elements of the curve north of Lou Place would be redesigned to achieve a design speed of 88 kph (55 mph). The volume of material to be excavated under Alternative 2 is 83,300 cubic meters (108,952 cubic yards). Approximately 2.21 hectares (5.45 acres) of land would need to be acquired from portions of 9 parcels, with an estimated 57% of the needed area coming from Reclamation land. The total estimated project cost of this alternative is $10,775,000.

Alternative 3: Widen Roadway Equally on Both Sides

Alternative 3 proposes to widen Auburn-Folsom Road equally on both sides. The existing southbound and northbound travel lanes would become the median and center lanes under this alternative. Structural roadway sections would be added to both sides of the existing pavement. Both the horizontal and vertical

elements of the curve north of Lou Place would be redesigned to achieve a design speed of 88 kph (55 mph). The volume of material to be excavated under Alternative 3 is 72,100 cubic meters (94,303 cubic yards). Approximately 1.15 hectares (2.83 acres) of land would need to be acquired from portions of 21 parcels, with an estimated 19% of the needed area coming from Reclamation land. The total estimated project cost of this alternative is $9,819,000.

Alternative 4: County DPW–Preferred Alternative

The Placer County Department of Public Works (DPW) developed Alternative 4 based on input received from the public, a detailed review of the positive and negative impacts of each of the three original alternatives, and initial data results from the environmental studies conducted during the environmental review step of the project development process. The intent of the County was to develop an alternative that minimized the negative impacts of the three original alternatives while maintaining the original project goals and objectives. The impacts were reduced by adjusting the alignment at various locations along the proposed route.

Alternative 4 includes all the proposed roadway capacity improvements described for Alternatives 1, 2, and 3, with the exception that the design speed of the curve just north of Lou Place is reduced from 88 kph (55 mph) (used for Alternatives 1, 2, and 3) to 80 kph (50 mph). This change in design speed reduces the size of the lateral cut and fill slopes.

Alternative 4 is primarily a combination of Alternatives 2 and 3. Alternative 4 would widen Auburn-Folsom Road to the east of the existing alignment, starting at the Placer County line, and would transition to widening equally on both sides near the Auburn-Folsom Road/Oak Hill Drive/Beal's Point intersection. From just north of Oak Hill Drive to Lou Place, the alignment transitions to an easterly widening, then back to widening equally on both sides at the major cut just north of Lou Place. Between the cut north of Lou Place and Country Court, the alignment again transitions to widening to the east, then back again to widening equally on both sides to reduce impacts on the Linda Creek wetland area. North of Country Court, the alignment slowly transitions easterly again to the Auburn-Folsom Road/Eureka Road intersection, then stays to the east to match the existing Auburn-Folsom Road/Fuller Drive intersection.

The Alternative 4 preliminary design plans include the installation of retaining walls as a design option to reduce the size of the cut-and-fill slopes at many locations. The cost estimate and right-of-way needs, however, are based on the scenario without retaining walls.

The volume of material to be excavated under Alternative 4 is 62,900 cubic meters (82,270 cubic yards). Approximately 1.25 hectares (3.09 acres) of land would need to be acquired from portions of 10 parcels, with an estimated 33% of the needed area coming from Reclamation land. The total estimated project cost of this alternative is $9,320,000.

Impacts of the Proposed Project

The potential environmental impacts that would result from implementation of the proposed project are summarized in Table ES-1. In some cases, impacts that have been identified would be less than significant. In other cases, mitigation measures that have been proposed by the County DPW would reduce the impacts to a less-than-significant level. Additional mitigation measures may be recommended during the environmental review process to reduce impacts to a less-than-significant level, where feasible. Finally, those impacts that cannot be mitigated to a less-than-significant level would remain as significant and unavoidable impacts, as shown in Table ES-1.

Other CEQA-Related Impact Conclusions

Cumulative Impacts

Section 15130 of the State CEQA Guidelines requires that the cumulative impacts of a proposed project be addressed in an EIR when the cumulative impacts could be significant. Cumulative impacts are the incremental effects of a proposed project added to the impacts of other closely related past, present, and reasonably foreseeable future projects, which, together, are cumulatively considerable. The cumulative impact analysis in this EA/Draft EIR addresses impacts associated with land use, aesthetics, traffic, air quality, noise, and biological resources. Chapter 12 discusses the cumulative impacts of the proposed project.

Growth Inducement and Growth-Related Impacts

Section 15126(g) of the State CEQA Guidelines requires lead agencies to discuss growth-inducing impacts and indirect impacts associated with growth inducement. Several factors affect the magnitude, timing, and type of economic and population growth. These factors include local government planning, economic climate, quality of life, and availability of public services and natural resources. Approval of the proposed project would improve safety along Placer County's Auburn-Folsom Road corridor, improve traffic conditions for the Granite Bay community, and accommodate expected increases in local and regional traffic volumes on Auburn-Folsom Road.

Although the improvement of roadway facilities in the area would increase the overall appeal of the area to residential and commercial development, the effect would be minor. Therefore, the proposed project is not anticipated to result in direct or indirect growth-inducing impacts or growth-facilitating impacts.

Table ES-1. Summary of Impacts of the Auburn-Folsom Road Widening Project, by Alternative

All four alternatives were evaluated as one scenario in the traffic analysis. There is no variation in traffic impacts associated with the four build alternatives because the roadway alignment selected would not affect traffic volumes or level of service. The traffic section analyzes three conditions: no project, with project (all alternatives), and the design option of a median that restricts turns.

Key:

SU = Significant and unavoidable.

S = Significant.

PS = Potentially significant.

LS = Less than significant.

NI = No impact.

NA = Not applicable.

	Alt. 1: Widening to the West	Alt. 2: Widening to the East	Alt. 3: Widening Equally on Both Sides	Alt. 4: County DPW–Preferred
TRAFFIC				
Impact 3.1 Temporary Disruption of Traffic Conditions During Construction				
Quantitative Comparison	NA	NA	NA	NA
Significance Before Mitigation	S	S	S	S
Mitigation Measures	P3.1: Prepare a Traffic Management Plan to be Implemented During Construction	P3.1: Prepare a Traffic Management Plan to be Implemented During Construction	P3.1: Prepare a Traffic Management Plan to be Implemented During Construction	P3.1: Prepare a Traffic Management Plan to be Implemented During Construction
Significance After Mitigation	LS	LS	LS	LS
Impact 3.2 Increased Roadway Capacity and Increased Traffic Volumes That Would Exacerbate the Construction Year (2005) "No-Project" LOS D, E, or F Conditions at an Intersection or on a Roadway Segment				
Quantitative Comparison	NA	NA	NA	NA
Significance Before Mitigation	S	S	S	S
Mitigation Measures	P3.2: Implement Strategies to Alleviate the Need to Widen Douglas Boulevard to Six Lanes	P3.2: Implement Strategies to Alleviate the Need to Widen Douglas Boulevard to Six Lanes	P3.2: Implement Strategies to Alleviate the Need to Widen Douglas Boulevard to Six Lanes	P3.2: Implement Strategies to Alleviate the Need to Widen Douglas Boulevard to Six Lanes

Table ES-1. Summary of Impacts of the Auburn-Folsom Road Widening Project, by Alternative

	Alt. 1: Widening to the West	Alt. 2: Widening to the East	Alt. 3: Widening Equally on Both Sides	Alt. 4: County DPW–Preferred
Significance After Mitigation	LS	LS	LS	LS
Impact 3.3 Increased Traffic Volumes That Would Exacerbate the Cumulative Year (2020) "No-Project" LOS D, E or F Conditions at an Intersection or on a Roadway Segment or Cause the Cumulative Year (2020) "No-Project" LOS at an Intersection or on a Roadway Segment to Deteriorate from LOS A, B, or C to D, E, or F and Would Exceed the Capacity of the Four-Lane Roadway				
Quantitative Comparison	NA	NA	NA	NA
Significance Before Mitigation	S	S	S	S
Mitigation Measures	P3.3a: Increase the Capacity at the Auburn-Folsom Road/Douglas Boulevard Intersection to Operate at an Acceptable LOS in 2020 P3.3b: Implement Strategies to Alleviate the Need to Widen Douglas Boulevard to Six Lanes	P3.3a: Increase the Capacity at the Auburn-Folsom Road/Douglas Boulevard Intersection to Operate at an Acceptable LOS in 2020 P3.3b: Implement Strategies to Alleviate the Need to Widen Douglas Boulevard to Six Lanes	P3.3a: Increase the Capacity at the Auburn-Folsom Road/Douglas Boulevard Intersection to Operate at an Acceptable LOS in 2020 P3.3b: Implement Strategies to Alleviate the Need to Widen Douglas Boulevard to Six Lanes	P3.3a: Increase the Capacity at the Auburn-Folsom Road/Douglas Boulevard Intersection to Operate at an Acceptable LOS in 2020 P3.3b: Implement Strategies to Alleviate the Need to Widen Douglas Boulevard to Six Lanes
Significance After Mitigation	LS	LS	LS	LS
Impact 3.4 Potential Inconsistency with Equestrian System Policies Contained in the Placer County General Plan and the Granite Bay Community Plan				
Quantitative Comparison	NA	NA	NA	NA
Significance Before Mitigation	S	S	S	S
Mitigation Measures	P3.4: Install a Signal at the Auburn-Folsom Road/Lou Place Intersection to Allow Pedestrian/Equestrian Crossings	P3.4: Install a Signal at the Auburn-Folsom Road/Lou Place Intersection to Allow Pedestrian/Equestrian Crossings	P3.4: Install a Signal at the Auburn-Folsom Road/Lou Place Intersection to Allow Pedestrian/Equestrian Crossings	P3.4: Install a Signal at the Auburn-Folsom Road/Lou Place Intersection to Allow Pedestrian/Equestrian Crossings
Significance After Mitigation	LS	LS	LS	LS

Table ES-1. Summary of Impacts of the Auburn-Folsom Road Widening Project, by Alternative

	Alt. 1: Widening to the West	Alt. 2: Widening to the East	Alt. 3: Widening Equally on Both Sides	Alt. 4: County DPW–Preferred
Impact 3.5 Potential Inconsistency with Pedestrian and Bicycle System Policies Contained in the Placer County General Plan and the Granite Bay Community Plan				
Quantitative Comparison	NA	NA	NA	NA
Significance Before Mitigation	S	S	S	S
Mitigation Measures	P3.5: Provide Class II Bikeways	P3.5: Provide Class II Bikeways	P3.5: Provide Class II Bikeways	P3.5: Provide Class II Bikeways
Significance After Mitigation	LS	LS	LS	LS
AIR QUALITY				
Impact 4.1 Temporary Increase in ROG, NOx, and PM10 Emissions During Grading and Construction Activities				
Quantitative Comparison	NA	NA	NA	NA
Significance Before Mitigation	S	S	S	S
Mitigation Measures	P4.1: Implement Best Available Mitigation Measures for Construction Activities	P4.1: Implement Best Available Mitigation Measures for Construction Activities	P4.1: Implement Best Available Mitigation Measures for Construction Activities	P4.1: Implement Best Available Mitigation Measures for Construction Activities
Significance After Mitigation	LS	LS	LS	LS
Impact 4.2 Increase in Local CO Concentrations				
Quantitative Comparison	NA	NA	NA	NA
Significance Before Mitigation	LS	LS	LS	LS
Mitigation Measures	None required	None required	None required	None required
Significance After Mitigation	LS	LS	LS	LS
Impact 4.3 Consistency with Regional Transportation Plans				
Quantitative Comparison	NA	NA	NA	NA
Significance Before Mitigation	LS	LS	LS	LS
Mitigation Measures	None required	None required	None required	None required
Significance After Mitigation	LS	LS	LS	LS

Table ES-1. Summary of Impacts of the Auburn-Folsom Road Widening Project, by Alternative

	Alt. 1: Widening to the West	Alt. 2: Widening to the East	Alt. 3: Widening Equally on Both Sides	Alt. 4: County DPW–Preferred
HYDROLOGY AND WATER QUALITY				
Impact 5.1 Temporary Degradation of Surface Water Quality During Construction				
Quantitative Comparison	NA	NA	NA	NA
Significance Before Mitigation	S	S	S	S
Mitigation Measures	P5.1: Obtain a Section 402 NPDES Permit and Prepare an Erosion and Sediment Control Plan	P5.1: Obtain a Section 402 NPDES Permit and Prepare an Erosion and Sediment Control Plan	P5.1: Obtain a Section 402 NPDES Permit and Prepare an Erosion and Sediment Control Plan	P5.1: Obtain a Section 402 NPDES Permit and Prepare an Erosion and Sediment Control Plan
Significance After Mitigation	LS	LS	LS	LS
Impact 5.2 Change in Soil Absorption Rates, Drainage Patterns, and the Rate and Amount of Runoff				
Quantitative Comparison	NA	NA	NA	NA
Significance Before Mitigation	S	S	S	S
Mitigation Measures	P5.2: Prepare a Drainage Report	P5.2: Prepare a Drainage Report	P5.2: Prepare a Drainage Report	P5.2: Prepare a Drainage Report
Significance After Mitigation	LS	LS	LS	LS
Impact 5.3 Postconstruction Degradation of Surface Water Quality				
Quantitative Comparison	NA	NA	NA	NA
Significance Before Mitigation	S	S	S	S
Mitigation Measures	P5.3: Prepare a Postconstruction Storm Water Pollution Prevention Plan	P5.3: Prepare a Postconstruction Storm Water Pollution Prevention Plan	P5.3: Prepare a Postconstruction Storm Water Pollution Prevention Plan	P5.3: Prepare a Postconstruction Storm Water Pollution Prevention Plan
Significance After Mitigation	LS	LS	LS	LS
NOISE				
Impact 6.1 Exposure of Noise-Sensitive Land Uses (Residences and Campgrounds) to Construction Noise				
Quantitative Comparison	NA	NA	NA	NA
Significance Before Mitigation	S	S	S	S

Table ES-1. Summary of Impacts of the Auburn-Folsom Road Widening Project, by Alternative

	Alt. 1: Widening to the West	Alt. 2: Widening to the East	Alt. 3: Widening Equally on Both Sides	Alt. 4: County DPW–Preferred
Mitigation Measures	P6.1a: Implement Sound Control Requirements P6.1b: Locate Equipment As Far from Noise-Sensitive Receivers As Practicable P6.1c: Use Sound-Control Devices on Combustion-Powered Equipment P6.1d: Shield/Shroud Any Impact Tools P6.1e: Shut Off Machinery When Not in Use P6.1f: Use Shortest Traveling Routes, When Practicable P6.1g: Disseminate Essential Information to Residences and Implement a Complaint Response/Tracking Program P6.1h: Implement Additional Mitigation Measures, As Needed and/or Required	P6.1a: Implement Sound Control Requirements P6.1b: Locate Equipment As Far from Noise-Sensitive Receivers As Practicable P6.1c: Use Sound-Control Devices on Combustion-Powered Equipment P6.1d: Shield/Shroud Any Impact Tools P6.1e: Shut Off Machinery When Not in Use P6.1f: Use Shortest Traveling Routes, When Practicable P6.1g: Disseminate Essential Information to Residences and Implement a Complaint Response/Tracking Program P6.1h: Implement Additional Mitigation Measures, As Needed and/or Required	P6.1a: Implement Sound Control Requirements P6.1b: Locate Equipment As Far from Noise-Sensitive Receivers As Practicable P6.1c: Use Sound-Control Devices on Combustion-Powered Equipment P6.1d: Shield/Shroud Any Impact Tools P6.1e: Shut Off Machinery When Not in Use P6.1f: Use Shortest Traveling Routes, When Practicable P6.1g: Disseminate Essential Information to Residences and Implement a Complaint Response/Tracking Program P6.1h: Implement Additional Mitigation Measures, As Needed and/or Required	P6.1a: Implement Sound Control Requirements P6.1b: Locate Equipment As Far from Noise-Sensitive Receivers As Practicable P6.1c: Use Sound-Control Devices on Combustion-Powered Equipment P6.1d: Shield/Shroud Any Impact Tools P6.1e: Shut Off Machinery When Not in Use P6.1f: Use Shortest Traveling Routes, When Practicable P6.1g: Disseminate Essential Information to Residences and Implement a Complaint Response/Tracking Program P6.1h: Implement Additional Mitigation Measures, As Needed and/or Required
Significance After Mitigation	LS	LS	LS	LS
Impact 6.2 Exposure of Residences and Campgrounds to Airblast and Vibration from Blasting				
Quantitative Comparison	NA	NA	NA	NA

Table ES-1. Summary of Impacts of the Auburn-Folsom Road Widening Project, by Alternative

	Alt. 1: Widening to the West	Alt. 2: Widening to the East	Alt. 3: Widening Equally on Both Sides	Alt. 4: County DPW–Preferred
Significance Before Mitigation	S	S	S	S
Mitigation Measures	P6.2: Employ Measures to Reduce Airblast and Vibration from Blasting	P6.2: Employ Measures to Reduce Airblast and Vibration from Blasting	P6.2: Employ Measures to Reduce Airblast and Vibration from Blasting	P6.2: Employ Measures to Reduce Airblast and Vibration from Blasting
Significance After Mitigation	LS	LS	LS	LS
Impact 6.3 Exposure of Noise-Sensitive Land Uses (Residences and Campgrounds) to Increased Traffic Noise Levels				
Quantitative Comparison	NA	NA	NA	NA
Significance Before Mitigation	LS	LS	LS	LS
Mitigation Measures	P6.3: Use Noise-Reducing Pavement	P6.3: Use Noise-Reducing Pavement	P6.3: Use Noise-Reducing Pavement	P6.3: Use Noise-Reducing Pavement
Significance After Mitigation	LS	LS	LS	LS
VISUAL RESOURCES/AESTHETICS				
Impact 7.1 Potential Inconsistency with Local Goals and Policies				
Quantitative Comparison	NA	NA	NA	NA
Significance Before Mitigation	LS	LS	LS	LS
Mitigation Measures	P7.1a: Preserve Existing Trail Access Points in Project Design P7.1b: Provide Class II Bikeway P7.1c: Revegetate All Disturbed Areas	P7.1a: Preserve Existing Trail Access Points in Project Design P7.1b: Provide Class II Bikeway P7.1c: Revegetate All Disturbed Areas	P7.1a: Preserve Existing Trail Access Points in Project Design P7.1b: Provide Class II Bikeway P7.1c: Revegetate All Disturbed Areas	P7.1a: Preserve Existing Trail Access Points in Project Design P7.1b: Provide Class II Bikeway P7.1c: Revegetate All Disturbed Areas
Significance After Mitigation	LS	LS	LS	LS
Impact 7.2 Temporary Visual Impact Caused by Construction Activities				
Quantitative Comparison	NA	NA	NA	NA

Table ES-1. Summary of Impacts of the Auburn-Folsom Road Widening Project, by Alternative

	Alt. 1: Widening to the West	Alt. 2: Widening to the East	Alt. 3: Widening Equally on Both Sides	Alt. 4: County DPW–Preferred
Significance Before Mitigation	LS	LS	LS	LS
Mitigation Measures	None required	None required	None required	None required
Significance After Mitigation	LS	LS	LS	LS
Impact 7.3 Degradation of Views and Increase in Glare				
Quantitative Comparison	Two homes within 15 feet of new roadway	Zero homes within 15 feet of new roadway	Zero homes within 15 feet of new roadway	Zero homes within 15 feet of new roadway
Significance Before Mitigation	S	S	S	S
Mitigation Measures	P7.3a: Select Street Lights to Minimize Exposure to Glare and Light P7.3b: Construct Fence between Affected Residences and Roadway	P7.3a: Select Street Lights to Minimize Exposure to Glare and Light	P7.3a: Select Street Lights to Minimize Exposure to Glare and Light	P7.3a: Select Street Lights to Minimize Exposure to Glare and Light
Significance After Mitigation	LS	LS	LS	LS
Impact 7.4 Degradation of Visual Quality Resulting from Tree Removal				
Quantitative Comparison	371 trees removed, 296 are native	389 trees removed, 359 are native	364 trees removed, 318 are native	346 trees removed, 313 are native
Significance Before Mitigation	S	S	S	S
Mitigation Measures	P7.4a: Obtain a Tree Permit P7.4b: Mitigate Tree Removal P7.4c: Revegetate and Restore All Disturbed Areas to Minimize Visual Quality Impacts and Provide Screening	P7.4a: Obtain a Tree Permit P7.4b: Mitigate Tree Removal P7.4c: Revegetate and Restore All Disturbed Areas to Minimize Visual Quality Impacts and Provide Screening	P7.4a: Obtain a Tree Permit P7.4b: Mitigate Tree Removal P7.4c: Revegetate and Restore All Disturbed Areas to Minimize Visual Quality Impacts and Provide Screening	P7.4a: Obtain a Tree Permit P7.4b: Mitigate Tree Removal P7.4c: Revegetate and Restore All Disturbed Areas to Minimize Visual Quality Impacts and Provide Screening

Table ES-1. Summary of Impacts of the Auburn-Folsom Road Widening Project, by Alternative

	Alt. 1: Widening to the West	Alt. 2: Widening to the East	Alt. 3: Widening Equally on Both Sides	Alt. 4: County DPW–Preferred
Significance After Mitigation	SU	SU	SU	SU
Impact 7.5 Degradation of Visual Quality Resulting from Cuts, Grading, and Other Changes in Topography				
Quantitative Comparison	NA	NA	NA	NA
Significance Before Mitigation	LS	S	S	LS
Mitigation Measures	None required	P7.5: Enhance Aesthetics of Retaining Walls, Soundwalls, and Other Structural Elements	P7.5: Enhance Aesthetics of Retaining Walls, Soundwalls, and Other Structural Elements	None required
Significance After Mitigation	LS	LS	LS	LS
BIOLOGICAL RESOURCES				
Impact 8.1 Potential Disturbance or Loss of Waters of the United States (Including Wetlands)				
Quantitative Comparison	Loss of 0.033 hectare (0.084 acre) of waters of the United States, including wetlands	Loss of 0.038 hectare (0.095 acre) of waters of the United States, including wetlands	Loss of 0.030 hectare (0.075 acre) of waters of the United States, including wetlands	Loss of 0.04 hectare (0.10 acre) of waters of the United States, including wetlands
Significance Before Mitigation	S	S	S	S
Mitigation Measures	P8.1a: Obtain a Section 404 Permit from the Corps P8.1b: Obtain a Section 401 Water Quality Certification or Waiver from the Central Valley RWQCB P8.1c: Obtain a Section 1601 Streambed Alteration Agreement from DFG P8.1d: Pay Appropriate	P8.1a: Obtain a Section 404 Permit from the Corps P8.1b: Obtain a Section 401 Water Quality Certification or Waiver from the Central Valley RWQCB P8.1c: Obtain a Section 1601 Streambed Alteration Agreement from DFG P8.1d: Pay Appropriate	P8.1a: Obtain a Section 404 Permit from the Corps P8.1b: Obtain a Section 401 Water Quality Certification or Waiver from the Central Valley RWQCB P8.1c: Obtain a Section 1601 Streambed Alteration Agreement from DFG P8.1d: Pay Appropriate	P8.1a: Obtain a Section 404 Permit from the Corps P8.1b: Obtain a Section 401 Water Quality Certification or Waiver from the Central Valley RWQCB P8.1c: Obtain a Section 1601 Streambed Alteration Agreement from DFG P8.1d: Pay Appropriate

Table ES-1. Summary of Impacts of the Auburn-Folsom Road Widening Project, by Alternative

	Alt. 1: Widening to the West	Alt. 2: Widening to the East	Alt. 3: Widening Equally on Both Sides	Alt. 4: County DPW–Preferred
	Environmental Document Review Fee P8.1e: Install Temporary Construction Fencing to Protect Wetlands P8.1f: Avoid and Minimize Disturbance of Waters of the United States, Including Wetlands P8.1g: Confine Construction Equipment and Associated Activities to the Designated Work Zone in Areas That Support Wetland Resources P8.1h: Compensate for the Loss of Waters of the United States	Environmental Document Review Fee P8.1e: Install Temporary Construction Fencing to Protect Wetlands P8.1f: Avoid and Minimize Disturbance of Waters of the United States, Including Wetlands P8.1g: Confine Construction Equipment and Associated Activities to the Designated Work Zone in Areas That Support Wetland Resources P8.1h: Compensate for the Loss of Waters of the United States	Environmental Document Review Fee P8.1e: Install Temporary Construction Fencing to Protect Wetlands P8.1f: Avoid and Minimize Disturbance of Waters of the United States, Including Wetlands P8.1g: Confine Construction Equipment and Associated Activities to the Designated Work Zone in Areas That Support Wetland Resources P8.1h: Compensate for the Loss of Waters of the United States	Environmental Document Review Fee P8.1e: Install Temporary Construction Fencing to Protect Wetlands P8.1f: Avoid and Minimize Disturbance of Waters of the United States, Including Wetlands P8.1g: Confine Construction Equipment and Associated Activities to the Designated Work Zone in Areas That Support Wetland Resources P8.1h: Compensate for the Loss of Waters of the United States
Quantitative Comparison of Mitigation Requirements	Option 1 of P8.1i would cost $7,392	Option 1 of P8.1i would cost $8,360	Option 1 of P8.1i would cost $6,600	Option 1 of P8.1i would cost $8,800
Significance After Mitigation	LS	LS	LS	LS
Impact 8.2 Potential Loss or Disturbance of Valley Foothill Riparian Forest				
Quantitative Comparison	Loss of 0.02 hectare (0.05 acre) of valley foothill riparian forest	Loss of 0.04 hectare (0.11 acre) of valley foothill riparian forest	Loss of 0.03 hectare (0.07 acre) of valley foothill riparian forest	Loss of 0.04 hectare (0.10 acre) of valley foothill riparian forest
Significance Before Mitigation	S	S	S	S

Table ES-1. Summary of Impacts of the Auburn-Folsom Road Widening Project, by Alternative

	Alt. 1: Widening to the West	Alt. 2: Widening to the East	Alt. 3: Widening Equally on Both Sides	Alt. 4: County DPW–Preferred
Mitigation Measures	P8.2a: Install Temporary Construction Fencing to Protect Trees P8.2b: Compensate for Permanent Impacts on Riparian Communities P8.2c: Update the Tree Survey Report for the Selected Alternative P8.2d: Avoid and Minimize Disturbance of Riparian Communities	P8.2a: Install Temporary Construction Fencing to Protect Trees P8.2b: Compensate for Permanent Impacts on Riparian Communities P8.2c: Update the Tree Survey Report for the Selected Alternative P8.2d: Avoid and Minimize Disturbance of Riparian Communities	P8.2a: Install Temporary Construction Fencing to Protect Trees P8.2b: Compensate for Permanent Impacts on Riparian Communities P8.2c: Update the Tree Survey Report for the Selected Alternative P8.2d: Avoid and Minimize Disturbance of Riparian Communities	P8.2a: Install Temporary Construction Fencing to Protect Trees P8.2b: Compensate for Permanent Impacts on Riparian Communities P8.2c: Update the Tree Survey Report for the Selected Alternative P8.2d: Avoid and Minimize Disturbance of Riparian Communities
Quantitative Comparison of Mitigation Requirements	Option 1 of P8.2b would cost $4,900	Option 1 of P8.2b would cost $10,780	Option 1 of P8.2b would cost $6,860	Option 1 of P8.2b would cost $9,800
Significance After Mitigation	LS	LS	LS	LS
Impact 8.3 Loss or Disturbance of Blue Oak–Digger Pine Woodland and Native Trees				
Quantitative Comparison	Loss of 371 trees, including 195 oaks and 101 other native trees	Loss of 389 trees, including 267 oaks and 92 other native trees	Loss of 364 trees, including 254 oaks and 64 other native trees	Loss of 346 trees, including 242 oaks and 71 other native trees
Significance Before Mitigation	S	S	S	S
Mitigation Measures	P8.3a: Obtain a Tree Permit P8.3b: Mitigate Tree Removal P8.3c: Revegetate All Disturbed Areas P8.3d: Install Temporary Construction Fencing	P8.3a: Obtain a Tree Permit P8.3b: Mitigate Tree Removal P8.3c: Revegetate All Disturbed Areas P8.3d: Install Temporary Construction Fencing	P8.3a: Obtain a Tree Permit P8.3b: Mitigate Tree Removal P8.3c: Revegetate All Disturbed Areas P8.3d: Install Temporary Construction Fencing	P8.3a: Obtain a Tree Permit P8.3b: Mitigate Tree Removal P8.3c: Revegetate All Disturbed Areas P8.3d: Install Temporary Construction Fencing

Table ES-1. Summary of Impacts of the Auburn-Folsom Road Widening Project, by Alternative

	Alt. 1: Widening to the West	Alt. 2: Widening to the East	Alt. 3: Widening Equally on Both Sides	Alt. 4: County DPW–Preferred
	to Protect Trees P8.3e: Update the Tree Survey Report for the Selected Alternative	to Protect Trees P8.3e: Update the Tree Survey Report for the Selected Alternative	to Protect Trees P8.3e: Update the Tree Survey Report for the Selected Alternative	to Protect Trees P8.3e: Update the Tree Survey Report for the Selected Alternative
Significance After Mitigation	LS	LS	LS	LS
Impact 8.4 Potential Mortality of Individual Valley Elderberry Longhorn Beetles or Disturbance of Habitat				
Quantitative Comparison	Direct impacts on three shrubs and indirect impacts on four shrubs	Direct impacts on five shrubs and indirect impacts on three shrubs	Direct impacts on five shrubs and indirect impacts on three shrubs	Direct impacts on five shrubs and indirect impacts on four shrubs
Significance Before Mitigation	S	S	S	S
Mitigation Measures	P8.4a: Complete Section 7 ESA Consultation with USFWS for Potential Impacts on VELB P8.4b: Establish a Minimum 6-Meter-Wide (20-Foot-Wide) Buffer around All Elderberry Shrubs That Will Not Be Removed P8.4c: Implement Dust Control Measures P8.4d: Transplant Elderberry Shrubs That Cannot Be Avoided P8.4e: Compensate for the Removal or Destruction of Valley Elderberry Longhorn Beetle Habitat P8.4f: Conduct	P8.4a: Complete Section 7 ESA Consultation with USFWS for Potential Impacts on VELB P8.4b: Establish a Minimum 6-Meter-Wide (20-Foot-Wide) Buffer around All Elderberry Shrubs That Will Not Be Removed P8.4c: Implement Dust Control Measures P8.4d: Transplant Elderberry Shrubs That Cannot Be Avoided P8.4e: Compensate for the Removal or Destruction of Valley Elderberry Longhorn Beetle Habitat P8.4f: Conduct	P8.4a: Complete Section 7 ESA Consultation with USFWS for Potential Impacts on VELB P8.4b: Establish a Minimum 6-Meter-Wide (20-Foot-Wide) Buffer around All Elderberry Shrubs That Will Not Be Removed P8.4c: Implement Dust Control Measures P8.4d: Transplant Elderberry Shrubs That Cannot Be Avoided P8.4e: Compensate for the Removal or Destruction of Valley Elderberry Longhorn Beetle Habitat P8.4f: Conduct	P8.4a: Complete Section 7 ESA Consultation with USFWS for Potential Impacts on VELB P8.4b: Establish a Minimum 6-Meter-Wide (20-Foot-Wide) Buffer around All Elderberry Shrubs That Will Not Be Removed P8.4c: Implement Dust Control Measures P8.4d: Transplant Elderberry Shrubs That Cannot Be Avoided P8.4e: Compensate for the Removal or Destruction of Valley Elderberry Longhorn Beetle Habitat P8.4f: Conduct

Table ES-1. Summary of Impacts of the Auburn-Folsom Road Widening Project, by Alternative

	Alt. 1: Widening to the West	Alt. 2: Widening to the East	Alt. 3: Widening Equally on Both Sides	Alt. 4: County DPW–Preferred
	Mandatory Contractor/Worker Awareness Training for Construction Personnel	Mandatory Contractor/Worker Awareness Training for Construction Personnel	Mandatory Contractor/Worker Awareness Training for Construction Personnel	Mandatory Contractor/Worker Awareness Training for Construction Personnel
Quantitative Comparison of Mitigation Requirements	P8.4d requires transplanting of 3 elderberry shrubs Option 1 of P8.4e would cost $3,000 Option 3 of P8.4d would require 0.03 hectare (0.08 acre) of conservation area	P8.4d requires transplanting of 5 elderberry shrubs Option 1 of P8.4e would cost $4,500 Option 3 of P8.4d would require 0.05 hectare (0.12 acre) of conservation area	P8.4d requires transplanting of 5 elderberry shrubs Option 1 of P8.4e would cost $4,500 Option 3 of P8.4d would require 0.05 hectare (0.12 acre) of conservation area	P8.4d requires transplanting of 5 elderberry shrubs Option 1 of P8.4e would cost $4,500 Option 3 of P8.4d would require 0.05 hectare (0.12 acre) of conservation area
Significance After Mitigation	LS	LS	LS	LS
Impact 8.5 Potential Mortality of Northwestern Pond Turtles				
Quantitative Comparison	NA	NA	NA	NA
Significance Before Mitigation	PS	PS	PS	PS
Mitigation Measures	P8.5: Conduct a Preconstruction Survey for Northwestern Pond Turtle at the Baldwin Reservoir Canal	P8.5: Conduct a Preconstruction Survey for Northwestern Pond Turtle at the Baldwin Reservoir Canal	P8.5: Conduct a Preconstruction Survey for Northwestern Pond Turtle at the Baldwin Reservoir Canal	P8.5: Conduct a Preconstruction Survey for Northwestern Pond Turtle at the Baldwin Reservoir Canal
Significance After Mitigation	LS	LS	LS	LS
Impact 8.6 Potential Disturbance of Nesting Loggerhead Shrike, Oak Titmouse, White-Tailed Kite, and Non-Special-Status Nesting Migratory Birds and Raptors				
Quantitative Comparison	NA	NA	NA	NA
Significance Before Mitigation	PS	PS	PS	PS

Table ES-1. Summary of Impacts of the Auburn-Folsom Road Widening Project, by Alternative

	Alt. 1: Widening to the West	Alt. 2: Widening to the East	Alt. 3: Widening Equally on Both Sides	Alt. 4: County DPW–Preferred
Mitigation Measures	P8.6a: Conduct a Focused Preconstruction Survey for Raptor Nests and Nesting Birds P8.6b: Avoid Disturbance of Nesting Special-Status and Non-Special-Status Migratory Birds and Raptors	P8.6a: Conduct a Focused Preconstruction Survey for Raptor Nests and Nesting Birds P8.6b: Avoid Disturbance of Nesting Special-Status and Non-Special-Status Migratory Birds and Raptors	P8.6a: Conduct a Focused Preconstruction Survey for Raptor Nests and Nesting Birds P8.6b: Avoid Disturbance of Nesting Special-Status and Non-Special-Status Migratory Birds and Raptors	P8.6a: Conduct a Focused Preconstruction Survey for Raptor Nests and Nesting Birds P8.6b: Avoid Disturbance of Nesting Special-Status and Non-Special-Status Migratory Birds and Raptors
Significance After Mitigation	LS	LS	LS	LS
Impact 8.7 Potential Disturbance of Nesting Cliff and Barn Swallows				
Quantitative Comparison	NA	NA	NA	NA
Significance Before Mitigation	PS	PS	PS	PS
Mitigation Measures	P8.7: Avoid Disturbance of Nesting Swallows	P8.7: Avoid Disturbance of Nesting Swallows	P8.7: Avoid Disturbance of Nesting Swallows	P8.7: Avoid Disturbance of Nesting Swallows
Significance After Mitigation	LS	LS	LS	LS
Impact 8.8 Potential Disturbance of Common Wildlife Species				
Quantitative Comparison	NA	NA	NA	NA
Significance Before Mitigation	LS	LS	LS	LS
Mitigation Measures	None required	None required	None required	None required
Significance After Mitigation	LS	LS	LS	LS
EARTH RESOURCES				
Impact 9.1 Potential Construction-Related Soil Erosion and Sedimentation				
Quantitative Comparison	NA	NA	NA	NA
Significance Before Mitigation	S	S	S	S

Table ES-1. Summary of Impacts of the Auburn-Folsom Road Widening Project, by Alternative

	Alt. 1: Widening to the West	Alt. 2: Widening to the East	Alt. 3: Widening Equally on Both Sides	Alt. 4: County DPW–Preferred
Mitigation Measures	P9.1a: Prepare and Implement Improvement Plans, Specifications, and Cost Estimates P9.1b: Prepare and Implement an Erosion and Sediment Control Plan P9.1c: Revegetate All Disturbed Areas P9.1d: Review Proposed Grading Plans P9.1e: Remove Unsuitable Fill Material or Debris	P9.1a: Prepare and Implement Improvement Plans, Specifications, and Cost Estimates P9.1b: Prepare and Implement an Erosion and Sediment Control Plan P9.1c: Revegetate All Disturbed Areas P9.1d: Review Proposed Grading Plans P9.1e: Remove Unsuitable Fill Material or Debris	P9.1a: Prepare and Implement Improvement Plans, Specifications, and Cost Estimates P9.1b: Prepare and Implement an Erosion and Sediment Control Plan P9.1c: Revegetate All Disturbed Areas P9.1d: Review Proposed Grading Plans P9.1e: Remove Unsuitable Fill Material or Debris	P9.1a: Prepare and Implement Improvement Plans, Specifications, and Cost Estimates P9.1b: Prepare and Implement an Erosion and Sediment Control Plan P9.1c: Revegetate All Disturbed Areas P9.1d: Review Proposed Grading Plans P9.1e: Remove Unsuitable Fill Material or Debris
Significance After Mitigation	LS	LS	LS	LS
Impact 9.2 Destruction of Unique Geologic Features				
Quantitative Comparison	NA	NA	NA	NA
Significance Before Mitigation	NI	NI	NI	NI
Mitigation Measures	None required	None required	None required	None required
Significance After Mitigation	NI	NI	NI	NI
Impact 9.3 Substantial Alteration of Existing Topography				
Quantitative Comparison	NA	NA	NA	NA
Significance Before Mitigation	LS	LS	LS	LS
Mitigation Measures	None required	None required	None required	None required
Significance After Mitigation	LS	LS	LS	LS

Table ES-1. Summary of Impacts of the Auburn-Folsom Road Widening Project, by Alternative

	Alt. 1: Widening to the West	Alt. 2: Widening to the East	Alt. 3: Widening Equally on Both Sides	Alt. 4: County DPW–Preferred
Impact 9.4 Potential Mass Wasting				
Quantitative Comparison	NA	NA	NA	NA
Significance Before Mitigation	LS	LS	LS	LS
Mitigation Measures	None required	None required	None required	None required
Significance After Mitigation	LS	LS	LS	LS
Impact 9.5 Potentially Expansive Soils and Sediments				
Quantitative Comparison	NA	NA	NA	NA
Significance Before Mitigation	LS	LS	LS	LS
Mitigation Measures	None required	None required	None required	None required
Significance After Mitigation	LS	LS	LS	LS
Impact 9.6 Potential Surface Fault Rupture				
Quantitative Comparison	NA	NA	NA	NA
Significance Before Mitigation	NI	NI	NI	NI
Mitigation Measures	None required	None required	None required	None required
Significance After Mitigation	NI	NI	NI	NI
Impact 9.7 Potential Strong Seismic Ground Shaking and Liquefaction				
Quantitative Comparison	NA	NA	NA	NA
Significance Before Mitigation	LS	LS	LS	LS
Mitigation Measures	None required	None required	None required	None required
Significance After Mitigation	LS	LS	LS	LS
Impact 9.8 Reduction of the Availability of a Known Locally or Regionally Important Mineral Resources				
Quantitative Comparison	NA	NA	NA	NA
Significance Before Mitigation	NI	NI	NI	NI
Mitigation Measures	None required	None required	None required	None required

Table ES-1. Summary of Impacts of the Auburn-Folsom Road Widening Project, by Alternative

	Alt. 1: Widening to the West	Alt. 2: Widening to the East	Alt. 3: Widening Equally on Both Sides	Alt. 4: County DPW–Preferred
Significance After Mitigation	NI	NI	NI	NI
CULTURAL RESOURCES				
Impact 10.1 Potential Damage to Previously Unidentified Buried Archaeological Resources				
Quantitative Comparison	NA	NA	NA	NA
Significance Before Mitigation	PS	PS	PS	PS
Mitigation Measures	P10.1: Stop Work If Cultural Deposits Are Discovered During Ground-Disturbing Activities	P10.1: Stop Work If Cultural Deposits Are Discovered During Ground-Disturbing Activities	P10.1: Stop Work If Cultural Deposits Are Discovered During Ground-Disturbing Activities	P10.1: Stop Work If Cultural Deposits Are Discovered During Ground-Disturbing Activities
Significance After Mitigation	LS	LS	LS	LS
Impact 10.2 Potential Damage to Previously Unidentified Human Remains				
Quantitative Comparison	NA	NA	NA	NA
Significance Before Mitigation	PS	PS	PS	PS
Mitigation Measures	P10.2: Comply with State/Federal Laws Pertaining to the Discovery of Human Remains	P10.2: Comply with State/Federal Laws Pertaining to the Discovery of Human Remains	P10.2: Comply with State/Federal Laws Pertaining to the Discovery of Human Remains	P10.2: Comply with State/Federal Laws Pertaining to the Discovery of Human Remains
Significance After Mitigation	LS	LS	LS	LS
TRAILS				
Impact 11.1 Inconsistency with Local Plans and Policies Related to the Development of Bikeways and Trails				
Quantitative Comparison	NA	NA	NA	NA
Significance Before Mitigation	LS	LS	LS	LS
Mitigation Measures	P11.1a: Provide Class II Bikeways P11.1b: Improve Equestrian Trail in	P11.1a: Provide Class II Bikeways P11.1b: Improve Equestrian Trail in	P11.1a: Provide Class II Bikeways P11.1b: Improve Equestrian Trail in	P11.1a: Provide Class II Bikeways P11.1b: Improve Equestrian Trail in

Table ES-1. Summary of Impacts of the Auburn-Folsom Road Widening Project, by Alternative

	Alt. 1: Widening to the West	Alt. 2: Widening to the East	Alt. 3: Widening Equally on Both Sides	Alt. 4: County DPW–Preferred
	Accordance with Standard County Design Conditions	Accordance with Standard County Design Conditions	Accordance with Standard County Design Conditions	Accordance with Standard County Design Conditions
Significance After Mitigation	LS	LS	LS	LS
Impact 11.2 Disruption of Trail Use or Connectivity in the Existing Trail Network				
Quantitative Comparison	NA	NA	NA	NA
Significance Before Mitigation	LS	LS	LS	LS
Mitigation Measures	P11.2: Install a Traffic Signal at the Auburn-Folsom Road/Lou Place Intersection	P11.2: Install a Traffic Signal at the Auburn-Folsom Road/Lou Place Intersection	P11.2: Install a Traffic Signal at the Auburn-Folsom Road/Lou Place Intersection	P11.2: Install a Traffic Signal at the Auburn-Folsom Road/Lou Place Intersection
Significance After Mitigation	LS	LS	LS	LS

Known Areas of Controversy

Section 15123(b) of the State CEQA Guidelines requires an EIR to identify areas of controversy known to the lead agency, including issues raised by agencies and the public. Issues raised by agencies and the public include

- selection of the preferred project;
- the exposure of residents along the corridor and campers at Folsom SRA to increased traffic noise;
- impacts on wetlands and special-status species;
- the loss of trees associated with the various alternatives;
- the location(s) where impacts on wetlands, special-status species, and trees will be mitigated;
- increased speeding on Auburn-Folsom Road after the project is complete;
- the location and design of the median (center turn lane versus raised medians);
- the need/desire for soundwall(s);
- the need/desire for "sound-absorbing" pavement material;
- concerns about visibility, safety, and drivers' ability to enter/exit driveways safely;
- encroachment into Folsom Lake Estates;
- possible gating/closure of Oak Hill Drive;
- possible increased drainage and flooding;
- need/desire for a stop light at Lou Place;
- possible increase in truck traffic as a result of the widening; and
- impacts on neighboring land uses.

Issues to be Resolved

Section 15123 (c) of the State CEQA Guidelines requires an EIR to identify issues to be resolved, including the choice among alternatives and whether or how to mitigate the significant effects. The following issues need to be resolved.

- If the County and Reclamation decide to approve the project, which alternative should be selected?
- Should the design speed be 80 kph (50 mph) or 88 kph (55 mph)?
- Should soundwalls be provided? If yes, where?
- Should retaining walls be provided? If yes, where?

- Should the Auburn-Folsom Road/Lou Place intersection be signalized?
- What median design should be selected? Should the median be a striped median, or raised median, or possibly landscaped median?
- Should the median design restrict left turns and U-turns and if yes, where should left turns and U-turns be allowed?
- Should the project include a traffic signal at Lou Place?
- Should wetland, elderberry shrub, and tree impacts associated with the Reclamation property be mitigated on the Reclamation property?

Significant Irreversible Environmental Changes

CEQA requires a discussion of potential significant, irreversible environmental changes that could result from the project. Examples of such changes include commitment of future generations to similar uses, irreversible damage that may result from accidents associated with a project, or irretrievable commitments of resources.

Implementation of the proposed project would result in the short-term commitment of nonrenewable energy resources and natural resources, including sand and gravel, asphalt, and other resources to construct the project.

Required Permits and Approvals

Placer County is the state lead agency for the proposed project under CEQA and is responsible for certifying the EIR. Because Auburn-Folsom Road is adjacent to the Folsom Lake State Recreation Area (SRA), which is owned by the U.S. Department of the Interior, Bureau of Reclamation, Reclamation is the federal lead agency under NEPA. Reclamation is responsible for compliance under NEPA.

The discretionary actions required by the County as the lead agency under CEQA for project implementation are listed below.

- Certification of the EIR
- Approval of proposed improvements
- Approval of final engineering designs and advertisement of construction bids for the proposed action
- Approval of right-of-way acquisition for the proposed action
- Approval to award the construction contract for the proposed action
- Preparation of drainage report and approval to implement recommendations of drainage report

The discretionary actions required by Reclamation as lead agency under NEPA for project implementation are listed below.

- Certification of compliance with NEPA and federal regulatory requirements
- Approval of a finding of no significant impact (FONSI)
- Approval of right-of-way acquisition of Bureau of Reclamation land

A list of permits and other approvals required to implement the project can be found in Chapter 2, "Project Alternatives."

Analysis of the No-Build Alternative

Section 15126.6(e) of the State CEQA Guidelines provides guidance on the evaluation of the "no-project" or "no-build" alternative. The purpose of describing and analyzing a no-project alternative is to allow decision makers to compare the impacts of approving the proposed project with the impacts of not approving the proposed project.

For the purpose of this environmental document, the No-Build Alternative is defined as what would happen if the project were not approved. For the purpose of this analysis, the practical result of not approving the proposed project (i.e., widening Auburn-Folsom Road from two to four lanes) is described below.

Traffic

Existing average daily traffic (ADT) volumes on Auburn-Folsom Road range from 27,900 near Douglas Boulevard to 28,900 near Pinebrook Drive. In 2005 without the project, these traffic volumes are projected to increase to 28,500 near Douglas Boulevard to 31,300 near Pinebrook Drive. These traffic volumes would result in p.m. peak-hour roadway segment LOS F at four of the study roadway segments.

In 2020 without the project, these traffic volumes are projected to increase to 31,500 near Douglas Boulevard to 43,100 near Pinebrook Drive. As traffic volumes increase, traffic operations along Auburn-Folsom Road will deteriorate. Congested conditions on Auburn-Folsom Road would encourage drivers to seek alternate north-south routes, such as Barton Road and Sierra College Boulevard. Levels of service on Barton Road would drop from an existing LOS of A to LOS E and F. Cut-through traffic from Auburn-Folsom Road would use Oak Hill Drive and Eureka Road, with existing volumes projected to increase from an ADT of 800 and 4,300, respectively, to 6,300 and 12,400 in 2020, respectively.

Air Quality

Under the No-Build Alternative, Auburn-Folsom Road would continue to operate as a two-lane facility, and no improvements would be constructed. Under this alternative, there would be no project-related construction air quality impacts (dust and equipment emissions). However, operation-related impacts would be more adverse under the No-Build Alternative (compared to the four build alternatives) because the intersections would be more congested, potentially creating carbon monoxide impacts.

Hydrology and Water Quality

Under the No-Build Alternative, the Linda Creek culvert would not be improved and there would be no further evaluation of upstream and downstream flow and flooding. Field observations suggest that water has overtopped Auburn-Folsom Road and contributed to bank instability. Without improvement, flood events would continue to overtop the road and contribute to bank scouring and water quality degradation, as well as disruption of traffic flow.

Noise

Under the No-Build Alternative, there would be no construction-related noise impacts (i.e., no short-term noise impacts would occur). It also is assumed that the road would not be resurfaced and pavement type would not change. As described in Chapter 3, "Transportation and Circulation," traffic volumes on Auburn-Folsom Road would increase regardless of project implementation. Future noise volumes would increase in proportion to this traffic increase. The pavement treatment proposed for use in the project would produce a 3–5 decibel noise reduction when compared to the existing surface. Therefore, the No-Build Alternative would result in higher future noise volumes when compared with the build alternatives.

Visual Resources/Aesthetics

Under the No-Build Alternative, the visual impacts associated with the proposed construction would not occur. Impacts would be less adverse under the No-Build Alternative (compared to the four build alternatives) because no trees would be removed, the road would not be widened, no soundwalls or retaining walls would be built, and no changes in topography would take place.

Biological Resources

Under the No-Build Alternative, the biological resources impacts associated with the proposed project would not occur. Impacts would be less adverse under the No-Build Alternative (compared to the four build alternatives) because no trees would be removed, no wetlands would be disturbed, and no other habitat would be affected.

Earth Resources

Under the No-Build Alternative, the impacts associated with the proposed construction would not occur. Impacts would be less adverse under the No-Build Alternative (compared to the four build alternatives) because there would be no ground or soil disturbance.

Cultural Resources

Under the No-Build Alternative, the impacts associated with the proposed construction would not occur. Impacts would be less adverse under the No-Build Alternative (compared to the four build alternatives) because there would be no potential disturbance of cultural resources.

Trails

Under the No-Build Alternative, the bikeway and trail network in the project area would not be modified. The project would upgrade the bikeway along Auburn-Folsom Road, from the County line north to Douglas Boulevard, from a Class III to a Class II bikeway. Also, the project would improve an equestrian trail on the west side of Auburn-Folsom Road from the County line north to Oak Hill Drive. Impacts on trails would be greater under the No-Build Alternative because these proposed improvements would not occur.

Environmentally Superior Alternative

The State CEQA Guidelines, Section 15126(d), requires that an EIR identify an environmentally superior alternative. The environmentally superior alternative for the proposed project is the No-Build Alternative because no physical changes to the environment would result from construction. However, as described above, the No-Build Alternative would result in increased traffic congestion, air quality impacts, and noise impacts. The No-Build Alternative also would not meet the objectives of the proposed project, including

- maintaining LOS C, as required by the Granite Bay Community Plan,

- accommodating local and regional traffic volumes through 2020, and
- improving safety along the Auburn-Folsom corridor.

If the environmentally superior alternative is the No-Build Alternative, the EIR must identify an environmentally superior alternative among the other alternatives (State CEQA Guidelines, Section 15126 [d][2]). In this case, the environmentally superior alternative is Alternative 4: County DPW–Preferred Alternative, with the identified mitigation measures.

Chapter 1

Introduction and Project Purpose and Need

Introduction and Purpose of this Report

Introduction

Placer County (County), with the cooperation of the U.S. Department of the Interior, Bureau of Reclamation (Reclamation), proposes to improve approximately 3.2 kilometers (2 miles) of Auburn-Folsom Road from the Placer County/Sacramento County line north to Douglas Boulevard. The project corridor is shown in Figure 1-1. Improvements include

- adding a travel lane in each direction, resulting in four 3.6-meter-wide (12-foot-wide) travel lanes;
- adding a 4.2-meter-wide (14-foot-wide) center lane that may include two-way left-turn lanes and/or raised or painted medians in many or all roadway segments;
- providing 1.8-meter-wide (6-foot-wide) shoulders with Class II bicycle lanes on each side of the road;
- redesigning the horizontal and vertical curve north of Lou Place to improve the sight distance to achieve a design speed of 88 kilometers per hour (kph) (55 miles per hour [mph]) (Alternatives 1, 2, and 3) or a design speed of 80 kph (50 mph) (Alternative 4);
- installing curb, gutter, and sidewalk at certain locations;
- constructing/improving a multi-use/equestrian trail on the west side of Auburn-Folsom Road, from the Baldwin Reservoir access road to the Oak Hill Drive intersection;
- constructing a new traffic signal at the Fuller Road intersection;
- improving traffic signal operations at the Eureka Road and Oak Hill Drive intersections;
- restriping Auburn-Folsom Road between Fuller Drive and Douglas Boulevard to accommodate the alignment of Auburn-Folsom Road south of Fuller Drive; and

- implementing sight-distance improvements along Eureka Road approximately 300 meters (980 feet) west of the Auburn-Folsom Road/Eureka Road intersection. Approximately 190 meters (620 feet) would be lowered by approximately 1 meter (3 feet) to improve the vertical sight distance along this portion of Eureka Road. This improvement would allow residents of the Ridgeview Mobile Home Park to use the Eureka Road driveway, which is currently gated.

This document discusses the following four possible alternatives in equal level detail:

- Alternative 1: Widen Roadway to the West
- Alternative 2: Widen Roadway to the East
- Alternative 3: Widen Roadway Equally on Both Sides
- Alternative 4: County DPW–Preferred Alternative

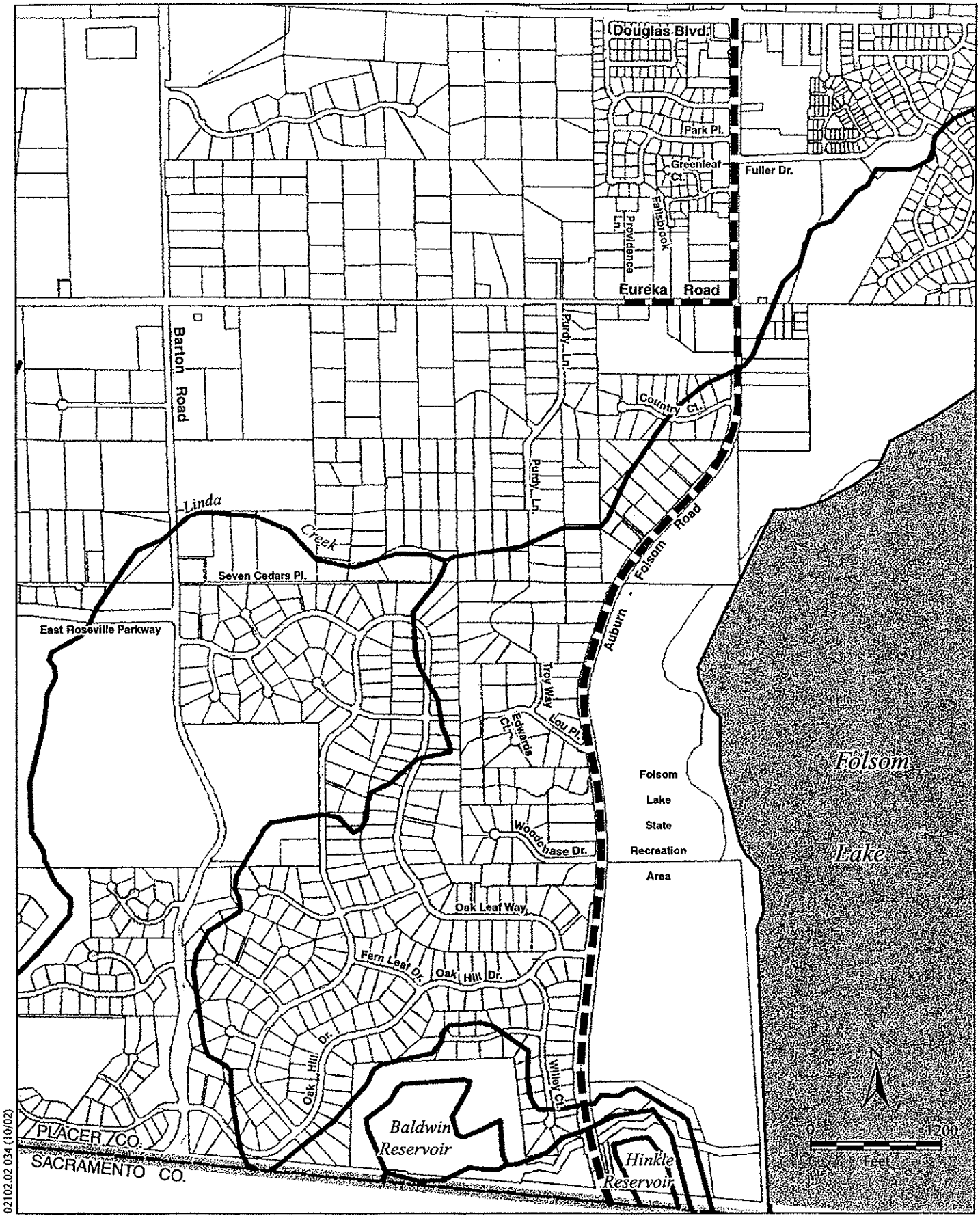
Auburn-Folsom Road is a primary connector route between the City of Auburn and the City of Folsom. The roadway begins in the City of Folsom north of the Lake Natoma Crossing bridge over the American River, intersects with Folsom Dam Road and continues to the City of Auburn in Placer County. South of Folsom Dam Road, Auburn-Folsom Road (known as Folsom-Auburn Road) is a four-lane roadway. At its intersection with Folsom Dam Road, Folsom-Auburn Road transitions from a four-lane width to a two-lane width in the northbound direction, creating a northbound "bottleneck effect."

The roadway has become a primary connector route for commuter traffic between the City of Roseville and the City of Rocklin area and the City of Folsom/eastern Sacramento County area. Rapidly increasing traffic volumes on Auburn-Folsom Road, from the Placer County/Sacramento County line north to Douglas Boulevard, have reached the point where there is a need to increase capacity of the roadway to serve the Granite Bay area and the regional through-commute traffic.

The City of Folsom, in conjunction with the California Department of Transportation (Caltrans), the Federal Highway Administration (FHWA), and Reclamation, has proposed to widen Folsom-Auburn Road from Folsom Dam Road to the Placer County line, a distance of approximately 1.2 kilometers (0.75 mile). The Folsom-Auburn Road widening project is considered a *related* and *independent* project in relation to the project proposed by Placer County and Reclamation.

Lead Agencies

Placer County is the state lead agency for the project and, as such, has the primary responsibility for preparing the environmental document to comply with



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Jones & Stokes

Figure 1-1
Project Site

the California Environmental Quality Act (CEQA) and for approving or denying the project.

Reclamation owns land on the east side of the roadway (Folsom Lake State Recreation Area [SRA]) and must grant an encroachment easement for construction of the project. Therefore, Reclamation is the federal lead agency for the project and has the primary responsibility for preparing the environmental document to comply with the National Environmental Policy Act (NEPA).

The County has determined that the appropriate environmental document under CEQA is an environmental impact report (EIR), and Reclamation has determined that the appropriate environmental document under NEPA is an environmental assessment (EA). The County and Reclamation have decided to prepare a joint environmental document to comply with both CEQA and NEPA (an EA/EIR).

Purpose of this Report

This environmental document has been prepared in compliance with NEPA and CEQA. The purpose of this report is to evaluate and disclose the environmental consequences of the proposed project. This report is a public informational document used in the planning and decision-making process. Although the environmental analysis presented does not control the ultimate decision on the project, Placer County and Reclamation must consider the information in this report before making a decision to approve or deny the project.

Government agencies must consider the environmental consequences of projects over which they have discretionary authority. State and local agencies are required by CEQA to avoid or mitigate impacts, when feasible. Public agencies also are required to balance a variety of public objectives, including economic, environmental, and social objectives.

CEQA (Sections 21000–21178.1 of the Public Resources Code) and the State CEQA Guidelines provide the statutory requirements for evaluating environmental impacts of a project. Specifically, the purpose of an EIR is to

- identify the potentially significant impacts of the proposed project on the environment and to indicate the manner in which those significant impacts can be avoided or mitigated;
- identify any unavoidable adverse impacts that cannot be mitigated;
- identify reasonable and feasible alternatives to the project that would eliminate any significant adverse environmental impacts or reduce the impacts to a less-than-significant level;
- disclose growth-inducing impacts;
- identify impacts found not to be significant; and
- disclose the significant cumulative impacts of all past, present, and reasonably anticipated future projects.

CEQA requires that the County prepare an EIR that reflects the independent judgement of the agency regarding the impacts, the level of significance of the impacts both before and after mitigation, and mitigation measures proposed to reduce the impacts. A Draft EIR is circulated to responsible agencies, trustee agencies with resources affected by the project, and interested agencies and individuals. The purposes of public and agency review of a Draft EIR include sharing expertise, disclosing agency analyses, checking for accuracy, detecting omissions, discovering public concerns, and soliciting counter-proposals.

NEPA requires that Reclamation prepare an EA to determine whether the proposed action will "significantly affect the quality of the human environment." The purposes of an EA are to

- provide evidence and analysis sufficient to determine whether an environmental impact statement (EIS) is required,
- aid a federal agency's compliance with NEPA when no EIS is necessary, and
- facilitate preparation of an EIS when one is necessary.

If, at the conclusion of the EA process, Reclamation determines that, under NEPA, the action has no potential for significant effects, Reclamation will prepare a "finding of no significant impact" (FONSI).

An important distinction between CEQA and NEPA is in the use of the term "significant" impact or effect. CEQA requires that environmental documents identify significant or potentially significant impacts, NEPA does not. Addressing significant or potentially significant impacts in joint CEQA and NEPA environmental documents can be confusing, especially in instances where the two laws and implementing regulations have different thresholds of significance. Under NEPA, the degree to which a resource is adversely affected is used only to determine which NEPA document is necessary. Once the federal agency has determined the magnitude of a project's impacts and the level of documentation required, it is the magnitude of the impact that is evaluated in the environmental document, not the degree of significance. For the purpose of the impact discussion in this document, determination of significant or potentially significant impacts is made in the context of CEQA only.

This EA/Draft EIR has been prepared jointly by the County and Reclamation to meet the requirements discussed above. Reviewers of this environmental document should focus on the sufficiency of the document in identifying and analyzing possible impacts on the environment and ways in which the significant effects of the project might be avoided or mitigated. Comments are most helpful when they suggest additional specific mitigation measures that would provide better ways to avoid or mitigate effects.

Project Purpose

The purpose of the proposed project is to relieve recurring traffic congestion by providing additional capacity to meet existing and projected traffic demands through 2020, as described in the Capital Improvement Program. The additional capacity would

- reduce corridor delay,
- relieve traffic congestion and add capacity during peak- and off-peak periods, and
- accommodate local and regional traffic volumes through 2020.

The proposed project also would improve roadway operation and safety by widening the roadway; signalizing the Fuller Drive intersection and improving the intersection's geometry; improving sight distance along Eureka Road; adding medians and left-turn lanes; and improving Auburn-Folsom Road's horizontal and vertical alignment.

Need for the Project

Auburn-Folsom Road has relatively high volumes of traffic throughout the daytime hours, with well-defined morning and evening peak-hour traffic volumes. As traffic volumes increase, the peaks will broaden, and roadway travelers will experience congestion for increasingly longer periods of time during the day.

Between the County line and Douglas Boulevard, drivers experience operational traffic problems during the morning and evening peak hours. Long queues form at the Eureka Road and Oak Hill Drive signalized intersections. Drivers turning onto Auburn-Folsom Road from driveways and residential streets, such as Fuller Drive, have difficulty finding gaps in traffic and therefore sometimes experience delays of several minutes. Pedestrians, including students attending the Willma E. Cavitt Junior High School (just east of the Fuller Drive intersection), are not able to easily cross Auburn-Folsom Road. The vertical and horizontal curves of the existing roadway also reduce the design speed and contribute to delays. Congestion on Auburn-Folsom Road results in drivers using cut-through routes, such as Barton Road and Oak Hill Drive. Finally, the frequency of accidents on Auburn-Folsom Road, between Eureka Road and Douglas Boulevard, exceeds the statewide average for similar transportation routes.

Traffic Analysis

A detailed traffic analysis was conducted by Fehr & Peers as part of the environmental review and is included as Chapter 3 of this EA/Draft EIR. The

traffic analysis included a description of the existing transportation system in the vicinity of the proposed project. Impacts on study roadways were determined by measuring the effect that the project has on traffic volumes, traffic operations at key intersections during peak-hour conditions, and on roadway segments under daily conditions. A summary of the analysis is presented below.

Transportation professionals typically describe vehicle traffic operating conditions for roadways and intersections in terms of "level of service" (LOS). LOS is a common, qualitative measurement of the effect that various factors have on traffic operations. Typical factors include speed, travel time, traffic interruptions, freedom to maneuver, and safety. The LOS for intersections and roadways ranges from "A" (the best) to "F" (the worst).

Existing Traffic Operations (without Project)

Table 1-1 contains the existing LOS and delay results for the study intersections. Table 1-1 shows that the study area intersections along Auburn-Folsom Road operate from LOS A (unsignalized) to LOS C (Eureka Road and Oak Hill Drive) to LOS D (Douglas Boulevard). Worst-case movements for the unsignalized intersections operate at LOS E and F (delays for the worst-case movement of more than 50 seconds per vehicle).

Table 1-1. Intersection Levels of Service—Existing Conditions

		PM Peak Hour			
		Worst-case Movement [1]		Overall	
Intersection	Control	Delay [2]	LOS	Delay [2]	LOS
1. Auburn-Folsom Road/Douglas Boulevard	Signalized	-	-	35.1	D
2. Auburn-Folsom Road/Fuller Drive	Side-street stop	37.8*	E*	1.7*	A*
3. Auburn-Folsom Road/Fallsbrook Court	Side-street stop	> 50.0*	F*	0.6*	A*
4. Auburn-Folsom Road/Eureka Road	Signalized	-	-	30.6*	C*
5. Auburn-Folsom Road/Country Court	Side-street stop	> 50.0*	F*	0.3*	A*
6. Auburn-Folsom Road/Lou Place	Side-street stop	> 50.0*	F*	0.5*	A*
7. Auburn-Folsom Road/Oak Hill Drive	Signalized	-	-	31.2*	C*
8. Auburn-Folsom Road/Pinebrook Drive	Signalized	-	-	11.4*	B*
9. Barton Road/Oak Hill Drive	Side-street stop	13.7	B	2.7	A
10. Barton Road/MacDuff Drive	Side-street stop	10.0	B	2.2	A
11. Barton Road/Eureka Road	All-way stop	18.4	C	16.1	C
12. Barton Road/Douglas Boulevard	Signalized	-	-	49.2	D

Notes: [1] Delay and LOS for the worst-case movement reported for unsignalized intersections only.
[2] Delay is reported as seconds per vehicle.

* An asterisk indicates intersections that are influenced by adjacent intersections. These intersections should be considered to operate worse than the reported LOS due to the effects of queuing from downstream intersections.

Source: Fehr & Peers 2002.

Table 1-2 contains the existing average daily traffic (ADT) and LOS results for the study roadway segments. As shown, average daily traffic (ADT) ranges from 27,900 vehicles at the north end of the project area, near Douglas Boulevard, to 28,900 at the south end of the project area, near Pinebrook Drive. The LOS from Fuller Drive south to Pinebrook Drive is F.

Table 1-2. Roadway Segment Daily Levels of Service—Existing Conditions

Roadway Segment	Roadway Type	Number of Lanes	ADT	LOS
Auburn-Folsom Road—Douglas Boulevard to Fuller Drive	A-HAC	4**	27,900	B
Auburn-Folsom Road—Fuller Drive to Eureka Road	A-HAC	2	28,800	F
Auburn-Folsom Road—Eureka Road to Country Court	A-HAC	2	28,300	F
Auburn-Folsom Road—Country Court to Oak Hill Drive	A-HAC	2	28,400	F
Auburn-Folsom Road—Oak Hill Drive to Pinebrook Drive	A-HAC	2	28,900	F
Barton Road—County Line to Oak Hill Drive	A-LAC	2	3,700	A
Barton Road—Oak Hill Drive to MacDuff Drive	A-LAC	2	4,500	A
Barton Road—East Roseville Parkway to Eureka Road	A-LAC	2	7,000	A
Barton Road—Eureka Road to Douglas Boulevard	A-LAC	2	7,700	A
Oak Hill Drive—Oak Leaf Way to Fern Leaf Drive	Local Road	2	800	*
MacDuff Drive—MacDuff Court to Oak Leaf Way	Local Road	2	1,400	*
Eureka Road—Auburn-Folsom Road to Barton Road	A-LAC	2	4,300	A
Douglas Boulevard—Auburn-Folsom Road to Barton Road	A-HAC	4	35,400	D

* The Placer County General Plan does not identify LOS for local roads.
** Auburn-Folsom Road transitions from four to two lanes through this section.

A-HAC = Arterial—high access control.
A-LAC = Arterial—low access control.

Source: Fehr & Peers 2002.

The transportation impact analysis focused on p.m. peak-hour traffic operations at the study intersections. The analysis includes the no-project conditions (2005 and 2020), the basic group of alternatives, and a raised median design option, as defined by Placer County DPW.

The traffic operations analysis was conducted for construction year (2005) conditions and cumulative year (2020) conditions. Traffic forecasts for cumulative conditions were developed using the Southeast Placer County travel demand model developed by DKS Associates for the *Southeast Placer County Transportation Study*. Fehr & Peers added detail to the roadway network and modified free-flow speeds to better reflect travel patterns in the study area.

Construction Year (2005) Conditions

Based on the geometry, traffic controls, and traffic volume forecasts, p.m. peak-hour traffic operations at the study intersections were analyzed for "no-project," project, and raised median project option conditions. Table 1-3 shows the intersection LOS under construction year (2005) no-project conditions.

Table 1-3. Intersection Level of Service—Construction Year (2005) No-Project Conditions

		PM Peak Hour			
		Worst-Case Movement [1]		Overall	
Intersection	Control	Delay [2]	LOS	Delay [2]	LOS
1. Auburn-Folsom Road/Douglas Boulevard	Signalized	-	-	40.9	D
2. Auburn-Folsom Road/Fuller Drive	Side-street stop	38.5*	E*	1.6*	A*
3. Auburn-Folsom Road/Fallsbrook Court	Side-street stop	> 50.0*	F*	1.5*	A*
4. Auburn-Folsom Road/Eureka Road	Signalized	-	-	55.6*	E*
5. Auburn-Folsom Road/Country Court	Side-street stop	> 50.0*	F*	1.6*	A*
6. Auburn-Folsom Road/Lou Place	Side-street stop	> 50.0*	F*	1.6*	A*
7. Auburn-Folsom Road/Oak Hill Drive	Signalized	-	-	45.9*	D*
8. Auburn-Folsom Road/Pinebrook Drive	Signalized	-	-	3.4*	A*
9. Barton Road/Oak Hill Drive	Side-street stop	17.7	C	4.2	A
10. Barton Road/MacDuff Drive	Side-street stop	11.1	B	2.0	A
11. Barton Road/Eureka Road	All-way stop	27.0	D	21.1	C
12. Barton Road/Douglas Boulevard	Signalized	-	-	51.8	D

Notes: [1] Delay and LOS for the worst-case movement reported for unsignalized intersections only.
[2] Delay is reported as seconds per vehicle.

* An asterisk indicates intersections that are influenced by adjacent intersections. These intersections should be considered to operate worse than the reported LOS due to the effects of queuing from downstream intersections.

Source: Fehr & Peers 2002.

As shown in Table 1-3, the Auburn-Folsom Road/Douglas Boulevard and Barton Road/Douglas Boulevard intersections will operate at LOS D during the p.m. peak hour under construction year (2005) "no-project" conditions. The p.m. peak-hour LOS will deteriorate to LOS E at the Auburn-Folsom Road/Eureka Road intersection and will deteriorate to LOS D at the Auburn-Folsom Road/Oak Hill Drive intersection under these conditions. The p.m. peak-hour intersection LOS will improve at the Auburn-Folsom Road/Pinebrook Drive intersection because of the increased capacity provided by Folsom's Folsom-Auburn Road widening project.

As shown in Table 1-4, construction of the project would improve the p.m. peak-hour intersection LOS to an acceptable level, compared to the "no-project" condition, at the Auburn-Folsom Road/Eureka Road and Auburn-Folsom Road/Oak Hill Drive intersections. The Auburn-Folsom Road/Fuller Drive intersection would operate at LOS A with the project. The Auburn-Folsom Road/Douglas Boulevard and Barton Road/Douglas Boulevard intersections would continue to operate at LOS D during the p.m. peak hour. Although these intersections would operate deficiently, the overall delay (measured in seconds per vehicle) would decrease from "no-project" conditions with implementation of the project at these locations.

Table 1-4. Intersection Level of Service—Construction Year (2005) with-Project Conditions

		PM Peak Hour			
		Worst-case Movement[1]		Overall	
Intersection	Control	Delay [2]	LOS	Delay [2]	LOS
1. Auburn-Folsom Road/Douglas Boulevard	Signalized	-	-	35.8	D
2. Auburn-Folsom Road/Fuller Drive	Signalized	-	-	4.4*	A*
3. Auburn-Folsom Road/Fallsbrook Court	Side-street stop	> 50.0*	F*	0.5*	A*
4. Auburn-Folsom Road/Eureka Road	Signalized	-	-	20.5*	C*
5. Auburn-Folsom Road/Country Court	Side-street stop	> 50.0*	F*	0.6*	A*
6. Auburn-Folsom Road/Lou Place	Side-street stop	> 50.0*	F*	0.7*	A*
7. Auburn-Folsom Road/Oak Hill Drive	Signalized	-	-	11.8*	B*
8. Auburn-Folsom Road/Pinebrook Drive	Signalized	-	-	3.4*	A*
9. Barton Road/Oak Hill Drive	Side-street stop	15.4	C	3.3	A
10. Barton Road/MacDuff Drive	Side-street stop	10.6	B	2.1	A
11. Barton Road/Eureka Road	All-way stop	22.1	C	18.4	C
12. Barton Road/Douglas Boulevard	Signalized	-	-	48.2	D

Notes: [1] Delay and LOS for the worst-case movement reported for unsignalized intersections only.
[2] Delay is reported as seconds per vehicle.

* An asterisk indicates intersections that may be influenced by adjacent intersections. These intersections should be considered to operate worse than the reported LOS due to the effects of queuing from downstream intersections.

Source: Fehr & Peers 2002.

As shown in Table 1-5, all of the Auburn-Folsom Road study roadway segments will operate at LOS F under construction year (2005) "no-project" conditions, except the existing four-lane section from Douglas Boulevard to Fuller Drive. The section of Douglas Boulevard between Auburn-Folsom Road and Barton Road will operate at LOS D.

Table 1-5. Roadway Segment Daily Levels of Service—Construction Year (2005) No Project Conditions

Roadway Segment	Roadway Type	Number of Lanes	ADT	LOS
Auburn-Folsom Road—Douglas Boulevard to Fuller Drive	A-HAC	4**	28,500	C
Auburn-Folsom Road—Fuller Drive to Eureka Road	A-HAC	2	29,400	F
Auburn-Folsom Road—Eureka Road to Country Court	A-HAC	2	29,800	F
Auburn-Folsom Road—Country Court to Oak Hill Drive	A-HAC	2	29,900	F
Auburn-Folsom Road—Oak Hill Drive to Pinebrook Drive	A-HAC	2	31,300	F
Barton Road—County Line to Oak Hill Drive	A-LAC	2	4,500	A
Barton Road—Oak Hill Drive to MacDuff Drive	A-LAC	2	6,200	A
Barton Road—East Roseville Parkway to Eureka Road	A-LAC	2	8,200	A
Barton Road—Eureka Road to Douglas Boulevard	A-LAC	2	9,100	B
Oak Hill Drive—Oak Leaf Way to Fern Leaf Drive	Local Road	2	1,700	*
MacDuff Drive—MacDuff Court to Oak Leaf Way	Local Road	2	1,400	*
Eureka Road—Auburn-Folsom Road to Barton Road	A-LAC	2	5,600	A
Douglas Boulevard—Auburn-Folsom Road to Barton Road	A-HAC	4	35,900	D

* The Placer County General Plan does not identify LOS for local roads.
** Auburn-Folsom Road transitions from 4 to 2 lanes through this section.

A-HAC = Arterial—high access control.
A-LAC = Arterial—low access control.

Source: Fehr & Peers 2002.

As shown in Table 1-6, all of the study roadway segments on Auburn-Folsom Road will operate at LOS C with implementation of the project under construction year (2005) conditions. The segment of Barton Road between Eureka Road and Douglas Boulevard will improve to LOS A because traffic will be reduced on this segment. The segment of Douglas Boulevard between Auburn-Folsom Road and Barton Road will operate at LOS E. The average daily traffic on Oak Hill Drive from Oak Leak Way to Fern Leaf Drive will decrease compared to the "no-project" condition.

Table 1-6. Roadway Segment Daily Levels of Service—Construction Year (2005) with Project Conditions

Roadway Segment	Roadway Type	Number of Lanes	ADT	LOS
Auburn-Folsom Road—Douglas Boulevard to Fuller Drive	A-HAC	4	29,900	C
Auburn-Folsom Road—Fuller Drive to Eureka Road	A-HAC	4	30,900	C
Auburn-Folsom Road—Eureka Road to Country Court	A-HAC	4	30,800	C
Auburn-Folsom Road—Country Court to Oak Hill Drive	A-HAC	4	30,900	C
Auburn-Folsom Road—Oak Hill Drive to Pinebrook Drive	A-HAC	4	31,600	C
Barton Road—County Line to Oak Hill Drive	A-LAC	2	4,800	A
Barton Road—Oak Hill Drive to MacDuff Drive	A-LAC	2	5,900	A
Barton Road—East Roseville Parkway to Eureka Road	A-LAC	2	7,900	A
Barton Road—Eureka Road to Douglas Boulevard	A-LAC	2	8,600	A
Oak Hill Drive—Oak Leaf Way to Fern Leaf Drive	Local Road	2	1,200	*
MacDuff Drive—MacDuff Court to Oak Leaf Way	Local Road	2	1,400	*
Eureka Road—Auburn-Folsom Road to Barton Road	A-LAC	2	5,400	A
Douglas Boulevard—Auburn-Folsom Road to Barton Road	A-HAC	4	36,600	E

* The Placer County General Plan does not identify LOS for local roads.

A-HAC = Arterial—high access control.
A-LAC = Arterial—low access control.

Source: Fehr & Peers 2002.

Cumulative Year (2020) Conditions

As shown in Table 1-7, all of the signalized study intersections except the Auburn-Folsom Road/Pinebrook Drive intersection will operate at LOS D or worse during the p.m. peak hour under cumulative year (2020) "no-project" conditions. The worst-case movement at all of the unsignalized study intersections, except the Barton Road/MacDuff Drive intersection, will operate at LOS E or F during the p.m. peak hour under cumulative year (2020) "no-project" conditions. The overall p.m. peak-hour intersection LOS at the Barton Road/Oak Hill Drive intersection will be LOS E, and the overall p.m. peak-hour intersection LOS at the Barton Road/Eureka Road intersection will be LOS F.

Table 1-7. Intersection Level of Service—Cumulative Year (2020) No-Project Conditions

		PM Peak Hour Hour			
		Worst-case Movement[1] -		Overall	
Intersection	Control	Delay[2]	LOS	Delay[2]	LOS
1. Auburn-Folsom Road/Douglas Boulevard	Signalized	-	-	49.9	D
2. Auburn-Folsom Road/Fuller Drive	Side-street stop	41.0*	E*	1.6*	A*
3. Auburn-Folsom Road/Fallsbrook Court	Side-street stop	> 50.0*	F*	1.9*	A*
4. Auburn-Folsom Road/Eureka Road	Signalized	-	-	> 80.0*	F*
5. Auburn-Folsom Road/Country Court	Side-street stop	> 50.0*	F*	4.4*	A*
6. Auburn-Folsom Road/Lou Place	Side-street stop	> 50.0*	F*	4.6*	A*
7. Auburn-Folsom Road/Oak Hill Drive	Signalized	-	-	> 80.0*	F*
8. Auburn-Folsom Road/Pinebrook Drive	Signalized	-	-	4.4*	A*
9. Barton Road/Oak Hill Drive	Side-street stop	> 50.0	F	35.6	E
10. Barton Road/MacDuff Drive	Side-street stop	21.9	C	1.8	A
11. Barton Road/Eureka Road	All-way stop	> 50.0	F	>50.0	F
12. Barton Road/Douglas Boulevard	Signalized	-	-	> 80.0	F

Notes: [1] Delay and LOS for the worst-case movement reported for unsignalized intersections only.
[2] Delay is reported as seconds per vehicle.

* An asterisk indicates intersections that are influenced by adjacent intersections. These intersections should be considered to operate worse than the reported LOS due to the effects of queuing from downstream intersections.

Source: Fehr & Peers 2002.

As shown in Table 1-8, construction of the project would improve the p.m. peak-hour intersection LOS, compared to the cumulative year "no-project" conditions, at the Auburn-Folsom Road/Oak Hill Drive intersection. The overall p.m. peak-hour intersection LOS would improve to LOS A at the Barton Road/Oak Hill Drive intersection. The p.m. peak-hour delay at the Auburn-Folsom Road/Douglas Boulevard intersection would increase with the construction of the project as more traffic uses Auburn-Folsom Road. The Auburn-Folsom Road/Eureka Road, Barton Road/Eureka Road, and Barton Road/Douglas Boulevard intersections would continue to operate at LOS F.

Table 1-8. Intersection Level of Service—Cumulative Year (2020) with-Project Conditions

		PM Peak Hour			
		Worst-case Movement[1]		Overall	
Intersection	Control	Delay [2]	LOS	Delay [2]	LOS
1. Auburn-Folsom Road/Douglas Boulevard	Signalized	-	-	71.5	E
2. Auburn-Folsom Road/Fuller Drive	Signalized	-	-	8.2*	A*
3. Auburn-Folsom Road/Fallsbrook Court	Side-street stop	> 50.0*	F*	2.2*	A*
4. Auburn-Folsom Road/Eureka Road	Signalized	-	-	> 80.0*	F*
5. Auburn-Folsom Road/Country Court	Side-street stop	> 50.0*	F*	4.0*	A*
6. Auburn-Folsom Road/Lou Place	Side-street stop	> 50.0*	F*	4.0*	A*
7. Auburn-Folsom Road/Oak Hill Drive	Signalized	-	-	42.8*	D*
8. Auburn-Folsom Road/Pinebrook Drive	Signalized	-	-	5.1*	A*
9. Barton Road/Oak Hill Drive	Side-street stop	> 50.0	F	7.4	A
10. Barton Road/MacDuff Drive	Side-street stop	13.3	B	1.4	A
11. Barton Road/Eureka Road	All-way stop	> 50.0	F	> 50.0	F
12. Barton Road/Douglas Boulevard	Signalized	-	-	> 80.0	F

Notes: [1] Delay and LOS for the worst-case movement reported for unsignalized intersections only.
[2] Delay is reported as seconds per vehicle.

* An asterisk indicates intersections that may be influenced by adjacent intersections. These intersections should be considered to operate worse than the reported LOS due to the effects of queuing from downstream intersections.

Source: Fehr & Peers 2002.

As shown in Table 1-9, all of the study roadway segments on Auburn-Folsom Road, Barton Road, Eureka Road, and Douglas Boulevard, except the existing four-lane section of Auburn-Folsom Road from Douglas Boulevard to Fuller Drive and the section of Barton Road from the County line to Oak Hill Drive, will operate at LOS D or worse under cumulative year (2020) "no-project" conditions.

Table 1-9. Roadway Segment Daily Levels of Service—Cumulative Year (2020) No-Project Conditions

Roadway Segment	Roadway Type	Number of Lanes	ADT	LOS
Auburn-Folsom Road—Douglas Boulevard to Fuller Drive	A-HAC	4**	31,500	C
Auburn-Folsom Road—Fuller Drive to Eureka Road	A-HAC	2	32,100	F
Auburn-Folsom Road—Eureka Road to Country Court	A-HAC	2	37,300	F
Auburn-Folsom Road—Country Court to Oak Hill Drive	A-HAC	2	37,200	F
Auburn-Folsom Road—Oak Hill Drive to Pinebrook Drive	A-HAC	2	43,100	F
Barton Road—County Line to Oak Hill Drive	A-LAC	2	8,400	A
Barton Road—Oak Hill Drive to MacDuff Drive	A-LAC	2	14,500	E
Barton Road—East Roseville Parkway to Eureka Road	A-LAC	2	14,100	E
Barton Road—Eureka Road to Douglas Boulevard	A-LAC	2	16,200	F
Oak Hill Drive—Oak Leaf Way to Fern Leaf Drive	Local Road	2	6,300	*
MacDuff Drive—MacDuff Court to Oak Leaf Way	Local Road	2	1,700	*
Eureka Road—Auburn-Folsom Road to Barton Road	A-LAC	2	12,400	D
Douglas Boulevard—Auburn-Folsom Road to Barton Road	A-HAC	4	38,500	E

* The Placer County General Plan does not identify LOS for local roads.
** Auburn-Folsom Road transitions from 4 to 2 lanes through this section.

A-HAC = Arterial—high access control.
A-LAC = Arterial—low access control.

Source: Fehr & Peers 2002.

As shown in Table 1-10 on the following page, all of the study roadway segments on Auburn-Folsom Road, Barton Road, and Douglas Boulevard, except the section of Barton Road between the County line and Oak Hill Drive, would continue to operate at LOS D or worse with implementation of the project. Although these segments operate deficiently, the LOS will improve on the following roadway segments:

- Barton Road—Oak Hill Drive to MacDuff Drive;
- Barton Road—East Roseville Parkway to Eureka Road; and
- Barton Road—Eureka Road to Douglas Boulevard.

The Barton Road segments improve because daily volumes would decrease with the implementation of the project, as will the segment of Eureka Road from Auburn-Folsom Road to Barton Road, which would improve to LOS C conditions. The segment of Barton Road between the County line and Oak Hill

Drive would experience an increase in daily traffic that would result in LOS B conditions. Implementation of the project would cause the segment of Douglas Boulevard from Auburn-Folsom Road to Barton Road to operate at LOS F because of the increase in peak-hour volumes that is projected to result from trips shifting to the Douglas Boulevard/Auburn-Folsom Road route because of the increased capacity along Auburn-Folsom Road. The project would also result in a shift of trips to Auburn-Folsom Road from parallel north-south routes, such as Sierra College Boulevard. The average daily traffic on Oak Hill Drive, from Oak Leak Way to Fern Leaf Drive, and MacDuff Drive, from MacDuff Court to Oak Leaf Way, would decrease compared to the "no-project" condition.

Implementation of the project would not be sufficient to eliminate unacceptable LOS operations at study intersections and on study roadway segments under cumulative year (2020) conditions and would increase the delay at the Auburn-Folsom Road/Douglas Boulevard intersection as more capacity is added to Auburn-Folsom Road. Implementation of the project would support Policy 3.A.5 of the Placer County General Plan by discouraging the use of neighborhood streets, such as Oak Hill Drive and MacDuff Drive.

Table 1-10. Roadway Segment Daily Levels of Service—Cumulative Year (2020) with-Project Conditions

Roadway Segment	Roadway Type	Number of Lanes	ADT	LOS
Auburn-Folsom Road—Douglas Boulevard to Fuller Drive	A-HAC	4	39,900	E
Auburn-Folsom Road—Fuller Drive to Eureka Road	A-HAC	4	41,500	F
Auburn-Folsom Road—Eureka Road to Country Court	A-HAC	4	43,300	F
Auburn-Folsom Road—Country Court to Oak Hill Drive	A-HAC	4	43,200	F
Auburn-Folsom Road— Oak Hill Drive to Pinebrook Drive	A-HAC	4	45,200	F
Barton Road—County Line to Oak Hill Drive	A-LAC	2	10,000	B
Barton Road—Oak Hill Drive to MacDuff Drive	A-LAC	2	12,600	D
Barton Road—East Roseville Parkway to Eureka Road	A-LAC	2	12,400	D
Barton Road—Eureka Road to Douglas Boulevard	A-LAC	2	13,200	D
Oak Hill Drive—Oak Leaf Way to Fern Leaf Drive	Local Road	2	3,000	*
MacDuff Drive—MacDuff Court to Oak Leaf Way	Local Road	2	1,500	*
Eureka Road—Auburn-Folsom to Barton Road	A-LAC	2	10,600	C
Douglas Boulevard—Auburn-Folsom Road to Barton Road	A-HAC	4	42,800	F

* The Placer County General Plan does not identify LOS for local roads.

A-HAC = Arterial—high access control.
A-LAC = Arterial—low access control.

Source: Fehr & Peers 2002.

Accident Data Analysis

The accident rates for intersections and roadway segments were calculated using the methods outlined in the *Traffic Engineering Handbook*. The accident rate for intersections is based on the number of vehicles entering the intersection annually. The accident rate for roadway segments is based on annual million vehicle-miles of travel on the segment. The formulas for calculating both the intersection and roadway segment accident rates account for the number of years of data that were collected, yielding an average yearly accident rate. Typically, the accident data used for a traffic analysis represents the most recent 3 full years. The calculated accident rates are compared to the average accident rates published in the Caltrans 1998 *Accident Data on California State Highways* book for similar facilities. Table 1-11 shows the accident rates for 1999, 2000, and 2001. As shown, the actual accident rate for Auburn-Folsom Road between Eureka Road and Fuller Drive is higher than the statewide average for a facility of the same general type. All the other roadway segments and intersections are lower than the statewide average.

Table 1-11. Summary of Accidents and Accident Rates for Auburn-Folsom Road

Location	Number of Accidents	Accident Rate (per million vehicle miles)	Statewide Average Rate (per million vehicle miles)
Roadway Segments			
County Line to Oak Hill Drive	7	0.69	2.00
Oak Hill Drive to Eureka Road	26	0.80	2.00
Eureka Road to Fuller Drive	12	2.75	2.00
Intersections			
Oak Hill Drive	3	0.10	0.54
Eureka Road	11	0.35	0.54
Fuller Drive	3	0.32	0.54

Source: Placer County Department of Public Works 2002.

Project Background

As previously stated, Auburn-Folsom Road is a primary two-lane connector roadway between the City of Auburn and the City of Folsom. The road also acts as a primary north-south connector for Granite Bay residents. The alignment of Auburn-Folsom Road south of Eureka Road was relocated during the construction of Folsom Dam in the mid-1950s.

In 1989, the Placer County Department of Public Works studied traffic and transportation issues in southern Placer County. The *South Placer Traffic Study* (Placer County Department of Public Works 1989) identified several roadways in

Granite Bay that need to be improved to meet the community's goal of maintaining LOS C or better at full buildout. The study identified Auburn-Folsom Road in its recommendations for roadways that should be included in the Placer County Capital Improvement Program (CIP) for future improvements. These recommendations were incorporated in the Granite Bay Community Plan, which was also completed and approved in 1989.

In 2000, traffic congestion in the Granite Bay area, the increase of through traffic, and "neighborhood traffic management" were studied in the *Southeast Placer County Transportation Study* (DKS Associates 2000). Again, improvements were recommended for Auburn-Folsom Road. To alleviate current and future congestion, the study recommended that Auburn-Folsom Road be widened from two lanes to four lanes between the County line and Fuller Drive. The proposed widening is therefore consistent with the Granite Bay Community Plan and the transportation studies that have been performed during the last 13 years.

Public Involvement Process

The proposed project was developed by Placer County through a process that seeks to balance community and regional values with transportation needs. Placer County is using a four-step process to ensure that the final design of Auburn-Folsom Road improves the roadway's capacity and safety while addressing many of the regional and community issues and concerns. The four-step process consists of preliminary design, environmental review, design, and construction. During the preliminary design stage, public input was sought in many forums by Placer County personnel, who have attended 11 citizen group meetings, held two public workshops, and sent three newsletters to more than 500 recipients. A project web page was created, including a project location map, project description, background information, and a news section. Three press releases about the proposed project have been issued.

Public involvement and input also is integral to the environmental review process. There are several key periods during the preparation of the EA/Draft EIR during which agencies and the public have had or will have the opportunity to comment on the proposed action and participate in the environmental review process:

- **Scoping comment period.** Placer County distributed a notice of preparation of an EIR/EA (NOP) in April 2002, to identify issues of concern regarding the proposed project and to incorporate comments received from the public and agencies into the EA/Draft EIR impact analysis (Appendix B). The distribution of an NOP is required under CEQA when a lead agency is preparing an EIR.

  The Initial Study distributed with the NOP identified the following topics as less than significant under CEQA:

- land use and planning
- population and housing (excluding growth-inducing impacts)
- energy
- fire hazards and other public safety hazards
- public services (e.g., police enforcement, schools)
- utilities and service systems

Based on comments received on the NOP, no analysis in these areas is required; therefore, topics analyzed in this document are transportation and circulation, air quality, hydrology/water quality, noise, visual resources/aesthetics, biological resources, earth resources, and cultural resources.

In response to the NOP and the Public Outreach Program conducted by Placer County, more than 75 written comments have been received regarding the proposed project. In general, citizens indicated a strong interest in Alternative 2, Widen Roadway to the East, and a combination of the "best" of Alternatives 1–3. This combination idea was developed into Alternative 4, the County DPW–Preferred Alternative (see Chapter 2). Citizens also expressed concern about the potential noise impacts of the proposed project.

- **EA/Draft EIR comment period.** Placer County will conduct a public hearing to present the results of the EA/Draft EIR and to solicit additional public comments. The purpose of the meeting is to provide opportunities for agencies and the public to comment on or express concerns about the EA/Draft EIR. Members of the public are encouraged to comment on the EA/Draft EIR at the meeting or in writing. Written comments can be sent to:

  Lori Lawrence, Placer County Planning Department
  11414 B Avenue
  Auburn, CA 95603
  Telephone: 530/886-3000
  Fax: 530/886-3003
  ljlawren@placer.ca.gov

Required Permits and Approvals

The discretionary actions required by the County as the lead agency under CEQA for project implementation are as follows.

- Certification of the EIR
- Approval of a proposed project/selection of the alternative
- Approval of final engineering designs and advertisement of construction bids
- Approval of right-of-way acquisition

- Approval to award the construction contract

The discretionary actions required by Reclamation as lead agency under NEPA for project implementation include the following.

- Approval of a FONSI
- Approval of right-of-way acquisition of Bureau of Reclamation land

This environmental document may be used by several other responsible or trustee agencies that also have review authority over the project. The various local, state, and federal agencies that may use this document are identified in Chapter 2, "Project Alternatives."

Report Organization and Terminology

Organization

This EA/Draft EIR is organized into the following chapters.

- The Executive Summary summarizes the proposed project alternatives, describes the environmentally superior alternative, and summarizes impacts and mitigation measures identified in this report.
- Chapter 1, "Introduction," provides an overview of this EA/Draft EIR and identifies the proposed project's purpose and need.
- Chapter 2, "Project Alternatives," describes the four alternatives analyzed in this report, as well as the No-Action Alternative.
- Chapters 3 through 11 present information about the current environmental conditions and regulatory setting relevant to a particular resource or topic and the effects of the project alternatives on environmental resources. The severity of effects is established using significance thresholds as identified by CEQA. Mitigation measures are presented that would reduce significant effects identified under CEQA to less-than-significant levels.
- Chapter 12, "Cumulative Impacts," describes the effects of the proposed project when considered with the similar effects of other past, present, and reasonably foreseeable future projects.
- Chapter 13, "Consultation, Coordination, and Integration with Other Federal Requirements," presents federal requirements (e.g., executive orders) and evaluates the proposed action in the context of these requirements.
- Chapter 14, "List of Preparers," lists the people involved in preparing this EA/Draft EIR.
- Chapter 15, "References Cited," lists printed references and personal communications cited in the text of this report.

- Technical appendices are bound separately in Volume 2 and Volume 3.

Terminology

To assist readers in understanding this EA/Draft EIR, terms used are defined as follows:

- *Environment* means the physical conditions that exist in the area and that would be affected by a proposed project, including land, air, water, minerals, flora, fauna, ambient noise, and objects of historical or aesthetic significance. The area involved is the area in which significant direct or indirect impacts would occur as a result of the project. The environment includes both natural and artificial conditions.
- *Significant* impact on the environment, as defined by CEQA, means a substantial, or potentially substantial, adverse change in any of the physical conditions in the area affected by the project, including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance.
- *Impacts* comprise:
  a. Direct or primary effects that are caused by the proposed action and occur at the same time and place.
  b. Indirect or secondary effects that are caused by the proposed action and are later in time or farther removed, but are still reasonably foreseeable. Indirect or secondary impacts may include growth-inducing impacts and other effects related to induced changes in the pattern of land use, population density, or growth rate, and related effects on air and water and other natural systems, including ecosystems.
- *Mitigation* consists of:
  a. avoiding the impact altogether by not taking a certain action or parts of an action;
  b. minimizing impacts by limiting the degree or magnitude of the action and its implementation;
  c. rectifying the impact by repairing, rehabilitating, or restoring the affected environment;
  d. reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action; and/or
  e. compensating for the impact by replacing or providing substitute resources or environments.

This environmental document identifies the two following types of mitigation measures:

- *Proposed mitigation measures* are measures that the Placer County DPW, as project proponent, is either proposing as part of the project design or has agreed to implement.
- *Recommended mitigation measures* are measures that are identified in this environmental document but that the Placer County DPW has not chosen to implement, and which may be required by the Placer County Board of Supervisors if the project is approved.

This environmental document uses a variety of terms to describe the level of significance of adverse impacts. These terms are defined as follows:

- *Less-than-significant impact under CEQA:* An impact that is adverse but that does not exceed the defined thresholds of significance under CEQA. Less-than-significant impacts do not require mitigation.
- *Potentially significant impact under CEQA:* An impact that may or may not be adverse, for example, potential disturbance of undiscovered cultural resources may be significant if a resource is discovered; however, if a resource is not discovered, the impact is less than significant.
- *Significant impact under CEQA:* An impact that exceeds the defined thresholds of significance and would or could cause a substantial adverse change in the environment. Mitigation measures are recommended to eliminate the impact or reduce it to a less-than-significant level.
- *Significant and unavoidable impact under CEQA:* An impact that exceeds the defined thresholds of significance and cannot be eliminated or reduced to a less-than-significant level through the implementation of mitigation measures.

Chapter 2

Project Alternatives

Introduction

Both NEPA and CEQA require that decision makers consider reasonable alternatives to proposed projects to avoid significant environmental effects. Section 1502.14 of the Council on Environmental Quality Regulations for Implementing NEPA states that the alternatives analysis "should present the environmental impacts of the proposal and the alternatives in comparative form, thus sharply defining the issues and providing a clear basis for choice among options by the decisionmaker and the public." Section 15126(d) of the State CEQA Guidelines requires that an EIR describe a range of reasonable alternatives to a project that would "feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project." Alternatives must be considered, even if they might impede to some degree the attainment of the project objectives or make it more costly. The point of considering alternatives is not to identify a different project to be developed, but to provide a basis for comparison and to foster informed decisions.

Placer County has performed preliminary engineering and design studies on four alternatives that best meet the objectives of the proposed project. These alternatives and the No-Build Alternative are described in this chapter. Pursuant to NEPA, the alternatives under consideration were analyzed at an equal level of detail. Because the No-Build Alternative does not satisfy the project objectives, it is presented and evaluated primarily as a baseline set of conditions to which the other alternatives can be compared.

Additional information about the design of the four alternatives can be found in the Preliminary Design Report for the Auburn-Folsom Road 4-Lane Widening Project (August 21, 2002) and the Preliminary Design Report Supplement for the Auburn-Folsom Road 4-Lane Widening Project (September 16, 2002). Copies of these reports are on file at the Placer County Department of Public Works offices and can be reviewed during normal business hours.

Project Location and Project Limits

The project area is located in southeast Placer County, with Folsom Lake immediately to the east and the City of Folsom to the south. The project limits extend from the Placer County/Sacramento County line north to Douglas Boulevard, a distance of approximately 3.2 kilometers (2 miles) (Figures 2-1 and 2-2).

The Folsom Lake State Recreation Area (SRA) extends along the southeastern portion of the project corridor. This portion of the Folsom Lake SRA represents the southernmost and westernmost part of the 7,280-hectare (18,000-acre) recreation area, which is owned by the U.S. Department of the Interior, Bureau of Reclamation and managed by the State of California Department of Parks and Recreation. The SRA receives over 2.5 million visitors annually. Facilities in the SRA include campgrounds, bike trails, and equestrian trails, as well as sites designated for fishing, boating, and water-skiing. Facilities near the project corridor include a bike trail, an equestrian trail, campgrounds, and the Beal's Point entrance to Folsom Lake.

Description of Existing Circulation Network

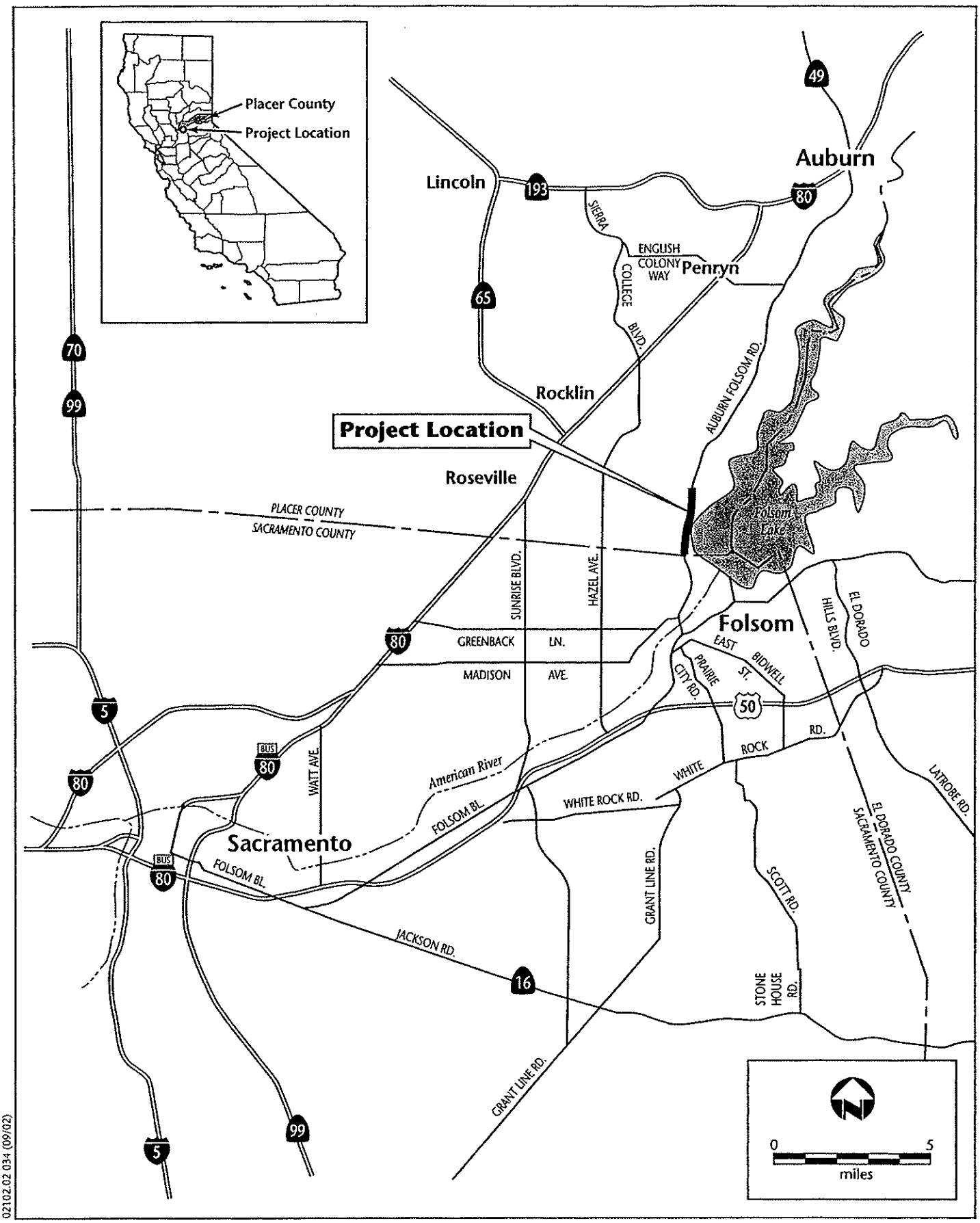
Brief descriptions of the key circulation facilities in the project area are provided below.

Auburn-Folsom Road is a two-lane, north-south roadway that begins at the Placer County/Sacramento County line and extends north to the City of Auburn. At the County line, the road's name changes to "Folsom-Auburn Road," and the roadway continues south to the City of Folsom. This roadway is one of a handful of routes that connect the northern Sacramento County, City of Folsom, and El Dorado Hills region with the south Placer County, City of Roseville, and Granite Bay area.

Douglas Boulevard is a four- and six-lane, east-west roadway that begins in the City of Roseville, crosses Interstate 80 (I-80), and extends through the Granite Bay area to the Folsom Lake SRA. An interchange is provided at I-80. An increasing amount of travelers on Douglas Road and Auburn-Folsom Road represent through traffic between the City of Folsom/El Dorado Hills and the City of Roseville area.

Fuller Drive is a two-lane east-west collector street that begins at Auburn-Folsom Road and connects to Bronson Drive. Fuller Drive serves a residential area that includes the Willma E. Cavitt Junior High School.

Eureka Road is a two-lane east-west collector street in the Granite Bay area of Placer County. Eureka Road begins as a six-lane roadway at I-80 in the City of Roseville. After crossing Douglas Boulevard, Eureka Road becomes a four-lane roadway. Upon crossing Sierra College Boulevard, Eureka Road becomes a two-



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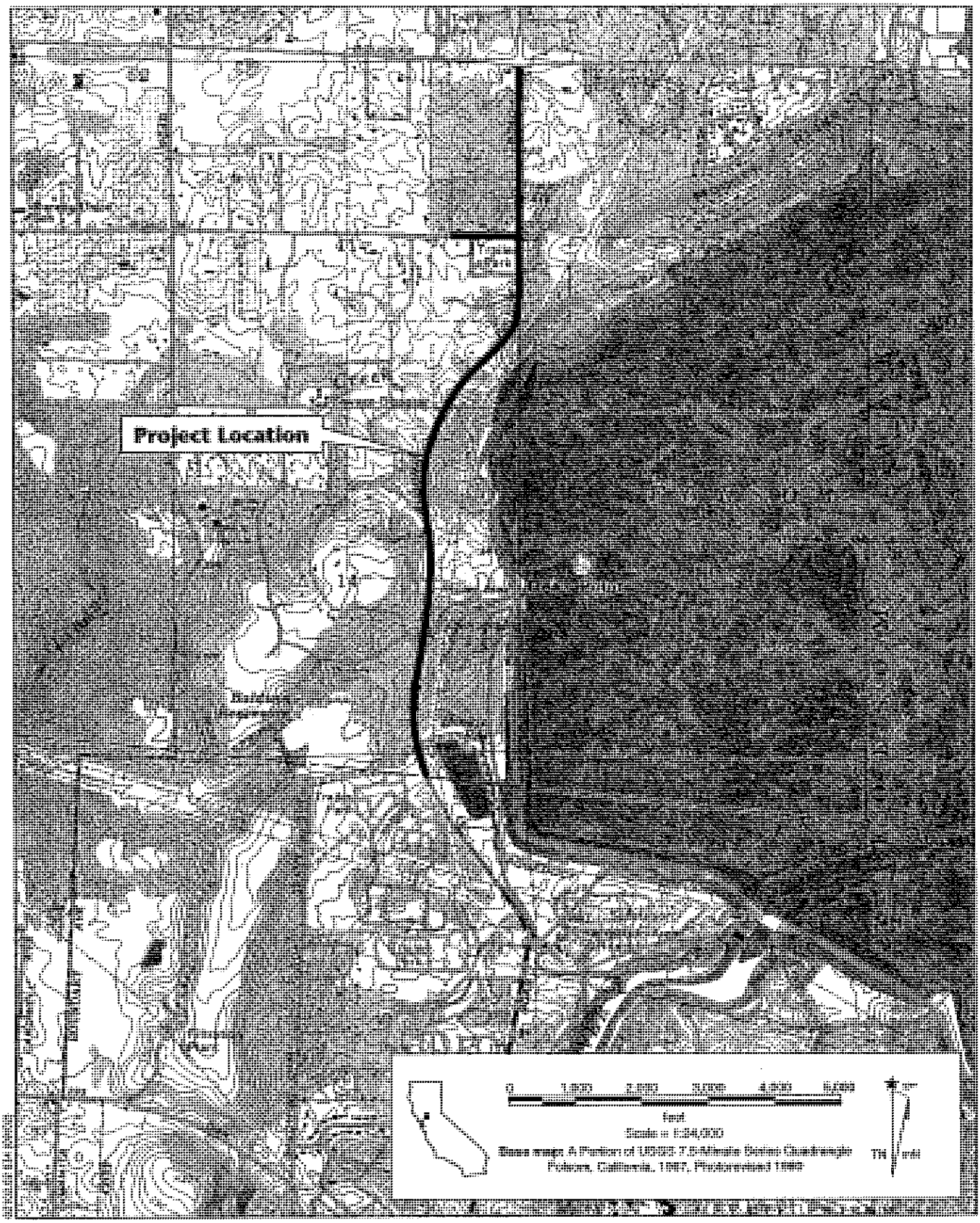
Jones & Stokes

Figure 2-1
Regional Location Auburn-Folsom Widening Project



Jones & Stokes

Figure 2-2
Project Location

lane roadway and turns at Wellington Way. Eureka Road terminates at Auburn-Folsom Road at a signalized intersection.

Oak Hill Drive is a two-lane residential street that begins at Barton Road, proceeds through the Folsom Lake Estates subdivision, and ends at Auburn-Folsom Road at a signalized intersection. The Beal's Point entrance to the Folsom Lake SRA forms the fourth leg of this intersection at Auburn-Folsom Road.

Description of Proposed Build Alternatives

As stated earlier, four build alternatives are analyzed at an equal level of detail in this EA/Draft EIR:

- Alternative 1: Widen Roadway to the West
- Alternative 2: Widen Roadway to the East
- Alternative 3: Widen Roadway Equally on Both Sides
- Alternative 4: County DPW-Preferred Alternative

In addition, this report evaluates the potential impacts of the No-Build Alternative.

Proposed Improvements Common to All Build Alternatives

The following information is common to all build alternatives.

The proposed project would widen approximately 3.2 kilometers (2.0 miles) of Auburn-Folsom Road from two lanes to four lanes from the Placer County/Sacramento County line to Douglas Boulevard. The road widening would generally follow the existing alignment. Improvements proposed include

- adding a travel lane in each direction, resulting in four 3.6-meter-wide (12-foot-wide) travel lanes;
- adding a 4.2-meter-wide (14-foot-wide) center lane that may include two-way left-turn lanes and/or raised or painted medians in many or all roadway segments;
- providing 1.8-meter-wide (6-foot-wide) shoulders with Class II bicycle lanes on each side of the road;
- redesigning the horizontal and vertical curve north of Lou Place to improve the sight distance to achieve a design speed of 88 kph (55 mph) (Alternatives 1, 2, and 3) or a design speed of 80 kph (50 mph) (Alternative 4);

- installing curb, gutter, and sidewalk at certain locations;
- constructing/improving a multi-use/equestrian trail on the west side of Auburn-Folsom Road, from the Baldwin Reservoir access road to the Oak Hill Drive intersection;
- constructing a new traffic signal at the Fuller Road intersection;
- improving traffic signal operations at the Eureka Road and Oak Hill Drive intersections;
- restriping Auburn-Folsom Road between Fuller Drive and Douglas Boulevard to accommodate the alignment of Auburn-Folsom Road south of Fuller Drive; and
- implementing sight-distance improvements along Eureka Road approximately 300 meters (980 feet) west of the Auburn-Folsom Road/Eureka Road intersection. Approximately 190 meters (620 feet) would be lowered by approximately 1 meter (3 feet) to improve the vertical sight distance along this portion of Eureka Road. This improvement would allow residents of the Ridgeview Mobile Home Park to use the Eureka Road driveway, which is currently gated. Reopening this driveway will allow the residents to enter and exit to Eureka Road, thereby allowing for the extension of the northbound left-turn lane and a raised or painted median on the northbound approach to the Auburn-Folsom Road/Eureka Road intersection.

In addition to these improvements, the County may need to replace or move the entrance sign to Beal's Point and fencing along the SRA. DPR has requested that the County install "no parking" signs on the shoulder of Auburn-Folsom Road and consider assisting State Parks and Reclamation with replacement of the existing t-post and wire fence along the road to improve the visual quality of the corridor (Nakaji pers. comm.).

Project Information Common to All Build Alternatives

The following information is common to all alternatives.

Median Design Options

Each of the proposed build alternatives includes construction of a 4.2-meter-wide (14-foot-wide) median. The median will be designed as a two-way left-turn lane or a painted and/or raised median. It is possible that the design of the median will vary along the project length. Portions of the median may be landscaped to improve the visual quality of the widened roadway. Landscaping, if provided, may be native vegetation that is drought tolerant and similar to the native vegetation on the adjacent SRA lands, or perhaps more formal.

The County has identified a median design option that includes prohibition of U-turns at various locations, as described in Chapter 3.

Construction Information

The primary geotechnical concern for any of the alternatives is to what degree the rock can be excavated in the proposed roadway areas. In the opinion of Anderson Consulting Group (which prepared a preliminary geotechnical report for the Preliminary Design Report), blasting will likely be required to facilitate cut excavation. The amount of blasting necessary will depend on factors such as the degree of rock weathering and hardness, spacing of joints and fractures that will allow ripper-tooth penetration, and the type of excavation equipment the contractor selects for the project.

Construction would involve new roadbed construction and cut and removal of material from along the roadway. Excavations may be 4–6 meters (13–20 feet) deep, depending on the alternative roadway alignment selected.

Removal of excess material and construction of the new roadway would involve the use of the following heavy- and light-duty construction equipment: bulldozers (CAT D8R or larger) and single- or multi-shanked rippers.

At least one construction staging area will be required for the contractor to store equipment and materials during construction. One temporary construction staging area has been identified at the south end of the project corridor, on the west side of the road, opposite the San Juan Water District offices. This area is currently undeveloped and was used as the construction staging area for an unrelated project, completed in 2001. Two temporary construction staging area sites have been identified at the north end of the project alignment, just south of Fuller Drive. Both temporary construction staging areas would be located on the east side of the road.

The anticipated construction schedule is as follows:

- Complete preliminary design—2002
- Complete environmental review—2003
- Complete final design—2003/2004
- Advertise and award bids—spring 2004
- Start construction—2004

It is anticipated that the project would require 18 months to construct. The project would be implemented in its entirety during two construction seasons. The Placer County Department of Public Works Standard Construction Specifications require that one lane in each direction be open at all times. A traffic management plan would be required with any of the build alternatives.

Right-of-Way Acquisition

Placer County will need to acquire right-of-way along the project alignment. Right-of-way would be acquired under the Uniform Relocation Assistance and Real Property Acquisition Policies Act.

Utility Relocation Information

On April 2, 2001, the Placer County Department of Public Works sent an "A" letter to utility companies known to have facilities in the Granite Bay community. The "A" letter is the first letter in the "ABC Plan" developed by the American Public Works Association for the coordination of public improvement projects. In general, utilities are responsible for relocating their facilities if they are located in a public right-of-way. In response to Placer County's "A" letter, the utility companies provided maps and descriptions of their facilities in the project area.

The following utility companies and agencies have facilities in the project area:

- Pacific Gas and Electric Company (PG&E)
  - a 10-centimeter (4-inch) north-south underground gas line near the Lou Place intersection, terminus unknown
  - pole-mounted electrical transmission equipment in the County's right-of-way on the west side of Auburn-Folsom Road
- Roseville Telephone
  - pole-mounted equipment in the County's right-of-way on the west side of Auburn-Folsom Road
- Starstream Communications
  - pole-mounted equipment in the County's right-of-way on the west side of Auburn-Folsom Road
- AT&T Communications
  - fiber-optic cable generally running along the western edge of Auburn-Folsom Road—cable is approximately 1.2 meters (4 feet) underground
- San Juan Water District
  - underground equipment and pipelines that cross under Auburn-Folsom Road at the County line
  - underground pipelines next to Auburn-Folsom Road north of Country Court
  - a pump station with a driveway that forms the eastern approach to the Eureka Road intersection

- City of Roseville
  - 152-centimeter (60-inch) raw water line that crosses under Auburn-Folsom Road next to the Placer/Sacramento County line

During the final design phase of the proposed action, Placer County will coordinate further with utilities regarding accurately locating existing facilities and relocating them.

Description of Alternatives

Preliminary design drawings of Alternatives 1–4 are included in Appendix A.

Alternative 1: Widen Roadway to the West

Alternative 1 proposes to widen Auburn-Folsom Road to the west. The existing southbound and northbound travel lanes would become northbound lanes under this alternative. A median/two-way left-turn lane and two southbound lanes would be added to the west. Both the horizontal and vertical elements of the curve north of Lou Place would be redesigned to achieve a design speed of 88 kph (55 mph). The volume of material to be excavated under Alternative 1 is 65,200 cubic meters (85,278 cubic yards). Approximately 2.06 hectares (5.10 acres) of land would need to be acquired from portions of 35 parcels, with an estimated 6.5% of the needed area coming from Reclamation land. The total estimated project cost of this alternative is $9,950,000.

Alternative 2: Widen Roadway to the East

Alternative 2 proposes to widen Auburn-Folsom Road to the east. The existing southbound and northbound travel lanes would become southbound lanes under this alternative. A median/two-way left-turn lane and two northbound lanes would be added to the east. Both the horizontal and vertical elements of the curve north of Lou Place would be redesigned to achieve a design speed of 88 kph (55 mph). The volume of material to be excavated under Alternative 2 is 83,300 cubic meters (108,952 cubic yards). Approximately 2.21 hectares (5.45 acres) of land would need to be acquired from portions of 9 parcels, with an estimated 57% of the needed area coming from Reclamation land. The total estimated project cost of this alternative is $10,775,000.

Alternative 3: Widen Roadway Equally on Both Sides

Alternative 3 proposes to widen Auburn-Folsom Road equally on both sides. The existing southbound and northbound travel lanes would become the median and center lanes under this alternative. Structural roadway sections would be added to both sides of the existing pavement. Both the horizontal and vertical

elements of the curve north of Lou Place would be redesigned to achieve a design speed of 88 kph (55 mph). The volume of material to be excavated under Alternative 3 is 72,100 cubic meters (94,303 cubic yards). Approximately 1.15 hectares (2.83 acres) of land would need to be acquired from portions of 21 parcels, with an estimated 19% of the needed area coming from Reclamation land. The total estimated project cost of this alternative is $9,819,000.

Alternative 4: County DPW–Preferred Alternative

The Placer County Department of Public Works developed Alternative 4 based on input received from the public, a detailed review of the positive and negative impacts of each of the three original alternatives, and initial data results from the environmental studies conducted during the environmental review step of the project development process. The intent of the County was to develop an alternative that minimized the negative impacts of the three original alternatives while maintaining the original project goals and objectives. The impacts were reduced by adjusting the alignment at various locations along the proposed route.

Alternative 4 includes all the proposed roadway capacity improvements described for Alternatives 1, 2, and 3, with the exception that the design speed of the curve just north of Lou Place has been reduced from 88 kph (55 mph) (used for Alternatives 1, 2, and 3) to 80 kph (55 mph). This change in design speed reduces size of the lateral cut and fill slopes.

Alternative 4 is primarily a combination of Alternatives 2 and 3. Alternative 4 would widen Auburn-Folsom Road to the east of the existing alignment, starting at the Placer County line, and would transition to widening equally on both sides near the Auburn-Folsom Road/Oak Hill Drive/Beal's Point intersection. From just north of Oak Hill Drive to Lou Place, the alignment transitions to an easterly widening, then back to widening equally on both sides at the major cut just north of Lou Place. Between the cut north of Lou Place and Country Court, the alignment again transitions to widening to the east, then back again to widening equally on both sides to reduce impacts on the Linda Creek wetland area. North of Country Court, the alignment slowly transitions easterly again to the Auburn-Folsom Road/Eureka Road intersection, then stays to the east to match the existing Auburn-Folsom Road/Fuller Drive intersection.

The Alternative 4 preliminary design plans include the installation of retaining walls as a design option to reduce the size of the cut and fill slopes at many locations. The cost estimate and right-of-way needs, however, are based on the scenario without retaining walls.

The volume of material to be excavated under Alternative 4 is 62,900 cubic meters (82,270 cubic yards). Approximately 1.25 hectares (3.09 acres) of land would need to be acquired from portions of 10 parcels, with an estimated 33% of the needed area coming from Reclamation land. The total estimated project cost of this alternative is $9,320,000.

No-Build Alternative

Under the No-Build Alternative (also called the "no-project" alternative), Placer County would not widen Auburn-Folsom Road in the project area at this time. The no-project scenario would represent denial of the project's build alternatives but would not preclude action by the County to construct the build alternatives at a later date.

Under the No-Build Alternative ("future conditions" without-project scenario), the level of service for all four study segments of Auburn-Folsom Road would be unacceptable (LOS F). Drivers on Auburn-Folsom Road would experience jammed conditions and excessive delays during a significant portion of the day. In addition, all of the study intersections would operate at LOS F during the p.m. peak hour. Furthermore, operation-related air-quality impacts would be more adverse under the No-Build Alternative (compared to the four build alternatives) because the intersections would be more congested, potentially creating carbon monoxide impacts. It also is assumed that the road would not be resurfaced and pavement type would not change. As described in Chapter 3, "Transportation and Circulation," traffic volumes on Auburn-Folsom Road would increase regardless of project implementation. Future noise volumes would increase in proportion to this traffic increase. The pavement treatment proposed for use in the project would produce a 3–5 decibel noise reduction when compared to the existing surface. Therefore, the No-Build Alternative would result in higher future noise volumes when compared with the build alternatives.

Under the No-Build Alternative, the bikeway and trail network in the project area would not be modified. The project would upgrade the bikeway along Auburn-Folsom Road, from the County line north to Douglas Boulevard, from a Class III to a Class II bikeway. Also, the project would improve an equestrian trail on the west side of Auburn-Folsom Road from the County line north to Oak Hill Drive. Impacts on trails would be greater under the No-Build Alternative because these proposed improvements would not occur.

The Linda Creek culvert would not be improved and there would be no further evaluation of upstream and downstream flow and flooding. Field observations suggest that water has overtopped Auburn-Folsom Road and contributed to bank instability. Without improvement, flood events would continue to overtop the road and contribute to bank scouring and water quality degradation, as well as disruption of traffic flow.

However, visual quality impacts would be less adverse under the No-Build Alternative (compared to the four build alternatives) because no trees would be removed, the road would not be widened, no soundwalls or retaining walls would be built, and no changes in topography would take place. Furthermore, the biological resources impacts associated with the proposed project would not occur. Biological impacts would be less adverse under the No-Build Alternative (compared to the four build alternatives) because no trees would be removed, no wetlands would be disturbed, and no other habitat would be affected.

Summary Comparison of Build Alternatives

Table 2-1 presents a summary comparison of the design information relevant to each build alternative as well as the advantages and disadvantages of each build alternative as identified by the Placer County DPW.

Required Entitlements, Permits, and Coordination

The information provided in this environmental document may be used by the following agencies in granting entitlements, permits, or agreements for the project.

- **Placer County Board of Supervisors**: Certification of the EIR and approval of one of the alternatives as described in this document.
- **U.S. Bureau of Reclamation**: Approval of a Finding of No Significant Impact (FONSI) and approval of one of the alternatives as described in this document.
- **U.S. Army Corps of Engineers (Corps):** Issuance of a nationwide Section 404 permit under the Clean Water Act.
- **U.S. Fish and Wildlife Service (USFWS):** Completion of Section 7 consultation under the federal Endangered Species Act (ESA) for potential impacts on valley elderberry longhorn beetle (VELB).
- **California Department of Fish and Game (DFG):** Issuance of a Section 1601 streambed alteration agreement under the California Fish and Game Code.
- **State Water Resources Control Board (SWRCB):** Issuance of a Clean Water Act Section 402 National Pollutant Discharge Elimination System general construction activities stormwater permit.
- **Central Valley Regional Water Quality Control Board (RWQCB):** Issuance of a Clean Water Act Section 401 water quality certification or waiver, as required for a Section 404 permit.

Related Project

The following roadway project is considered a "related" project because it is directly related to the proposed project. It is, however, considered an independent project that can be constructed with or without the proposed project.

Folsom-Auburn Road Widening Project

The City of Folsom, with the cooperation of the Federal Highway Administration (FHWA), the California Department of Transportation (Caltrans), and Placer

Table 2-1. Summary Comparison of Build Alternatives

Design Issue	Alternative 1: Widen to the West	Alternative 2: Widen to the East	Alternative 3: Widen Equally on Both Sides	Alternative 4: County DPW–Preferred Alternative
Design speed	55 mph	55 mph	55 mph	50 mph
Amount of right-of-way to be acquired	2.06 hectares (5.10 acres)	2.21 hectares (5.45 acres)	1.15 hectares (2.83 acres)	1.25 hectares (3.09 acres)
Number of parcels affected by right-of-way acquisition	35 parcels	9 parcels	21 parcels	10 parcels
Amount of land coming from the Bureau	6.5%	57%	19%	33%
Amount of earthwork without retaining walls	65,200 cubic meters (85,278 cubic yards)	83,300 cubic meters (108,952 cubic yards)	72,100 cubic meters (94,303 cubic yards)	62,900 cubic meters (82,270 cubic yards)
Estimated project cost	$9,950,000	$10,775,000	$9,819,000	$9,320,000
Advantages				
Traffic capacity	Provides adequate capacity for projected traffic volumes	Provides adequate capacity for projected traffic volumes	Provides adequate capacity for projected traffic volumes	Provides adequate capacity for projected traffic volumes
Extent of widening	Requires significant widening on only one side of the existing roadway	Requires significant widening on only one side of the existing roadway		
Extent of excavation	Requires less excavation than Alternatives 2 or 3		Requires more excavation than Alternative I but less than Alternative 2	Requires the least amount of earthwork
Ease of construction	Widening on one side is easier to construct than widening on both sides	Widening on one side is easier to construct than widening on both sides		
Right-of-way requirements	Requires the least amount of land from the Bureau	Requires the acquisition of right-of-way from nine parcels (lowest of the four alternatives)	Requires right-of-way from more parcels than Alternative 2 but less than Alternative 1	Uses the existing right-of-way efficiently and requires the least amount of right-of-way from private (nongovernmental) property owners along the corridor Requires the acquisition of right-of-way easements from 10 parcels
Tree impacts				Reduces the number of trees affected by the project between the county line and Oak Hill Drive

Table 2-1. Continued

Design Issue	Alternative 1: Widen to the West	Alternative 2: Widen to the East	Alternative 3: Widen Equally on Both Sides	Alternative 4: County DPW–Preferred Alternative
Noise impacts		Residents on west side consider this alternative the most desirable because of the perceived decrease in noise associated with moving the roadway "away" from their residences		
Wetland impacts				Reduces the impacts on the Linda Creek wetland area to the east while minimizing the impacts on residences on the west side, near Country Court
Environmental disturbance and consequent cost				Reduces the required cut just north of Lou Place; reduces the level of environmental disturbance in this area and the cost of the project

Table 2-1. Continued

Design Issue	Alternative 1: Widen to the West	Alternative 2: Widen to the East	Alternative 3: Widen Equally on Both Sides	Alternative 4: County DPW–Preferred Alternative
Disadvantages				
Extent of excavation		Requires the most excavation		
Ease of construction			Is more difficult to construct and may take longer to construct than Alternatives 1 or 2 With the addition of a raised median, very little of the existing pavement would remain; therefore, it may be more efficient to reconstruct the entire cross section. Very similar to Alternative 4	Is more difficult to construct and may take longer to construct than Alternatives 1 and 2, but is superior to Alternative 3 With the addition of a raised median, very little of the existing pavement would remain; therefore, it may be more efficient to reconstruct the entire cross section. Very similar to Alternative 3
Right-of-way requirements		Requires the most right-of-way from the Bureau		
Noise impacts	Residents on west side consider this alternative the least desirable because of the perceived increase in noise associated with moving the roadway "closer" to their residences			
Environmental disturbance and consequent cost		Requires the largest cut slope on the east side of the roadway, just to the north of Lou Place		
Traffic control			Traffic would be more difficult to control during construction and significant traffic delays may result	Traffic would be more difficult to control during construction than Alternatives 1 and 2 and significant traffic delays, similar to Alternative 3, may result

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County, has proposed to improve Folsom-Auburn Road from a point 60 meters (200 feet) south of its intersection with Folsom Dam Road in the City of Folsom to a termination point approximately 245 meters (800 feet) north of the Placer County line. Improvements include widening the roadway from two lanes to four, adding turning lanes at intersections in the project corridor, adding bicycle lanes on both sides of the roadway, and constructing a separated pedestrian walkway/bicycle path along the west side of the roadway. The total length of this project is approximately 1.2 kilometers (0.75 mile).

The City of Folsom prepared an EA/EIR and Section 4(f) evaluation for the project in 2002. Copies of the environmental document can be reviewed at the City of Folsom Department of Public Works offices during normal business hours.

This project is considered directly related to, but independent of, the proposed project. The City of Folsom can construct this project without Placer County constructing the proposed project and vice versa.

The City of Folsom has proposed to construct a 61-meter-long (200-foot-long), 2.5-meter-high (8-foot-high) solid noise barrier (also referred to as a soundwall) along the property lines of approximately two Wiley Court residences that back onto Auburn-Folsom Road.

Chapter 3

Transportation and Circulation

This chapter, prepared by Fehr & Peers Associates, Inc. and Placer County staff, describes the transportation and circulation impacts associated with the proposed widening of Auburn-Folsom Road in Placer County, California. As presented in Chapter 1 and Chapter 2, Placer County is proposing to widen Auburn-Folsom Road from two through lanes to four through lanes between the Placer County/Sacramento County line and Fuller Drive, and restripe Auburn-Folsom Road between Fuller Drive and Douglas Boulevard to accommodate the alignment of Auburn-Folsom Road south of Fuller Drive. The transportation impact analysis focuses on potential impacts of the widening to the roadway, bicycle, pedestrian, and equestrian components of the transportation system in the vicinity of the proposed project. Mitigation measures are identified to offset any potential impacts.

This chapter is organized in three sections. The first two sections are the environmental and regulatory settings. The environmental setting describes the existing transportation system, and the regulatory setting describes the existing transportation laws and regulations that apply to the project. The third section describes the impact analysis and identifies specific impacts of the project and the associated mitigation measures.

Affected Environment

Environmental Setting

Widening Auburn-Folsom Road would change the physical and operational characteristics of the existing corridor. The extent of the change will be used to measure potential impacts. Therefore, the environmental setting describes the existing transportation system, which will provide reviewers with a baseline context for the potential impacts identified later in this section.

Existing Transportation System

The existing transportation system in the vicinity of the proposed project primarily consists of roadways, limited bicycle and pedestrian facilities, and equestrian trails. The roadways are the primary transportation facilities in the

study area. Bicyclists, pedestrians, and equestrians also rely on these roadways and the shoulders for travel. Additionally, some facilities exist for the use of pedestrians and equestrians. A detailed description of the roadways in the study area is provided below, followed by discussions relative to other modes, including transit, bicycles, pedestrians, and equestrians.

Roadway System

Figure 3-1 shows the Auburn-Folsom Road study corridor and the major intersections selected for analysis as part of this study. Auburn-Folsom Road is classified as a major arterial in the Placer County General Plan, August 1994. Arterials link highways, communities and major activity centers and, as defined in the General Plan, are "primary circulation routes for through traffic." According to the Placer County General Plan, urban and suburban major arterials are to provide at least a four-lane cross section.

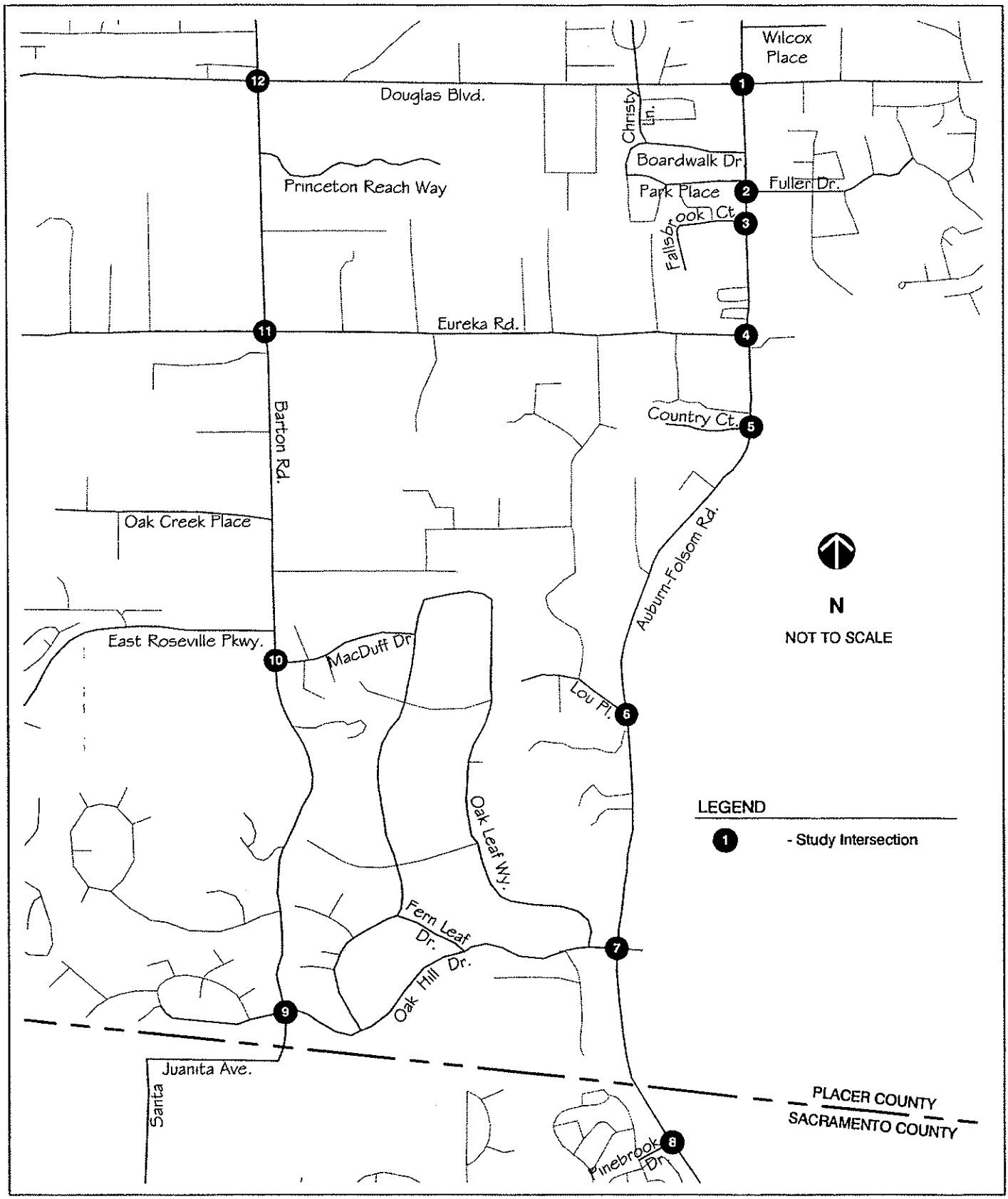
For this analysis, impacts on study roadways were determined by measuring the effect that the project has on traffic volumes, traffic operations at key intersections during peak hour conditions, and on roadway segments under daily conditions. The following intersections and roadway segments were selected for analysis by the Placer County DPW.

Intersections

1. Auburn-Folsom Road/Douglas Boulevard;
2. Auburn-Folsom Road/Fuller Drive;
3. Auburn-Folsom Road/Fallsbrook Court;
4. Auburn-Folsom Road/Eureka Road;
5. Auburn-Folsom Road/Country Court;
6. Auburn-Folsom Road/Lou Place;
7. Auburn-Folsom Road/Oak Hill Drive;
8. Auburn-Folsom Road/Pinebrook Drive;
9. Barton Road/Oak Hill Drive;
10. Barton Road/MacDuff Drive;
11. Barton Road/Eureka Road; and
12. Barton Road/Douglas Boulevard.

Roadway Segments

13. Auburn-Folsom Road – Douglas Boulevard to Fuller Drive;



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PROJECT STUDY INTERSECTIONS

FIGURE 3-1

14. Auburn-Folsom Road – Fuller Drive to Eureka Road;
15. Auburn-Folsom Road – Eureka Road to Country Court;
16. Auburn-Folsom Road – Country Court to Oak Hill Drive;
17. Auburn-Folsom Road – Oak Hill Drive to Pinebrook Drive;
18. Barton Road – County line to Oak Hill Drive;
19. Barton Road – Oak Hill Drive to MacDuff Drive;
20. Barton Road – MacDuff Drive to East Roseville Parkway;
21. Barton Road – East Roseville Parkway to Eureka Road;
22. Barton Road – Eureka Road to Douglas Boulevard;
23. Oak Hill Drive – West of Fern Leaf Drive;
24. MacDuff Drive – MacDuff Court to Oak Leaf Way;
25. Eureka Road – Auburn-Folsom Road to Barton Road; and
26. Douglas Boulevard – Auburn-Folsom Road to Barton Road.

Analysis Methodology

Transportation professionals typically describe vehicle traffic operating conditions for roadways and intersections in terms of "level of service" (LOS). LOS is a common, qualitative measurement of the effect that various factors have on traffic operations. Typical factors include speed, travel time, traffic interruptions, freedom to maneuver, and safety. The LOS for intersections and roadways ranges from "A" (the best) to "F" (the worst). Empirical LOS criteria and methods of calculation have been developed by the Transportation Research Board (TRB) and documented in the *Highway Capacity Manual* (HCM), 2000. The TRB LOS definitions and calculations are the prevailing measurement standard used throughout the United States and are used in this study. The 2000 HCM methods identify LOS based on the control delay per vehicle for signalized intersections and for each minor movement for two-way stop-controlled intersections. Tables 3-1 and 3-2 relate the LOS designation to a general description of traffic operations at signalized and unsignalized intersections, respectively. Technical Appendix P, "Traffic Data," contains all LOS technical calculations.

The daily LOS for roadway segments is based on maximum daily volume thresholds developed for the Placer County General Plan. Table 3-3 provides the maximum daily volume thresholds for roadway segments by LOS.

TABLE 3-1
SIGNALIZED INTERSECTION LOS CRITERIA

LOS	Average Control Delay (seconds/vehicle)	Description
A	≤ 10.0	Very low delay. Most vehicles do not stop.
B	> 10.0 to 20.0	Generally good progression of vehicles. Slight delays.
C	> 20.0 to 35.0	Fair progression. Increased number of stopped vehicles.
D	> 35.0 to 55.0	Noticeable congestion. Large portion of vehicles stopped.
E	> 55.0 to 80.0	Poor progression. High delays and frequent cycle failure.
F	> 80.0	Oversaturation. Forced flow. Extensive queuing.

Source: *Highway Capacity Manual*, Transportation Research Board, 2000.

TABLE 3-2
UNSIGNALIZED INTERSECTION LOS CRITERIA

LOS	Average Control Delay (seconds/vehicle)	Description
A	≤ 10.0	Little or no conflicting traffic for minor street approach.
B	> 10.0 to 15.0	Minor street approach begins to notice presence of available gaps.
C	> 15.0 to 25.0	Minor street approach begins experiencing delay for available gaps.
D	> 25.0 to 35.0	Minor street approach experiences queuing due to a reduction in available gaps.
E	> 35.0 to 50.0	Extensive minor street queuing due to insufficient gaps.
F	> 50.0	Insufficient gaps of suitable size to allow minor street traffic demand to cross safely through the major traffic stream.

Sources: *Highway Capacity Manual*, Transportation Research Board, 2000,
Fehr & Peers, 2002.

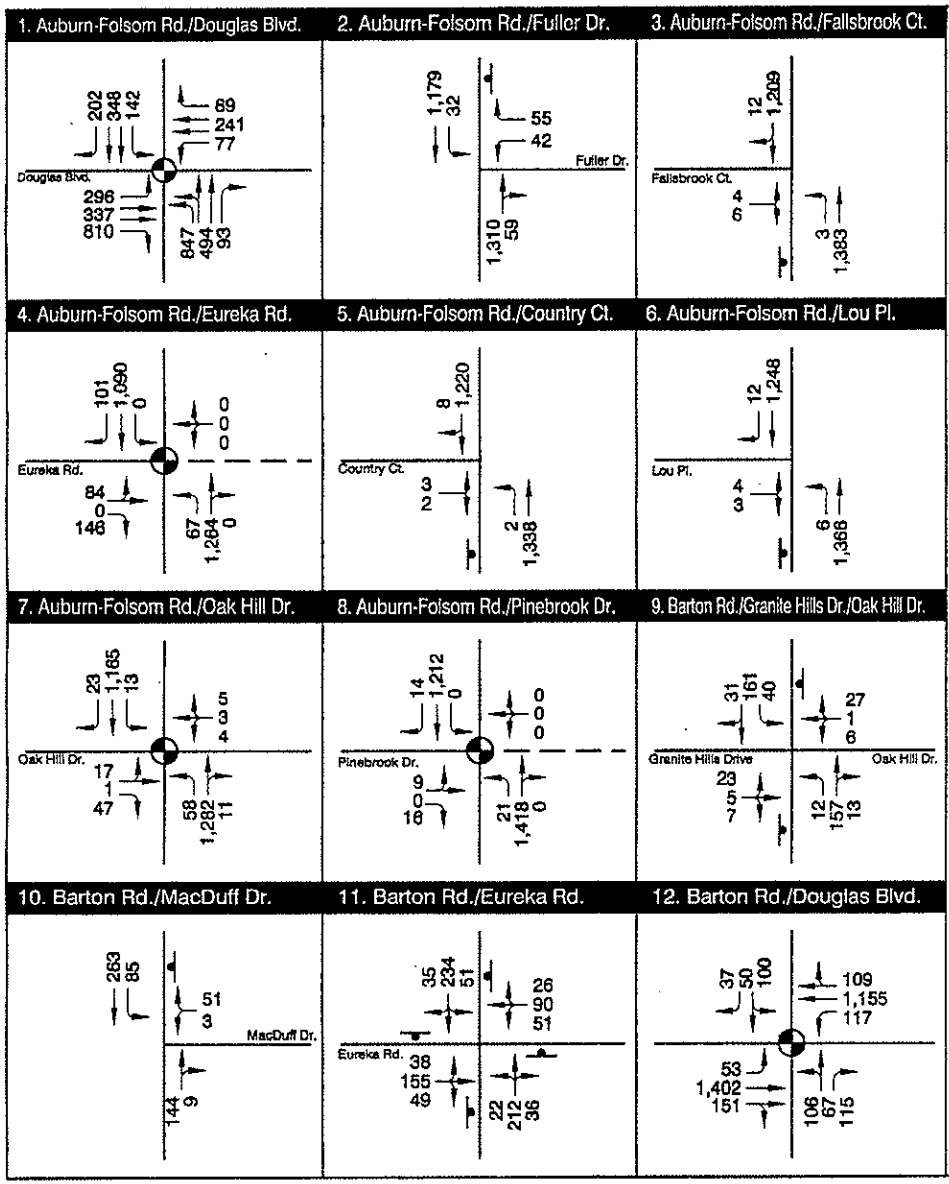
TABLE 3-3
DAILY ROADWAY SEGMENT LOS CRITERIA

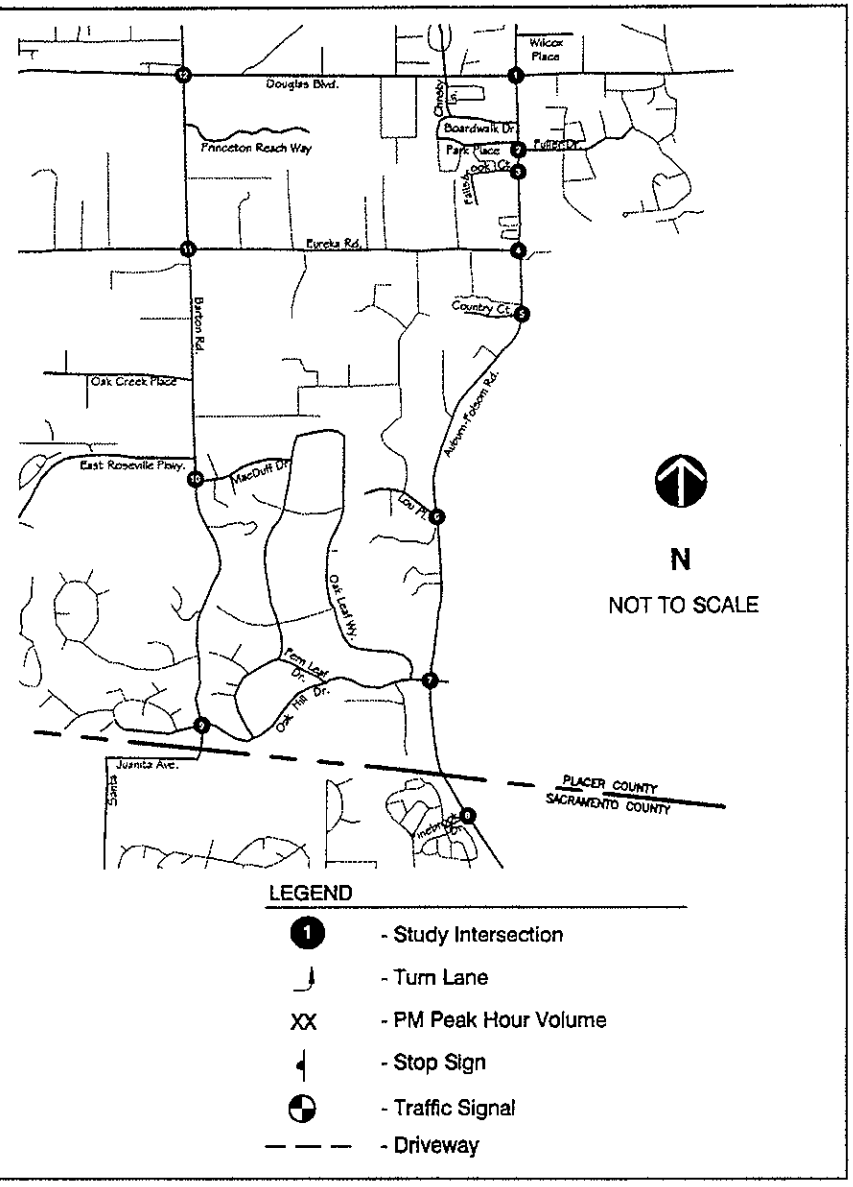
Roadway Type	Lanes	Maximum Daily Two-Way Traffic Volume				
		A	B	C	D	E
Arterial – Low Access Control (A-LAC)	2	9,000	10,500	12,000	13,740	15,000
Arterial – High Access Control (A-HAC)	2	12,000	14,000	16,000	18,000	20,000
	4	24,000	28,000	32,000	36,000	40,000

Sources: Placer County General Plan Update, General Plan Background Report, Volume 1, August 16, 1994
Fehr & Peers, 2002

Existing Traffic Operations

Figure 3-2 shows existing lane configurations and p.m. peak hour traffic volumes at the study intersections. The analysis methodology described above along with the input data from Figure 3-2 was used to measure existing p.m. peak hour traffic operations for the study intersections. Table 3-4 contains the existing LOS and delay results for the study intersections.





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PM PEAK HOUR TRAFFIC VOLUMES - EXISTING CONDITIONS

FIGURE 3-2

TABLE 3-4
INTERSECTION LEVELS OF SERVICE – EXISTING CONDITIONS

Intersection	Control	PM Peak Hour			
		Worst-case Movement [1]		Overall	
		Delay [2]	LOS	Delay [2]	LOS
1. Auburn-Folsom Road/Douglas Boulevard	Signalized	-	-	35.1	D
2. Auburn-Folsom Road/Fuller Drive	Side-street Stop	37.8*	E*	1.7*	A*
3. Auburn-Folsom Road/Fallsbrook Court	Side-street Stop	> 50.0*	F*	0.6*	A*
4. Auburn-Folsom Road/Eureka Road	Signalized	-	-	30.6*	C*
5. Auburn-Folsom Road/Country Court	Side-street Stop	> 50.0*	F*	0.3*	A*
6. Auburn-Folsom Road/Lou Place	Side-street Stop	> 50.0*	F*	0.5*	A*
7. Auburn-Folsom Road/Oak Hill Drive	Signalized	-	-	31.2*	C*
8. Auburn-Folsom Road/Pinebrook Drive	Signalized	-	-	11.4*	B*
9. Barton Road/Oak Hill Drive	Side-street Stop	13.7	B	2.7	A
10. Barton Road/MacDuff Drive	Side-street Stop	10.0	B	2.2	A
11. Barton Road/Eureka Road	All-way Stop	18.4	C	16.1	C
12. Barton Road/Douglas Boulevard	Signalized	-	-	49.2	D

Notes: [1] Delay and LOS for the worst-case movement reported for unsignalized intersections only.
[2] Delay is reported as seconds per vehicle.
* An asterisk indicates intersections that are influenced by adjacent intersections. These intersections should be considered to operate worse than the reported LOS due to the effects of queuing from downstream intersections.
Source: Fehr & Peers, 2002

In some cases, the reported LOS does not match field observed conditions. Specific locations include:

- Auburn-Folsom Road/Fuller Drive;
- Auburn-Folsom Road/Fallsbrook Court;
- Auburn-Folsom Road/Eureka Road;
- Auburn-Folsom Road/Country Court;
- Auburn-Folsom Road/Lou Place;
- Auburn-Folsom Road/Oak Hill Drive; and
- Auburn-Folsom Road/Pinebrook Drive.

At these locations, queuing from the Auburn-Folsom Road/Folsom Dam Road intersection, which is downstream of the Auburn-Folsom Road/Pinebrook Drive intersection, extends into the study intersection. As a result, the intersection analysis results only provide the LOS for the volume of traffic that actually enters the intersection; the actual LOS is worse.

Table 3-5 contains the existing average daily traffic (ADT) and LOS results for the study roadway segments. This information is also presented graphically in Figure 3-3.

TABLE 3-5
ROADWAY SEGMENT DAILY LEVELS OF SERVICE – EXISTING CONDITIONS

Roadway Segment	Roadway Type	Number of Lanes	ADT	LOS
Auburn-Folsom Road – Douglas Boulevard to Fuller Drive	A-HAC	4**	27,900	B
Auburn-Folsom Road – Fuller Drive to Eureka Road	A-HAC	2	28,800	F
Auburn-Folsom Road – Eureka Road to Country Court	A-HAC	2	28,300	F
Auburn-Folsom Road – Country Court to Oak Hill Drive	A-HAC	2	28,400	F
Auburn-Folsom Road – Oak Hill Drive to Pinebrook Drive	A-HAC	2	28,900	F
Barton Road – County Line to Oak Hill Drive	A-LAC	2	3,700	A
Barton Road – Oak Hill Drive to MacDuff Drive	A-LAC	2	4,500	A
Barton Road – East Roseville Parkway to Eureka Road	A-LAC	2	7,000	A
Barton Road – Eureka Road to Douglas Boulevard	A-LAC	2	7,700	A
Oak Hill Drive – Oak Leaf Way to Fern Leaf Drive	Local Road	2	800	*
MacDuff Drive – MacDuff Court to Oak Leaf Way	Local Road	2	1,400	*
Eureka Road – Auburn-Folsom to Barton Road	A-LAC	2	4,300	A
Douglas Boulevard – Auburn-Folsom Road to Barton Road	A-HAC	4	35,400	D

A-HAC = Arterial –High Access Control
A-LAC = Arterial – Low Access Control

* The Placer County General Plan does not identify LOS for local roads.
** Auburn-Folsom Road transitions from 4 to 2 lanes through this section.

Source: Fehr & Peers, 2002

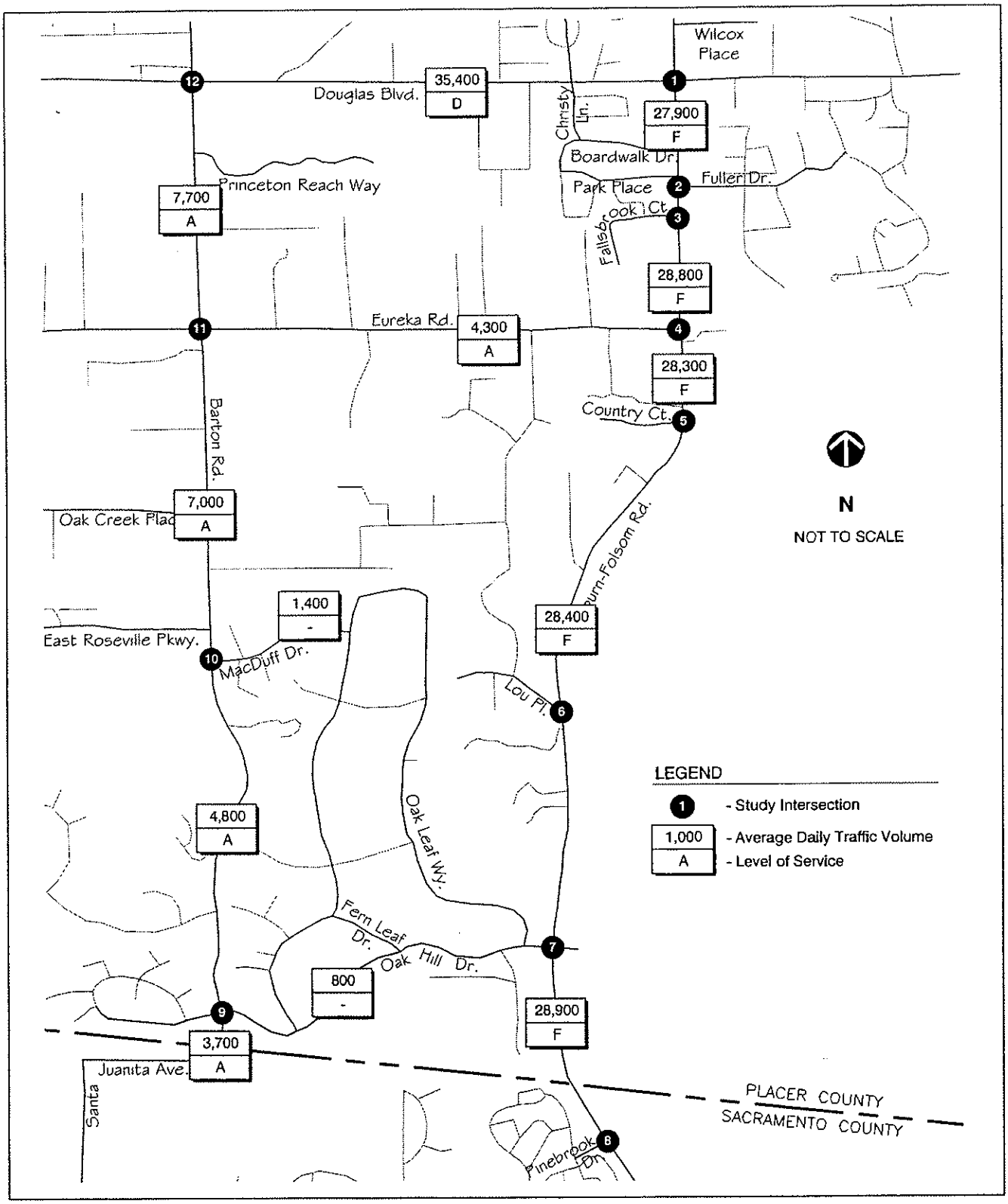
Transit System

No transit service is currently provided in the study corridor. The City of Folsom provides a fixed-route service on Folsom-Auburn Road south of the study corridor.

Bicycle/Pedestrian System

There are several facilities for bicycles and pedestrians in the study area. Figure 3-4 displays the following existing facilities:

- Class III bike routes extend along both sides of Auburn-Folsom Road between Pinebrook Drive and Fallsbrook Court. Class II bike lanes exist on Auburn-Folsom Road south of Pinebrook Drive and north of Fallsbrook Court.
- Class II bike lanes extend along both sides of East Roseville Parkway west of Barton Road.
- A sidewalk is provided on the west side of Auburn-Folsom Road from Fallsbrook Court north through the Country Gables Shopping Center and on the east side from Fuller Drive north to Wilcox Place.



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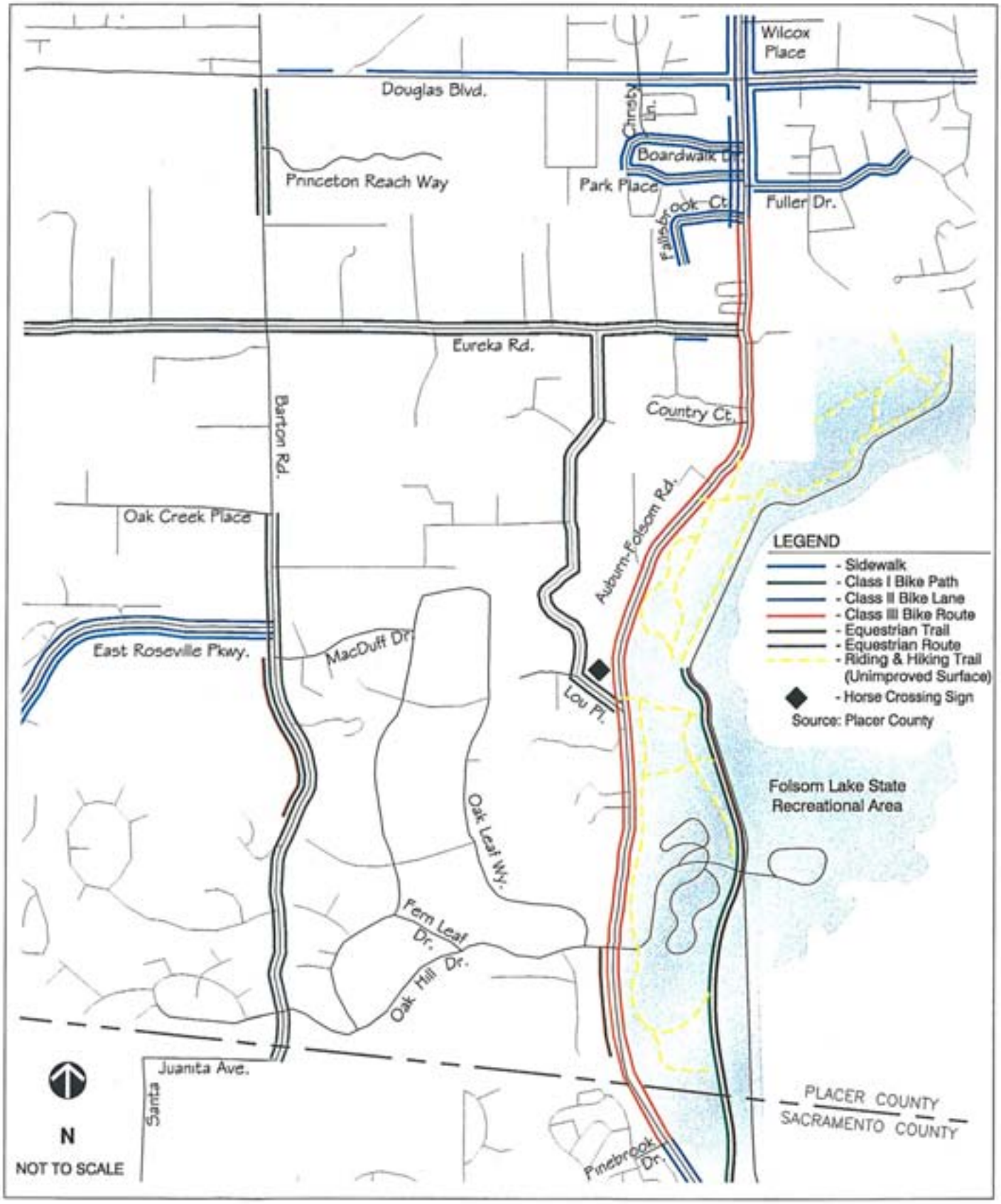
AVERAGE DAILY TRAFFIC VOLUMES - EXISTING CONDITIONS

FIGURE 3-3



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EXISTING PEDESTRIAN AND RECREATIONAL SYSTEM

FIGURE 3-4

- A sidewalk is provided on the south side of Douglas Boulevard from Auburn-Folsom Road west to Christy Lane. A sidewalk is provided on portions of the north side of Douglas Boulevard between Auburn-Folsom Road and Barton Road.
- A sidewalk is provided on the south side of East Roseville Parkway west of Barton Road.
- Sidewalks are provided along both sides of Boardwalk Drive, Park Place, Fallsbrook Court, and Fuller Drive in the vicinity of the project.
- A short segment of sidewalk is provided on the south side of Eureka Road west of Auburn-Folsom Road.
- Controlled crossings exist for bicyclists and pedestrians to cross Auburn-Folsom Road at Douglas Boulevard, Eureka Road, and Oak Hill Drive.

Equestrian System

A unique component of the transportation system in the study corridor is equestrian trails. The Folsom Lake State Recreation Area is an attractive riding destination, and equestrians use the trail network within this area. As shown in Figure 3-4, equestrian trails parallel portions of Eureka Road, Barton Road, Purdy Lane/Lou Place, and Auburn-Folsom Road. Consistent with the Granite Bay Community Plan, there is an equestrian trail along the west side of Auburn-Folsom Boulevard south of Oak Hill Drive and an equestrian route west of Auburn-Folsom Road between Eureka Road and Lou Place. Controlled crossings exist for equestrians to cross Auburn-Folsom Road at Douglas Boulevard, Eureka Road, and Oak Hill Drive.

Regulatory Setting

Existing transportation policies, laws, and regulations that would apply to the proposed project are summarized below. This information provides a context for the impact discussion related to the project's consistency with applicable regulatory conditions.

Local Regulations

Applicable local regulations can be found in the Placer County General Plan and the Granite Bay Community Plan.

Placer County General Plan

Policy 3.A.1. The County shall plan, design, and regulate roadways in accordance with the functional classification system described in Part I of the Policy Document and reflected in the Circulation Plan Diagram.

Policy 3.A.2. Streets and roads shall be dedicated, widened, and constructed according to the roadway design and access standards generally defined in Section I of this Policy Document and, more specifically, in community plans and the County's *Highway Deficiencies Report*.

Policy 3.A.3. The County shall require that roadway rights-of-way be wide enough to accommodate the travel lanes needed to carry long-range forecasted traffic volumes (beyond 2010), as well as any planned bikeways and required drainage, utilities, landscaping, and suitable separations.

Policy 3.A.4. On arterial roadways and thoroughfares, intersection spacing should be maximized. Driveway encroachments along collector and arterial roadways shall be minimized. Access control restrictions for each class of roadway in the county are specified in Part I of this Policy Document.

Policy 3.A.5. Through-traffic shall be accommodated in a manner that discourages the use of neighborhood roadways, particularly local streets. This through-traffic, including through truck traffic, shall be directed to appropriate routes in order to maintain public safety and local quality of life.

Policy 3.A.7. The County shall develop and manage its roadway system to maintain the following minimum levels of service.

a. LOS "C" on rural roadways, except within one-half mile of state highways where the standard shall be LOS "D".

b. LOS "C" on urban/suburban roadways except within one-half mile of state highways where the standard shall be LOS "D".

   The County may allow exceptions to these level of service standards where it finds that the improvements or other measures required to achieve the LOS standards are unacceptable based on established criteria. In allowing any exception to the standards, the County shall consider the following factors:

   - The number of hours per day that the intersection or roadway segment would operate at conditions worse than the standard.
   - The ability of the required improvement to significantly reduce peak hour delay and improve traffic operations.
   - The right-of-way needs and the physical impacts on surrounding properties.
   - The visual aesthetics of the required improvement and its impact on community identity and character.
   - Environmental impacts including air quality and noise impacts.

- Construction and right-of-way acquisition costs.
- The impacts on general safety.
- The impacts of the required construction phasing and traffic maintenance.
- The impacts on quality of life as perceived by residents.
- Consideration of other environmental, social, or economic factors on which the County may base findings to allow an exceedance of the standards.

Exceptions to the standards will only be allowed after all feasible measures and options are explored, including alternative forms of transportation.

Policy 3.A.9. The County shall work with neighboring jurisdictions to provide acceptable and compatible levels of service and joint funding on the roadways that may occur on the circulation network in the Cities and the unincorporated area.

Policy 3.A.10. The County shall strive to meet the level of service standards through a balanced transportation system that provides alternatives to the automobile.

Policy 3.A.11. The County shall plan and implement a complete road network to serve the needs of local traffic.

Policy 3.A.13. The County shall secure financing in a timely manner for all components of the transportation system to achieve and maintain adopted level of service standards.

Policy 3.D.1. The County shall promote the development of a comprehensive and safe system of recreational and commuter bicycle routes that provides connections between the county's major employment and housing areas and between its existing and planned bikeways.

Policy 3.D.2. The County shall work with neighboring jurisdictions to coordinate planning and development of the County's bikeways and multi-purpose trails with those of neighboring jurisdictions.

Policy 5.C.1. The County shall support development of a countywide trail system designed to achieve the following objectives:

a. Provide safe, pleasant, and convenient travel by foot, horse, or bicycle;

b. Link residential areas, schools, community buildings, parks, and other community facilities within residential developments. Whenever possible, trails should connect to the countywide trail system, regional trails, and the trail or bikeways plans of cities;

c. Provide access to recreation areas, major waterways, and vista points;

d. Provide for multiple uses (i.e., pedestrian, equestrian, bicycle);

e. Use public utility corridors such as power transmission line easements, railroad rights-of-way, irrigation district easements, and roadways;

f. Whenever feasible, be designed to separate equestrian trails from cycling paths, and to separate trails from the roadway by the use of curbs, fences, landscape buffering, and/or spatial distance;

g. Connect commercial areas, major employment centers, institutional uses, public facilities, and recreational areas with residential areas; and

h. Protect sensitive open space and natural resources.

Granite Bay Community Plan

Policy III.B.3. Encourage scenic or greenbelt corridors along major transportation routes. Roads and other public works shall incorporate beauty as well as utility, safety, and economy.

Goal V.A.5. "Through" traffic which must pass through the community shall be accommodated in a manner that will not encourage the use of residential or private roads, paths, or trails. "Through" traffic shall be directed to appropriate routes (such as Auburn-Folsom Road, etc.) in order to maintain the community's rural quality and natural environment and to provide for public safety. Local areas within the community shall be connected to main paths, trails, and thoroughfares in adjoining areas.

Policy V.A.10. The level of service (LOS) on major roadways (i.e., arterial and collector routes) and intersections identified in the CIP shall be at Level "C" or better.

Note that the *Southeast Placer County Transportation Study* (DKS Associates) recommended that the level of service policies in the Granite Bay Community Plan be modified to allow exceptions to the LOS C standard where improvements that would be required to achieve LOS C would result in unacceptable impacts. The *Southeast Placer County Transportation Study* recommended a LOS exception for Auburn-Folsom Road and that Auburn-Folsom Road be widened to four lanes from the County line to just north of Douglas Boulevard. The study also recommended that four lanes be maintained on Douglas Boulevard between Auburn-Folsom Road and Cavitt-Stallman South Road but that right-of-way for six lanes be preserved and that turn lanes to provide LOS D conditions be provided at the Auburn-Folsom Road/Douglas Boulevard intersection. The exceptions to the LOS standard recommended in the *Southeast Placer County Transportation Study* are in accordance with General Plan Policy 3.A.7.

Policy V.A.13. Roads shall be designed and maintained to encourage safe, alternative forms of transportation that contribute to a rural atmosphere (such as: walking, bicycling, riding, and public transportation).

Recreation Element

Policy II.7. To promote the establishment of a connected trail system for bicyclist, equestrian, and pedestrian use.

Environmental Consequences

Criteria for Determining Significance under CEQA

A transportation/circulation impact is considered significant if implementation of the project would result in any of the following actions.

Roadway System

- Cause the construction year (2005) or cumulative year (2020) "no-project" level of service (LOS) at an intersection or on a roadway segment to deteriorate from A, B, or C to D, E, or F.
- Cause the construction year or cumulative year "no-project" volume on a "local" road to exceed 2,000 vehicles per day (vpd).
- Exacerbate the construction year or cumulative year "no-project" LOS D, E or F conditions at an intersection or on a roadway segment.
- Exacerbate conditions on an impacted "local" road by adding trips to the construction year or cumulative year "no-project" volumes.
- Create inconsistencies with adopted roadway system plans, guidelines, policies, or standards of Placer County.

Transit System

- Disrupt existing transit services or facilities.
- Interfere with planned transit services or facilities.
- Create inconsistencies with adopted transit system plans, guidelines, policies, or standards of Placer County.

Bicycle, Pedestrian, and Equestrian System

- Disrupt existing bicycle, pedestrian, or equestrian facilities.
- Interfere with planned bicycle, pedestrian, or equestrian facilities.
- Create inconsistencies with adopted bicycle, pedestrian, or equestrian system plans, guidelines, policies, or standards of Placer County.

Methods and Assumptions for the Impact Analysis

The transportation impact analysis focused on p.m. peak hour traffic operations at the study intersections under each alternative but also considered potential

effects on non-auto travel modes. The analysis includes the no-project conditions (2005 and 2020), the basic group of "build" alternatives, and a raised median design project option, as defined by Placer County DPW.

As presented in Chapters 1 and 2, Placer County has identified four build alternatives that are analyzed at an equal level of detail in this EA/Draft EIR.

- Alternative 1: Widen Roadway to the West
- Alternative 2: Widen Roadway to the East
- Alternative 3: Widen Roadway Equally on Both Sides
- Alternative 4: County DPW-Preferred Alternative

Each of these alternatives would widen Auburn-Folsom Road from two to four lanes and would have the following commonalities so that only one traffic analysis for all the alternatives was required:

- same access points
- same median design (striped median allowing unlimited left turns)
- signalization of the Auburn-Folsom Road/Fuller Drive intersection
- coordination of the traffic signals on Auburn-Folsom Road at Douglas Boulevard, Fuller Drive, and Eureka Road, and
- possible elimination of left-turn access to and from Auburn-Folsom Road at the mobile home park south of Eureka Road. The County will lower the vertical curve on Eureka Road west of the mobile home park's driveway as part of the project to improve the sight distance at the Eureka Road driveway and allow that access to be opened.

The County also has identified a raised median design option that consists of the installation of a raised median on Auburn-Folsom Road from Douglas Boulevard to the County line with median openings for left-turns at Boardwalk Drive, Fuller Drive, Eureka Road, Country Court, Lou Place, and Oak Hill Drive. Left-turns at other locations, such as Fallsbrook Court, would be eliminated. The raised median design project option is assumed to allow for U-turns only at the signalized intersections on Auburn-Folsom Road. All other project design information for the raised median design option is the same as identified above.

In addition to the build alternatives, this analysis included a "no-project" scenario. As defined in Chapter 2, the "no-project" scenario would only represent denial of the project's build alternatives at this time and would not preclude action by the County to construct the build alternatives at a later date.

The traffic operations analysis was conducted for construction year (2005) conditions and cumulative year (2020) conditions. Traffic forecasts for cumulative conditions were developed using the Southeast Placer County travel demand model developed by DKS Associates for the Southeast Placer County Transportation Study. Fehr & Peers added detail to the roadway network and

modified free-flow speeds to better reflect travel patterns in the study area. The cumulative year (2020) Southeast Placer County travel demand model does not include a new American River crossing (to replace Folsom Dam Road). This improvement is identified in the 2025 Metropolitan Transportation Plan as a "Tier 1" project and is anticipated by 2010 but has yet to receive any secured funding. At the direction of County staff, we assumed that the new American River crossing would not be constructed by 2020.

The City of Folsom's project to widen Folsom-Auburn Road from two to four lanes from Folsom Dam Road to the Placer County line has been included in the analysis. The Folsom-Auburn Road widening project is included in the Sacramento Area Council of Governments (SACOG) 1999 Metropolitan Transportation Plan and the 2000-2001 Metropolitan Transportation Improvement Program. Although the Folsom-Auburn Road widening project will increase the capacity at the Folsom-Auburn Road/Folsom Dam Road intersection, the Draft Environmental Assessment/Environmental Impact Report prepared by the City of Folsom (June 2002) states that this intersection will operate at LOS F under Year 2025 conditions with the project. The Folsom-Auburn Road widening project does not include the provision of additional southbound left-turn or westbound right-turn capacity to accommodate the heavy traffic flows using Folsom Dam Road. Therefore, the Folsom-Auburn Road/Folsom Dam Road intersection will continue to affect traffic operations through the study corridor.

Traffic forecasts for construction year conditions were developed using a linear interpolation between the existing traffic counts and the cumulative conditions forecasts.

Traffic Operations Analysis Results

Based on the geometrics, traffic controls, and traffic volume forecasts displayed in Figures 3-5 through 3-10, p.m. peak hour traffic operations at the study intersections were analyzed for "no-project," project, and raised median project option conditions. The results of the intersection analysis are summarized in Tables 3-6 through 3-11. Tables 3-12 through 3-15 summarize the results of the roadway segment analysis. The roadway segment analysis results are also presented graphically in Figures 3-11 through 3-14.

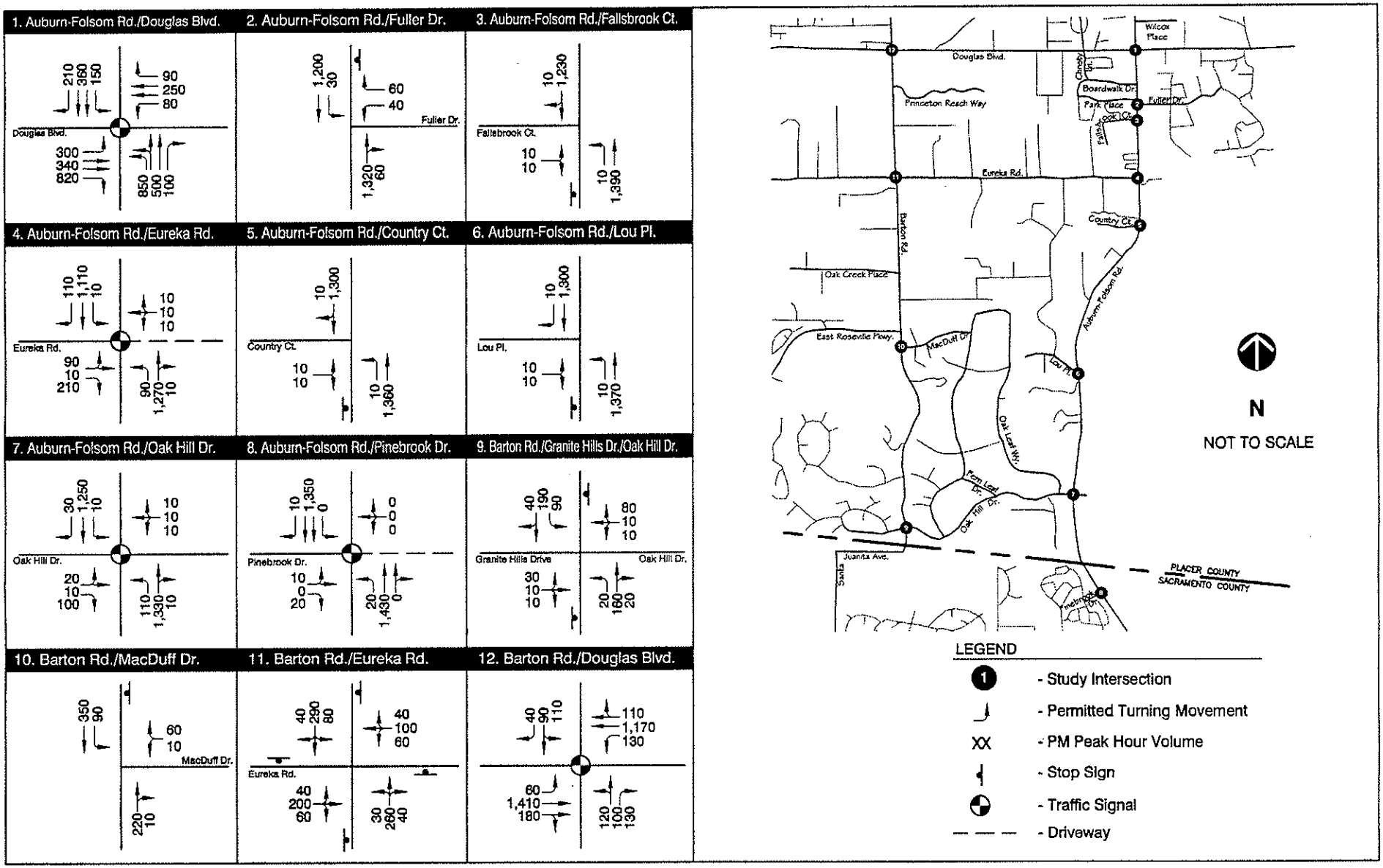
The LOS results were compared against the standards of significance to identify potential roadway system impacts of the project. For potential impacts on bicycle, pedestrian, and equestrian components of the transportation system, the physical aspects of the project were compared directly to the significance criteria, which consists primarily of an assessment of the project's consistency with regulatory conditions.

TABLE 3-6
INTERSECTION LEVEL OF SERVICE –
CONSTRUCTION YEAR (2005) NO-PROJECT CONDITIONS

Intersection	Control	PM Peak Hour			
		Worst-case Movement [1]		Overall	
		Delay [2]	LOS	Delay [2]	LOS
1. Auburn-Folsom Road/Douglas Boulevard	Signalized	-	-	40.9	D
2. Auburn-Folsom Road/Fuller Drive	Side-street Stop	38.5*	E*	1.6*	A*
3. Auburn-Folsom Road/Fallsbrook Court	Side-street Stop	> 50.0*	F*	1.5*	A*
4. Auburn-Folsom Road/Eureka Road	Signalized	-	-	55.6*	E*
5. Auburn-Folsom Road/Country Court	Side-street Stop	> 50.0*	F*	1.6*	A*
6. Auburn-Folsom Road/Lou Place	Side-street Stop	> 50.0*	F*	1.6*	A*
7. Auburn-Folsom Road/Oak Hill Drive	Signalized	-	-	45.9*	D*
8. Auburn-Folsom Road/Pinebrook Drive	Signalized	-	-	3.4*	A*
9. Barton Road/Oak Hill Drive	Side-street Stop	17.7	C	4.2	A
10. Barton Road/MacDuff Drive	Side-street Stop	11.1	B	2.0	A
11. Barton Road/Eureka Road	All-way Stop	27.0	D	21.1	C
12. Barton Road/Douglas Boulevard	Signalized	-	-	51.8	D

Notes: [1] Delay and LOS for the worst-case movement reported for unsignalized intersections only.
[2] Delay is reported as seconds per vehicle.
* An asterisk indicates intersections that are influenced by adjacent intersections. These intersections should be considered to operate worse than the reported LOS due to the effects of queuing from downstream intersections.
Source: Fehr & Peers, 2002

As shown in Table 3-6, the Auburn-Folsom Road/Douglas Boulevard and Barton Road/Douglas Boulevard intersections will operate at LOS D during the p.m. peak hour under construction year (2005) "no-project" conditions. The p.m. peak hour LOS will deteriorate to LOS E at the Auburn-Folsom Road/Eureka Road intersection and will deteriorate to LOS D at the Auburn-Folsom Road/Oak Hill Drive intersection under these conditions. The p.m. peak hour intersection LOS will improve at the Auburn-Folsom Road/Pinebrook Drive intersection due to the increased capacity from the City's Folsom-Auburn Road widening project.



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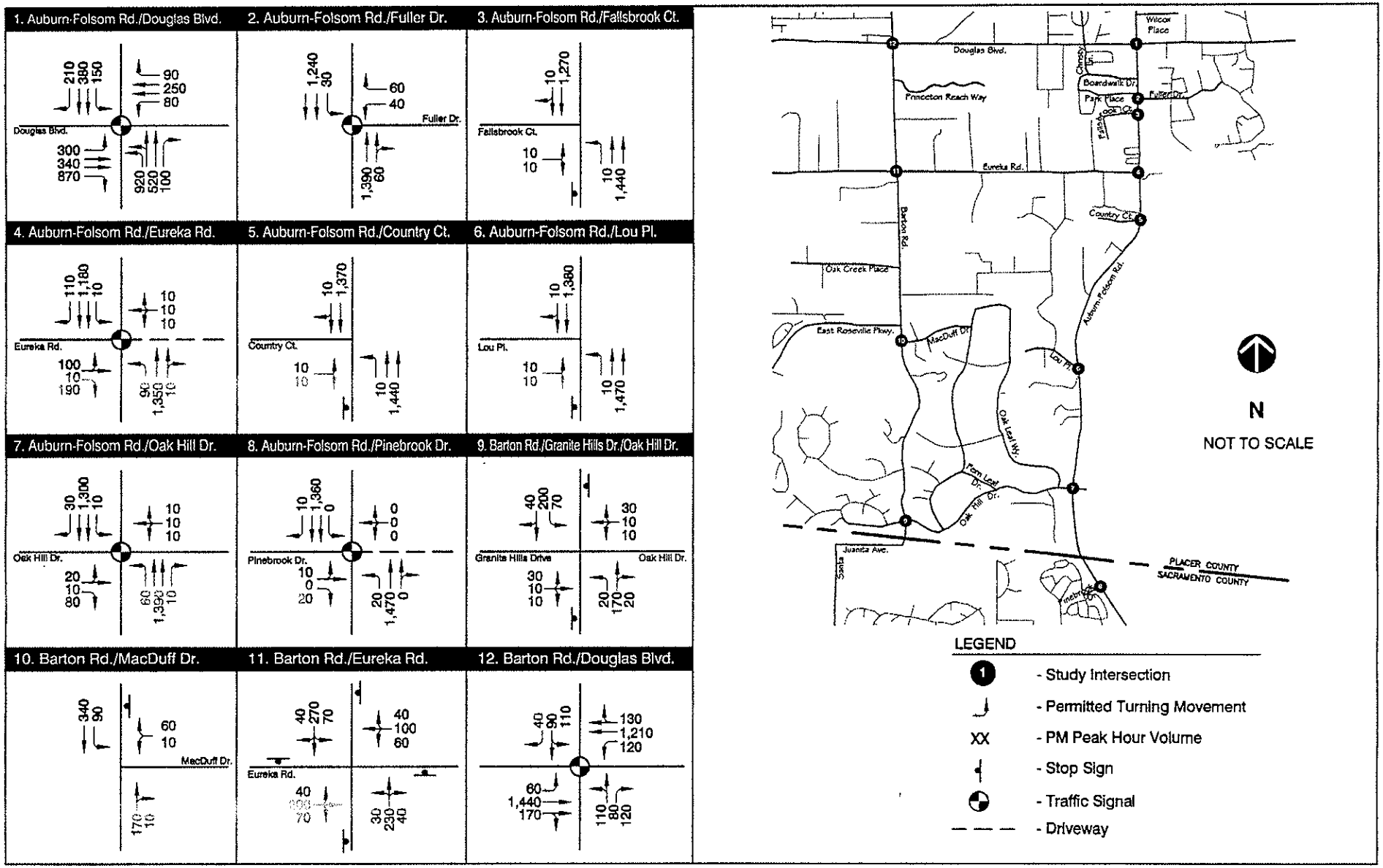
PM PEAK HOUR TRAFFIC VOLUMES - CONSTRUCTION YEAR (2005) NO PROJECT CONDITIONS

FIGURE 3-5



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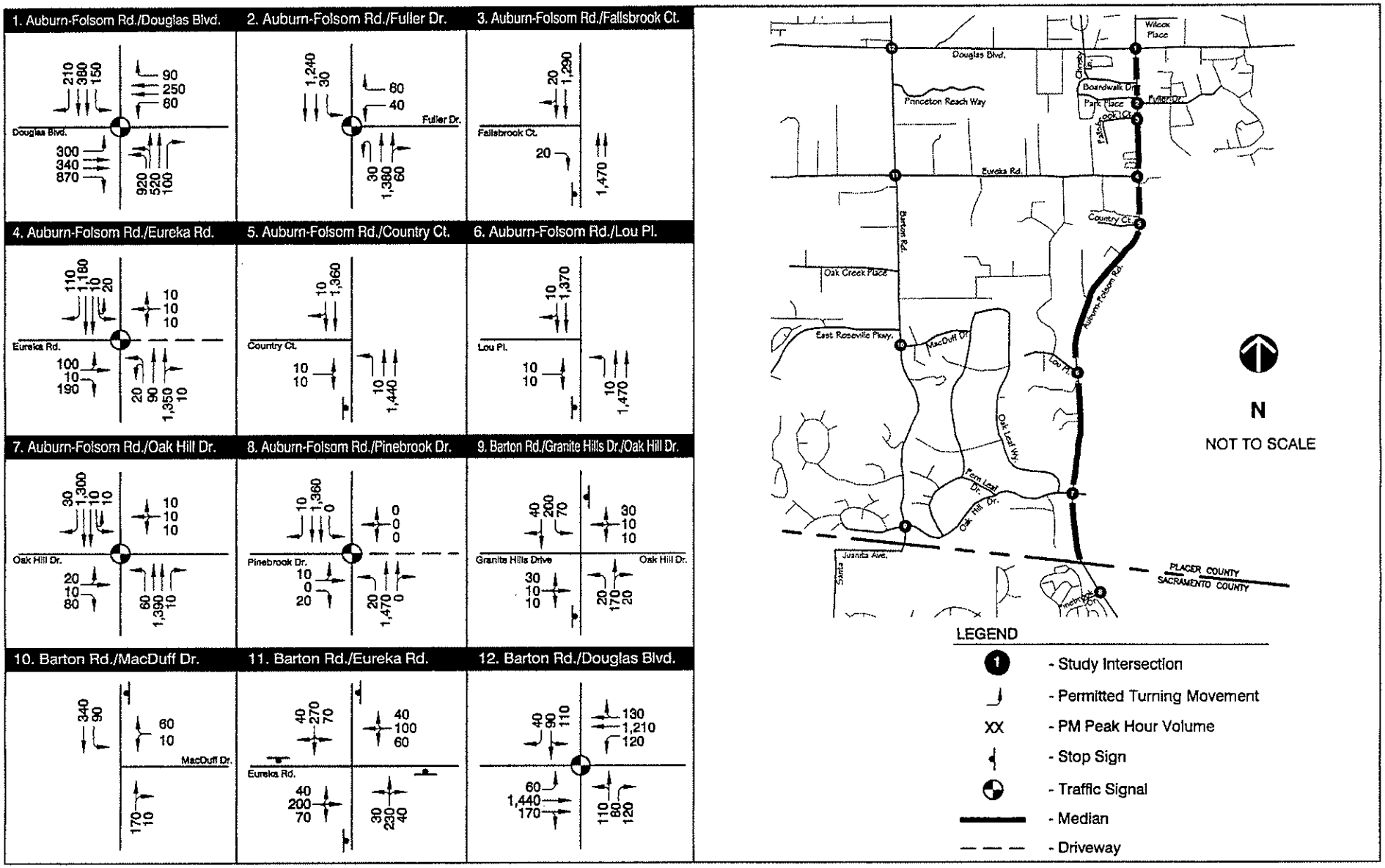
PM PEAK HOUR TRAFFIC VOLUMES - CONSTRUCTION YEAR (2005) WITH PROJECT CONDITIONS

FIGURE 3-6



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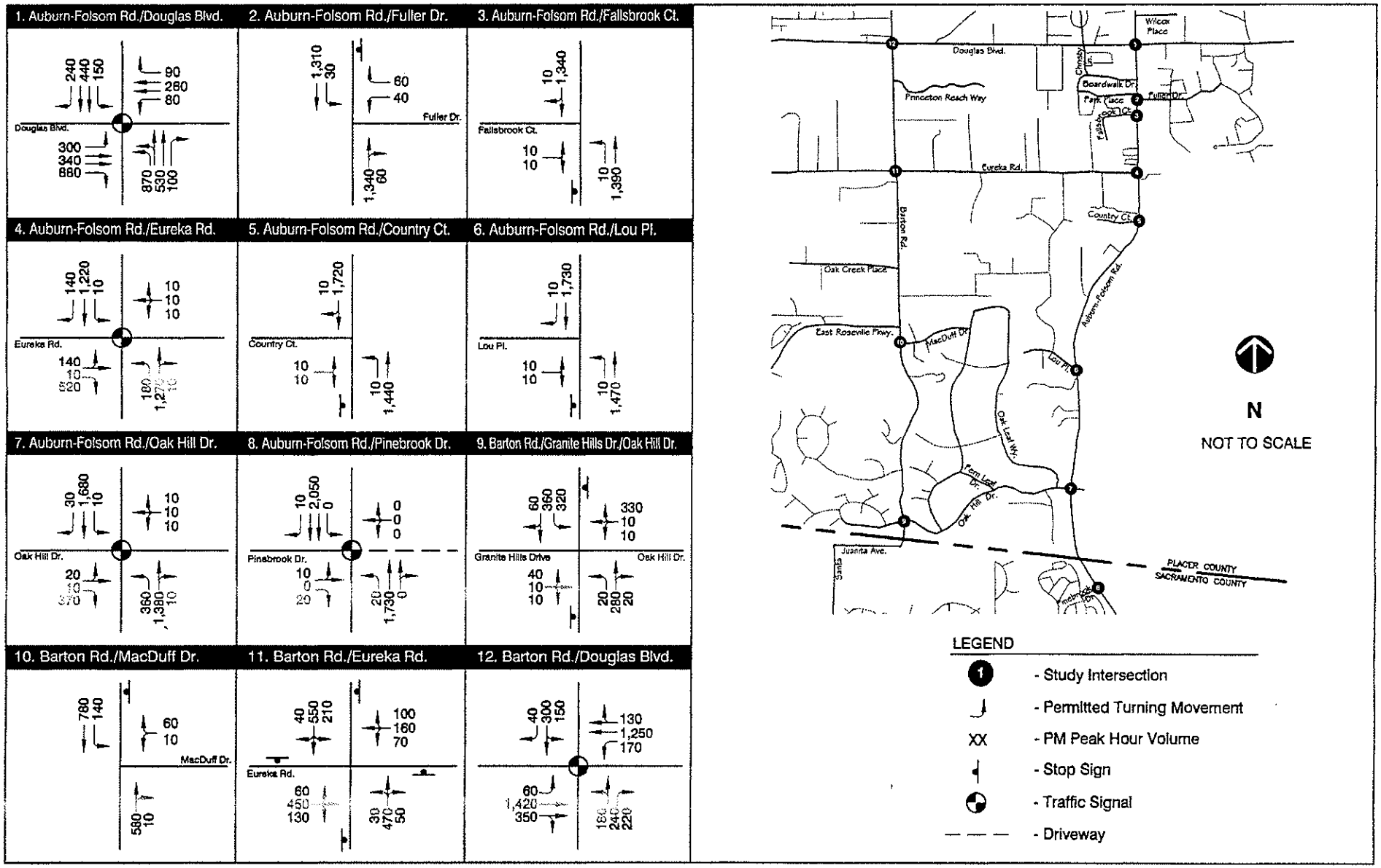
PM PEAK HOUR TRAFFIC VOLUMES - CONSTRUCTION YEAR (2005) WITH PROJECT WITH MEDIAN CONDITIONS

FIGURE 3-7



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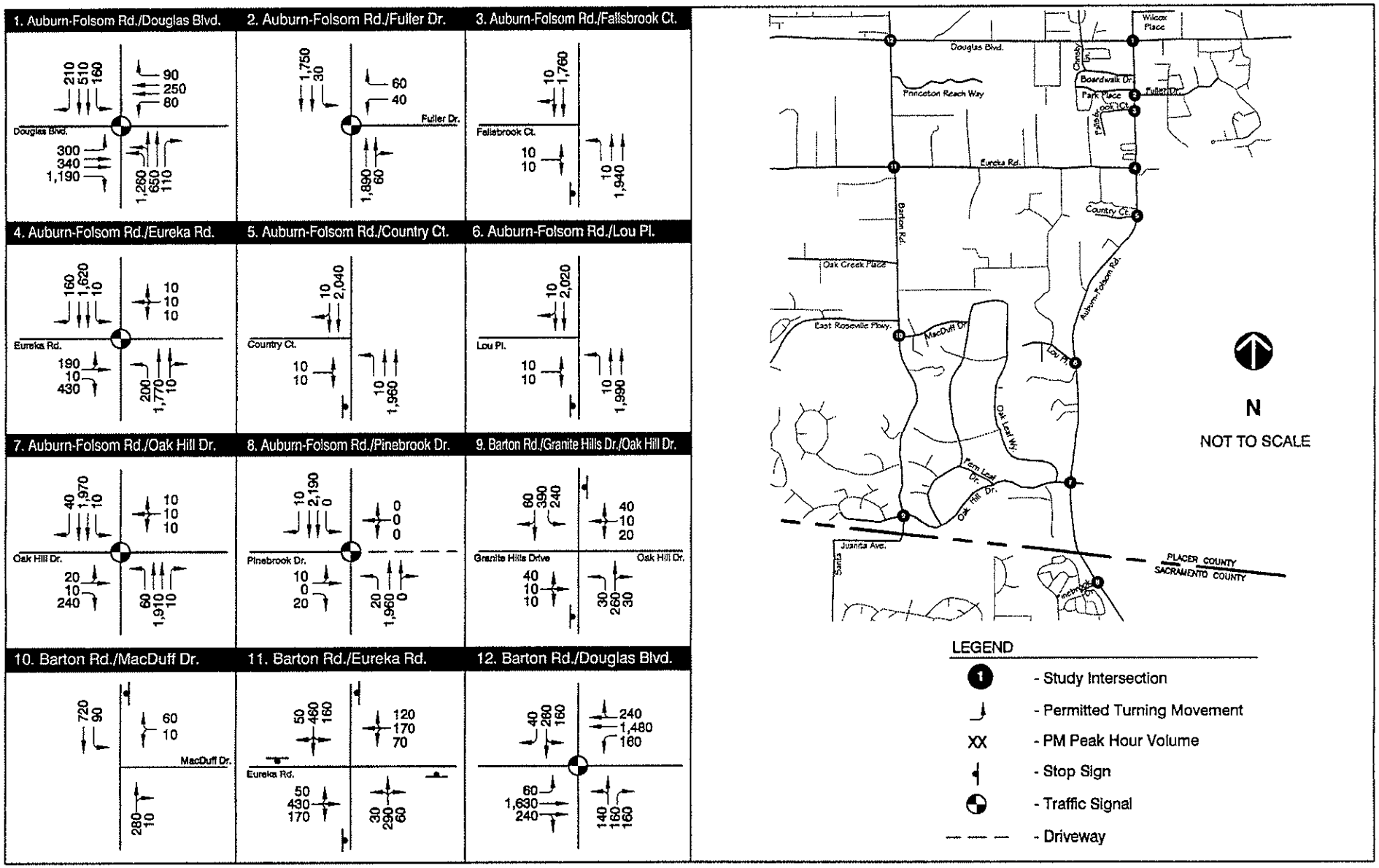
PM PEAK HOUR TRAFFIC VOLUMES - CUMULATIVE (YEAR 2020) NO PROJECT CONDITIONS

FIGURE 3-8



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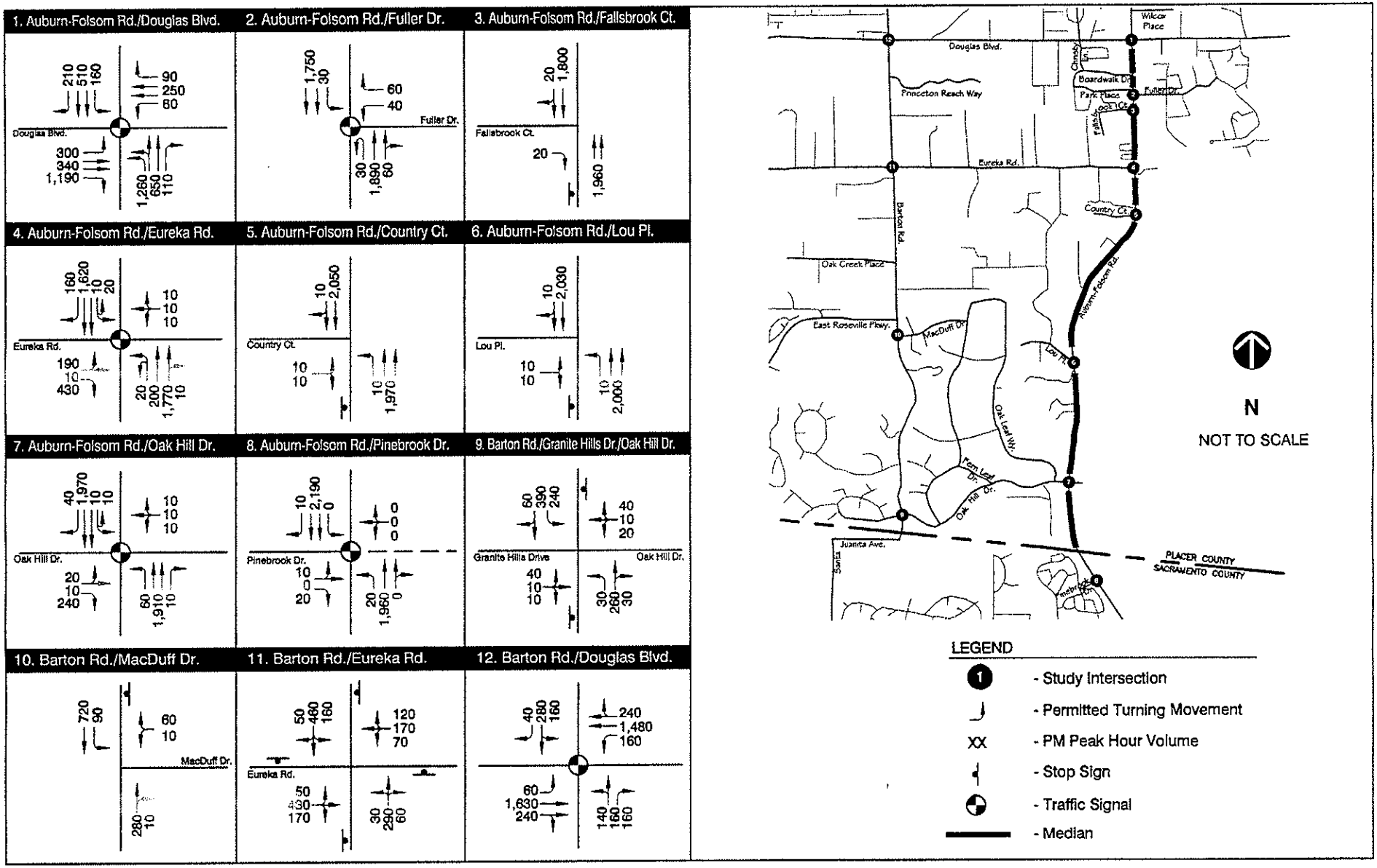
PM PEAK HOUR TRAFFIC VOLUMES - CUMULATIVE (YEAR 2020) WITH PROJECT CONDITIONS

FIGURE 3-9



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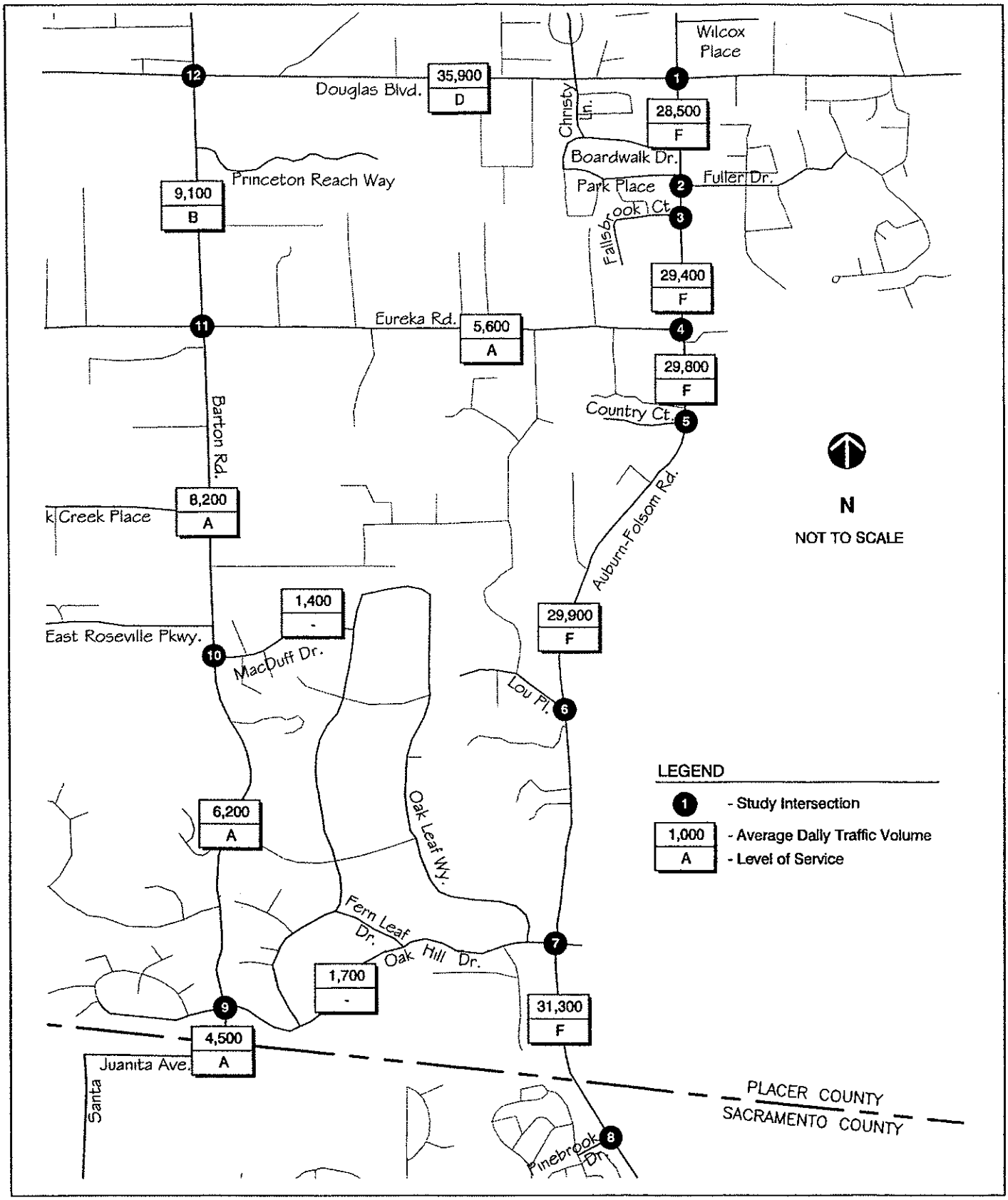
PM PEAK HOUR TRAFFIC VOLUMES - CUMULATIVE (YEAR 2020) WITH PROJECT WITH MEDIAN CONDITIONS

FIGURE 3-10



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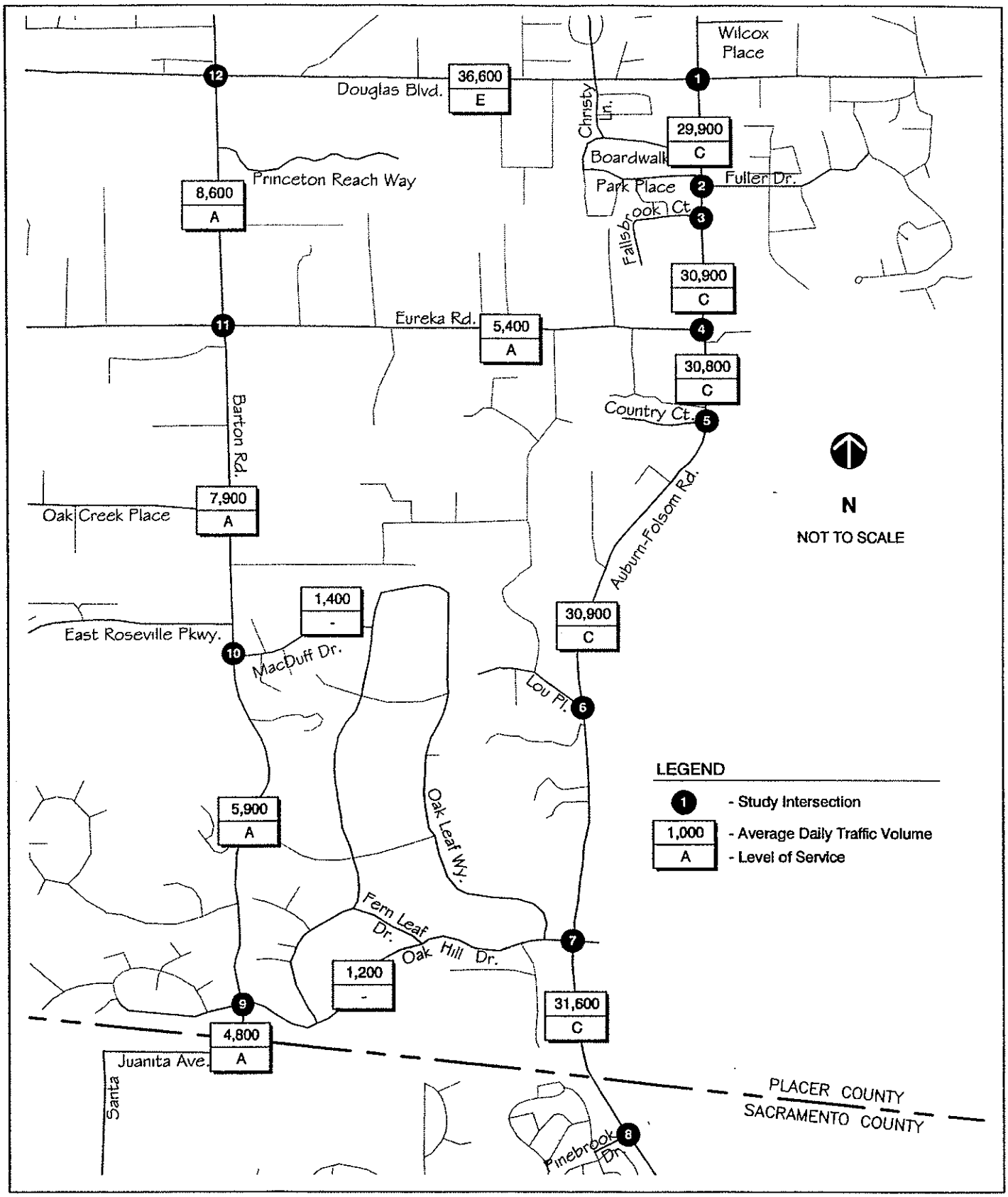
AVERAGE DAILY TRAFFIC VOLUMES - CONSTRUCTION YEAR (2005) NO PROJECT CONDITIONS

FIGURE 3-11



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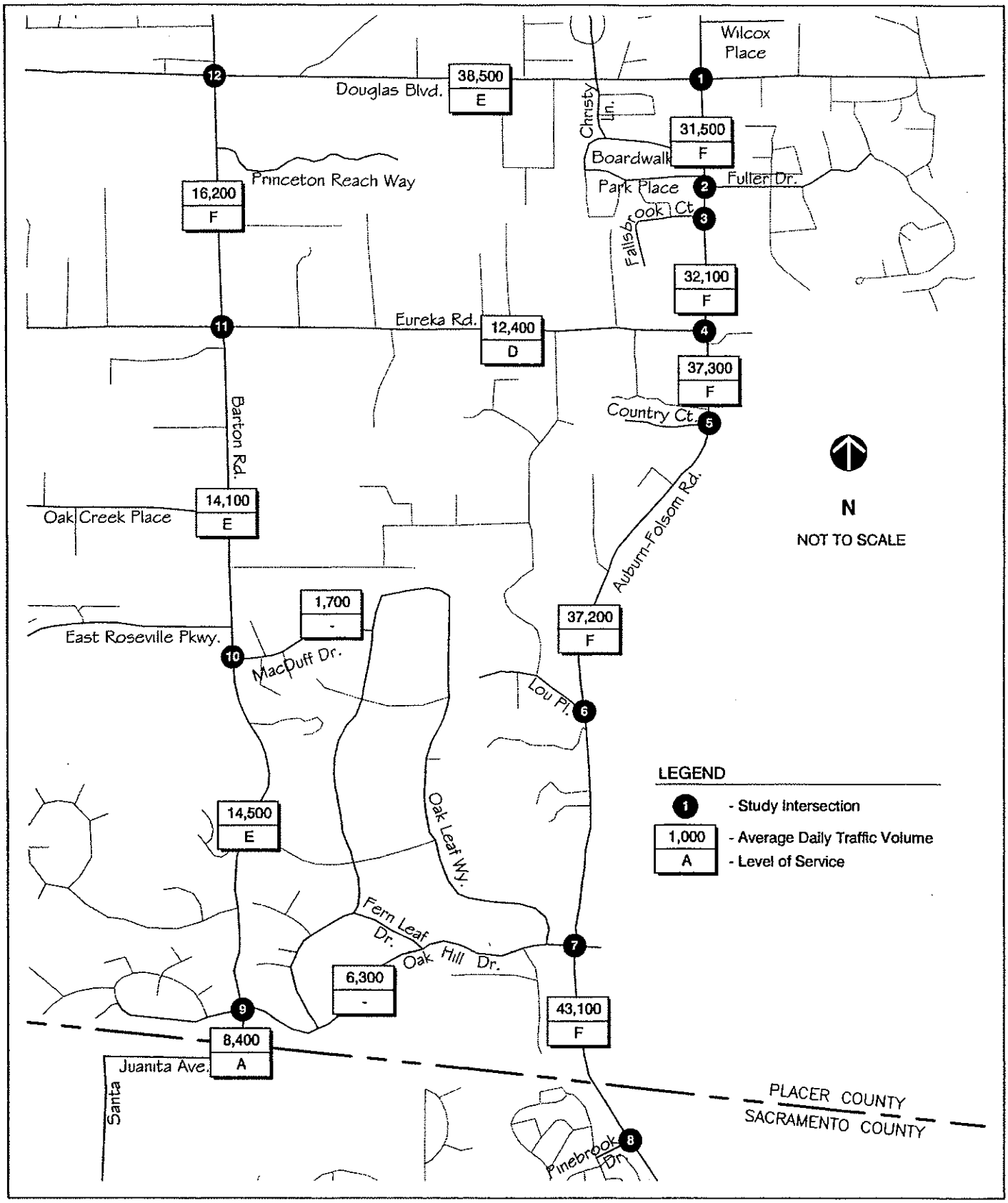
AVERAGE DAILY TRAFFIC VOLUMES - CONSTRUCTION YEAR (2005) WITH PROJECT CONDITIONS

FIGURE 3-12



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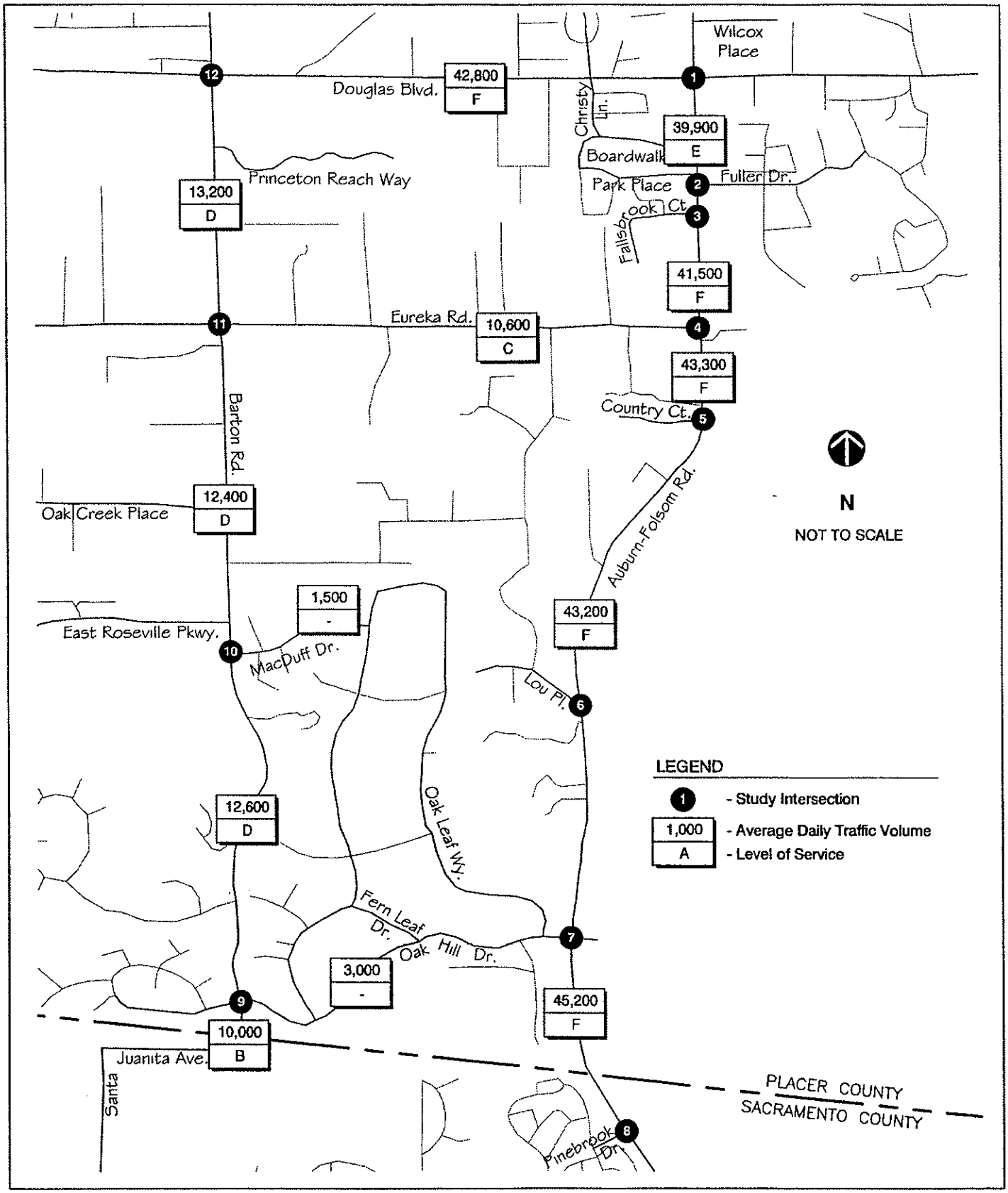
AVERAGE DAILY TRAFFIC VOLUMES - CUMULATIVE (YEAR 2020) NO PROJECT CONDITIONS

FIGURE 3-13



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AVERAGE DAILY TRAFFIC VOLUMES - CUMULATIVE (YEAR 2020) WITH PROJECT CONDITIONS

FIGURE 3-14

TABLE 3-7
INTERSECTION LEVEL OF SERVICE –
CONSTRUCTION YEAR (2005) WITH-PROJECT CONDITIONS

Intersection	Control	PM Peak Hour			
		Worst-case Movement[1]		Overall	
		Delay [2]	LOS	Delay [2]	LOS
1. Auburn-Folsom Road/Douglas Boulevard	Signalized	-	-	35.8	D
2. Auburn-Folsom Road/Fuller Drive	Signalized	-	-	4.4*	A*
3. Auburn-Folsom Road/Fallsbrook Court	Side-street Stop	> 50.0*	F*	0.5*	A*
4. Auburn-Folsom Road/Eureka Road	Signalized	-	-	20.5*	C*
5. Auburn-Folsom Road/Country Court	Side-street Stop	> 50.0*	F*	0.6*	A*
6. Auburn-Folsom Road/Lou Place	Side-street Stop	> 50.0*	F*	0.7*	A*
7. Auburn-Folsom Road/Oak Hill Drive	Signalized	-	-	11.8*	B*
8. Auburn-Folsom Road/Pinebrook Drive	Signalized	-	-	3.4*	A*
9. Barton Road/Oak Hill Drive	Side-street Stop	15.4	C	3.3	A
10. Barton Road/MacDuff Drive	Side-street Stop	10.6	B	2.1	A
11. Barton Road/Eureka Road	All-way Stop	22.1	C	18.4	C
12. Barton Road/Douglas Boulevard	Signalized	-	-	48.2	D

Notes: [1] Delay and LOS for the worst-case movement reported for unsignalized intersections only.
[2] Delay is reported as seconds per vehicle.
* An asterisk indicates intersections that may be influenced by adjacent intersections. These intersections should be considered to operate worse than the reported LOS due to the effects of queuing from downstream intersections. Because the project adds an extra travel lane in each direction, the storage for queued vehicles will be greater at the study intersections. This would help to minimize the extent of queuing from downstream intersections compared to the no project scenario.

Source: Fehr & Peers, 2002

As shown in Table 3-7, the construction of the project will improve the p.m. peak hour intersection LOS to an acceptable level as compared to the "no-project" condition, at the Auburn-Folsom Road/Eureka Road and Auburn-Folsom Road/Oak Hill Drive intersections. The Auburn-Folsom Road/Fuller Drive intersection will operate at LOS A with the project. The Auburn-Folsom Road/Douglas Boulevard and Barton Road/Douglas Boulevard intersections will continue to operate at LOS D during the p.m. peak hour. Although these intersections operate deficiently, the overall delay (measured in seconds per vehicle) decreases from "no-project" conditions with implementation of the project at these locations.

Queue lengths for each turning movement at the study intersections have been calculated as part of the technical analysis and are included in Appendix P. The project design shall incorporate turn-pocket lengths that accommodate the projected queues.

TABLE 3-8
INTERSECTION LEVEL OF SERVICE –
CONSTRUCTION YEAR (2005) WITH-PROJECT CONDITIONS (WITH RAISED MEDIAN)

Intersection	Control	PM Peak Hour			
		Worst-case Movement[1]		Overall	
		Delay [2]	LOS	Delay [2]	LOS
1. Auburn-Folsom Road/Douglas Boulevard	Signalized	-	-	35.5	D
2. Auburn-Folsom Road/Fuller Drive	Signalized	-	-	6.0*	A*
3. Auburn-Folsom Road/Fallsbrook Court	Side-street Stop	14.8*	B*	0.1*	A*
4. Auburn-Folsom Road/Eureka Road	Signalized	-	-	21.4*	C*
5. Auburn-Folsom Road/Country Court	Side-street Stop	> 50.0*	F*	0.6*	A*
6. Auburn-Folsom Road/Lou Place	Side-street Stop	> 50.0*	F*	0.7*	A*
7. Auburn-Folsom Road/Oak Hill Drive	Signalized	-	-	12.2*	B*
8. Auburn-Folsom Road/Pinebrook Drive	Signalized	-	-	3.4*	A*
9. Barton Road/Oak Hill Drive	Side-street Stop	15.4	C	3.3	A
10. Barton Road/MacDuff Drive	Side-street Stop	10.6	B	2.1	A
11. Barton Road/Eureka Road	All-way Stop	22.1	C	18.4	C
12. Barton Road/Douglas Boulevard	Signalized	-	-	48.2	D

Notes: [1] Delay and LOS for the worst-case movement reported for unsignalized intersections only.
[2] Delay is reported as seconds per vehicle.
* An asterisk indicates intersections that may be influenced by adjacent intersections. These intersections should be considered to operate worse than the reported LOS due to the effects of queuing from downstream intersections.
Source: Fehr & Peers, 2002

As shown in Table 3-8, all intersections will operate at the same LOS with either the project or the raised median project option. The overall intersection delay with the raised median project option will increase at the Auburn-Folsom Road/Fuller Drive, Auburn-Folsom Road/Eureka Road, and Auburn-Folsom Road/Oak Hill Drive intersections compared to the project scenario due to the U-turns that will result from the installation of a raised median, but the levels of service will remain unchanged from "project" conditions. The overall intersection delay will decrease at the Auburn-Folsom Road/Douglas Boulevard intersection, and the worst-case movement and overall intersection delay at the Auburn-Folsom Road/Fallsbrook Court intersection will decrease due to the elimination of left turns at this location.

Queue lengths for each turning movement at the study intersections have been calculated as part of the technical analysis and are included in Appendix P. The raised median project option design shall incorporate turn-pocket lengths that accommodate the projected queues.

TABLE 3-9
INTERSECTION LEVEL OF SERVICE –
CUMULATIVE YEAR (2020) NO-PROJECT CONDITIONS

Intersection	Control	PM Peak Hour Hour			
		Worst-case Movement[1]		Overall	
		Delay [2]	LOS	Delay [2]	LOS
1. Auburn-Folsom Road/Douglas Boulevard	Signalized	-	-	49.9	D
2. Auburn-Folsom Road/Fuller Drive	Side-street Stop	41.0*	E*	1.6*	A*
3. Auburn-Folsom Road/Fallsbrook Court	Side-street Stop	> 50.0*	F*	1.9*	A*
4. Auburn-Folsom Road/Eureka Road	Signalized	-	-	> 80.0*	F*
5. Auburn-Folsom Road/Country Court	Side-street Stop	> 50.0*	F*	4.4*	A*
6. Auburn-Folsom Road/Lou Place	Side-street Stop	> 50.0*	F*	4.6*	A*
7. Auburn-Folsom Road/Oak Hill Drive	Signalized	-	-	> 80.0*	F*
8. Auburn-Folsom Road/Pinebrook Drive	Signalized	-	-	4.4*	A*
9. Barton Road/Oak Hill Drive	Side-street Stop	> 50.0	F	35.6	E
10. Barton Road/MacDuff Drive	Side-street Stop	21.9	C	1.8	A
11. Barton Road/Eureka Road	All-way Stop	> 50.0	F	>50.0	F
12. Barton Road/Douglas Boulevard	Signalized	-	-	> 80.0	F

Notes: [1] Delay and LOS for the worst-case movement reported for unsignalized intersections only.
[2] Delay is reported as seconds per vehicle.
* An asterisk indicates intersections that are influenced by adjacent intersections. These intersections should be considered to operate worse than the reported LOS due to the effects of queuing from downstream intersections.
Source: Fehr & Peers, 2002

As shown in Table 3-9, all of the signalized study intersections except the Auburn-Folsom Road/Pinebrook Drive intersection will operate at LOS D or worse during the p.m. peak hour under cumulative year (2020) "no-project" conditions. The worst-case movement at all of the unsignalized study intersections except the Barton Road/MacDuff Drive intersection will operate at LOS E or F during the p.m. peak hour under cumulative year (2020) "no-project" conditions. The overall p.m. peak hour intersection LOS at the Barton Road/Oak Hill Drive intersection will be LOS E, and the overall p.m. peak hour intersection LOS at the Barton Road/Eureka Road intersection will be LOS F.

TABLE 3-10
INTERSECTION LEVEL OF SERVICE –
CUMULATIVE YEAR (2020) WITH-PROJECT CONDITIONS

Intersection	Control	PM Peak Hour			
		Worst-case Movement[1]		Overall	
		Delay[2]	LOS	Delay[2]	LOS
1. Auburn-Folsom Road/Douglas Boulevard	Signalized	-	-	71.5	E
2. Auburn-Folsom Road/Fuller Drive	Signalized	-	-	8.2*	A*
3. Auburn-Folsom Road/Fallsbrook Court	Side-street Stop	> 50.0*	F*	2.2*	A*
4. Auburn-Folsom Road/Eureka Road	Signalized	-	-	> 80.0*	F*
5. Auburn-Folsom Road/Country Court	Side-street Stop	> 50.0*	F*	4.0*	A*
6. Auburn-Folsom Road/Lou Place	Side-street Stop	> 50.0*	F*	4.0*	A*
7. Auburn-Folsom Road/Oak Hill Drive	Signalized	-	-	42.8*	D*
8. Auburn-Folsom Road/Pinebrook Drive	Signalized	-	-	5.1*	A*
9. Barton Road/Oak Hill Drive	Side-street Stop	> 50.0	F	7.4	A
10. Barton Road/MacDuff Drive	Side-street Stop	13.3	B	1.4	A
11. Barton Road/Eureka Road	All-way Stop	> 50.0	F	> 50.0	F
12. Barton Road/Douglas Boulevard	Signalized	-	-	> 80.0	F

Notes: [1] Delay and LOS for the worst-case movement reported for unsignalized intersections only.
[2] Delay is reported as seconds per vehicle.
* An asterisk indicates intersections that may be influenced by adjacent intersections. These intersections should be considered to operate worse than the reported LOS due to the effects of queuing from downstream intersections.
Source: Fehr & Peers, 2002

As shown in Table 3-10, the construction of the project will improve the p.m. peak hour intersection LOS as compared to the cumulative year "no-project" conditions, at the Auburn-Folsom Road/Oak Hill Drive intersection. The overall p.m. peak hour intersection LOS will improve to LOS A at the Barton Road/Oak Hill Drive intersection. The p.m. peak hour delay at the Auburn-Folsom Road/Douglas Boulevard intersection will increase with the construction of the project as more traffic uses Auburn-Folsom Road. The Auburn-Folsom Road/Eureka Road, Barton Road/Eureka Road, and Barton Road/Douglas Boulevard intersections will continue to operate at LOS F.

Queue lengths for each turning movement at the study intersections have been calculated as part of the technical analysis and are included in Appendix P. The project design shall incorporate turn-pocket lengths that accommodate the projected queues.

TABLE 3-11
INTERSECTION LEVEL OF SERVICE –
CUMULATIVE YEAR (2020) WITH-PROJECT CONDITIONS (WITH RAISED MEDIAN)

Intersection	Control	PM Peak Hour			
		Worst-case Movement[1]		Overall	
		Delay [2]	LOS	Delay [2]	LOS
1. Auburn-Folsom Road/Douglas Boulevard	Signalized	-	-	71.5	E
2. Auburn-Folsom Road/Fuller Drive	Signalized	-	-	10.7*	B*
3. Auburn-Folsom Road/Fallsbrook Court	Side-street Stop	20.2*	C*	0.1*	A*
4. Auburn-Folsom Road/Eureka Road	Signalized	-	-	> 80.0*	F*
5. Auburn-Folsom Road/Country Court	Side-street Stop	> 50.0*	F*	4.1*	A*
6. Auburn-Folsom Road/Lou Place	Side-street Stop	> 50.0*	F*	4.1*	A*
7. Auburn-Folsom Road/Oak Hill Drive	Signalized	-	-	42.8*	D*
8. Auburn-Folsom Road/Pinebrook Drive	Signalized	-	-	5.1*	A*
9. Barton Road/Oak Hill Drive	Side-street Stop	> 50.0	F	7.4	A
10. Barton Road/MacDuff Drive	Side-street Stop	13.3	B	1.4	A
11. Barton Road/Eureka Road	All-way Stop	> 50.0	F	> 50.0	F
12. Barton Road/Douglas Boulevard	Signalized	-	-	> 80.0	F

Notes: [1] Delay and LOS for the worst-case movement reported for unsignalized intersections only.
[2] Delay is reported as seconds per vehicle.
* An asterisk indicates intersections that may be influenced by adjacent intersections. These intersections should be considered to operate worse than the reported LOS due to the effects of queuing from downstream intersections.
Source: Fehr & Peers, 2002

As shown in Table 3-11, all intersections will operate at the same LOS with either the project or the raised median project option, except the Auburn-Folsom Road/Fuller Drive intersection. The Auburn-Folsom Road/Fuller Drive intersection will operate at LOS B. The overall p.m. peak hour intersection delay will increase slightly at the Auburn-Folsom Road/Country Court and Auburn-Folsom Road/Lou Place intersections, but the levels of service will remain unchanged from "project" conditions. The worst-case movement and overall intersection delay at the Auburn-Folsom Road/Fallsbrook Court intersection will decrease due to the elimination of left turns at this location.

Queue lengths for each turning movement at the study intersections have been calculated as part of the technical analysis and are included in Appendix P. The raised median project option design shall incorporate turn-pocket lengths that accommodate the projected queues.

TABLE 3-12
ROADWAY SEGMENT DAILY LEVELS OF SERVICE – CONSTRUCTION YEAR (2005) NO-PROJECT CONDITIONS

Roadway Segment	Roadway Type	Number of Lanes	ADT	LOS
Auburn-Folsom Road – Douglas Boulevard to Fuller Drive	A-HAC	4**	28,500	C
Auburn-Folsom Road – Fuller Drive to Eureka Road	A-HAC	2	29,400	F
Auburn-Folsom Road – Eureka Road to Country Court	A-HAC	2	29,800	F
Auburn-Folsom Road – Country Court to Oak Hill Drive	A-HAC	2	29,900	F
Auburn-Folsom Road – Oak Hill Drive to Pinebrook Drive	A-HAC	2	31,300	F
Barton Road – County Line to Oak Hill Drive	A-LAC	2	4,500	A
Barton Road – Oak Hill Drive to MacDuff Drive	A-LAC	2	6,200	A
Barton Road – East Roseville Parkway to Eureka Road	A-LAC	2	8,200	A
Barton Road – Eureka Road to Douglas Boulevard	A-LAC	2	9,100	B
Oak Hill Drive – Oak Leaf Way to Fern Leaf Drive	Local Road	2	1,700	*
MacDuff Drive – MacDuff Court to Oak Leaf Way	Local Road	2	1,400	*
Eureka Road – Auburn-Folsom to Barton Road	A-LAC	2	5,600	A
Douglas Boulevard – Auburn-Folsom Road to Barton Road	A-HAC	4	35,900	D

A-HAC = Arterial –High Access Control
A-LAC = Arterial – Low Access Control

* The Placer County General Plan does not identify LOS for local roads.
** Auburn-Folsom Road transitions from 4 to 2 lanes through this section.

Source: Fehr & Peers, 2002

As shown in Table 3-12, all of the Auburn-Folsom Road study roadway segments will operate at LOS F under construction year (2005) "no-project" conditions except the existing four-lane section from Douglas Boulevard to Fuller Drive. The section of Douglas Boulevard between Auburn-Folsom Road and Barton Road will operate at LOS D.

TABLE 3-13
ROADWAY SEGMENT DAILY LEVELS OF SERVICE – CONSTRUCTION YEAR (2005) WITH-PROJECT CONDITIONS

Roadway Segment	Roadway Type	Number of Lanes	ADT	LOS
Auburn-Folsom Road – Douglas Boulevard to Fuller Drive	A-HAC	4	29,900	C
Auburn-Folsom Road – Fuller Drive to Eureka Road	A-HAC	4	30,900	C
Auburn-Folsom Road – Eureka Road to Country Court	A-HAC	4	30,800	C
Auburn-Folsom Road – Country Court to Oak Hill Drive	A-HAC	4	30,900	C
Auburn-Folsom Road – Oak Hill Drive to Pinebrook Drive	A-HAC	4	31,600	C
Barton Road – County Line to Oak Hill Drive	A-LAC	2	4,800	A
Barton Road – Oak Hill Drive to MacDuff Drive	A-LAC	2	5,900	A
Barton Road – East Roseville Parkway to Eureka Road	A-LAC	2	7,900	A
Barton Road – Eureka Road to Douglas Boulevard	A-LAC	2	8,600	A
Oak Hill Drive – Oak Leaf Way to Fern Leaf Drive	Local Road	2	1,200	*
MacDuff Drive – MacDuff Court to Oak Leaf Way	Local Road	2	1,400	*
Eureka Road – Auburn-Folsom to Barton Road	A-LAC	2	5,400	A
Douglas Boulevard – Auburn-Folsom Road to Barton Road	A-HAC	4	36,600	E

A-HAC = Arterial –High Access Control
A-LAC = Arterial – Low Access Control

* The Placer County General Plan does not identify LOS for local roads.

Source: Fehr & Peers, 2002

As shown in Table 3-13, all of the study roadway segments on Auburn-Folsom Road will operate at LOS C with implementation of the project or raised median project option under construction year (2005) conditions. The segment of Barton Road between Eureka Road and Douglas Boulevard will improve to LOS A due to a reduction in traffic on this segment. The segment of Douglas Boulevard between Auburn-Folsom Road and Barton Road will operate at LOS E. The average daily traffic on Oak Hill Drive from Oak Leak Way to Fern Leaf Drive will decrease as compared to the "no-project" condition.

TABLE 3-14
ROADWAY SEGMENT DAILY LEVELS OF SERVICE – CUMULATIVE YEAR (2020) NO-PROJECT CONDITIONS

Roadway Segment	Roadway Type	Number of Lanes	ADT	LOS
Auburn-Folsom Road – Douglas Boulevard to Fuller Drive	A-HAC	4**	31,500	C
Auburn-Folsom Road – Fuller Drive to Eureka Road	A-HAC	2	32,100	F
Auburn-Folsom Road – Eureka Road to Country Court	A-HAC	2	37,300	F
Auburn-Folsom Road – Country Court to Oak Hill Drive	A-HAC	2	37,200	F
Auburn-Folsom Road – Oak Hill Drive to Pinebrook Drive	A-HAC	2	43,100	F
Barton Road – County Line to Oak Hill Drive	A-LAC	2	8,400	A
Barton Road – Oak Hill Drive to MacDuff Drive	A-LAC	2	14,500	E
Barton Road – East Roseville Parkway to Eureka Road	A-LAC	2	14,100	E
Barton Road – Eureka Road to Douglas Boulevard	A-LAC	2	16,200	F
Oak Hill Drive – Oak Leaf Way to Fern Leaf Drive	Local Road	2	6,300	*
MacDuff Drive – MacDuff Court to Oak Leaf Way	Local Road	2	1,700	*
Eureka Road – Auburn-Folsom to Barton Road	A-LAC	2	12,400	D
Douglas Boulevard – Auburn-Folsom Road to Barton Road	A-HAC	4	38,500	E

A-HAC = Arterial –High Access Control
A-LAC = Arterial – Low Access Control

* The Placer County General Plan does not identify LOS for local roads.
** Auburn-Folsom Road transitions from 4 to 2 lanes through this section.

Source: Fehr & Peers, 2002

As shown in Table 3-14, all of the study roadway segments on Auburn-Folsom Road, Barton Road, Eureka Road, and Douglas Boulevard except the existing four-lane section of Auburn-Folsom Road from Douglas Boulevard to Fuller Drive and the section of Barton Road from the County line to Oak Hill Drive will operate at LOS D or worse under cumulative year (2020) "no-project" conditions.

TABLE 3-15
ROADWAY SEGMENT DAILY LEVELS OF SERVICE – CUMULATIVE YEAR (2020) WITH-PROJECT CONDITIONS

Roadway Segment	Roadway Type	Number of Lanes	ADT	LOS
Auburn-Folsom Road – Douglas Boulevard to Fuller Drive	A-HAC	4	39,900	E
Auburn-Folsom Road – Fuller Drive to Eureka Road	A-HAC	4	41,500	F
Auburn-Folsom Road – Eureka Road to Country Court	A-HAC	4	43,300	F
Auburn-Folsom Road – Country Court to Oak Hill Drive	A-HAC	4	43,200	F
Auburn-Folsom Road – Oak Hill Drive to Pinebrook Drive	A-HAC	4	45,200	F
Barton Road – County Line to Oak Hill Drive	A-LAC	2	10,000	B
Barton Road – Oak Hill Drive to MacDuff Drive	A-LAC	2	12,600	D
Barton Road – East Roseville Parkway to Eureka Road	A-LAC	2	12,400	D
Barton Road – Eureka Road to Douglas Boulevard	A-LAC	2	13,200	D
Oak Hill Drive – Oak Leaf Way to Fern Leaf Drive	Local Road	2	3,000	*
MacDuff Drive – MacDuff Court to Oak Leaf Way	Local Road	2	1,500	*
Eureka Road – Auburn-Folsom to Barton Road	A-LAC	2	10,600	C
Douglas Boulevard – Auburn-Folsom Road to Barton Road	A-HAC	4	42,800	F

A-HAC = Arterial –High Access Control
A-LAC = Arterial – Low Access Control

* The Placer County General Plan does not identify LOS for local roads.

Source: Fehr & Peers, 2002.

As shown in Table 3-15, all of the study roadway segments on Auburn-Folsom Road, Barton Road, and Douglas Boulevard except the section of Barton Road between the County line and Oak Hill Drive will continue to operate at LOS D or worse with implementation of the project or raised median project option. Although these segments operate deficiently, the LOS will improve on the following roadway segments:

- Barton Road – Oak Hill Drive to MacDuff Drive;
- Barton Road – East Roseville Parkway to Eureka Road; and
- Barton Road – Eureka Road to Douglas Boulevard.

The Barton Road segments improve due to the decrease in daily volumes with the implementation of the project or raised median project option, as will the segment of Eureka Road from Auburn-Folsom Road to Barton Road, which will improve to LOS C conditions. The segment of Barton Road between the County line and Oak Hill Drive will experience an increase in daily traffic that will result in LOS B conditions. Implementation of the project or raised median project option will cause the segment of Douglas Boulevard from Auburn-Folsom Road to Barton Road to operate at LOS F and the segment of Auburn-Folsom Road from Douglas Boulevard to Fuller Drive to operate at LOS E due to the increase in peak hour volumes that are projected to occur from trips shifting to the Douglas Boulevard/Auburn-Folsom Road route because of the increased capacity along Auburn-Folsom Road. The project will also result in a shift of trips to Auburn-Folsom Road from parallel north-south routes, such as Sierra College Boulevard. The average daily traffic on Oak Hill Drive from Oak Leak Way to

Fern Leaf Drive and MacDuff Drive from MacDuff Court to Oak Leaf Way will decrease as compared to the "no-project" condition.

Implementation of the project will not be sufficient to eliminate unacceptable LOS operations at study intersections and on study roadway segments under cumulative year (2020) conditions and will increase the delay at the Auburn-Folsom Road/Douglas Boulevard intersection as more capacity is added to Auburn-Folsom Road. Implementation of the project or raised median project option will support Policy 3.A.5. of the General Plan by discouraging the use of neighborhood streets, such as Oak Hill Drive and MacDuff Drive.

Impact Analysis

The impacts on the study intersections and roadway segments have been analyzed for three conditions: the "no-project" condition, the "project" alternative, and the "raised median project option" alternative. All of the "build" alternatives involve widening Auburn-Folsom Road from two to four lanes from the County line to Fuller Drive and incorporate the same access points. Therefore, all of the "build" alternatives are analyzed as one "project" alternative. As defined by the County the "raised median project option" includes widening Auburn-Folsom Road to four lanes from the County line to Fuller Drive and the installation of a raised median along the entire corridor with median openings for left-turns at Boardwalk Drive, Fuller Drive, Eureka Road, Country Court, Lou Place, and Oak Hill Drive. U-turns would be allowed only at the signalized intersections.

No-Project Conditions

Construction Year (2005) No-Project Conditions

Existing ADT on Auburn-Folsom Road ranges from 27,900 near Douglas Boulevard to 28,900 near Pinebrook Drive. In 2005 without the project, these traffic volumes are projected to increase to 28,500 near Douglas Boulevard to 31,300 near Pinebrook Drive. As traffic volumes increase, traffic operations along Auburn-Folsom Road will deteriorate. Congested conditions on Auburn-Folsom Road would encourage drivers to seek alternate north-south routes such as Barton Road and Sierra College Boulevard. Cut-through traffic from Auburn-Folsom Road would use Oak Hill Drive and Eureka Road, with existing volumes projected to increase from an ADT of 800 and 4,300, respectively to 1,700 and 5,600 in 2005, respectively.

Projected traffic volumes in 2005 under "no-project" conditions would result in p.m. peak hour intersection LOS D or worse at the following intersections:

- Auburn-Folsom Road/Douglas Boulevard (LOS D);
- Auburn-Folsom Road/Eureka Road (LOS E);
- Auburn-Folsom Road/Oak Hill Drive (LOS D); and

- Barton Road/Douglas Boulevard (LOS D).

These traffic volumes would result in p.m. peak hour roadway segment LOS D or worse on the following roadway segments:

- Auburn-Folsom Road – Fuller Drive to Eureka Road (LOS F);
- Auburn-Folsom Road – Eureka Road to Country Court (LOS F);
- Auburn-Folsom Road – Country Court to Oak Hill Drive (LOS F);
- Auburn-Folsom Road – Oak Hill Drive to Pinebrook Drive (LOS F); and
- Douglas Boulevard – Auburn-Folsom Road to Barton Road (LOS D).

Cumulative (Year 2020) No-Project Conditions

Existing ADT on Auburn-Folsom Road ranges from 27,900 near Douglas Boulevard to 28,900 near Pinebrook Drive. In 2020 without the project, these traffic volumes are projected to increase to 31,500 near Douglas Boulevard to 43,100 near Pinebrook Drive. As traffic volumes increase, traffic operations along Auburn-Folsom Road will deteriorate. Congested conditions on Auburn-Folsom Road would encourage drivers to seek alternate north-south routes such as Barton Road and Sierra College Boulevard. Levels of service on Barton Road would drop from an existing LOS of A to a LOS of E and F. Cut-through traffic from Auburn-Folsom Road would use Oak Hill Drive and Eureka Road, with existing volumes projected to increase from an ADT of 800 and 4,300, respectively to 6,300 and 12,400 in 2020, respectively.

Projected traffic volumes in 2020 under "no-project" conditions would result in p.m. peak hour intersection LOS D or worse at the following intersections:

- Auburn-Folsom Road/Douglas Boulevard (LOS D);
- Auburn-Folsom Road/Eureka Road (LOS F);
- Auburn-Folsom Road/Oak Hill Drive (LOS F);
- Barton Road/Oak Hill Drive (LOS E);
- Barton Road/Eureka Road (LOS F); and
- Barton Road/Douglas Boulevard (LOS F).

These traffic volumes would result in p.m. peak hour roadway segment LOS D or worse on the following roadway segments:

- Auburn-Folsom Road – Fuller Drive to Eureka Road (LOS F);
- Auburn-Folsom Road – Eureka Road to Country Court (LOS F);
- Auburn-Folsom Road – Country Court to Oak Hill Drive (LOS F);
- Auburn-Folsom Road – Oak Hill Drive to Pinebrook Drive (LOS F);
- Barton Road – Oak Hill Drive to MacDuff Drive (LOS E);
- Barton Road – East Roseville Parkway to Eureka Road (LOS E)
- Barton Road – Eureka Road to Douglas Boulevard (LOS F);

- Eureka Road – Barton Road to Auburn-Folsom Road (LOS D); and
- Douglas Boulevard – Auburn-Folsom Road to Barton Road (LOS E).

Impacts

Construction-Related Impacts

Impact 3.1 Temporary Disruption of Traffic Conditions During Construction

Construction of the proposed project is anticipated to take approximately 18 months over two construction seasons. Regardless of which alternative is selected and whether the median is striped or raised, construction of the project could result in lane closures, detours, and the addition of construction trucks and equipment on the surrounding roadway system. Increased traffic delays may result in drivers choosing alternate routes, when feasible.

This impact is considered significant. Implementation of Mitigation Measure P3.1 would reduce this impact to a less-than-significant level.

Operation-Related Impacts

Impact 3.2 Increased Roadway Capacity and Increased Traffic Volumes That Would Exacerbate the Construction Year (2005) "No-Project" LOS D, E, or F Conditions at an Intersection or on a Roadway Segment

Implementation of any of the project alternatives or the raised median project option will exacerbate the "no-project" p.m. peak hour LOS deficiency on the following roadway segment:

- Douglas Boulevard – Auburn-Folsom Road to Barton Road (LOS E).

The project alternatives and the raised median project option will exacerbate the "no-project" LOS deficiency because widening Auburn-Folsom Road attracts more trips to the corridor than "no-project" conditions. This causes the impact on Douglas Boulevard, which is a major arterial, but also benefits local residential roadways that would otherwise experience cut-through traffic under "no project" conditions (i.e., the Barton Road-Oak Hill Drive cut-through route).

Because the project alternatives and the project option will exacerbate "no-project" LOS D conditions on a study roadway segment, this impact is considered significant. Implementation of Mitigation Measure P3.2 would reduce this impact to a less-than-significant level.

Impact 3.3 Increased Traffic Volumes That Would Exacerbate the Cumulative Year (2020) "No-Project" LOS D, E or F Conditions at an Intersection or on a Roadway Segment or Cause the Cumulative Year (2020) "No-Project" LOS at an Intersection or on a Roadway Segment to Deteriorate from LOS A, B, or C to D, E, or F and Would Exceed the Capacity of the Four-Lane Roadway

Implementation of any of the project alternatives or the raised median project option would exacerbate the "no-project" p.m. peak hour intersection LOS deficiency at the following intersection:

- Auburn-Folsom Road/Douglas Boulevard (LOS E).

The project alternatives or the raised median project option would exacerbate the "no-project" p.m. peak hour roadway segment LOS deficiency on the following roadway segment:

- Douglas Boulevard – Barton Road to Auburn-Folsom Road (LOS F).

The project alternatives and the raised median project option will exacerbate the "no-project" LOS deficiencies because widening Auburn-Folsom Road attracts more trips to the corridor than "no-project" conditions. This causes the impact on Douglas Boulevard, which is a major arterial, but also benefits local residential roadways that would otherwise experience cut-through traffic under "no project" conditions (i.e., the Barton Road-Oak Hill Drive cut-through route).

The project alternatives and the raised median project option would also cause the LOS to deteriorate to LOS E on Auburn-Folsom Road from Douglas Boulevard to Fuller Drive.

Because the project alternatives and the raised median project option will exacerbate "no-project" LOS D conditions at a study intersection and on a study roadway segment and cause the LOS on a roadway segment to deteriorate to LOS E, this impact is considered significant. Implementation of Mitigation Measures P3.3a and P3.3b would reduce this impact to a less-than-significant level.

Consistency with Applicable Bicycle, Pedestrian and Equestrian System Improvements and Policies

Impact 3.4 Potential Inconsistency with Equestrian System Policies Contained in the Placer County General Plan and the Granite Bay Community Plan

The project alternatives or the raised median project option would be potentially inconsistent with the following policy statements contained in the Placer County

General Plan, the Granite Bay Community Plan, and the Granite Bay Community Plan Recreation Element:

- Policy 3.D.2 of the General Plan requires that the County work to coordinate and develop bikeways and multi-purpose trails with neighboring jurisdictions. Policy V.A.13 of the Community Plan requires that roads be designed to encourage alternative modes of transportation, such as walking, bicycling, riding, and public transportation, and Policy III.7 of the Community Plan Recreation Element requires that a connected trail system for bicyclist, equestrian and pedestrian use be established.

The project does not include an equestrian crossing of Auburn-Folsom Road at Lou Place as identified in the Granite Bay Community Plan. Therefore, the project may be inconsistent with the policies of Placer County. This impact is considered significant. Implementation of Mitigation Measure P3.4 would reduce this impact to a less-than-significant level.

Impact 3.5 Potential Inconsistency with Pedestrian and Bicycle System Policies Contained in the Placer County General Plan and the Granite Bay Community Plan

The project alternatives or the raised median project option would be potentially inconsistent with the following policy statements contained in the Placer County General Plan, the Granite Bay Community Plan, and the Granite Bay Community Plan Recreation Element:

- Policy 3.D.2 of the General Plan requires that the County work to coordinate and develop bikeways and multi-purpose trails with neighboring jurisdictions. Policy V.A.13 of the Community Plan requires that roads be designed to encourage alternative modes of transportation, such as walking, bicycling, riding, and public transportation, and Policy III.7 of the Community Plan Recreation Element requires that a connected trail system for bicyclist, equestrian and pedestrian use be established.

The project includes on-street bicycle lanes, which is consistent with the regional plans and policies. Implementation of Mitigation Measure P3.5 would reduce this impact to a less-than-significant level.

Mitigation Measures

This section details the mitigation measures identified for the project alternatives and the raised median project option. Mitigation measures are identified as either of the following:

- *Proposed mitigation measures* are measures that the Placer County DPW, as project proponent, is either proposing as part of the project design or has agreed to implement.

- *Recommended mitigation measures* are measures that are identified in this environmental document but that the Placer County DPW has not chosen to implement, and which may be required by the Placer County Board of Supervisors if the project is approved.

Proposed Mitigation Measures

Mitigation Measure P3.1: Prepare a Traffic Management Plan to be Implemented During Construction

The Placer County DPW shall develop and implement a traffic control plan for the project. The plan shall be designed to reduce the effects of construction on the roadway system throughout the construction period. The plan shall include provisions to discourage "cut-through" traffic on local streets. The plan shall also discourage the use of Barton Road as a parallel north-south street and detour traffic to Sierra College Boulevard.

As feasible, at least one lane of traffic shall be maintained at all times. Proposed lane closures during the a.m. and p.m. commuting hours (6–9 a.m. and 3–6 p.m.) shall be minimized to the extent feasible. As feasible, pedestrian, equestrian, and bicycle access shall be maintained during construction. Construction areas shall be secured to prevent pedestrians, equestrians, and bicyclists from entering the work area.

This mitigation measure is common to all alternatives.

Mitigation Measure P3.2: Implement Strategies to Alleviate the Need to Widen Douglas Boulevard to Six Lanes

Placer County Department of Public Works will implement strategies as part of the regular transportation planning and traffic engineering functions and alleviate the need to widen Douglas Boulevard to six lanes. The *Southeast Placer County Transportation Study* recommended alternative strategies to be implemented rather than widening Douglas Boulevard to six lanes. These strategies, endorsed by the Board of Supervisors in December 2000, included:

- Work with PCTPA, SACOG and neighboring jurisdictions to address a regional solution to the amount of through traffic in Granite Bay.
- Add turn lanes at major intersections along Douglas Boulevard to provide LOS D.
- Potentially close some median openings along Douglas Boulevard to maintain its ability to carry traffic at higher levels of service.

This mitigation measure is common to all alternatives.

Mitigation Measure P3.3a: Increase the Capacity at the Auburn-Folsom Road/Douglas Boulevard Intersection to Operate at an Acceptable LOS in 2020

The County will continue to monitor the LOS at the Auburn-Folsom Road/Douglas Boulevard intersection and construct new improvements as

needed. The Board of Supervisors will approve intersection improvements at the Auburn-Folsom Road/Douglas Boulevard intersection that are included in the Capital Improvement Program that is funded by traffic mitigation fees in the Granite Bay area when funds are available and the need exists. The intersection improvements include:

Provide additional turn lanes as follows: a free right-turn lane on the eastbound approach, two exclusive left-turn and two exclusive through lanes on the northbound approach, and two exclusive left-turn lanes on the eastbound approach.

Mitigation Measure P3.3b: Implement Strategies to Alleviate the Need to Widen Douglas Boulevard to Six Lanes

Placer County Department of Public Works will implement strategies as part of the regular transportation planning and traffic engineering functions and alleviate the need to widen Douglas Boulevard to six lanes. The *Southeast Placer County Transportation Study* recommended alternative strategies to be implemented rather than widening Douglas Boulevard to six lanes. These strategies, endorsed by the Board of Supervisors in December 2000, included:

- Work with PCTPA, SACOG, and neighboring jurisdictions to address a regional solution to the amount of through traffic in Granite Bay.
- Add turn lanes at major intersections along Douglas Boulevard to provide LOS D.
- Potentially close some median openings along Douglas Boulevard to maintain its ability to carry traffic at higher levels of service.

This mitigation measure is common to all alternatives.

Mitigation Measure P3.4: Install a Signal at the Auburn-Folsom Road/Lou Place Intersection to Allow Pedestrian/Equestrian Crossings

In accordance with the current Granite Bay Community Plan, Placer County DPW will install a signal at the Auburn-Folsom Road/Lou Place intersection to facilitate pedestrian and equestrian movements across Auburn-Folsom Road into Folsom State Recreational Area. In the event that the Granite Bay Community Plan is modified to remove an equestrian trail along Lou Place and a crossing at Auburn-Folsom Road, the Placer County DPW has the option of installing a signal or not, at its discretion.

This mitigation measure is common to all alternatives.

Mitigation Measure P3.5: Provide Class II Bikeways

Placer County DPW shall provide Class II bikeways along Auburn-Folsom Road pursuant to the Placer County Bikeways Master Plan. The location, width, alignment, and surfacing of the bikeways shall be in accordance with the bikeway design standards listed in the Placer County General Plan.

Recommended Mitigation Measures

There are no recommended mitigation measures.

Table 3-16. Traffic Impact Summary Table

	Alt. 1: Widening to the West	Alt. 2: Widening to the East	Alt. 3: Widening Equally on Both Sides	Alt. 4: County DPW–Preferred
TRAFFIC				
Impact 3.1 Temporary Disruption of Traffic Conditions During Construction				
Quantitative Comparison	NA	NA	NA	NA
Significance Before Mitigation	S	S	S	S
Mitigation Measures	P3.1: Prepare a Traffic Management Plan to be Implemented During Construction	P3.1: Prepare a Traffic Management Plan to be Implemented During Construction	P3.1: Prepare a Traffic Management Plan to be Implemented During Construction	P3.1: Prepare a Traffic Management Plan to be Implemented During Construction
Significance After Mitigation	LS	LS	LS	LS
Impact 3.2 Increased Roadway Capacity and Increased Traffic Volumes That Would Exacerbate the Construction Year (2005) "No-Project" LOS D, E, or F Conditions at an Intersection or on a Roadway Segment				
Quantitative Comparison	NA	NA	NA	NA
Significance Before Mitigation	S	S	S	S
Mitigation Measures	P3.2: Implement Strategies to Alleviate the Need to Widen Douglas Boulevard to Six Lanes	P3.2: Implement Strategies to Alleviate the Need to Widen Douglas Boulevard to Six Lanes	P3.2: Implement Strategies to Alleviate the Need to Widen Douglas Boulevard to Six Lanes	P3.2: Implement Strategies to Alleviate the Need to Widen Douglas Boulevard to Six Lanes
Significance After Mitigation	LS	LS	LS	LS
Impact 3.3 Increased Traffic Volumes That Would Exacerbate the Cumulative Year (2020) "No-Project" LOS D, E or F Conditions at an Intersection or on a Roadway Segment or Cause the Cumulative Year (2020) "No-Project" LOS at an Intersection or on a Roadway Segment to Deteriorate from LOS A, B, or C to D, E, or F and Would Exceed the Capacity of the Four-Lane Roadway				
Quantitative Comparison	NA	NA	NA	NA
Significance Before Mitigation	S	S	S	S
Mitigation Measures	P3.3a: Increase the Capacity at the Auburn-Folsom Road/Douglas Boulevard Intersection to Operate at an Acceptable LOS in 2020	P3.3a: Increase the Capacity at the Auburn-Folsom Road/Douglas Boulevard Intersection to Operate at an Acceptable LOS in 2020	P3.3a: Increase the Capacity at the Auburn-Folsom Road/Douglas Boulevard Intersection to Operate at an Acceptable LOS in 2020	P3.3a: Increase the Capacity at the Auburn-Folsom Road/Douglas Boulevard Intersection to Operate at an Acceptable LOS in 2020

Table 3-16. Traffic Impact Summary Table

	Alt. 1: Widening to the West	Alt. 2: Widening to the East	Alt. 3: Widening Equally on Both Sides	Alt. 4: County DPW–Preferred
	P3.3b: Implement Strategies to Alleviate the Need to Widen Douglas Boulevard to Six Lanes	P3.3b: Implement Strategies to Alleviate the Need to Widen Douglas Boulevard to Six Lanes	P3.3b: Implement Strategies to Alleviate the Need to Widen Douglas Boulevard to Six Lanes	P3.3b: Implement Strategies to Alleviate the Need to Widen Douglas Boulevard to Six Lanes
Significance After Mitigation	LS	LS	LS	LS
Impact 3.4 Potential Inconsistency with Equestrian System Policies Contained in the Placer County General Plan and the Granite Bay Community Plan				
Quantitative Comparison	NA	NA	NA	NA
Significance Before Mitigation	S	S	S	S
Mitigation Measures	P3.4: Install a Signal at the Auburn-Folsom Road/Lou Place Intersection to Allow Pedestrian/Equestrian Crossings	P3.4: Install a Signal at the Auburn-Folsom Road/Lou Place Intersection to Allow Pedestrian/Equestrian Crossings	P3.4: Install a Signal at the Auburn-Folsom Road/Lou Place Intersection to Allow Pedestrian/Equestrian Crossings	P3.4: Install a Signal at the Auburn-Folsom Road/Lou Place Intersection to Allow Pedestrian/Equestrian Crossings
Significance After Mitigation	LS	LS	LS	LS

Table 3-16. Traffic Impact Summary Table

	Alt. 1: Widening to the West	Alt. 2: Widening to the East	Alt. 3: Widening Equally on Both Sides	Alt. 4: County DPW–Preferred
Impact 3.5 Potential Inconsistency with Pedestrian and Bicycle System Policies Contained in the Placer County General Plan and the Granite Bay Community Plan				
Quantitative Comparison	NA	NA	NA	NA
Significance Before Mitigation	S	S	S	S
Mitigation Measures	P3.5: Provide Class II Bikeways	P3.5: Provide Class II Bikeways	P3.5: Provide Class II Bikeways	P3.5: Provide Class II Bikeways
Significance After Mitigation	LS	LS	LS	LS

Key:

SU = Significant and unavoidable.

S = Significant.

PS = Potentially significant.

LS = Less than significant.

NI = No impact.

NA = Not applicable.

Chapter 4
Air Quality

This chapter describes the air quality environment of the project area, identifies policies and regulations relevant to air quality, and addresses the air quality impacts associated with construction and operation of the proposed project.

Affected Environment

Environmental Setting

Climate and Meteorology

The project area is located in the Placer County portion of the Sacramento Valley Air Basin (SVAB). The climate in the area is characterized by hot, dry summers and mild, wet winters. Monthly averages of daily extreme temperatures range from 39°F to 52°F in January and 58°F to 90°F in July. The average annual rate of precipitation is 25 inches, approximately 90% of which occurs during a 6-month period from November to April.

The prevailing wind direction in the Sacramento Valley portion of Placer County is from the south and southeast, primarily because of marine breezes that come through the Carquinez Strait. During winter, sea breezes diminish and winds from the north occur more frequently, but winds from the south still predominate.

Air pollution problems often develop when calm winds combine with inversions. An *inversion* is an increase in temperature corresponding to height above ground; during inversions, vertical mixing of air ceases. Cessation of horizontal wind is called a *calm*.

Because of prevailing winds coming generally from the south to southwest, air quality in the area is influenced heavily by mobile and stationary sources of air pollution located upwind, in the Sacramento metropolitan area. The "transport" of emissions, coupled with intense inversions, results in frequent violations of the ozone standard during summer.

Two types of inversions can occur. The first usually takes place between late spring and early fall, when a layer of warm air often overlies a layer of cool air from the Delta and San Francisco Bay. The second, a typical winter inversion, is

formed when the sun heats the upper air layers, trapping air below that cooled by contact with the colder surface of the earth during the night. Although each inversion type predominates during certain seasons, both types can occur at any time. Local topography produces many variations that can affect the inversion base and influence local air quality. When calm winds occur with inversions, pollutant concentrations increase over the area. These conditions trap pollutants and increase pollutant concentrations by preventing their dilution and dispersion into the atmosphere.

Ambient Air Quality Standards and Existing Placer County Air Quality

Both California and the federal government have established ambient air quality standards for several different pollutants, known as criteria pollutants, and require areas that violate these standards to prepare and implement plans to achieve the standards by certain deadlines. The air pollutants of greatest concern in the project area are carbon monoxide (CO), various components of photochemical smog (ozone and other pollutants), and particulate matter 10 microns or less in diameter (PM10). State and federal air quality standards are summarized in Table 4-1.

Because of the recorded violations of the state and federal ozone standards, the SVAB and Mountain Counties Air Basin (MCAB) portions of Placer County have been designated by the California Air Resources Board (ARB) as nonattainment areas for ozone and by the U.S. Environmental Protection Agency (EPA) as severe nonattainment areas for ozone. Placer County also is classified by the state as a nonattainment area for PM10. The nonattainment designations indicate that the ozone and PM10 levels in Placer County are a potential threat to public health. Table 4-2 summarizes the criteria pollutant attainment status for Placer County.

The discussion below focuses on ozone, CO, and PM10 because:

- the project area's air quality exceeds the allowable ambient state and federal standards for ozone and the state standard for PM10;
- the Placer County 1994 Air Quality Attainment Plan anticipates that ozone standards will not be attained until at least 2005; and
- projected increases in population, vehicle trips, and vehicle miles traveled could result in excessive CO concentrations in the project area.

Ozone and Its Precursors

Ozone, the main component of photochemical smog, is primarily a summer and fall pollution problem. Ozone is not emitted directly into the air, but is formed through a complex series of chemical reactions involving other compounds (known as ozone precursors, including reactive organic gases [ROG] and oxides

Table 4-1. Ambient Air Quality Standards Applicable in California

Pollutant	Symbol	Average Time	Standard (parts per million)		Standard (micrograms per cubic meter)		Violation Criteria	
			California	National	California	National	California	National
Ozone	O_3	1 hour	0.09	0.12	180	235	If exceeded	If exceeded on more than 3 days in 3 years
		8 hours	NA	0.08	NA	157	NA	If exceeded more than 3 days in 3 years
Carbon monoxide	CO	8 hours	9.0	9	10,000	10,000	If exceeded	If exceeded on more than 1 day per year
		1 hour	20	35	23,000	40,000	If exceeded	If exceeded on more than 1 day per year
(Lake Tahoe only)		8 hours	6	NA	7,000	NA	If equaled or exceeded	NA
Nitrogen dioxide	NO_2	Annual average	NA	0.053	NA	100	NA	If exceeded
		1 hour	0.25	NA	470	NA	If exceeded	
Sulfur dioxide	SO_2	Annual average	NA	0.03	NA	80	NA	If exceeded
		24 hours	0.04	0.14	105	365	If exceeded	If exceeded on more than 1 day per year
		1 hour	0.25	NA	655	NA	NA	NA
Hydrogen sulfide	H_2S	1 hour	0.03	NA	42	NA	If equaled or exceeded	NA
Vinyl chloride	C_2H_3Cl	24 hours	0.010	NA	26	NA	If equaled or exceeded	NA
Sulfate particles	SO_4	24 hours	NA	NA	25	NA	If equaled or exceeded	NA
Inhalable particulate matter	PM10	Annual geometric mean	NA	NA	20	NA	If exceeded	NA
		Annual arithmetic mean	NA	NA	NA	50	NA	If exceeded
		24 hours	NA	NA	50	150	If exceeded	If average 1% over 3 years is exceeded
	PM2.5	Annual geometric mean	NA	NA	12	NA	If exceeded	NA
		Annual arithmetic mean	NA	NA	NA	15	NA	If exceeded
		24 hours	NA	NA	NA	65	NA	If average 2% over 3 years is exceeded

Table 4-1. Continued

Pollutant	Symbol	Average Time	Standard (parts per million)		Standard (micrograms per cubic meter)		Violation Criteria	
			California	National	California	National	California	National
Lead particles	Pb	Calendar quarter	NA	NA	NA	1.5	NA	If exceeded no more than 1 day per year
		30 days	NA	NA	1.5	NA	If equaled or exceeded	NA

Notes:
All standards are based on measurements at 25°C and 1 atmosphere pressure.
National standards shown are the primary (health effects) standards.
NA = not applicable.

Table 4-2. Criteria Pollutant Attainment Status for Placer County

	Status	
Pollutant	California	Federal
Ozone	nonattainment[a]	severe nonattainment[a]
Carbon monoxide	unclassified/attainment	unclassified/attainment
PM10	nonattainment	unclassified

Notes: "Unclassified" designations indicate that sufficient monitoring data are unavailable. Unclassified areas are generally treated as attainment areas.

The Lake Tahoe Air Basin, which includes the eastern portion of Placer County, is classified as an attainment area.

of nitrogen [NO_x]). The period required for ozone formation allows the reacting compounds to spread over a large area, producing a regional pollution problem. Ozone problems are the cumulative result of regional development patterns, rather than the result of a few emission sources.

In Placer County, ROG and NO_x are emitted primarily by motor vehicles. Major secondary sources are solvent use; petroleum processing, storage, and transfer; and miscellaneous industrial processes. During the next 20 years, stationary and area sources likely will replace motor vehicles as the principal source of ROG emissions.

Health Effects

Ozone is a public health concern because it is a respiratory irritant that also increases susceptibility to respiratory infections. Ozone also causes substantial damage to leaf tissues of crops and natural vegetation, and it damages many materials by acting as a chemical oxidizing agent.

State and Federal Standards

State and federal standards for ozone have been set for a 1-hour averaging time. As shown in Table 4-1, the state 1-hour standard is 0.09 parts per million (ppm), which is not to be exceeded. The federal 1-hour standard is 0.12 ppm, which is not to be exceeded more than three times in any 3-year period. A federal 8-hour standard of 0.08 ppm has also been set. As shown in Table 4-3, the project area occasionally has violated the federal and state standards. As stated, ozone problems arise primarily from vehicle traffic associated with urban development.

Carbon Monoxide

Excessive CO concentrations primarily are a winter pollution problem that can be strongly localized. Motor vehicle emissions are the dominant source of CO in most areas. Because CO is a directly emitted pollutant, dispersion and reduced pollution concentrations accompany its transport away from the emission source. Consequently, CO problems often result from high traffic volumes and traffic congestion, and are usually located near congested intersections.

Outdoor CO levels are a fairly reliable indicator of potential indoor CO levels. Because CO is not chemically reactive and is poorly soluble in water, it is not adsorbed onto surfaces or otherwise altered as it enters open doorways, open windows, or building ventilation systems.

Data from previous studies suggest that CO problems occur primarily near traffic arteries with substantial amounts of commercial development. The presence of substantial commercial development is an important contributing factor for two reasons. First, parking lots for such developments are a localized source of emissions, augmenting the CO emissions from vehicle traffic on adjacent roadways. Second, vehicles leaving major parking lots are likely to be in a cold-start mode, resulting in higher CO emission rates than are typical for through traffic on major roadways.

Meteorological conditions are another important factor affecting the development of CO problems. High CO levels develop primarily during winter, when periods of light winds or calm conditions combine to form ground-level temperature inversions (typically in the evening through early morning). These conditions result in reduced dispersion of vehicle emissions, allowing CO problems to develop and persist during hours when traffic volumes are declining from peak levels. Motor vehicles also exhibit increased CO emission rates at cool temperatures.

Motor vehicles are the primary source of CO emissions in most areas, including Placer County. Miscellaneous industrial fuel combustion and waste burning are major secondary CO sources.

Health Effects

CO is a public health concern because CO combines with hemoglobin and thereby reducing the rate at which oxygen is transported in the bloodstream. Because CO binds to hemoglobin 220–245 times more strongly than oxygen, even low concentrations of CO can significantly affect the blood oxygen concentration. Both the cardiovascular and central nervous systems can be affected when 25–40% of the hemoglobin in the bloodstream is bound to CO rather than to oxygen. State and federal ambient air quality standards for CO have been set at levels intended to keep CO from combining with more than 15% of the body's hemoglobin (U.S. Environmental Protection Agency 1978, California Air Resources Board 1982).

State and Federal Standards

State and federal CO standards have been set for both 1- and 8-hour averaging times. As shown in Table 4-1, the state 1-hour standard is 20 ppm and the federal 1-hour standard is 35 ppm. State and federal 8-hour standards are both 9 ppm. State standards represent values not to be exceeded; federal standards are values not to be exceeded more than once per year. As shown in Table 4-4, no violations of state or federal standards have occurred during the monitoring period.

Particulate Matter

PM10 emissions in Placer County are generated primarily by agricultural operations, traffic on unpaved roads, and construction and demolition. Secondary sources include motor vehicle exhaust, residential open burning, and fireplace emissions.

Health Effects

Health concerns associated with suspended particulate matter focus on particles small enough to reach the lungs when inhaled. Few particles larger than 10 microns in diameter reach the lungs. Smaller suspended particles or droplets, designated as PM10, can lodge in the lungs and contribute to respiratory problems. PM10 arises from sources such as road dust, diesel soot, combustion products, abrasion of tires and brakes, construction operations, and dust carried by windstorms. It is also formed in the atmosphere from reactions of nitrogen

Table 4-3. Summary of Ozone Monitoring Data for Placer County, 1995–2000

Monitoring Station	1995	1996	1997	1998	1999	2000
Auburn: Dewitt Avenue						
Maximum 1-hour concentration (ppm)	0.148	0.125	0.016	0.144	0.142	0.124
Days standard exceeded						
CAAQS (1-hour) > 0.09 ppm	26	22	4	15	24	22
NAAQS (1-hour) > 0.12 ppm	2	1	0	5	2	0
Colfax: City Hall						
Maximum 1-hour concentration (ppm)	0.130	0.108	0.103	0.132	0.159	0.119
Days standard exceeded						
CAAQS (1-hour) > 0.09 ppm	16	4	2	11	9	10
NAAQS (1-hour) > 0.12 ppm	1	0	0	1	1	0
Rocklin: Rocklin Road						
Maximum 1-hour concentration (ppm)	0.146	0.130	0.113	0.143	0.128	0.118
Days standard exceeded						
CAAQS (1-hour) > 0.09 ppm	25	30	9	16	17	16
NAAQS (1-hour) > 0.12 ppm	3	1	0	3	3	0
Roseville: North Sunrise Boulevard						
Maximum 1-hour concentration (ppm)	0.135	0.135	0.111	0.153	0.136	0.128
Days standard exceeded						
CAAQS (1-hour) > 0.09 ppm	18	24	7	20	14	13
NAAQS (1-hour) > 0.12 ppm	2	2	0	5	2	1

Notes: CAAQS = California ambient air quality standards
NAAQS = national ambient air quality standards
ppm = parts per million

Sources: California Air Resources Board 2001 and U.S. Environmental Protection Agency 2001.

Table 4-4. Summary of Carbon Monoxide Monitoring Data for Placer County, 1995–2000

Monitoring Station	1995	1996	1997	1998	1999	2000
Rocklin: Rocklin Road						
Maximum 8-hour concentration (ppm)	1.64	1.40	NA	NA	NA	NA
Maximum 1-hour concentration (ppm)	NA	3.10	NA	NA	NA	NA
Days standard exceeded						
CAAQS (8-hour) ≥ 9.0 ppm	0	0	NA	NA	NA	NA
NAAQS (8-hour) ≥ 9.0 ppm	0	0	NA	NA	NA	NA
CAAQS (1-hour) ≥ 20 ppm	0	0	NA	NA	NA	NA
NAAQS (1-hour) ≥ 35 ppm	0	0	NA	NA	NA	NA
Roseville: North Sunrise Boulevard						
Maximum 8-hour concentration (ppm)	2.15	2.81	2.15	2.36	2.24	2.36
Maximum 1-hour concentration (ppm)	NA	4.50	3.70	4.20	3.90	3.20
Days standard exceeded						
CAAQS (8-hour) ≥ 9.0 ppm	0	0	0	0	0	0
NAAQS (8-hour) ≥ 9.0 ppm	0	0	0	0	0	0
CAAQS (1-hour) ≥ 20 ppm	0	0	0	0	0	0
NAAQS (1-hour) ≥ 35 ppm	0	0	0	0	0	0
Tahoe City: River Road						
Maximum 8-hour concentration (ppm)	2.91	NA	NA	NA	NA	NA
Maximum 1-hour concentration (ppm)	NA	NA	NA	NA	NA	NA
Days standard exceeded						
CAAQS (8-hour) ≥ 9.0 ppm	0	NA	NA	NA	NA	NA
NAAQS (8-hour) ≥ 9.0 ppm	NA	NA	NA	NA	NA	NA
CAAQS (1-hour) ≥ 20 ppm	NA	NA	NA	NA	NA	NA
NAAQS (1-hour) ≥ 35 ppm	NA	NA	NA	NA	NA	NA

Notes: CAAQS = California ambient air quality standards.
NAAQS = national ambient air quality standards.
ppm = parts per million.
NA = not applicable.

Sources: California Air Resources Board 2001 and U.S. Environmental Protection Agency 2001.

dioxide (NO_2) and sulfur dioxide (SO_2) with ammonia. Fine particles pose a serious health hazard, either alone or in combination with other pollutants. The smallest particles inhaled will be deposited in the lungs and can cause permanent lung damage. Fine particles also can have a damaging effect on health by interfering with the body's mechanism for clearing the respiratory tract or by acting as a carrier of absorbed toxic substances.

State and Federal Standards

Both the federal and state standards for particulate matter have been revised to apply only to PM10. State and federal PM10 standards have been set for 24-hour and annual averaging times. As shown in Table 4-1, the state and federal 24-hour standards are 50 and 150 micrograms per cubic meter ($\mu g/m^3$), respectively. The state annual standard is 30 $\mu g/m^3$ as an annual geometric mean, and the federal annual PM10 standard is 50 $\mu g/m^3$ as an annual arithmetic mean. (*Geometric mean* equals the *n*th root of the product of *n* observations. *Arithmetic mean* is the sum of the total observations divided by the number of observations.) Federal and state 24-hour standards may not be exceeded more than 1 day per year, and annual standards are not to be exceeded.

As shown in Table 4-5, the project area has occasionally violated the state PM10 standard. A variety of emission sources contribute to particulate matter problems; agricultural activities, dust suspended by vehicle traffic, and aerosols formed by photochemical smog reactions are major contributors. Also, particulate matter emissions from industrial sources can be important localized emission sources.

Regulatory Setting

Existing Air Quality Management in Placer County

The Placer County Air Pollution Control District (PCAPCD) is responsible for maintaining and improving air quality throughout Placer County. Although PCAPCD has primary responsibility for air quality in Placer County, many agencies are involved in air pollution control, including EPA, ARB, and the Sacramento Area Council of Governments (SACOG). The duties of these agencies have been modified by the California Clean Air Act of 1988 (California CAA) and the federal Clean Air Act Amendments of 1990 (CAAAs).

Each law specifies deadlines for submitting air quality attainment plans, which must contain specific measures designed to achieve the state and federal ambient air quality standards.

Federal

The CAAAs give EPA additional authority to require states to reduce emissions of CO, ozone precursors, and PM10 in nonattainment areas. They set new attainment deadlines based on the severity of the problem.

EPA has delegated responsibility for many implementation and oversight tasks to ARB and, indirectly, to PCAPCD. ARB traditionally has established state air quality standards, maintained oversight authority in air quality planning, developed programs for reducing emissions from motor vehicles, developed air emission inventories, collected air quality and meteorological data, and approved state implementation plans. The responsibilities of air pollution control districts (e.g., PCAPCD) include overseeing stationary source emissions, approving permits, maintaining emissions inventories, maintaining air quality stations, overseeing agricultural burning permits, and reviewing air quality–related sections of environmental documents required by CEQA.

State

The California CAA designates air pollution control districts as lead air quality planning agencies, requires them to prepare air quality plans, and grants them authority to implement transportation control measures (TCMs). TCMs are defined in the California CAA as "any strategy to reduce trips, vehicle use, vehicle miles traveled, vehicle idling, or traffic congestion for the purpose of reducing vehicle emissions."

The California CAA focuses on attainment of the state ambient air quality standards, which, for certain pollutants and averaging periods, are more stringent than the comparable federal standards. The California CAA requires designation of attainment and nonattainment areas with respect to state ambient air quality standards. The California CAA also requires that air pollution control districts prepare an air quality attainment plan if the district violates state air quality standards for CO, SO_2, NO_2, or ozone. No locally prepared attainment plans are required for areas that violate the state PM10 standards. The California CAA requires that the state air quality standards be met as expeditiously as practicable but, unlike the federal CAA, does not set precise attainment deadlines. Instead, it establishes increasingly stringent requirements for areas that will require more time to achieve the standards.

The California CAA emphasizes the control of "indirect and area-wide sources" of air pollutant emissions. It gives local air pollution control districts explicit authority to regulate indirect sources of air pollution and to establish TCMs. The California CAA does not define indirect and area-wide sources, but Section 110 of the federal CAAAs defines an indirect source as

> a facility, building, structure, installation, real property, road, or highway which attracts, or may attract, mobile sources of pollution. Such term includes parking lots, parking garages, and other facilities subject to any measure for management of parking supply....

State Implementation Plan

PCAPCD is responsible for preparing and submitting to ARB air quality attainment plans for criteria pollutants for which the portion of Placer County

Table 4-5. Summary of PM10 Monitoring Data for Placer County, 1995–2000

Monitoring Station	1995	1996	1997	1998	1999	2000
Auburn: Dewitt Avenue						
Maximum 24-hour concentration (μg/m^3)	55	98	54	NA	NA	NA
Second highest 24-hour concentration (μg/m^3)	44	47	51	NA	NA	NA
Average geometric mean concentration (μg/m^3)	23.3	15.5	12.4	NA	NA	NA
Average arithmetic mean concentration (μg/m^3)	NA	22.5	15.4	NA	NA	NA
Days standard exceeded[a]						
CAAQS (24-hour) > 50 μg/m^3	0	6	12	NA	NA	NA
NAAQS (24-hour) > 150 μg/m^3	0	0	0	NA	NA	NA
Colfax: City Hall						
Maximum 24-hour concentration (μg/m^3)	86	60	74	NA	NA	NA
Second highest 24-hour concentration (μg/m^3)	54	50	66	NA	NA	NA
Average geometric mean concentration (μg/m^3)	26.7	17.8	14.1	NA	NA	NA
Average arithmetic mean concentration (μg/m^3)	NA	21.4	21.9	NA	NA	NA
Days standard exceeded[a]						
CAAQS (24-hour) > 50 μg/m^3	18	6	36	NA	NA	NA
NAAQS (24-hour) > 150 μg/m^3	0	0	0	NA	NA	NA
Lincoln: L Street						
Maximum 24-hour concentration (μg/m^3)	84	60	66	NA	NA	NA
Second highest 24-hour concentration (μg/m^3)	67	47	66	NA	NA	NA
Average geometric mean concentration (μg/m^3)	33.9	18.5	15.7	NA	NA	NA
Average arithmetic mean concentration (μg/m^3)	NA	23.3	21.7	NA	NA	NA
Days standard exceeded[a]						
CAAQS (24-hour) > 50 μg/m^3	18	6	24	NA	NA	NA
NAAQS (24-hour) > 150 μg/m^3	0	0	0	NA	NA	NA
Rocklin: Rocklin Road						
Maximum 24-hour concentration (μg/m^3)	55	34	43	70.0	75.0	46.0
Second highest 24-hour concentration (μg/m^3)	47	33	36	47.0	72.0	41.0
Average geometric mean concentration (μg/m^3)	20.8	16.6	19.0	16.6	21.3	19.8
Average arithmetic mean concentration (μg/m^3)	21.6	18.3	19.9	19.4	24.8	20.7
Days standard exceeded[a]						
CAAQS (24-hour) > 50 μg/m^3	3	0	0	6	24	0
NAAQS (24-hour) > 150 μg/m^3	0	0	0	0	0	0

Table 4-5. Continued

Monitoring Station	1995	1996	1997	1998	1999	2000
Roseville: North Sunrise Boulevard						
Maximum 24-hour concentration ($\mu g/m^3$)	61	39	50	67	89	58
Second highest 24-hour concentration ($\mu g/m^3$)	53	39	39	62	83	50
Average geometric mean concentration ($\mu g/m^3$)	22.8	19.2	20.8	19.4	22.5	22.1
Average arithmetic mean concentration ($\mu g/m^3$)	23.5	20.5	21.8	22.4	26.1	23.9
Days standard exceeded[1]						
CAAQS (24-hour) > 50 $\mu g/m^3$	2	0	0	18	24	6
NAAQS (24-hour) > 150 $\mu g/m^3$	0	0	0	0	0	0

Notes: CAAQS = California ambient air quality standards.
NAAQS = national ambient air quality standards.
NA = not applicable.
$\mu g/m3$ = micrograms per cubic meter.

[a] Calculated exceedances based on measurements taken every 6 days.

Sources: California Air Resources Board 2001 and U.S. Environmental Protection Agency 2001.

within the SVAB, MCAB, and Lake Tahoe Air Basin is not in attainment. ARB must review these plans and forward them, along with the plans of the other districts throughout the state (collectively called the State Implementation Plan [SIP]), to EPA Region IX for approval. EPA requires a separate compliance plan for each federally designated nonattainment pollutant.

The five air pollution control districts in the SVAB, including PCAPCD, as well as ARB and SACOG, helped to prepare the Sacramento Area Regional Ozone Attainment Plan (OAP). The OAP was prepared to fulfill the requirements of the federal CAAAs and was submitted to EPA on November 15, 1994, as part of California's SIP. PCAPCD adopted the OAP in 1994 to address ozone pollution control problems in the district and to implement strategies for reducing air pollution to attainment levels. The OAP does not address particulate matter; PM10 was excluded from planning requirements by the California CAA because of the difficulty in managing it. The OAP is still in effect. A triennial report was released in 2000 detailing the progress of the 1994 plan.

The SIP consists of adopted measures, commitments to adopt new measures, emission inventories, air quality modeling results, contingency measures, and a demonstration of emission reductions sufficient for attainment and rate-of-progress milestones. The new measures proposed in the SIP build on existing state and local air quality programs.

Based on ozone levels recorded between 1988 and 1991, the lower SVAB, including the Placer County portion, was classified by the EPA as a nonattainment area, with attainment required by 1999. However, no feasible controls could be identified that would provide the needed reductions by 1999; the earliest possible attainment date identified was 2005. The shift to 2005 required that several additional controls be implemented in Placer County. The emission-offsets requirement for new and modified sources was increased from a ratio of 1.2:1 to 1.3:1.

Failure to attain the health-based ambient air quality standards for ozone by 2005, as required by the CAA, could result in the loss of federal highway funds, increase fees for existing sources, and very stringent standards for new sources of pollution. If PCAPCD determines that ozone attainment cannot be achieved by 2005, the SIP would need to be revised to show a later attainment date, and the region's attainment status would be redesignated from *severe* nonattainment to *extreme* nonattainment. Redesignation would allow the region more time to comply with ambient air quality standards for ozone, although more stringent reductions and attainment measures would be required. If the region chooses not to prepare a new SIP, EPA would prepare a Federal Implementation Plan (FIP), and the region would have to follow the measures identified in the FIP.

[1] Under the old requirement, for any new emissions generated from a major stationary source, emission offsets must be purchased equal to 1.2 times the emissions generated. For example, if a new stationary source emits 100 tons of NO_x, it must purchase offsets of 120 tons. Under the new requirement, offsets must be purchased to 1.3 times emissions generated—130 tons of NO_x for the example given.

Local

Placer County Air Quality Conditions of Approval

Placer County has developed a list of sample conditions of approval that should be considered by all applicants (including the County itself) requesting entitlements from Placer County. The conditions include submittal of a dust control plan, minimization of open burning of wood/vegetative waste materials, and certification by EPA of all woodburning devices used in the project. This list of conditions is shown below (Placer County 2001).

- **ap1.** The applicant shall submit a dust control plan to the APCD *[PCAPCD]* no later than 45 days prior to groundbreaking. The applicant shall not break ground prior to receiving APCD approval of the dust control plan.
- **ap2.** No open burning shall occur unless the applicant demonstrates, in writing, to the APCD that alternatives to open burning have been explored and that open burning is the only feasible method of disposal. The District's issuance of a Burn Permit will be dependent upon the applicant's successful demonstration that no other feasible method of disposal exists. Any burning must be done in conformance with APCD Regulation 3 (Open Burning). The burning of construction/demolition debris is prohibited.
- **ap3.** The applicant shall ensure that the project conforms with all APCD Rules and Regulations. Contact the APCD to review any rules that may apply to specific types of projects.

PCAPCD also has developed a list of best available mitigation measures that should be considered for various projects. The list includes measures related to project design/construction, traffic flow improvements, public/private trip reduction programs, parking, ridesharing, telecommunications, alternative transportation, transit, and bicycle/pedestrian use. Appendix C lists the best available air quality mitigation measures.

Environmental Consequences

Criteria for Determining Significance under CEQA

Appendix G of the State CEQA Guidelines, Placer County thresholds, and standard professional practice were used to determine whether the proposed project would have a significant environmental effect. The proposed action may have a significant effect on air quality if it would

- violate any air quality standard or contribute to an existing or projected air quality violation;
- expose sensitive receptors to pollutants;

- increase localized CO levels at nearby intersections in violation of adopted standards;
- create objectionable odors; or
- conflict with or obstruct implementation of an applicable air quality plan.

In addition to the criteria described above, PCAPCD has specified significance thresholds to determine whether mitigation is needed for project-related impacts on air quality. Project-related emissions are considered significant if emissions would exceed 82 pounds per day (ppd) of ROG, NO_x, oxides of sulfur (SOx), or PM10 (Vintze pers. comm.). For projects that exceed these levels, project applicants must implement all feasible mitigation measures to reduce impacts to less-than-significant levels.

Methods and Assumptions for the Impact Analysis

Construction-Related Impact Assessment Methodology

Construction is a source of dust and exhaust, which can have substantial temporary impacts on local air quality (i.e., causing PM10 concentrations to exceed state air quality standards). Such emissions would result from the use of heavy equipment, as well as from land clearing, ground excavation, cut and fill operations, and roadway construction. Dust emissions can vary substantially from day to day, depending on the level of activity, the specific operations, and the prevailing weather. A major portion of dust emissions for the proposed project likely would be caused by construction traffic on temporary construction roads.

Construction emissions were estimated by using version 4.1 of the road construction model developed by the Sacramento Metropolitan Air Quality Management District (SMAQMD). The road construction model is a public-domain spreadsheet model formatted as a series of individual worksheets. The model enables users to estimate emissions using a minimum amount of project-specific information. The model estimates emissions for load hauling (on-road heavy-duty vehicle trips), worker commute trips, construction site fugitive PM10 dust, and off-road construction vehicles. Although exhaust emissions are estimated for each activity, fugitive dust estimates currently are limited to grubbing/land clearing and grading/excavation.

Operation-Related Impact Assessment Methodology

The primary operation-related pollutants that would be associated with the proposed project are CO, PM10, and ozone precursors emitted as vehicle exhaust. The effects of CO emissions were evaluated through CO dispersion modeling, as described below. The effects of PM10 and ozone precursors were evaluated through the conformity process, also described below.

CO Dispersion Modeling

Predicting the ambient air quality impacts of pollutant emissions requires an assessment of the transport, dispersion, chemical transformation, and removal processes that affect pollutants after their release from a source. Gaussian dispersion models frequently are used for such analyses. The term "Gaussian dispersion" refers to a general type of mathematical equation used to describe the horizontal and vertical distribution of pollutants downwind from an emission source.

Gaussian dispersion models assume that pollutant emissions are carried downwind in a defined plume, subject to horizontal and vertical mixing with the surrounding atmosphere. The plume spreads horizontally and vertically, so pollutant concentrations decrease as the plume travels downwind. The most mixing with the surrounding atmosphere occurs at the edge of the plume, resulting in lower pollutant concentrations outward (horizontally and vertically) from the center of the plume. This decrease in concentration outward from the center of the plume is assumed to follow a Gaussian ("normal") statistical distribution. Horizontal and vertical mixing generally occur at different rates. Because turbulent motions in the atmosphere take place on a variety of spatial and temporal scales, vertical and horizontal mixing also vary with distance downwind from the emission source.

The CALINE4 Model

The ambient air quality effects of traffic emissions were evaluated using the CALINE4 dispersion model (Benson 1989). CALINE4 is a Gaussian dispersion model specifically designed to evaluate the air quality impacts of roadway projects. Each roadway link analyzed in the model is treated as a series of short segments. Each segment is treated as a separate emission source producing a plume of pollutants that disperses downwind. Pollutant concentrations at any specific location are calculated using the total contribution from overlapping pollution plumes that originate from the series of roadway segments.

When winds are essentially parallel to a roadway link, pollution plumes from all roadway segments overlap. This overlap produces high concentrations near the roadway (near the center of the overlapping pollution plumes) and low concentrations well away from the roadway (at the edges of the overlapping pollution plumes). When winds are at an angle to the roadway link, pollution plumes from distant roadway segments make essentially no contribution to the pollution concentration observed at a given location. Under such cross-wind situations, pollutant concentrations near the roadway are lower than under parallel wind conditions (because of fewer overlapping plume contributions), whereas pollutant concentrations away from the roadway may be higher (near the center of at least some pollution plumes) than would occur with parallel winds.

The CALINE4 model employs a "mixing cell" approach to estimating pollutant concentrations over the roadway itself. The size of the mixing cell over each roadway segment is based on the width of the traffic lanes (generally 3.6 meters [12 feet] per lane) plus an additional turbulence zone on either side (generally 3

meters [10 feet] on each side). Parking lanes and roadway shoulders are not counted as traffic lanes. The height of the mixing cell is calculated by the model.

Pollutants emitted along a roadway link are treated as being well mixed within the mixing cell volume because of mechanical turbulence caused by moving vehicles and convective mixing resulting from the temperatures of vehicle exhaust gases. Pollutant concentrations downwind from the mixing cell are calculated using horizontal and vertical dispersion rates that are a function of various meteorological and ground surface conditions.

Modeling Procedures

Roadway and Traffic Conditions. Traffic volumes and operating conditions used in the modeling were obtained from the traffic analysis prepared for the proposed project. CO modeling was conducted for the study intersections (i.e., the intersections of Douglas Boulevard, Eureka Road, and Oak Hill Drive with Auburn-Folsom Road) using p.m. peak-hour traffic volumes.

CO modeling was performed for the following scenario:

- Cumulative with-project condition—2020

The 2005 construction year "with-project" scenario was not modeled because all the intersections and links are at LOS C or better. The CO protocol calls for CO modeling at intersections and links that operate at LOS D or worse.

Vehicle Emission Rates. Vehicle emission rates were based on ARB's EMFAC7F (version 1.1) emission rate program. A cold-start percentage of 10% and a hot-start percentage of 50% were assumed for the analysis. Free-flow traffic speeds were adjusted to reflect congested speeds using methods in the *Highway Capacity Manual* (Transportation Research Board 2000).

Receptor Locations. CO concentrations were estimated for four receptor locations at intersections with LOS D or worse. The receptors were assumed to be located at 30 meters (100 feet) from the center of the roadway. Receptor heights were set at 1.8 meters (5.9 feet).

Meteorological Conditions. Meteorological inputs to the CALINE4 model were determined using methods recommended in Caltrans' CO modeling protocol (Garza et al. 1997). The meteorological conditions used in the modeling represent a calm winter period. Worst-case wind angles were modeled to determine a worst-case pollutant concentration at each receptor. The meteorological inputs include 0.5-meter-per-second (1.6-foot-per-second) wind speed, ground-level temperature inversion (atmospheric stability class G), wind direction standard deviation equal to 5°, and a mixing height of 1,000 meters (3,281 feet).

Background Concentrations and 8-Hour Values. Background concentrations of 3.4 parts per million (ppm) and 2.2 ppm were added to the modeled 1-hour and 8-hour values, respectively, to account for sources of CO not included in the modeling. Eight-hour modeled values were calculated from the 1-hour modeled

values using a persistence factor of 0.7. Background concentration data represented an average of the past 3 years of monitoring data, taken from the closest monitoring station (in Roseville).

Transportation Conformity

The proposed project is located in an area designated as nonattainment for the federal ozone standards. Because ozone precursors are regional pollutants, the proposed project must be evaluated under the transportation conformity requirements. The conformity analysis is performed on the Regional Transportation Plan (RTP), which includes the proposed project. An affirmative regional conformity determination must be made before the proposed project can proceed. Such a determination is not required if the proposed project is described in the approved RTP and Transportation Improvement Program (TIP), and if the project has not been altered in design concept or scope from that in the RTP. A subsequent conformity determination is not required.

Implementation of the proposed project also would result in emission of CO from motor vehicles. Because CO is a localized pollutant, microscale air quality modeling must demonstrate that the proposed project would not cause or contribute to violations of the 1-hour or 8-hour CO national ambient air quality standards (NAAQS).

Impacts

Construction-Related Impacts

Impact 4.1 Temporary Increase in ROG, NO_x, and PM10 Emissions During Grading and Construction Activities

The proposed project involves construction of two new travel lanes, bike lanes, and a median. Typically, there are four activities associated with road construction: 1) grubbing and land clearing; 2) grading and excavation; 3) constructing drainage, utilities, and sub-grade features; and 4) paving. The road construction model was used to estimate construction-related ROG, NO_x, and PM10 emissions associated with these activities. The results are shown in Table 4-6.

Table 4-6. Construction Emission Estimates

	Construction Emission Estimates (Pounds per Day)		
Construction Phase	ROG	NO_x	PM10
Grubbing and land clearing	15	133	15
Grading and excavation	15	129	15
Drainage, utilities, and sub-grade features	19	165	8
Paving	13	115	5
Maximum	19	165	15
Significance threshold	82	82	82
Exceed threshold?	No	Yes	No

Note: PM10 estimates assume 50% control of fugitive dust from watering and associated dust control measures.

Source: Road Construction Model Version 4.1

The predicted NO_x emissions would exceed the threshold of 82 pounds per day set by PCAPCD.

This impact is common to all build alternatives and is considered significant. Implementation of Mitigation Measure P4.1 would reduce the effect of NO_x emissions, but would not reduce this impact to a less-than-significant level. Therefore, this impact is considered significant and unavoidable.

Operation-Related Impacts

Impact 4.2 Increase in Local CO Concentrations

CO concentrations were estimated for the three intersections (i.e., the intersections of Douglas Boulevard, Eureka Road, and Oak Hill Drive with Auburn-Folsom Road) that are projected to operate at LOS D or worse in 2020 under cumulative with-project conditions. Table 4-7 summarizes the CO modeling results. No violations of either the 1-hour or the 8-hour state CO standard would occur under the 2020 with-project scenario. On the basis of assumptions about improvements in vehicle emission technology and the turnover in the vehicle fleet, estimated future CO concentrations for the project condition would be well below the thresholds established for the state and federal ambient CO standards.

This impact is common to all build alternatives and is considered less than significant. No mitigation is required.

Impact 4.3 Consistency with Regional Transportation Plans

The proposed project is included in the 2025 Metropolitan Transportation Plan (MTP) and the 2003/05 Metropolitan Transportation Improvement Program (MTIP). CO modeling was conducted to evaluate whether the project would cause or contribute to local violations of the state or federal ambient air quality standards at sensitive receptors in the project vicinity. As described above, the proposed project would not cause or contribute to violations of the CO ambient air quality standards. Consequently, the project would be a conforming transportation project.

This impact is common to all build alternatives and is considered less than significant. No mitigation is required.

Mitigation Measures

This section details the mitigation measures identified for the project alternatives. Mitigation measures are identified as either of the following.

- *Proposed mitigation measures* are measures that the Placer County DPW, as project proponent, is either proposing as part of the project design or has agreed to implement.
- *Recommended mitigation measures* are measures that are identified in this environmental document but that the Placer County DPW has not chosen to implement, and which may be required by the Placer County Board of Supervisors if the project is approved.

Proposed Mitigation Measures

Mitigation Measure P4.1: Implement Best Available Mitigation Measures for Construction Activities

1. Construction equipment exhaust emissions shall not exceed PCAPCD Rule 202 Visible Emission limitations.
2. Placer County DPW shall submit to PCAPCD, and receive approval of, a Construction Emission/Dust Control Plan before groundbreaking.
3. The prime contractor shall submit to PCAPCD a comprehensive inventory (listing make, model, year, emission rating) of all the heavy-duty off-road equipment (50 horsepower [hp] or greater) that will be used an aggregate of 40 or more hours for the project. PCAPCD personnel, with assistance from ARB, shall conduct initial Visible Emission Evaluations (VEEs) of all heavy-duty equipment on the inventory list.
4. Placer County DPW shall establish an enforcement plan to evaluate, on a weekly basis, project-related on- and-off-road heavy-duty vehicle engine emission opacities, using standards defined in 13 CCR 2180–2194. An

Table 4-7. CO Modeling Results

Intersection	Receptor Location	CO Concentrations (ppm) Cumulative with-Project Conditions (2020) 1 hour	8 hour
Auburn-Folsom Road and Douglas Boulevard	NW Corner	4.6	3.0
	NE Corner	4.4	2.9
	SE Corner	4.6	3.0
	SW Corner	4.3	2.8
Auburn-Folsom Road and Eureka Road	NW Corner	4.5	3.0
	NE Corner	4.3	2.8
	SE Corner	4.4	2.9
	SW Corner	4.4	2.9
Auburn-Folsom Road and Oak Hill Drive	NW Corner	4.2	2.8
	NE Corner	4.2	2.8
	SE Corner	4.1	2.7
	SW Corner	4.2	2.8
Ambient Standards		20*	9.0

Notes:
Background concentrations of 3.4 ppm and 2.2 ppm were added to the 1-hour and 8-hour results, respectively.
*The federal 1-hour standard is 35 ppm.

Environmental Coordinator, ARB-certified to perform VEEs, shall routinely evaluate project-related off-road and heavy-duty on-road equipment emissions for compliance with this requirement. Operators of vehicles and equipment found to exceed opacity limits shall be notified, and the equipment must be repaired within 72 hours of notification.

5. Construction contracts shall stipulate that at least 20% of the heavy-duty off-road equipment included in the inventory be powered by ARB-certified off-road engines, as follows:

175 hp–750 hp	1996 and newer engines
100 hp–174 hp	1997 and newer engines
50 hp–99 hp	1998 and newer engines

In lieu of or in addition to this requirement, Placer County DPW can use other measures to reduce PM10 and NO_x emissions from its project through the use of emulsified diesel fuel and/or particulate matter traps. PCAPCD shall be contacted to discuss this measure.

6. Placer County DPW shall conduct no open burning of removed vegetation during construction. Vegetative material shall be chipped or delivered to waste-to-energy facilities.
7. Placer County DPW shall ensure that earthmoving construction equipment is cleaned with water once per day.
8. Placer County DPW shall ensure that soil binders are spread on unpaved roads and on employee/equipment parking areas.
9. Placer County DPW shall ensure that approved chemical soil stabilizers are applied, according to manufacturers' specifications, to all inactive construction areas (previously graded areas that remain inactive for 96 hours).
10. Placer County DPW shall ensure that ground cover is reestablished on the construction site as soon as possible through seeding and watering.

Recommended Mitigation Measures

There are no recommended air quality mitigation measures.

Table 4-8. Air Quality Impact Summary Table

	Alt. 1: Widening to the West	Alt. 2: Widening to the East	Alt. 3: Widening Equally on Both Sides	Alt. 4: County DPW–Preferred
AIR QUALITY				
Impact 4.1 Temporary Increase in ROG, NOx, and PM10 Emissions During Grading and Construction Activities				
Quantitative Comparison	NA	NA	NA	NA
Significance Before Mitigation	S	S	S	S
Mitigation Measures	P4.1: Implement Best Available Mitigation Measures for Construction Activities	P4.1: Implement Best Available Mitigation Measures for Construction Activities	P4.1: Implement Best Available Mitigation Measures for Construction Activities	P4.1: Implement Best Available Mitigation Measures for Construction Activities
Significance After Mitigation	LS	LS	LS	LS
Impact 4.2 Increase in Local CO Concentrations				
Quantitative Comparison	NA	NA	NA	NA
Significance Before Mitigation	LS	LS	LS	LS
Mitigation Measures	None required	None required	None required	None required
Significance After Mitigation	LS	LS	LS	LS

Table 4-8. Air Quality Impact Summary Table

	Alt. 1: Widening to the West	Alt. 2: Widening to the East	Alt. 3: Widening Equally on Both Sides	Alt. 4: County DPW–Preferred
Impact 4.3 Consistency with Regional Transportation Plans				
Quantitative Comparison	NA	NA	NA	NA
Significance Before Mitigation	LS	LS	LS	LS
Mitigation Measures	None required	None required	None required	None required
Significance After Mitigation	LS	LS	LS	LS

Key:

SU = Significant and unavoidable.

S = Significant.

PS = Potentially significant.

LS = Less than significant.

NI = No impact.

NA = Not applicable.

Chapter 5

Hydrology and Water Quality

This chapter describes water resources in project region, regulations and policies pertaining to hydrology and water quality, and the proposed project's potential impacts on hydrology and water quality.

Affected Environment

Environmental Setting

Climate

The north Pacific high-pressure system dominates the project region's large-scale meteorology and produces northerly winds along the west coast of the United States during most of the year. The average annual precipitation in the project area is 58 centimeters (23 inches) (California Data Exchange Center 2002), but precipitation in summer is infrequent; most precipitation is associated with rainstorms that occur from October through April. Rainstorms originate over the Pacific Ocean and carry considerable moisture. In the project area, such storms usually last 1 to 4 days. Cloudbursts occurring within rainstorms are often the cause of flooding in watersheds of a few hundred square miles or less and below 1,220 meters (4,000 feet) above sea level (Placer County Flood Control and Water Conservation District 1994). A cloudburst is a severe thunderstorm with very intense, short-lived rainfall, often accompanied by hail, strong winds, or tornadoes. Cloudbursts are most likely to occur inland at lower elevations, in winter or early spring, and in association with subtropical moisture sources. In western Placer County, cloudbursts usually cover an area smaller than 777 square kilometers (300 square miles) and last less than 2 hours (Placer County Flood Control and Water Conservation District 1994).

Surface Water

The project area is located in the approximately 202-square-kilometer (78-square-mile) Dry Creek watershed. Topography in the area is relatively gentle (less than 2% slope). The soils underlying the project area can be assigned hydrologic classifications based on the U.S. Soil Conservation Service's (SCS's)

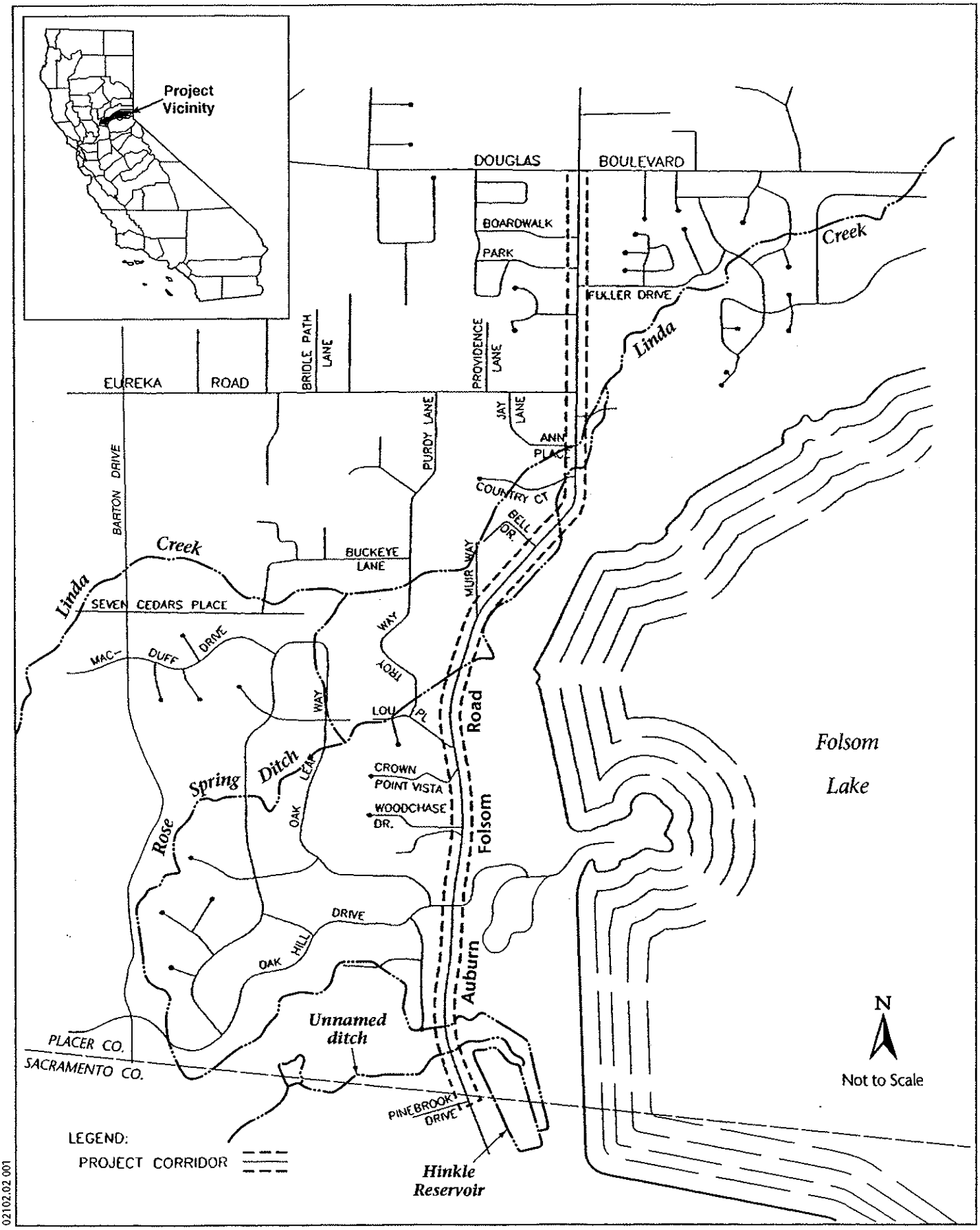
Technical Release 55 methodology (1986). Soils are grouped into one of the following categories based on infiltration rates.

- **Group A: Low runoff potential.** These soils have high infiltration rates even when thoroughly wetted and consist chiefly of deep, well- to excessively drained sands or gravels.
- **Group B: Moderately low runoff potential.** These soils have moderate infiltration rates when thoroughly wetted and consist chiefly of moderately deep to deep, moderately well- to well-drained soils with fine to moderately coarse textures. These soils have a moderate rate of water transmission.
- **Group C: Moderately high runoff potential.** These soils have slow infiltration rates when thoroughly wetted and consist chiefly of soils with a layer that impedes downward movement of water, or soils with moderately fine to fine texture. These soils have a slow rate of water transmission.
- **Group D: High runoff potential.** These soils have very slow infiltration rates when thoroughly wetted and consist chiefly of clay soils with a high potential for swelling, soils with a permanent high-water table, soils with a claypan or clay layer at or near the surface, and shallow soils over nearly impervious material. These soils have a very slow rate of water transmission.

Approximately 90% of the project area is underlain by soils that can be classified as hydrologic soil group C. The remaining 10% of the project area is underlain by soils that can be classified as hydrologic soil group D.

Linda Creek is a major tributary of Dry Creek and is crossed by the project corridor approximately 61 meters (200 feet) south of the Eureka Road/Auburn-Folsom Road intersection (Figure 2-2). This crossing was studied by the Placer County Flood Control and Water Conservation District (PCFCWCD) and the Sacramento County Water Agency (SCWA) in the Dry Creek Watershed Control Plan (Plan) (Placer County Flood Control and Water Conservation District and Sacramento County Water Agency 1992). The existing Linda Creek crossing consists of a 22-meter-long (72-foot-long), 1.3- by 1.8-meter (4.3- by 6-foot) corrugated metal arch culvert with approximately 0.28% slope. The project corridor also crosses Rose Spring Ditch and an unnamed ditch, both associated with Hinkle Reservoir (Figure 5-1).

Watershed models developed for the Plan used aerial photography from 1989. Future watershed conditions were determined using land use estimates for full buildout of current general and specific plans. Based on topography, soils, culvert size, channel configuration, and land use information, the following flows were calculated as part of the Plan (Table 5-1).



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Jones & Stokes

Figure 5-1
Water Resources in the Project Area

Table 5-1. 1989 and Future (Buildout) Flows at Linda Creek

Current Capacity of Culvert (cfs)	Flows (cfs)			
	100-Year-Flood (1989 Data)	100-Year-Flood (Future)	25-Year-Flood (1989 Data)	25-Year-Flood (Future)
180	169	330	75	197

cfs = cubic feet per second.

Note: The flows listed in Table 5-1 are overtopping flow rates, not total peak flow rates at the existing culvert. Per Table 2-7 of the 1992 Dry Creek Watershed Flood Control Plan, PCFCWCD recommends the following total peak flow rates for Linda Creek at Auburn-Folsom Road: 25-year (1989) = 255 cfs; 25-year (future) = 377 cfs; 100-year (1989) = 349 cfs; 100-year (future) = 510 cfs.

As shown in the Table 5-1, the predicted 25-year and 100-year floodflows at the Linda Creek culvert would exceed the capacity of the culvert, although the flows during 1989 did not. The increased flows would result from development of the region, which will increase runoff in waterways.

At the south end of the project area, the road also crosses an unnamed ditch that feeds into Baldwin Reservoir.

Groundwater

The Sierra Nevada foothills are composed of metamorphic rock heavily intruded with granitic magmas that have limited water-bearing capacity, although some fresh water may be found in fractures and joints. Most groundwater occurs in quartz veins that are found along moderately dipping shear zones and major joints.

Recent stream deposits and older terrace deposits are more permeable than fractured bedrock but generally are too small and isolated to provide a significant regional groundwater supply. These unconsolidated deposits are shallow veneers over bedrock and are susceptible to surface contamination and interrupted yield during drought years.

Regulatory Setting

Federal

Clean Water Act

There are several sections of the Clean Water Act that regulate impacts on waters of the United States. Section 101 specifies the objectives of the act, which are implemented largely through Title III ("Standards and Enforcement") and

Section 301 ("Prohibitions"). The discharge of dredged or fill material into waters of the United States is subject to permitting specified under Title IV ("Permits and Licenses") of the act and specifically under Section 404 ("Discharges of Dredge or Fill Material"). Section 401 ("Certification") specifies additional requirements for permit review, particularly at the state level.

Placement of fill materials into waters of the United States is regulated by Section 404 of the Clean Water Act, which is administered by the U.S. Army Corps of Engineers (Corps). Section 401 requires that an applicant pursuing a federal permit (under Section 404) to conduct any activity that may result in a discharge of a pollutant obtain a water quality certification or waiver. Water quality certifications are issued by Regional Water Quality Control Boards (RWQCBs) in California. Under the Clean Water Act, the RWQCB must issue or waive Section 401 water quality certification for the project to be permitted under Section 404. Water quality certification requires the evaluation of water quality considerations associated with dredging or placing fill materials into waters of the United States.

The 1987 amendments to the Clean Water Act created a new section of the Clean Water Act devoted to stormwater permitting (Section 402[p]). The U.S. Environmental Protection Agency (EPA) has granted the State of California primacy in administering and enforcing the provisions of both the Clean Water Act and the National Pollutant Discharge Elimination System (NPDES) permit program. The NPDES program was established by 1972 amendments to the Federal Water Pollution Control Act to control discharges of pollutants from point sources. NPDES is the primary federal program that regulates both point source and nonpoint source discharges to waters of the United States. (*Point sources* are discrete origin points for pollutants, such as an outfall or factory, in contrast to *nonpoint sources* such as agricultural runoff.)

The State of California adopts water quality standards to protect beneficial uses of state waters as required by Section 303 of the Clean Water Act and the Porter-Cologne Water Quality Control Act of 1969 (Porter-Cologne Act). Section 303(d) of the Clean Water Act established the Total Maximum Daily Load (TMDL) process to guide the application of state water quality standards (see discussion of state water quality standards below). To identify candidate bodies of water for TMDL analysis, a list of water quality–limited streams was generated. These streams are impaired by the presence of pollutants, including sediment, and are more sensitive to disturbance. According to the most current 303d list (1998), Linda Creek is not considered water-quality limited.

Federal Flood Insurance Program

Congress, alarmed by increasing costs of disaster relief, passed the National Flood Insurance Act of 1968 and the Flood Disaster Protection Act of 1973. The intent of these acts is to reduce the need for large publicly funded flood control structures and disaster relief by restricting development on floodplains.

The Federal Emergency Management Agency (FEMA) administers the National Flood Insurance Program (NFIP) to provide subsidized flood insurance to communities that comply with FEMA regulations limiting development in floodplains. FEMA issues Flood Insurance Rate Maps (FIRMs) for communities participating in the NFIP. These maps delineate flood hazard zones in the community. FIRMs are available for the portions of Placer County in the Linda Creek watershed. According to the most recent FIRM (Map Number 06061C0483 G, Effective Date: November 21, 2001), the project is not located within the 100-year floodplain of Linda Creek or any other body of water.

Executive Order 11988

Executive Order 11988 (Floodplain Management) addresses floodplain issues related to public safety, conservation, and economics. It generally requires federal agencies constructing, permitting, or funding projects in floodplains to

- avoid incompatible floodplain development,
- be consistent with the standards and criteria of the NFIP, and
- restore and preserve the natural and beneficial floodplain values.

State

The Porter-Cologne Water Quality Control Act

The Porter-Cologne Act established the State Water Resources Control Board (SWRCB) and divided the state into nine regional basins, each with an RWQCB. The SWRCB is the primary state agency responsible for protecting the quality of the state's surface water and groundwater supplies.

The Porter-Cologne Act authorizes the SWRCB to draft state policies regarding water quality and issue Waste Discharge Requirements (WDRs) for discharges to state waters. The act requires the SWRCB or the RWQCB to adopt water quality control plans (Basin Plans) for the protection of water quality. A water quality control plan must

- identify beneficial uses of water to be protected,
- establish water quality objectives for the reasonable protection of the beneficial uses, and
- establish a program of implementation for achieving the water quality objectives.

The Basin Plans also provide the technical basis for determining waste discharge requirements, taking enforcement actions, and evaluating clean water grant proposals. Basin Plans are updated and reviewed every 3 years. The Central Valley RWQCB has jurisdiction over the project area.

Permits issued to control pollution (i.e., NPDES permits) must implement Basin Plan requirements (i.e., water quality standards) that take into consideration beneficial uses to be protected.

Local

Placer County General Plan

The following policies from the Placer County General Plan are applicable to this project.

Policy 4.E.1. The County shall encourage the use of natural stormwater drainage systems to preserve and enhance natural features.

Policy 4.E.4. The County shall ensure that new storm drainage systems are designed in conformance with the Placer County Flood Control and Water Conservation District's Stormwater Management Manual and the County's Development Manual.

Policy 4.E.5. The County shall continue to implement and enforce its Grading Ordinance and Flood Damage Prevention Ordinance.

Policy 4.E.6. The County shall continue to support the programs and policies of the watershed flood control plans developed by the Flood Control and Water Conservation District.

Policy 4.E.7. The County shall prohibit the use of underground storm drain systems in rural and agricultural areas, unless no other feasible alternatives are available for conveyance of stormwater from new development or when necessary to mitigate flood hazards.

Policy 4.E.10. The County shall strive to improve the quality of runoff from urban and suburban development through use of appropriate and feasible mitigation measures including, but not limited to, artificial wetlands, grassy swales, infiltration/sedimentation basins, riparian setbacks, oil/grit separators, and other best management practices.

Policy 4.E.11. The County shall require new development to adequately mitigate increases in stormwater peak flows and/or volume. Mitigation measures should take into consideration impacts on adjoining lands in the unincorporated area and on properties in jurisdictions within and immediately adjacent to Placer County.

Policy 4.E.12. The County shall encourage project designs that minimize drainage concentrations and impervious coverage and maintain, to the extent feasible, natural site drainage conditions.

Policy 4.E.13. The County shall require that new development conforms with the applicable programs, policies, recommendations, and plans of the Placer County Flood Control and Water Conservation District.

Policy 4.E.14. The County shall require projects that have significant impacts on the quantity and quality of surface water runoff to allocate land as necessary for the purpose of detaining post-project flows and/or for the incorporation of mitigation measures for water quality impacts related to urban runoff.

Policy 4.E.15. The County shall identify and coordinate mitigation measures with responsible agencies for the control of storm sewers, monitoring of discharges, and implementation of measures to control pollutant loads in urban storm water runoff (e.g., California Regional Water Quality Control Board, Placer County Division of Environmental Health, Placer County Department of Public Works, Placer County Flood Control and Water Conservation District).

Policy 4.F.1. The County shall require that arterial roadways and expressways, residences, commercial and industrial uses and emergency facilities be protected, at a minimum, from a 100-year storm event.

Policy 4F.5. The County shall attempt to maintain natural conditions within the 100-year floodplain of all rivers and streams except under the following circumstances: 1) Where work is required to manage and maintain the stream's drainage characteristics and where such work is done in accordance with the Placer County Flood Damage Prevention Ordinance, California Department of Fish and Game regulations, and Clean Water Act provisions administered by the U.S. Army Corps of Engineers; or 2) When facilities for the treatment of urban runoff can be located in the floodplain, provided that there is no destruction of riparian vegetation.

Policy 4.F.10. The County shall preserve or enhance the aesthetic qualities of natural drainage courses in their natural or improved state compatible with flood control requirements and economic, environmental, and ecological factors.

Policy 4.F.13. The County shall continue to implement and enforce its Grading Ordinance and Flood Damage Prevention Ordinance.

Policy 4.F.14. The County shall ensure that new storm drainage systems are designed in conformance with the Placer County Flood Control and Water Conservation District's Stormwater Management Manual and the County's Land Development Manual.

Placer County Storm Water Manual

The following policies contained in the Placer County Storm Water Manual are applicable to the proposed project.

Policy 1. Storm drainage planning and design in western Placer County shall adhere to the criteria presented in this manual. Governmental agencies and

engineers shall utilize the manual in the planning of new facilities and in their reviews of proposed works by developers, private parties, and other governmental agencies, including the California Department of Transportation, other elements of the State Government and Federal Government. However, none of the criteria or guidelines is intended to substitute for the sound application of fundamental engineering or scientific principles or to conflict with stated goals and policies.

Policy 3. The 100-year flood shall be the criterion for measures intended to minimize property damage, injury, and loss of life.

Policy 5. Channel modifications which create problems downstream shall be avoided. Potential problems include erosion, downstream sediment deposition, increase of runoff peaks, and debris transport.

Policy 15. Natural drainageways shall be used for storm runoff whenever possible. The environmental value of natural channels is clear. Natural channels are also valuable in controlling storm runoff because vegetation and irregular sections and alignments of natural channels dissipate energy, thereby slowing the runoff. Furthermore, the floodplain typically provides temporary storage of floodwaters which attenuates flood peaks as they pass through the channel reach.

Granite Bay Community Plan

The following policies from the Granite Bay Community Plan are applicable to the proposed project.

Policy 15. Retain in their natural condition all stream influence areas, including floodplains and riparian vegetation areas, while allowing for limited stream crossings for public roads, trails, and utilities.

Policy 26. Review proposed projects for their potential adverse affect on water quality.

Policy 27. Encourage application of measures to mitigate erosion and water pollution from earth disturbing activities such as land development and road construction.

Policy 28. Control of fugitive dust at construction sites by the use of water and other reasonable dust controls shall be required.

Policy 33. The standards of the Placer County Grading Ordinance and Resources section of the Granite Bay Community Plan shall be implemented for all projects in the Granite Bay area.

Policy 36. Grading activities shall be prohibited during the rainy season.

Environmental Consequences

Criteria for Determining Significance under CEQA

Appendix G of the State CEQA Guidelines and standard professional practice were used to determine whether the proposed project would have a significant environmental effect. The proposed project would have a significant effect on hydrology and water quality if it would

- violate any water quality standards or waste discharge requirements, or otherwise substantially degrade water quality;
- cause substantial flooding, erosion, or siltation; or
- substantially interfere with groundwater recharge.

Methods and Assumptions for the Impact Analysis

This section is based on information provided in the following references:

- the preliminary plans for the proposed project;
- the Dry Creek Watershed Flood Control Plan (Plan); and
- the Hydraulic Engineering Center's (HEC's) River Analysis System (RAS) program files, developed by the Corps.

Additional information can be found in Appendix K.

It is assumed that the proposed project would not result in an increase in the flows calculated for the Plan.

Impacts

Construction-Related Impacts

Impact 5.1 Temporary Degradation of Surface Water Quality During Construction

The severity of construction-related water quality impacts is dependent on soil erosion potential; construction practices; the frequency, magnitude, and duration of precipitation events; and proximity to stream channels.

Project construction activities would expose disturbed and loosened soils to erosion from rainfall, runoff, and wind. Most natural erosion occurs at slow rates; however, the rate increases when the land is cleared or altered and left disturbed. Construction activities remove the protective cover of vegetation and

natural soil resistance to rainfall impact erosion. Sheet erosion occurs when slope length and runoff velocity increase on disturbed areas. As runoff accumulates, it concentrates into rivulets that cut grooves (rills) into the soil surface. If the flow is sufficient, these rills may develop into gullies. Excessive stream and channel erosion may occur if runoff volumes and rates increase as a result of construction activities.

Sedimentation is the settling out of soil particles transported by water. Sedimentation occurs when the velocity of water in which soils particles are suspended is slowed sufficiently to allow the particles to settle out. Larger particles, such as gravel and sand, settle out more rapidly than fine particles, such as silt and clay. Sediment is considered a pollutant by the RWQCB, and sediment also transports adsorbed pollutants, such as nutrients, hydrocarbons, and metals.

Excessive sediment in waterways can cause increased turbidity and reduced light penetration, resulting in reduction of prey capture for sight-feeding predators, reduction in light available for photosynthesis, clogging of gills and filter mechanisms of fish and aquatic invertebrates, reduction of spawning and juvenile fish survival, smothering of bottom-dwelling organisms, changes in substrate composition, and reduction of aesthetic values. Also, concentrations of nutrients and other pollutants (such as metals and certain pesticides) associated with sediment particles increase. Although these effects usually are short-term and greatly diminish after revegetation, sediment and sediment-borne pollutants may be remobilized under suitable hydrologic and hydraulic conditions.

Although sediment from erosion is the pollutant most frequently associated with construction activity, other pollutants of concern include toxic chemicals and miscellaneous wastes. A typical construction site uses many chemicals or compounds that can be hazardous to aquatic life, should it enter a waterway (i.e., Linda Creek). Gasoline, oils, grease, solvents, lubricants, and other petroleum-based products are used commonly in construction activities. Many petroleum products contain a variety of toxic compounds and impurities and tend to form oily films on the water surface, altering oxygen diffusion rates. Concrete, soap, trash, and sanitary wastes are other common sources of potentially harmful materials.

The proximity of construction activities to watercourses increases the potential for spilled toxic substance to enter the water. Water used to wash equipment and tools, and other waste dumped or spilled on the construction site, can easily lead to seepage of pollutants into watercourses. Accidental spillage of construction chemicals into a watercourse also could occur.

The impact of toxic construction-related materials on water quality is largely determined by the duration and time of activities. Construction conducted in the dry season generally causes less soil and channel erosion and runoff of toxic chemicals into streams. However, low summer flows in streams are less able to dilute pollutants.

Potential construction-related water quality effects on Linda Creek and the Baldwin Reservoir canal are common to all build alternatives and are considered significant. Implementation of Mitigation Measure P5.1 would reduce this impact to a less-than-significant level.

Operation-Related Impacts

Impact 5.2 Change in Soil Absorption Rates, Drainage Patterns, and the Rate and Amount of Runoff

The proposed project would cover additional natural ground surface, resulting in decreased permeable area. This decrease would contribute to decreased absorption rates and increased volumes and rates of runoff. As described under "Affected Environment," the culvert at Linda Creek would not convey the 25-year and 100-year floodflow under full buildout conditions. Placer County General Plan Policy 4.F.1 states that the County shall require that arterial roadways and expressways be protected, at a minimum, from a 100-year storm event.

In summary, increased runoff resulting from the project could exacerbate the flooding problems in the area. This impact is common to all build alternatives and is considered significant. Implementation of Mitigation Measure P5.2 would reduce this impact to a less-than-significant level.

Impact 5.3 Postconstruction Degradation of Surface Water Quality

The proposed project would accommodate more vehicle traffic, resulting in increased accumulation of pollutants, such as hydrocarbons and trace metals, on impervious surfaces (roads and shoulder areas). Delivered to waterways by local runoff, these pollutants would have the potential to affect water quality and aquatic life.

This impact is common to all build alternatives and is considered significant. Implementation of Mitigation Measure P5.3 would reduce this impact to a less-than-significant level.

Mitigation Measures

This section details the mitigation measures identified for the project alternatives. Mitigation measures are identified as either of the following.

- *Proposed mitigation measures* are measures that the Placer County DPW, as project proponent, is either proposing as part of the project design or has agreed to implement.

- *Recommended mitigation measures* are measures that are identified in this environmental document but that the Placer County DPW has not chosen to implement, and which may be required by the Placer County Board of Supervisors if the project is approved.

Proposed Mitigation Measures

Mitigation Measure P5.1: Obtain a Section 402 NPDES Permit and Prepare an Erosion and Sediment Control Plan

As required by the NPDES General Permit for Discharges of Storm Water Associated with Construction Activities, Placer County DPW shall prepare an erosion and sediment control plan. The plan shall be prepared and approved before construction activities begin. The following measures shall be addressed in the plan.

1. All graded areas shall be covered with protective materials, such as mulch, or reseeded with adaptive plant species. The plan shall include details regarding seed material, fertilizer, and mulching.
2. Protocols for the handling of construction and maintenance materials, such as sanitary wastes and petroleum products, shall be developed to minimize the chance of spill and to provide prompt corrective action should spill occur.
3. All graded areas and soil piles shall be mounded to minimize erosion potential.
4. Drainage outfalls shall be designed and positioned to avoid erosion. Energy dissipators shall be installed where necessary.
5. Erosion control measures shall include best management practices (BMPs) to minimize water quality impacts; BMPs include filter berm, sandbag, or straw-bale barriers; siltation retention fences; vegetated buffer strips; vegetated swales; and spill containment provisions.
6. Temporary sediment catchment basins shall be constructed where necessary to prevent sediment from being transported to permanent detention basins and drainages. The locations and size of the temporary basins shall be shown in the erosion and sediment control plan.
7. Grading shall not be permitted after October 15 or before May 1. Grading may be permitted outside of these dates if the Director of DPW determines that such work can be completed before the onset of weather conditions that would prevent the work from being adequately winterized or completed.
8. Revegetation shall begin when the graded area has attained finished grade, but not later than October 1 (to ensure germination by October 30).

Mitigation Measure P5.2: Prepare a Drainage Report

Placer County DPW shall prepare a drainage report in conformance with the requirements of Section 5 of the Land Development Manual (LDM) and the Placer County Storm Water Management Manual that are in effect at the time of submittal. The drainage report shall be submitted to the DPW for review and

approval. The report shall be prepared by a Registered Civil Engineer and shall, at a minimum, include a written text addressing existing conditions, the effects of the improvements, all appropriate calculations, a watershed map, increases in downstream flows, and proposed onsite and offsite improvements and drainage easements to accommodate flows from the project. The report shall address storm drainage during construction and thereafter, and shall propose BMPs to reduce erosion and water quality degradation.

The existing culvert at Linda Creek shall be evaluated in the drainage report for condition and capacity and shall be upgraded, replaced, or mitigated as specified by DPW. All stormwater drainage facilities shall be designed in accordance with the requirements of the County Storm Water Management Manual that are in effect at the time of submittal, and to the satisfaction of DPW. These facilities shall be constructed with project improvements and easements provided, as required by DPW. Maintenance of these facilities shall be the responsibility of Placer County.

PCFCWCD recommends using a minimum design peak flow rate of 510 cfs for the sizing of any proposed culverts at Auburn-Folsom Road. It is PCFCWCD's opinion that increasing the size of the existing culvert to prevent overtopping of the roadway during 100-yeaer storm events would be beneficial to the area.

The 1992 Dry Creek Watershed Flood Control Plan based its bridge/culvert replacement recommendations on passing the 100-year peak flow with no freeboard. Based on this, PCFCWCD would accept a culvert design that passes the future 100-year peak flow rate of 510 cfs with minimal freeboard below the proposed roadway.

The drainage report will analyze the pre- and postdevelopment water surface elevations for 2-, 10-, 25-, and 100-year storm events for future culvert proposals.

Mitigation Measure P5.3: Prepare a Postconstruction Storm Water Pollution Prevention Plan

Placer County DPW shall prepare a Storm Water Pollution Prevention Plan (SWPPP). The plan must include BMPs. Proposed BMPs are listed below.

1. Vegetate swales to minimize and decelerate flows and collect pollutants and suspended sediments.
2. Establish and maintain vegetation in swales and drainageways to achieve an optimal balance of conveyance and water quality protection characteristics.
3. Install velocity dissipators, rip-rap, and/or other appropriate devices to slow runoff, promote deposition of waterborne particles, and reduce the erosive potential of storm flows

Recommended Mitigation Measures

There are no recommended hydrology mitigation measures.

Table 5-2. Hydrology and Water Quality Impact Summary Table

	Alt. 1: Widening to the West	Alt. 2: Widening to the East	Alt. 3: Widening Equally on Both Sides	Alt. 4: County DPW–Preferred
HYDROLOGY AND WATER QUALITY				
Impact 5.1 Temporary Degradation of Surface Water Quality During Construction				
Quantitative Comparison	NA	NA	NA	NA
Significance Before Mitigation	S	S	S	S
Mitigation Measures	P5.1: Obtain a Section 402 NPDES Permit and Prepare an Erosion and Sediment Control Plan	P5.1: Obtain a Section 402 NPDES Permit and Prepare an Erosion and Sediment Control Plan	P5.1: Obtain a Section 402 NPDES Permit and Prepare an Erosion and Sediment Control Plan	P5.1: Obtain a Section 402 NPDES Permit and Prepare an Erosion and Sediment Control Plan
Significance After Mitigation	LS	LS	LS	LS
Impact 5.2 Change in Soil Absorption Rates, Drainage Patterns, and the Rate and Amount of Runoff				
Quantitative Comparison	NA	NA	NA	NA
Significance Before Mitigation	S	S	S	S
Mitigation Measures	P5.2: Prepare a Drainage Report	P5.2: Prepare a Drainage Report	P5.2: Prepare a Drainage Report	P5.2: Prepare a Drainage Report
Significance After Mitigation	LS	LS	LS	LS

Table 5-2. Hydrology and Water Quality Impact Summary Table

	Alt. 1: Widening to the West	Alt. 2: Widening to the East	Alt. 3: Widening Equally on Both Sides	Alt. 4: County DPW–Preferred
Impact 5.3 Postconstruction Degradation of Surface Water Quality				
Quantitative Comparison	NA	NA	NA	NA
Significance Before Mitigation	S	S	S	S
Mitigation Measures	P5.3: Prepare a Postconstruction Storm Water Pollution Prevention Plan	P5.3: Prepare a Postconstruction Storm Water Pollution Prevention Plan	P5.3: Prepare a Postconstruction Storm Water Pollution Prevention Plan	P5.3: Prepare a Postconstruction Storm Water Pollution Prevention Plan
Significance After Mitigation	LS	LS	LS	LS

Key:

SU = Significant and unavoidable.

S = Significant.

PS = Potentially significant.

LS = Less than significant.

NI = No impact.

NA = Not applicable.

Chapter 6
Noise

This chapter describes the noise environment of the project area, identifies policies and regulations relevant to noise, and addresses the noise impacts associated with construction and operation of the proposed project. Background information on environmental acoustics, including definitions of terms commonly used in noise analysis, are provided in Appendix E.

Terminology

Noise terms used in this chapter are briefly defined below.

- *Sound* is a vibratory disturbance created by a vibrating object, which, when transmitted by pressure waves through a medium such as air, is capable of being detected by a receiving mechanism, such as the human ear or a microphone.
- *Noise* is sound that is loud, unpleasant, unexpected, or otherwise undesirable.
- The *decibel (dB)* is a unitless measure of sound on a logarithmic scale, which indicates the squared ratio of sound pressure amplitude to a reference sound pressure amplitude. The reference pressure is 20 micro-Pascals.
- The *A-weighted decibel (dBA)* represents an overall frequency-weighted sound level in decibels that approximates the frequency response of the human ear.
- *Maximum sound level (L_{max})* is the maximum sound level measured during the measurement period.
- *Minimum sound level (L_{min})* is the minimum sound level measured during the measurement period.
- *Equivalent sound level (L_{eq})* is the equivalent steady-state sound level that, in a stated period of time, would contain the same acoustical energy.
- *Percentile-exceeded sound level (L_{xx})* is the sound level exceeded "x" percent of a specific time period. For example, L_{10} is the sound level exceeded 10% of the time.
- *Day-night level (L_{dn})* is the energy average of the A-weighted sound levels occurring during a 24-hour period, with 10 dB added to the A-weighted sound levels occurring between 10:00 p.m. and 7:00 a.m.

- *Community noise equivalent level (CNEL)* is the energy average of the A-weighted sound levels occurring during a 24-hour period, with 5 dB added to the A-weighted sound levels occurring between 7:00 p.m. and 10:00 p.m. and 10 dB added to the A-weighted sound levels occurring between 10:00 p.m. and 7:00 a.m.

L_{dn} and CNEL values rarely differ by more than 1 dB. As a matter of practice, L_{dn} and CNEL values are considered to be equivalent and are treated as such in this assessment. In general, human sound perception is such that a change in sound level of 3 dB is just noticeable, a change of 5 dB is clearly noticeable, and a change of 10 dB is perceived as doubling or halving the sound level.

Affected Environment

Environmental Setting

Noise-Sensitive Land Uses

Noise-sensitive land uses generally are defined as locations where people reside or where the presence of unwanted sound could adversely affect the use of the land. Noise-sensitive land uses typically include residences, hospitals, schools, guest lodging, libraries, and certain types of recreational areas. There are numerous noise-sensitive land uses along Auburn-Folsom Road. These primarily consist of residences and Beals Point Campground.

Existing Noise Environment

The main influence on the noise environment in the project area is roadway traffic. The predominant noise source is traffic on Auburn-Folsom Road. The noise environment in the project area has been characterized through both noise monitoring and noise modeling.

Short-Term Monitoring

Short-term noise monitoring was conducted in the project area on August 13, 14, and 22, 2002, using Larson Davis SLM Model 812 sound level meters. Measurements were taken at 21 primary positions in the project area. Noise monitoring positions are identified in Table 6-1 and Figure 6-1. Table 6-2 summarizes the results of the short-term noise monitoring.

At each position, sound level data was typically collected over a 10-minute period. The calibration of each sound level meter was checked before and after each measurement using a Larson-Davis Model CA-250 calibrator. Weather conditions were hot and calm.

Table 6-1. Noise Monitoring Position Locations

Monitoring Position	Monitoring Location
1	Gate entrance to Fallbrook Court
2	8880 Whispering Pines Mobile Home Park
3	9045 Auburn-Folsom Road
4	6895 Country Court
5	6920 Bell Road
6	9145 Auburn-Folsom Road
7	9306 Muir
8	9400 Auburn-Folsom Road
9	6715 Crown Point Vista
10	6650 Crown Point Vista
11	9700 Auburn-Folsom Road
12	Beals Point Camp Site #60
13	Beals Point Camp Site #10
14	9935 Wiley Court
15	9965 Wiley Court
16	10015 Wiley Court
17	10075 Wiley Court
18	10085 Wiley Court
19	7240 Sierra Drive
20	7235 Sierra Drive
21	9217 Purdy Lane

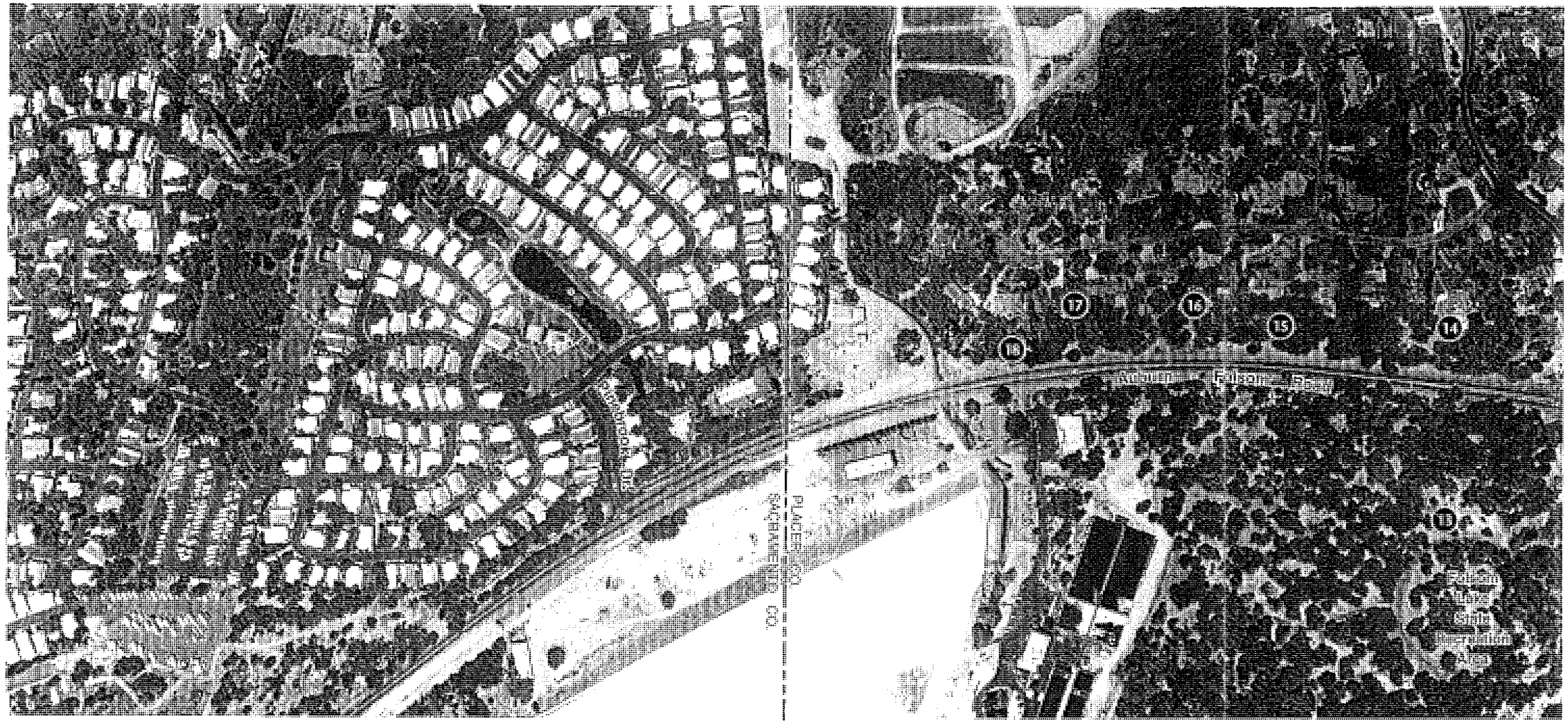
Table 6-2. Summary of Short-Term Noise Monitoring

Position	Date	Start Time	Duration (minutes)	Sound Level (dBA-L_{eq})	L_{max} (dBA)	L_{10} (dBA)	L_{90} (dBA)[1]	Sources
1	8/13/2002	10:19 a.m.	9:08	59.4	68.3	62.3	53.3	Local traffic
1	8/13/2002	10:32 a.m.	9:53	59.7	72.6	62.7	50.9	Local traffic
2	8/13/2002	10:19 a.m.	9:33	66.9	75.1	70.3	53.6	Local traffic
2	8/13/2002	10:32 a.m.	9:44	69.3	87.9	71.0	58.5	Local traffic
3	8/13/2002	11:30 a.m.	10:00	64.6	74.1	68.1	52.9	Local traffic
4	8/13/2002	11:30 a.m.	9:46	64.1	76.7	66.9	52.1	Local traffic
5	8/13/2002	12:15 p.m.	7:05	56.9	67.8	60.0	49.9	Local traffic
6	8/13/2002	12:15 p.m.	8:43	58.8	68.7	61.4	51.5	Local traffic
7	8/13/2002	3:00 p.m.	10:00	58.9	69.8	61.7	51.7	Local traffic
8	8/13/2002	3:00 p.m.	10:00	52.4	63.7	55.0	45.9	Local traffic
9	8/13/2002	3:42p.m.	9:54	66.4	73.9	69.0	59.9	Local traffic
10	8/13/2002	3:42p.m.	10:00	59.5	68.7	62.0	54.7	Local traffic
11	8/14/2002	11:42 a.m.	8:46	59.2	67.9	62.1	50.3	Local traffic
11	8/14/2002	11:55 a.m.	10:00	58.8	65.7	58.6	59.6	Local traffic
12	8/14/2002	9:40 a.m.	7:48	53.8	63.3	56.8	43.1	Local traffic
12	8/14/2002	9:53a.m.	9:04	54.0	62.6	56.5	47.4	Local traffic
13	8/14/2002	9:40 a.m.	7:38	54.5	62.8	57.7	45.1	Local traffic
13	8/14/2002	9:53a.m.	7:57	55.3	64.8	58.1	45.6	Local traffic
14	8/14/2002	11:42 a.m.	10:00	55.8	64.8	58.3	49.3	Local traffic
14	8/14/2002	11:55 a.m.	10:00	55.0	62.5	58.0	46.3	Local traffic
15	8/14/2002	10:39 a.m.	9:51	57.9	65.8	60.8	50.1	Local traffic
15	8/14/2002	10:52 a.m.	10:00	57.2	67.5	60.0	45.4	Local traffic
16	8/14/2002	10:39 a.m.	10:00	53.7	59.8	56.1	48.7	Local traffic
16	8/14/2002	10:52 a.m.	10:00	53.1	59.4	55.2	48.6	Local traffic
17	8/14/2002	12:33 p.m.	10:00	59.3	66.8	62.6	49.7	Local traffic
17	8/14/2002	12:46 9.m.	10:00	59.3	65.9	62.1	51.1	Local traffic
18	8/14/2002	12:33 p.m.	10:00	63.4	73.1	66.6	51.6	Local traffic
18	8/14/2002	12:46 9.m.	9:47	63.3	71.4	66.6	52.0	Local traffic
19	8/14/2002	2:21 p.m.	10:00	41.3	66.7	40.8	39.0	Local traffic

Table 6-2. Continued

Position	Date	Start Time	Duration (minutes)	Sound Level (dBA-L_{eq})	L_{max} (dBA)	L_{10} (dBA)	L_{90} (dBA)[1]	Sources
19	8/22/2002	6:53 a.m.	6:00	44.7	49.8	46.1	43.4	Local traffic
20	8/14/2002	2:04 p.m.	8:48	42.5	67.2	42.3	37.2	Local traffic
21	8/14/2002	2:03 p.m.	8:53	45.8	58.0	47.8	42.0	Local traffic
21	8/14/2002	2:21 p.m.	10:00	43.7	49.3	45.6	41.3	Local traffic

[1] L_{90} is considered to represent the residual or background sound level.



Legend

A Noise Modeled Location

18 Noise Monitored and Modeled Location

N

Note: Noise Monitoring and Modeling Locations 19, 20, and 21 unavailable.

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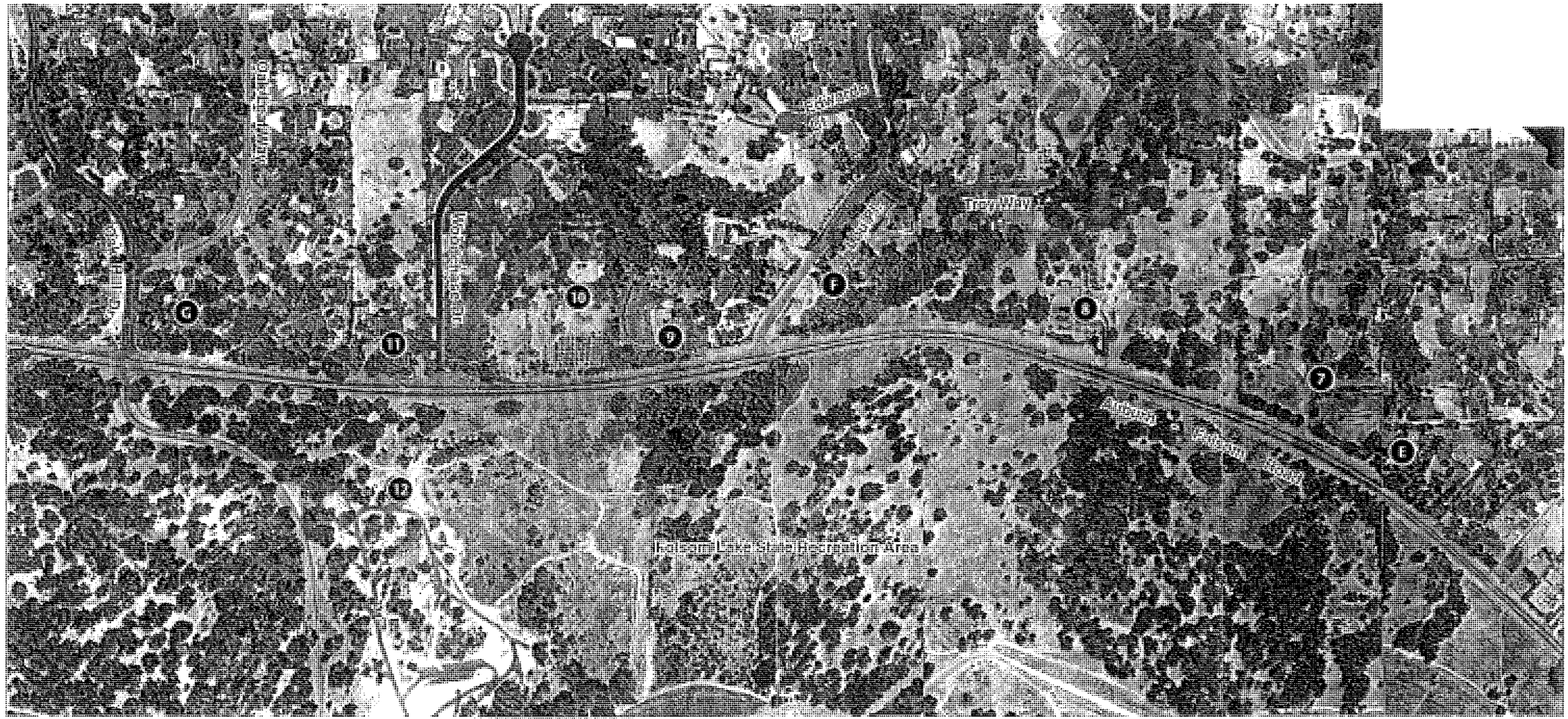
Figure 6-1a
Noise Monitoring and Modeling Locations



Legend

A Noise Modeled Location

18 Noise Monitored and Modeled Location

N

Note: Noise Monitoring and Modeling Locations 19, 20, and 21 unavailable.

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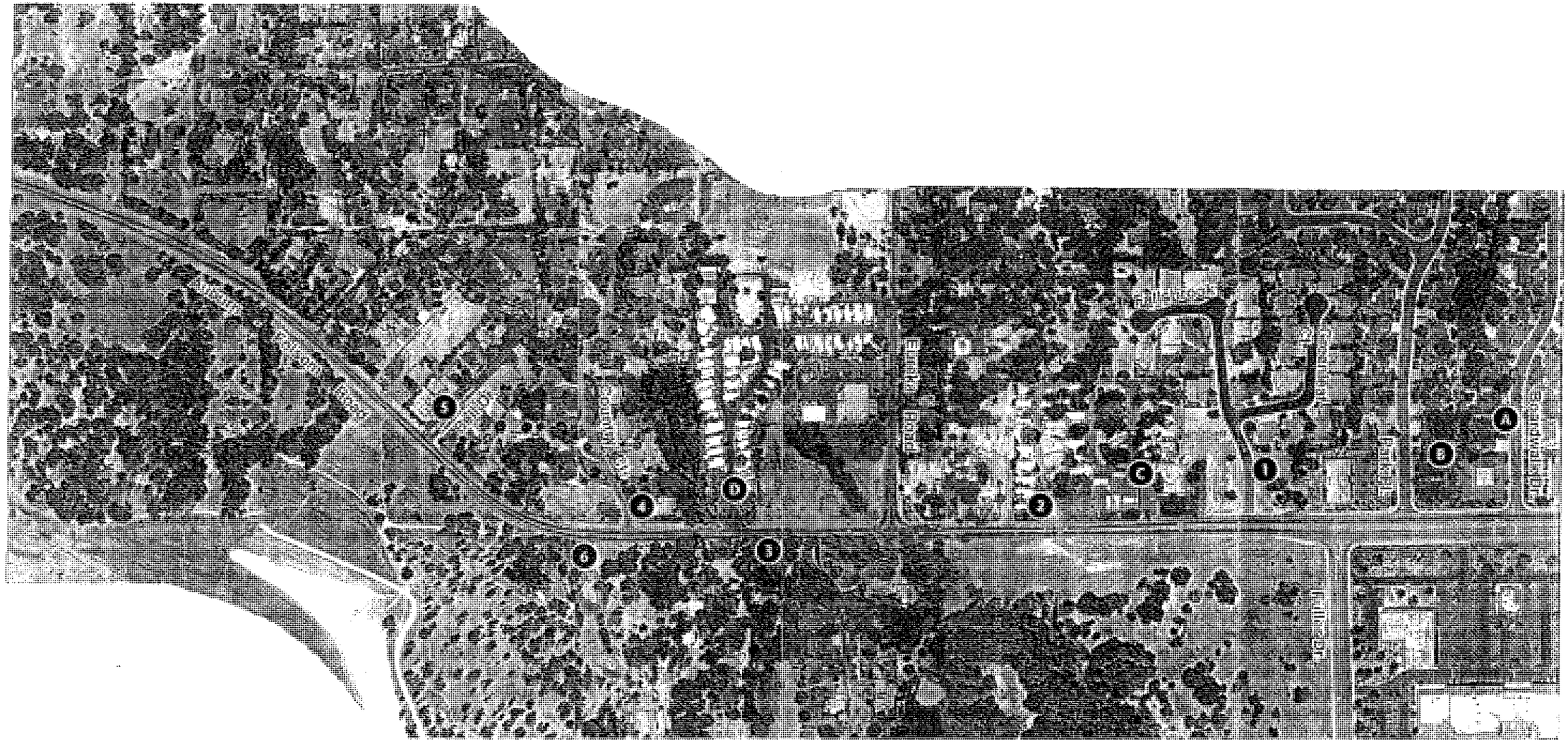
Jones & Stokes

Figure 6-1b
Noise Monitoring and Modeling Locations



Legend

A Noise Modeled Location

18 Noise Monitored and Modeled Location

N

Note: Noise Monitoring and Modeling Locations 19, 20, and 21 unavailable.

02102.02 034 (10/02)

Jones & Stokes

Figure 6-1c
Noise Monitoring and Modeling Locations

When a noise-generating event not related to traffic, such as an aircraft overflight, occurred, the sound meter was paused until the event passed. When the meter was paused for this reason, the measurement duration was less than 10 minutes.

Traffic was counted and categorized during the measurements. This traffic data, along with the measured sound level data, was used to calibrate and check the accuracy of the noise prediction model developed for the project. The noise model then used the traffic input data from peak periods to assess worst-case noise levels at all locations.

At Position 19, the homeowner requested that an additional measurement be taken during the a.m. or p.m. commute hour. The additional measurement was taken on August 22, 2002, beginning at 6:53 a.m. The measured sound level of 44.7 dB-L_{eq} was about 3 dB higher than the sound level measured at 2:21 p.m. on August 14, 2002. This is consistent with the long-term data discussed below. Although traffic on Auburn-Folsom Road is the predominant source of background noise at this location, the measured sound level of 45 dBA during the peak morning commute hour indicates that traffic noise at this location is far below the County's noise compatibility standards for residential uses.

Long-Term Monitoring

Long-term noise monitoring was conducted in the project area over 5 weekdays, beginning on Monday, August 12, using three Larson-Davis Model 700 Type 2 sound level meters. Meters were placed at the south end of the project area (Long-Term Position 1), the middle of the project area (Long-Term Position 2), and at the north end of the project area (Long-Term Position 3). The purpose of the measurements recorded by these meters was to quantify variations in sound level occurring throughout the day, rather than to identify absolute sound levels at a specific receiver of concern. Weather conditions were generally warm and calm for the duration of the measurements.

Tables 6-3 through 6-5 summarize the results of the long-term monitoring. The 24-hour pattern of traffic noise levels recorded is typical of a roadway with a strong morning traffic peak and relatively constant traffic volumes throughout the day. As expected, traffic noise levels drop off during the evening and nighttime hours. The differences between the sound levels measured during each hour and the maximum noise-hour sound levels are also shown in the tables. Where there is a full day of data, the daily L_{dn} value has also been calculated. The difference between the calculated L_{dn} value and the worst-hour noise level is also provided. As can been in Tables 6-3 through 6-5, this difference is 1 to 2 dB, based on the average data for the entire week.

Regulatory Setting

Federal

Although Reclamation has a NEPA guidance document, it does not contain any requirements specific to noise, and Reclamation has not adopted any regulations relating to noise.

State

California requires each local government entity to implement a noise element as part of its general plan. California Administrative Code, Title 4, has guidelines for evaluating the compatibility of various land uses as a function of community noise exposure. The state land use compatibility guidelines are listed in Table 6-6.

Local

Placer County has established policies and regulations concerning the generation and control of noise that could adversely affect its citizens and noise-sensitive land uses. Below is a brief discussion of the general plan policies and noise guidelines implemented by the County to protect its citizens from noise.

Placer County General Plan

The Placer County General Plan, required by state law, serves as the County's blueprint for land use and development. The County initiated a comprehensive update of its general plan in November 1990 and adopted the general plan update in 1994.

The Noise Element of the Placer County General Plan contains planning guidelines relating to noise. The noise element identifies goals and policies to support achievement of those goals. Policy 9.A.9 relates specifically to this project:

Policy 9.A.9. Noise created by new transportation sources, including roadway improvement projects shall be mitigated so as not to exceed the levels specified in Table 9-3 (of the Noise Element) at outdoor activity areas or interior spaces of existing noise-sensitive uses.

Table 6-7 summarizes the maximum allowable noise levels for transportation noise sources.

Table 6-3. Summary of Long-Term Noise Monitoring at Long-Term Position 1

Time	1-Hour dB-L_{eq}						Worst Noise Hour dB-L_{eq} *Minus* Hourly dB-L_{eq}
	Monday (8/12/2002)	Tuesday (8/13/2002)	Wednesday (8/14/2002)	Thursday (8/15/2002)	Friday (8/16/2002)	Average	
12 a.m.	NA[1]	58.5	60.0	59.0	60.0	59	11
1 a.m.	NA[1]	55.5	56.5	56.5	57.0	56	14
2 a.m.	NA[1]	55.0	55.0	55.0	56.0	55	15
3 a.m.	NA[1]	55.0	56.5	57.0	54.0	56	14
4 a.m.	NA[1]	60.0	60.5	60.5	60.0	60	10
5 a.m.	NA[1]	66.5	67.0	66.5	67.0	67	3
6 a.m.	NA[1]	69.5	70.0	70.0	70.0	70	0
7 a.m.	NA[1]	69.0	70.0	69.5	70.0	70	0
8 a.m.	NA[1]	69.0	68.5	69.0	69.0	69	1
9 a.m.	NA[1]	68.5	68.0	68.0	68.0	68	2
10 a.m.	NA[1]	67.5	67.5	67.5	67.5	68	2
11 a.m.	NA[1]	67.5	67.5	67.5	67.5	68	2
12 p.m.	67.5	67.0	67.0	67.0	68.0	67	3
1 p.m.	67.0	66.5	66.5	67.0	67.5	67	3
2 p.m.	66.5	66.5	66.5	67.0	67.0	67	3
3 p.m.	66.5	66.5	67.0	67.0	67.0	67	3
4 p.m.	66.5	66.5	66.5	67.0	66.0	67	3
5 p.m.	67.0	66.0	66.5	66.5	66.0	66	4
6 p.m.	67.0	67.5	66.0	68.0	67.5	67	3
7 p.m.	66.0	67.0	67.5	67.5	67.5	67	3
8 p.m.	66.0	66.0	66.5	66.5	66.5	66	4
9 p.m.	65.0	65.5	66.0	66.5	66.0	66	4
10 p.m.	63.0	63.5	64.0	64.5	65.5	64	6
11 p.m.	61.5	61.5	62.0	62.0	64.0	62	8
L_{dn}	NA[1]	70.6	71.0	71.0	71.3	71.0	

[1] NA = Data not collected.

Table 6-4. Summary of Long-Term Noise Monitoring at Long-Term Position 2

Time	1-Hour dB-L_{eq}						Worst Noise Hour dB-L_{eq} *Minus* Hourly dB-L_{eq}
	Monday (8/12/2002)	Tuesday (8/13/2002)	Wednesday (8/14/2002)	Thursday (8/15/2002)	Friday (8/16/2002)	Average	
12 a.m.	NA[1]	58.5	60.0	58.5	60.5	59	11
1 a.m.	NA[1]	57.0	57.0	56.5	58.0	57	13
2 a.m.	NA[1]	56.5	56.0	56.0	56.0	56	14
3 a.m.	NA[1]	56.5	56.5	57.0	55.5	56	14
4 a.m.	NA[1]	59.5	59.5	59.5	60.0	60	10
5 a.m.	NA[1]	66.0	66.0	66.0	66.5	66	4
6 a.m.	NA[1]	70.0	70.0	69.5	69.5	70	0
7 a.m.	NA[1]	70.0	70.5	70.0	70.0	70	0
8 a.m.	NA[1]	69.0	69.0	69.0	69.5	69	1
9 a.m.	NA[1]	67.5	68.0	68.0	68.0	68	2
10 a.m.	NA[1]	67.5	67.5	67.5	67.5	68	2
11 a.m.	NA[1]	67.0	67.5	67.5	68.0	68	2
12 p.m.	67.5	67.0	67.5	67.5	68.5	68	2
1 p.m.	67.0	67.0	67.0	67.5	68.0	67	3
2 p.m.	67.5	67.5	67.0	68.0	68.5	68	2
3 p.m.	68.5	68.0	68.5	68.5	68.5	68	2
4 p.m.	68.5	68.5	69.0	69.0	69.0	69	1
5 p.m.	68.5	68.5	68.5	69.0	68.5	69	1
6 p.m.	68.0	68.0	69.0	69.0	68.5	69	1
7 p.m.	67.0	67.5	67.5	67.5	67.5	67	3
8 p.m.	67.0	67.0	66.0	67.0	66.0	67	3
9 p.m.	65.5	66.5	65.0	66.0	65.5	66	4
10 p.m.	63.0	63.0	63.5	64.0	65.0	64	6
11 p.m.	61.5	61.0	61.0	63.0	63.0	62	8
L_{dn}	NA[1]	70.9	71.0	71.0	71.3	71.1	

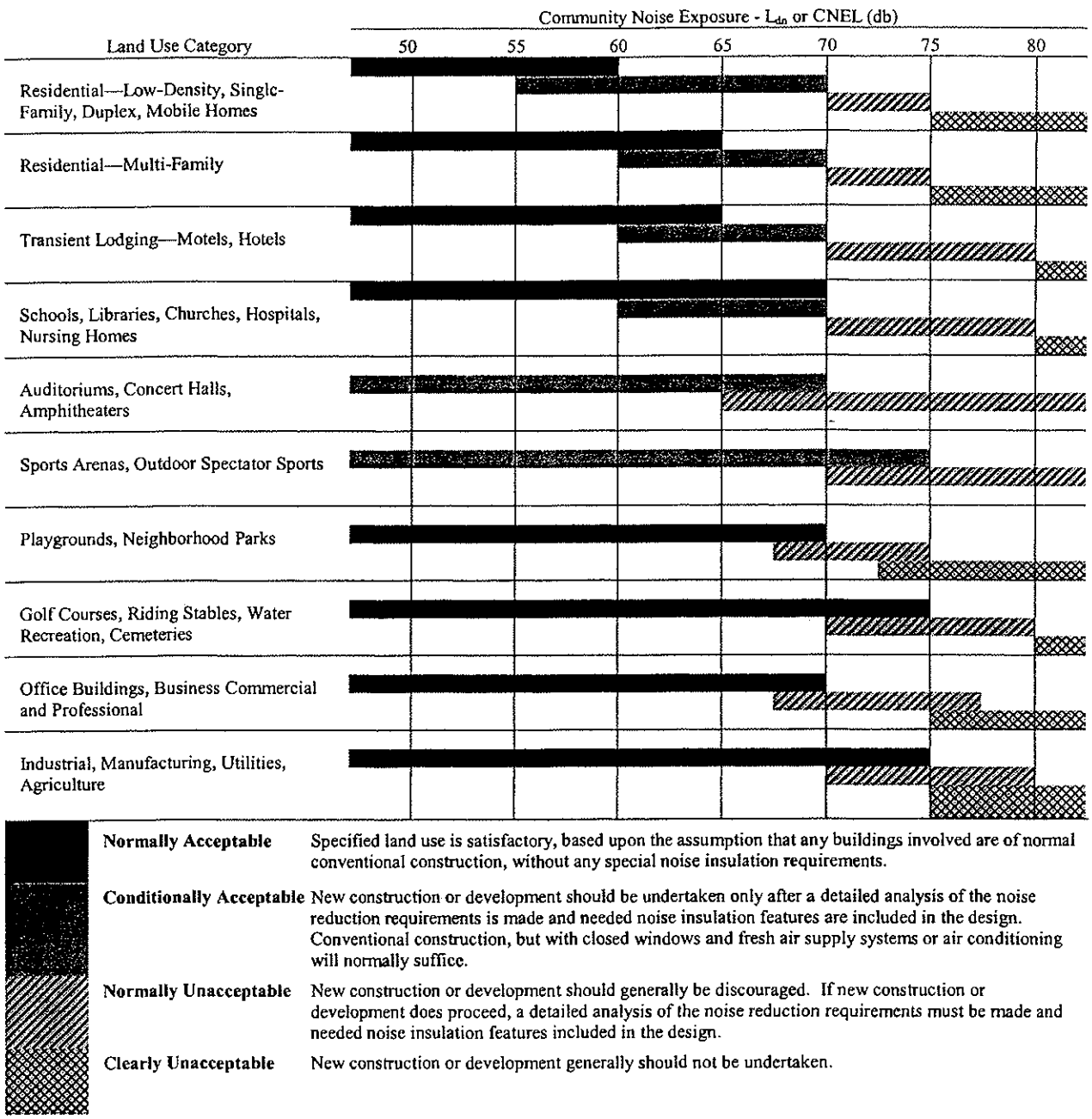
[1] NA = Data not collected.

Table 6-5. Summary of Long-Term Noise Monitoring at Long-Term Position 3

Time	1-Hour dB-L_{eq}						Worst Noise Hour dB-L_{eq} *Minus* Hourly dB-L_{eq}
	Monday (8/12/2002)	Tuesday (8/13/2002)	Wednesday (8/14/2002)	Thursday (8/15/2002)	Friday (8/16/2002)	Average	
12 a.m.	NA[1]	59.0	59.5	59.0	59.0	59	11
1 a.m.	NA[1]	55.5	56.5	56.0	56.5	56	14
2 a.m.	NA[1]	55.5	56.5	56.5	55.0	56	14
3 a.m.	NA[1]	55.0	57.0	56.0	56.0	56	14
4 a.m.	NA[1]	60.5	61.5	61.5	60.5	61	9
5 a.m.	NA[1]	67.5	67.5	67.5	68.0	68	2
6 a.m.	NA[1]	69.5	69.5	69.5	70.0	70	0
7 a.m.	NA[1]	69.0	69.5	69.5	69.5	69	1
8 a.m.	NA[1]	69.0	69.0	68.5	69.0	69	1
9 a.m.	NA[1]	68.5	68.5	68.0	68.5	68	2
10 a.m.	NA[1]	67.5	68.0	68.0	68.0	68	2
11 a.m.	NA[1]	68.0	67.5	68.0	68.5	68	2
12 p.m.	68.0	67.5	68.0	67.5	68.5	68	2
1 p.m.	67.5	67.5	67.5	68.0	68.0	68	2
2 p.m.	67.5	67.5	68.0	68.5	68.5	68	2
3 p.m.	67.5	68.0	68.5	69.0	68.0	68	2
4 p.m.	69.0	68.5	68.0	68.0	68.0	68	2
5 p.m.	68.0	67.5	68.0	67.5	67.0	68	2
6 p.m.	67.5	67.5	68.5	68.0	68.0	68	2
7 p.m.	66.5	67.0	67.5	67.5	68.0	67	3
8 p.m.	67.5	66.0	66.5	67.0	NA[1]	67	3
9 p.m.	65.5	65.5	66.5	66.5	NA[1]	66	4
10 p.m.	63.5	63.5	64.5	64.0	NA[1]	64	6
11 p.m.	61.5	62.0	61.0	62.5	NA[1]	62	8
L_{dn}	NA[1]	71.0	71.2	71.2	NA[1]	71.4	

[1] NA = Data not collected.

Table 6-6. State Land Use Compatibility Standards for Community Noise Environment



Normally Acceptable	Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.
Conditionally Acceptable	New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features are included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice.
Normally Unacceptable	New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.
Clearly Unacceptable	New construction or development generally should not be undertaken.

Source: California Governor's Office of Planning and Research, November 1998.

Table 6-7. Placer County Noise Element: Maximum Allowable Noise Exposure for Transportation Noise Sources

	Outdoor Activity Areas[1]	Interior Spaces	
Land Use	L_{dn}/CNEL, dB	L_{dn}/CNEL, dB	L_{eq}, dB[2]
Residential	60[3]	45	–
Transient lodging	60[3]	45	–
Hospitals, nursing homes	60[3]	45	–
Theatres, auditoriums, music Halls	–	–	35
Churches, meeting halls	60[3]	–	40
Office buildings	–	–	45
Schools, libraries, museums	–	–	45
Playgrounds, neighborhood parks	70	–	–

Notes:

1 Where the location of outdoor activity areas is unknown, the exterior noise level standard shall be applied to the property line of the receiving land use.

2 As determined for a typical worst-case hour during periods of use.

3 Where it is not possible to reduce noise in outdoor activity areas to 60 dB L_{dn}/CNEL or less using a practical application of the best-available noise reduction measures, an exterior noise level of up to 65 dB L_{dn}/CNEL may be allowed provided that available exterior noise level reduction measures have been implemented and interior noise levels are in compliance with this table.

Source: Placer County 1994.

The General Plan further states that noise created by new transportation noise sources, including roadway improvement projects shall be mitigated so as to not exceed the levels specified in Table 6-7 at outdoor activity areas or interior spaces of existing noise-sensitive land uses. Where noise-sensitive land uses are proposed in areas exposed to existing or projected exterior noise levels exceeding the levels specified in Table 6-7, the County requires that an acoustical analysis be conducted as part of the review process so that noise mitigation may be included in the project design. However, at the discretion of the County, the requirement for an acoustical analysis may be waived, provided that all of the following conditions are met:

1. The development is for less than five single-family dwellings or less than 930 square meters (10,000 square feet) of total gross floor area for office buildings, churches, or meeting halls.

2. The noise source in question consists of a single roadway or railroad for which up-to-date noise exposure information is available. An acoustical analysis will be required when the noise source in question is a stationary noise source or airport, or when the noise source consists of multiple transportation noise sources.
3. The existing or projected future noise exposure at the exterior of buildings which will contain noise-sensitive uses or within proposed outdoor activity areas (other than outdoor sports and recreation areas) does not exceed 65 dB L_{dn} (or CNEL) prior to mitigation. For outdoor sports and recreation areas, the existing or projected future noise exposure may not exceed 75 dB L_{dn} (or CNEL) prior to mitigation.
4. The topography in the project area is essentially flat; that is, noise source and receiving land use are at the same grade.
5. Effective noise mitigation, as determined by the County, is incorporated into the project design to reduce noise exposure to the levels specified in Table 6-7. Such measures may include the use of building setbacks, building orientation, noise barriers, and the standard noise mitigations contained in the *Placer County Acoustical Design Manual*. If closed windows are required for compliance with interior noise levels standards, air conditioning or a mechanical ventilation system will be required.

Also, the County shall implement one or more of the following mitigation measures where existing noise levels significantly affect existing noise-sensitive land uses, or where the cumulative increase in noise levels resulting from new development significantly affects noise-sensitive land uses.

1. Rerouting traffic onto streets that have available traffic capacity and that do not adjoin noise-sensitive land uses
2. Lowering speed limits, if feasible and practical
3. Implement programs to pay for noise mitigation, such as low cost loans to owners of noise-affected property or developer fees
4. Acoustical treatment of buildings
5. Construction of noise barriers

Placer County

The County has noise standards in its general plan. The County implements these noise standards as conditions of approval. However, the County does not have a noise ordinance, nor does it have any explicit limits on noise for general activities. The County has established standards for hours in which construction activities may occur. The County's Land Development Department's Sample Conditions of Approval and County Minute Order 90-08 prohibit construction activities on Sundays and federal holidays, and allow construction to occur only from Monday through Friday between 6:00 a.m. and 8:00 p.m. and on Saturday between 8:00 a.m. and 6:00 p.m. These construction limitations are applicable

only to construction activities for which a building permit or grading permit is required.

Environmental Consequences

Criteria for Determining Significance under CEQA and NEPA

Appendix G of the State CEQA Guidelines, Placer County's General Plan Noise Element, and guidance from County staff (Carlos pers. comm.) were used to determine whether the proposed project would result in significant noise impacts. Appendix G of the State CEQA Guidelines states that a proposed project may have a significant impact related to noise if it would

- expose people to, or generate, noise levels in excess of standards established in a local general plan or noise ordinance or applicable standards of other agencies;
- expose people to, or generate, excessive groundborne vibration or groundborne noise levels;
- result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project;
- result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project;
- be located within an airport land use plan area, or, where such a plan has not been adopted, within 3.2 kilometers (2 miles) of a public airport or public use airport and expose people residing or working in the project area to excessive noise levels; or
- be located in the vicinity of a private airstrip and expose people residing or working in the project area to excessive noise levels.

Based on County noise standards and County CEQA practice (Carlos pers. comm.), the proposed project is considered to result in a significant operational noise impact if

- the predicted future noise level with the project is 65 dB-L_{dn} or higher and the increase in noise compared to future no-project conditions is 1.5 dB or more;
- the predicted future noise level with the project is between 60 and 65 dB-L_{dn} and the increase in noise compared to future no-project conditions is 3 dB or more; or
- the predicted future noise level with the project is 60 dB-L_{dn} or less and the increase in noise compared to future no-project conditions is 5 dB or more.

There are no commonly accepted thresholds for acceptable levels of noise from construction activities. The Federal Transit Administration (FTA) suggests the guidelines shown in Table 6-8 as reasonable criteria for the assessment of construction-related noise impacts.

Table 6-8. Federal Transit Administration Suggested Construction Noise Criteria

	1-Hour L_{eq} (dBA)	
Land Use	Day	Night
Residential	90	80
Commercial	100	100
Industrial	100	100

Source: Federal Transit Administration 1995.

For the purposes of this assessment, construction activities would be considered to result in a significant noise impact if construction noise levels are predicted to exceed the noise thresholds in Table 6-8.

The Reclamation does not have adopted noise standards. For the purposes of assessing the significance of noise impacts under NEPA, the County's thresholds defined above are used.

Methods and Assumptions for the Impact Analysis

The assessment of construction-related noise impacts was conducted using methods developed by FTA (Federal Transit Administration 1995). Traffic-related impacts resulting from operation of the proposed project were modeled using FHWA's Traffic Noise Prediction Model (FHWA-RD-77-108) and traffic data provided by the project traffic engineer, Fehr & Peers.

Impacts

Construction-Related Impacts

Impact 6.1 Exposure of Noise-Sensitive Land Uses (Residences and Campgrounds) to Construction Noise

Potential noise impacts resulting from construction of proposed project were evaluated by estimating the amount of noise generated on the theoretical worst-case day of construction activity. A detailed inventory of construction equipment that will be used for the proposed project was not available; therefore, this noise analysis is based on equipment that is anticipated to be used.

Table 6-9 presents a list of noise generation levels for various types of equipment typically used for construction projects. The list, compiled by the Federal Transit Administration (1995), was used in this analysis to estimate construction noise. The magnitude of construction noise impacts was assumed to depend on the type of construction activity, the noise level generated by various pieces of construction equipment, the duration of the activity, and the distance between the activity and noise-sensitive receivers. Any shielding effects that might result from local barriers, including topography, were not specifically taken into account. This results in a conservative estimation of construction noise levels at locations where topography will block the line of sight to the construction activity.

Table 6-9. Construction Equipment Noise

Equipment	Maximum Noise Level (dBA at 15 meters [50 feet])
Backhoe	80
Bulldozer	85
Concrete mixer	85
Concrete pump	82
Concrete vibrator	76
Grader	85
Heavy truck	88
Paver	89
Pneumatic tool	85
Scraper	89

Source: Federal Transit Administration 1995.

A reasonable worst-case assumption is that the three loudest pieces of equipment would operate simultaneously and continuously over at least a 1-hour period for a combined-source noise level. Based on the noise levels shown in Table 6-9, Table 6-10 presents the calculated sound level estimates for construction activities, as a function of distance. Simultaneous operation of a paver, scraper, and truck for a combined source level of 93 dBA at 15 meters (50 feet) is assumed. Point-source attenuation of 6 dB per doubling of distance, as well as molecular absorption of 0.7 dB per 305 meters (1,000 feet) and anomalous excess attenuation of 1 dB per 305 meters (1,000 feet), are assumed.

Table 6-10. Estimated Construction Noise in the Vicinity of an Active Construction Site

Distance Attenuation	
Distance to Receiver (meters [feet])	Sound Level at Receiver (dBA)
15 (50)	93
30 (100)	87
61 (200)	81
122 (400)	74
183 (600)	70
244 (800)	68
305 (1,000)	65
457 (1,500)	61
610 (2,000)	58
762 (2,500)	55
914 (3,000)	52
1,219 (4,000)	48
1,609 (5,280)	44
2,286 (7,500)	37

Notes: The following assumptions were used:

Basic sound level drop-off rate: 6.0 dB per doubling of distance
Molecular absorption coefficient: 0.7 dB per 305 meters (1,000 feet)
Anomalous excess attenuation: 1.0 dB per 305 meters (1,000 feet)
Reference sound level: 93 dBA
Distance for reference sound level: 15 meters (50 feet)

This calculation does not include the effects, if any, of local shielding, which may reduce sound levels further.

Estimates are based on Jones & Stokes' calculations for a paver, scraper, and truck.

The results in Table 6-10 indicate that noise-sensitive land uses located within approximately 21 meters (70 feet) of an active construction site may be exposed to construction noise in excess of the daytime significance threshold of 90 dBA L_{eq}. Also, noise-sensitive land uses located within approximately 69 meters (225 feet) of an active construction site would be exposed to noise levels in excess of the nighttime significance threshold of 80 dBA L_{eq}.

Because noise-sensitive uses are located within these distances, this impact is considered significant, and is common to all build alternatives. Implementation of Mitigation Measures P6.1a through P6.1h would reduce this impact to a less-than-significant level.

Impact 6.2 Exposure of Residences and Campgrounds to Airblast and Vibration from Blasting

Blasting may be required to prepare a portion of the project site for construction. The need for blasting would depend on site-specific conditions and engineering considerations that are not known at this time. Accordingly, no information on the location, type, or extent of blasting is known. Noise and vibration generated by blasting is a complex function of the charge size, charge depth, hole size, degree of confinement, initiation methods, spatial distribution of charges, and other factors. This information is not currently available. However, given the proximity of potential blasting areas to existing residences, there is potential for blasting to result in significant adverse effects related to noise and vibration.

This impact is common to all build alternatives and is considered significant. Implementation of Mitigation Measure P6.2 would reduce this impact to a less-than-significant level.

Operation-Related Impacts

Impact 6.3 Exposure of Noise-Sensitive Land Uses (Residences and Campgrounds) to Increased Traffic Noise Levels

Traffic noise levels for existing conditions and future conditions with and without the project have been modeled for receivers at Positions 1 through 18. Noise at Positions 19 through 21 were not specifically modeled because existing noise measurements indicate that traffic noise levels are far below 60 dB-L_{dn} and its clear that the project would not result in significant noise impacts at these locations. Noise levels were also modeled at seven additional locations where measurements were not conducted. These locations are identified with letters A through G. All measurements and modeling positions are indicated in Figure 6-1.

Open-graded asphalt will be used for the proposed project. These types of asphalt are known to result in reduced traffic noise. Sacramento County has used open-graded asphalt for several roadway resurfacing projects and has conducted noise studies on the effectiveness of rubberized asphalt in the reduction of traffic noise (Brown-Buntin Associates 1993, 1995, 1996). These studies conclude that the use of rubberized asphalt can result in a net noise reduction of at least 3 dB relative to conventional asphalt overlays.

Open-Graded Asphalt Concrete (OGAC) pavement, also known as porous asphalt, provides a porous surface that allows water to drain quickly through the pavement from the surface of the pavement. In addition to providing better wet-weather traction (e.g., reduced hydroplaning, surface spray, nighttime glare, etc.), this type of pavement also has been shown to reduce traffic noise levels. Although many studies indicated that an OGAC pavement can reduce noise levels upwards of 7 dB immediately, studies conducted by Caltrans indicate that

a reduction in traffic noise of 4 to 6 dB is sustainable over time (California Department of Transportation 2001).

The FHWA Traffic Noise Prediction Model (FHWA-RD-77-108) calculates a 1-hour L_{eq} value based on the highest hourly traffic volume that is predicted to occur during the day, and does not take into account the effects of noise-reducing asphalt. For this reason, two adjustments have been made to the model results so that they can be evaluated using County criteria. First, it was conservatively assumed that the use of open-graded asphalt would result in a net reduction of 3 dB compared to dense-graded asphalt, and that dense-graded asphalt would continue to be used in the future if the proposed project is not implemented. Second, the L_{dn} value is assumed to be 2 dB greater than the calculated worst hour noise level, based on the measurement results reported in Table 6-11.

Table 6-11 summarizes the results of traffic noise modeling for existing traffic conditions and 2020 conditions with and without each of the project alternatives. Table 6-11 provides several comparisons. First, the comparison of future no-project conditions to existing conditions denotes the increase in noise that would occur in the project area because of background growth in the area (without the effects of the project). The comparison of future project conditions to existing conditions shows the overall increase in noise because of background growth and implementation of the project. The comparison of future with-project conditions to future no-project conditions represents the direct effect of the project.

The comparison of future with-project conditions to future no-project conditions is used to assess the significance of noise impacts. None of the project alternatives would cause an increase (compared to no-project conditions) of more than 1 dB. Accordingly, based on the significance thresholds defined above, none of the project alternatives is predicted to result in a significant traffic noise impact. Although no mitigation is required, Mitigation Measure P6.3 is recommended to specify the process that the County will use in implementing noise-reducing asphalt.

Mitigation Measures

This section details the mitigation measures identified for the project alternatives. Mitigation measures are identified as either of the following.

- *Proposed mitigation measures* are measures that the Placer County DPW, as project proponent, is either proposing as part of the project design or has agreed to implement.
- *Recommended mitigation measures* are measures that are identified in this environmental document but that the Placer County DPW has not chosen to implement, and which may be required by the Placer County Board of Supervisors if the project is approved.

Table 6-11. Comparison of Noise Modeling Results

Receiver[a]	Existing Conditions	Existing-Plus-Related-Projects Conditions (Future No-Project)	Future with-Project Conditions				Future No-Project Minus Existing Conditions	Future with-Project Minus Existing Conditions				Future with-Project Minus Future No-Project Conditions			
			Alt 1	Alt 2	Alt 3	Alt 4		Alt 1	Alt 2	Alt 3	Alt 4	Alt 1	Alt 2	Alt 3	Alt 4
1	65	65	64	63	63	63	0	-1	-2	-2	-2	-1	-2	-2	-2
2	72	73	74	70	71	71	1	2	-2	-1	-1	1	-3	-2	-2
3	72	73	69	70	71	69	1	-3	-2	-1	-3	-4	-3	-2	-4
4	68	69	68	66	66	67	1	0	-2	-2	-1	-1	-3	-3	-2
5	65	66	64	64	64	63	1	-1	-1	-1	-2	-2	-2	-2	-3
6	63	64	61	63	61	61	1	-2	0	-2	-2	-3	-1	-3	-3
7	64	65	62	62	62	62	1	-2	-2	-2	-2	-3	-3	-3	-3
8	62	63	63	60	61	61	1	1	-2	-1	-1	0	-3	-2	-2
9	68	69	70	66	68	67	1	2	-2	0	-1	1	-3	-1	-2
10	64	65	64	63	63	63	1	0	-1	-1	-1	-1	-2	-2	-2
11	67	68	67	65	66	66	1	0	-2	-1	-1	-1	-3	-2	-2
12	63	64	62	62	61	61	1	-1	-1	-2	-2	-2	-2	-3	-3
13	62	63	61	61	61	61	1	-1	-1	-1	-1	-2	-2	-2	-2
14	63	65	63	62	63	62	2	0	-1	0	-1	-2	-3	-2	-3
15	64	66	64	63	64	64	2	0	-1	0	0	-2	-3	-2	-2
16	62	64	64	61	62	62	2	2	-1	0	0	0	-3	-2	-2
17	65	67	65	64	64	64	2	0	-1	-1	-1	-2	-3	-3	-3
18	67	69	67	66	67	68	2	0	-1	0	1	-2	-3	-2	-1
A	61	61	59	58	58	58	0	-2	-3	-3	-3	-2	-3	-3	-3
B	62	62	60	60	60	60	0	-2	-2	-2	-2	-2	-2	-2	-2
C	60	61	60	59	59	59	1	0	-1	-1	-1	-1	-2	-2	-2
D	68	69	66	66	66	65	1	-2	-2	-2	-3	-3	-3	-3	-4

Table 6-11. Continued

Receiver[a]	Existing Conditions	Existing-Plus-Related-Projects Conditions (Future No-Project)	Future with-Project Conditions				Future No-Project Minus Existing Conditions	Future with-Project Minus Existing Conditions				Future with-Project Minus Future No-Project Conditions			
			Alt 1	Alt 2	Alt 3	Alt 4		Alt 1	Alt 2	Alt 3	Alt 4	Alt 1	Alt 2	Alt 3	Alt 4
E	65	65	63	63	62	62	0	1	1	0	-3	1	1	0	-3
F	63	64	64	61	63	60	1	4	1	3	-3	3	0	2	-4
G	67	68	66	65	65	65	1	2	1	1	-2	1	0	0	-3

[a] Receiver with number indicates noise monitoring and modeling position, whereas receiver with letter indicates noise monitoring position.

Proposed Mitigation Measures

Mitigation Measure P6.1a: Implement Sound Control Requirements

Sound control shall conform to the provisions in Section 7-1.01I, "Sound Control Requirements," of the Placer County Standard Specifications.

The noise level from the contractor's operations and all construction activities, between the hours of 9:00 p.m. and 6:00 a.m., shall not exceed 86 dBA at a distance of 15 meters (50 feet) from the construction area. This requirement is no way relieves the contractor from responsibility for complying with local ordinances regulating noise level.

For blasting and drilling operations, Placer County DPW and its contractors shall limit operations to the period between 6:00 a.m. and 8:00 p.m. Monday through Friday and between 8:00 a.m. and 6:00 p.m. on Saturdays. No blasting or drilling shall be conducted on Sundays or on federal holidays.

All equipment shall have sound-control devices no less effective than those provided on the original equipment. No equipment shall have an unmuffled exhaust. As directed by the engineer, the contractor shall implement appropriate additional noise mitigation measures including, but not limited to, shutting off idling equipment and sending additional notifications of adjacent residents.

Said noise level requirements shall apply to all equipment on the job or related to the project, including, but not limited to, trucks, transit mixers, and transient equipment that may or may not be owned by the contractor. The use of loud sound signals shall be avoided in favor of light warnings, excepting those required by safety laws for the protection of personnel.

Mitigation Measure P6.1b: Locate Equipment As Far from Noise-Sensitive Receivers As Practicable

Placer County DPW shall locate all stationary noise-generating equipment, such as pumps and generators, as far as possible from nearby noise-sensitive receivers. Where practicable, nearby noise-sensitive receivers shall be shielded from noise-generating equipment using noise-attenuating buffers, such as structures or haul-truck trailers. Stationary noise sources located less than 91 meters (300 feet) from noise-sensitive receivers shall be equipped with noise-reducing engine housings. Portable acoustical barriers shall be placed around noise-generating equipment located within 61 meters (200 feet) of residences. Water tanks and equipment storage, staging, and warm-up areas shall be located as far from noise-sensitive receivers as possible.

Mitigation Measure P6.1c: Use Sound-Control Devices on Combustion-Powered Equipment

Placer County DPW shall ensure that all construction equipment powered by gasoline or diesel engines have sound-control devices at least as effective as those originally provided by the manufacturer. All equipment shall be operated and maintained to minimize noise generation. No equipment shall be permitted to have an unmuffled exhaust.

Mitigation Measure P6.1d: Shield/Shroud Any Impact Tools

Any impact tools used during demolition of existing infrastructure shall be shrouded or shielded.

Mitigation Measure P6.1e: Shut Off Machinery When Not in Use

Mobile noise-generating equipment and machinery shall be shut off when not in use.

Mitigation Measure P6.1f: Use Shortest Traveling Routes, When Practicable

Placer County DPW shall require that construction vehicles accessing the project area use the shortest possible route to and from local freeways, provided the routes do not expose additional receivers to noise.

Mitigation Measure P6.1g: Disseminate Essential Information to Residences and Implement a Complaint Response/Tracking Program

Placer County DPW shall send a notification of the construction schedule to people with residences and the operators of Beals Point Campground within 152 meters (500 feet) of the construction area. The notification shall be in writing and shall be delivered before construction. Placer County DPW and the construction contractor shall designate a noise disturbance coordinator, who shall be responsible for responding to complaints about construction noise. The coordinator shall determine the cause of each complaint and shall ensure that reasonable measures are implemented to correct the problem. A contact telephone number for the noise disturbance coordinator shall be posted conspicuously on construction site fences and shall be included in the written notification of the construction schedule sent to nearby residents.

Mitigation Measure P6.1h: Implement Additional Mitigation Measures, As Needed and/or Required

Throughout the construction period, the construction contractor shall implement additional noise mitigation measures at the request of Placer County DPW. Additional measures may include changing the location of stationary noise-generating equipment, shutting off idling equipment, rescheduling construction activity, installing acoustical barriers around stationary sources of construction noise, temporarily relocating residents where feasible, using alternative equipment or construction methods that produce less noise, or other site-specific measures as appropriate.

Mitigation Measure P6.2: Employ Measures to Reduce Airblast and Vibration from Blasting

The project contractor shall retain a qualified blasting specialist to develop a site-specific blasting program report to assess, control, and monitor airblast and ground vibration from blasting. The report shall be reviewed and approved by Placer County DPW before issuance of a blasting permit. The report shall include, at minimum, the following measures.

1. The contractor shall use current state-of-the-art technology to keep blast-related vibration at offsite residential and other occupied structures as low as

possible, consistent with blasting safety. In no instance shall blast vibration, measured on the ground adjacent to a residential or other occupied structure, be allowed to exceed the frequency-dependent limits specified in the Alternative Blasting Level Criteria contained in U.S. Bureau of Mines (USBM) Report of Investigations 8507.

2. The project contractor shall use current state-of-the-art technology to keep airblast at offsite residential and other occupied structures as low as possible. In no instance shall airblast, measured at a residence or other occupied structure, be allowed to exceed the 0.013-pounds per square inch (psi) (133-dB) limit recommended in USBM Report of Investigations 8485.

3. The project contractor shall monitor and record airblast and vibration for blasts within 305 meters (1,000 feet) of residences and other occupied structures to verify that measured levels are within the recommended limits at those locations. The contractor shall use blasting seismographs containing three channels that record in three mutually perpendicular axes and which have a fourth channel for recording airblast. The frequency response of the instrumentation shall be from 2 to 250 Hertz (Hz), with a minimum sampling rate of 1,000 samples per second per channel. The recorded data must be such that the frequency of the vibrations can be determined readily. If blasting is found to exceed specified levels, blasting shall cease, and alternative blasting or excavation methods shall be employed that result in the specified levels not being exceeded.

Airblast and vibration monitoring shall take place at the nearest offsite residential or other occupied structure. If vibration levels are expected to be lower than those required to trigger the seismograph at that location, or if permission cannot be obtained to record at that location, recording shall be accomplished at some closer site in line with the structure. Specific locations and distances where airblast and vibration are measured shall be documented in detail along with measured airblast and vibration amplitudes.

Mitigation Measure P6.3: Use Noise-Reducing Pavement

Placer County DPW shall place noise-reducing open-graded asphalt pavement or equivalent throughout the project area. Placer County DPW shall consult staff from Sacramento County and Caltrans to identify the formulation specifications for the open-graded asphalt that are most effective in reducing traffic noise. The pavement type selected shall have a minimum sound reduction capacity of 3 dB, based on long-term weathered conditions.

Recommended Mitigation Measures

There are no recommended noise mitigation measures.

Table 6-12. Noise Impact Summary Table

	Alt. 1: Widening to the West	Alt. 2: Widening to the East	Alt. 3: Widening Equally on Both Sides	Alt. 4: County DPW--Preferred
NOISE				
Impact 6.1 Exposure of Noise-Sensitive Land Uses (Residences and Campgrounds) to Construction Noise				
Quantitative Comparison	NA	NA	NA	NA
Significance Before Mitigation	S	S	S	S
Mitigation Measures	P6.1a: Implement Sound Control Requirements P6.1b: Locate Equipment As Far from Noise-Sensitive Receivers As Practicable P6.1c: Use Sound-Control Devices on Combustion-Powered Equipment P6.1d: Shield/Shroud Any Impact Tools P6.1e: Shut Off Machinery When Not in Use P6.1f: Use Shortest Traveling Routes, When Practicable P6.1g: Disseminate Essential Information To Residences and Implement a Complaint Response/Tracking Program P6.1h: Implement Additional Mitigation	P6.1a: Implement Sound Control Requirements P6.1b: Locate Equipment As Far from Noise-Sensitive Receivers As Practicable P6.1c: Use Sound-Control Devices on Combustion-Powered Equipment P6.1d: Shield/Shroud Any Impact Tools P6.1e: Shut Off Machinery When Not in Use P6.1f: Use Shortest Traveling Routes, When Practicable P6.1g: Disseminate Essential Information To Residences and Implement a Complaint Response/Tracking Program P6.1h: Implement Additional Mitigation	P6.1a: Implement Sound Control Requirements P6.1b: Locate Equipment As Far from Noise-Sensitive Receivers As Practicable P6.1c: Use Sound-Control Devices on Combustion-Powered Equipment P6.1d: Shield/Shroud Any Impact Tools P6.1e: Shut Off Machinery When Not in Use P6.1f: Use Shortest Traveling Routes, When Practicable P6.1g: Disseminate Essential Information To Residences and Implement a Complaint Response/Tracking Program P6.1h: Implement Additional Mitigation	P6.1a: Implement Sound Control Requirements P6.1b: Locate Equipment As Far from Noise-Sensitive Receivers As Practicable P6.1c: Use Sound-Control Devices on Combustion-Powered Equipment P6.1d: Shield/Shroud Any Impact Tools P6.1e: Shut Off Machinery When Not in Use P6.1f: Use Shortest Traveling Routes, When Practicable P6.1g: Disseminate Essential Information To Residences and Implement a Complaint Response/Tracking Program P6.1h: Implement Additional Mitigation

Table 6-12. Noise Impact Summary Table

	Alt. 1: Widening to the West	Alt. 2: Widening to the East	Alt. 3: Widening Equally on Both Sides	Alt. 4: County DPW–Preferred
	Measures, As Needed and/or Required	Measures, As Needed and/or Required	Measures, As Needed and/or Required	Measures, As Needed and/or Required
Significance After Mitigation	LS	LS	LS	LS
Impact 6.2 Exposure of Residences and Campgrounds to Airblast and Vibration from Blasting				
Quantitative Comparison	NA	NA	NA	NA
Significance Before Mitigation	S	S	S	S
Mitigation Measures	P6.2: Employ Measures to Reduce Airblast and Vibration from Blasting	P6.2: Employ Measures to Reduce Airblast and Vibration from Blasting	P6.2: Employ Measures to Reduce Airblast and Vibration from Blasting	P6.2: Employ Measures to Reduce Airblast and Vibration from Blasting
Significance After Mitigation	LS	LS	LS	LS
Impact 6.3 Exposure of Noise-Sensitive Land Uses (Residences and Campgrounds) to Increased Traffic Noise Levels				
Quantitative Comparison	NA	NA	NA	NA
Significance Before Mitigation	LS	LS	LS	LS
Mitigation Measures	P6.3: Use Noise-Reducing Pavement	P6.3: Use Noise-Reducing Pavement	P6.3: Use Noise-Reducing Pavement	P6.3: Use Noise-Reducing Pavement
Significance After Mitigation	LS	LS	LS	LS

Key:

SU = Significant and unavoidable.

S = Significant.

PS = Potentially significant.

LS = Less than significant.

NI = No impact.

NA = Not applicable.

Chapter 7

Visual Resources/Aesthetics

This chapter describes the aesthetic character of the region and the project corridor, discusses existing sources of light and glare, and identifies viewer groups in the project area. This information is based on FHWA guidance regarding aesthetic evaluations and on a visit to the project site. Photographs of the project area (Figures 7-2 through 7-6) and a map of the locations from which they were taken (Figure 7-1) are presented at the end of the chapter. Concepts and terminology used in this assessment of visual resources are defined below. This chapter also identifies the proposed project's potential impacts on aesthetics.

Concepts and Terminology for Aesthetics Analysis

Identification of a project area's existing visual resources and conditions involves three steps:

- Objective identification of the visual features (visual resources) of the landscape.
- Assessment of the *character* and *quality* of those resources relative to overall regional visual character.
- Determination of the importance to people, or *sensitivity*, of views of visual resources in the landscape.

The aesthetic value of an area is a measure of its visual *character* and *quality*, combined with the viewer response to the area (Federal Highway Administration 1983). The scenic quality component can best be described as the overall impression that an individual viewer retains after driving though, walking though, or flying over an area (U.S. Bureau of Land Management 1980). Viewer response is a combination of *viewer exposure* and *viewer sensitivity*. Viewer exposure is a function of the number of viewers, the number of views seen, the distance of the viewers, and the viewing duration. Viewer sensitivity relates to the extent of the public's concern for particular viewsheds. These terms and criteria are described in detail below.

Viewshed

A *viewshed* is defined as all of the surface area visible from a particular location (e.g., an overlook) or sequence of locations (e.g., a roadway or trail) (Federal Highway Administration 1983). To identify the importance of views of a resource, a viewshed may be broken into distance zones of *foreground, middleground,* and *background.* Generally, the closer a resource is to the viewer, the more dominant it is and the greater is its importance to the viewer. Although distance zones in viewsheds may vary between different geographic regions or types of terrain, the standard foreground zone is 0.4–0.8 kilometer (0.25–0.5 mile) from the viewer, the middleground zone extends from the foreground zone to 4.8–8 kilometers (3–5 miles) from the viewer, and the background zone extends from the middleground zone to infinity (U.S. Forest Service 1974).

Visual Character

Both natural and artificial landscape features make up the *character* of a view. Character is influenced by geologic, hydrologic, botanical, wildlife, recreational, and urban features. Urban features include those associated with landscape settlement and development, such as roads, utilities, structures, earthworks, and the results of other human activities. The perception of visual character can vary significantly seasonally and even hourly as weather, light, shadow, and the elements that compose the viewshed change. Form, line, color, and texture are the basic components used to describe visual character and quality for most visual assessments (U.S. Forest Service 1974, Federal Highway Administration 1983). The appearance of the landscape is described in terms of the dominance of each of these components.

Visual Quality

Visual *quality* is evaluated using the well-established approach to visual analysis adopted by FHWA, employing the concepts of vividness, intactness, and unity (Federal Highway Administration 1983, Jones et al. 1975), as defined below.

- *Vividness* is the visual power or memorability of landscape components as they combine in striking or distinctive visual patterns.
- *Intactness* is the visual integrity of the natural and human-built landscape and its freedom from encroaching elements; this factor can be present in well-kept urban and rural landscapes, as well as in natural settings.
- *Unity* is the visual coherence and compositional harmony of the landscape considered as a whole; it frequently attests to the careful design of individual components in the artificial landscape. (Federal Highway Administration 1983.)

Visual quality is evaluated based on the relative degree of vividness, intactness, and unity, as modified by its visual sensitivity. High-quality views are highly vivid, relatively intact, and exhibit a high degree of visual unity. Low-quality

views lack vividness, are not visually intact, and possess a low degree of visual unity.

Visual Sensitivity and Viewer Response

The measure of the quality of a view must be tempered by the overall *sensitivity* of the viewer. Viewer sensitivity is based on the visibility of resources in the landscape, the proximity of viewers to the visual resource, the elevation of viewers relative to the visual resource, the frequency and duration of viewing, the number of viewers, and the type and expectations of individuals and viewer groups. For example, visual sensitivity is higher for views seen by people who are driving for pleasure; people engaging in recreational activities such as hiking, biking, or camping; and homeowners. Sensitivity tends to be lower for views seen by people driving to and from work or as part of their work (U.S. Forest Service 1974, Federal Highway Administration 1983, U.S. Soil Conservation Service 1978). Commuters and nonrecreational travelers have generally fleeting views and tend to focus on commute traffic and not on surrounding scenery, and therefore are generally considered to have low visual sensitivity. Residential viewers typically have extended viewing periods and are concerned about changes in the views from their homes; therefore, they generally are considered to have high visual sensitivity. Viewers using recreation trails and areas, scenic highways, and scenic overlooks are usually assessed as having high visual sensitivity.

Judgments of visual quality and viewer response must be made based in a regional frame of reference (U.S. Soil Conservation Service 1978). The same type of visual resource in different geographic areas could have a different degree of visual quality and sensitivity in each setting. For example, a small hill may be a significant visual element in a flat landscape but have very little significance in mountainous terrain.

Affected Environment

Environmental Setting

Regional Aesthetic Character

The project corridor is located in southeastern Placer County, a transition zone between the flat, open lands of the Sacramento Valley and the foothills of the Sierra Nevada. I-80 traverses the region to the west and north of the project area, through a landscape dominated by mixed conifer and oak woodlands and annual grasslands with occasional rock outcrops. The contrasts in form, color, and texture of this vegetation add visual variety and interest to the foothill landscape.

The project corridor is located in the Granite Bay community, east of the City of Roseville and west of Folsom Lake State Recreation Area (SRA). The overall

project area has been undergoing considerable suburbanization, moving from a rural character to mixed uses of housing developments and retail centers.

Description of the Project Corridor

Auburn-Folsom Road is considered a scenic roadway by Placer County. In Placer County, the road is a two-lane and four-lane thoroughfare that links U.S. Highway 50 in Folsom and communities along the I-80 corridor (e.g., Auburn and Roseville). Traffic on the roadway is a mix of cross-town and local commuters and recreational travelers.

Although there are some commercial, residential, and industrial uses at the north and south ends of the project corridor, the eastern viewshed is dominated by the Folsom Lake SRA and an earth dike that helps contain Folsom Lake (also known as a "wing dam" because it connects to the main concrete dam of Folsom Lake). From the roadway, views to the east primarily comprise gentle slopes with annual grasslands, oak scrub, and pine trees. Toward the southern end of the corridor, the earth dike of Folsom Lake is sometimes visible as a high, level ridge covered with grasses and boulders (Figure 7-2).

The western side of the project corridor contains a variety of residential and commercial uses, with a patchwork of native and ornamental vegetation, different types of fencing, residences with varied setbacks, and, infrequently, small roadside advertisements. Numerous trees screen the residences from the road. The mix of housing and vegetation types lends the feeling of a rural, agrarian character, but does not have a high level of unity. Also, the road contrasts subtly with the surrounding landscape because of features that are typical of suburbanized roadways, such as signalized intersections and striped turn pockets.

Auburn-Folsom Road cuts into slopes in some portions of the project corridor. Some of these cut slopes have exposed natural granite substrate (Figure 7-2). In other places, the roadway shoulder drops off at a sharp angle on the west side. There are no medians, and the shoulders are composed of gravel or mowed annual vegetation in many locations. Overhead power lines and the occasional cellular phone tower are visible from the road.

Overall, the project corridor has moderate visual quality. The unity and intactness of the natural landscape are somewhat impaired by intruding elements such as utility lines, signs, and property-specific vegetation and built elements. The eastern landscape of hills and native vegetation is moderately vivid.

Viewpoints and Visual Resources

Views of the roadway from representative locations, as well as the visual characteristics of the project corridor, are described below and documented with photographs.

Northern Terminus, Near Douglas Boulevard

Near its intersection with Douglas Boulevard, Auburn-Folsom Road is four lanes wide and flanked by commercial shopping centers, gas stations, and restaurants. These land uses have relatively low profiles and landscaped setbacks. Going south from the intersection, travelers ascend a small hill; here, commercial uses taper off and more expansive views of the project corridor become available.

Mobile Home Parks on West Side

There are two mobile home parks on the west side of Auburn-Folsom Road. Whispering Pines Mobile Home Park is bounded on the north by a parking lot and small business. One mobile home in this park is located fairly close to the existing roadway and is shielded by a fence and vegetation (Figure 7-3).

Ridgeview Mobile Home Park also is located in the project corridor. The entryway of this park is manicured with lawn and ornamental vegetation. From both mobile home parks, residents are able to see the roadway, but are somewhat screened by vegetation, fencing, and other homes.

Other Residential Uses to the East and West

Homes on individual lots in the project corridor predominantly are of a rural ranchette style, with varying setbacks, mailboxes, fencing styles, vegetation types, and architectural styles (Figure 7-3). Most residents have obscured or partially screened views of the roadway from their homes, because of intervening topography, fences, or vegetation. A few homes are located east of the roadway, north of the Folsom Lake SRA.

There is a newer, gated community on the west side of Auburn-Folsom Road, at Woodchase Drive. This development has a manicured entryway with ornamental vegetation and a down light. Its presence adds a more suburban element to the primarily rural character of the corridor.

Folsom Lake State Recreation Area

The Folsom Lake SRA dominates the southern and eastern portions of the project corridor. Traveling north to south along the roadway, views of the SRA are composed of gentle swells covered with oak scrub, conifers, and annual grassland (Figure 7-4). These views are mostly foreshortened by tree canopies and the rising ridge of the Folsom Lake earth dike, which precludes background views when looking directly east. However, from elevated portions of the roadway (for example, going north to south), travelers can look southeast to see a distant expanse of oak and conifer woodland.

Toward the southern end of the project corridor, the grassy and rocky ridges bordering Folsom Lake become prominent in the east.

In addition to the one main vehicle entrance from Auburn-Folsom Road to the Folsom Lake SRA, there is a marked path leading from the shoulder of the roadway up a slope to the earth dike ridge. From two approximately 0.8 kilometers (0.5-mile) segments of this paved ridge, Auburn-Folsom Road is clearly visible to hikers, bicyclists, and horseback riders (Figure 7-4). The road also is visible from approximately 16 campsites in a recreational vehicle (RV)

campground in the southern portion of the SRA (Figure 7-5). Finally, hikers and bicyclists using the trail near the vehicle entrance have relatively constant views of the roadway (Figure 7-5).

San Juan Water District Plant and Surrounds

Located at the southern end of the project corridor, to the east, is a water treatment facility operated by the San Juan Water District. The facility has an industrial yard surrounded by chain-link fencing (Figure 7-6). Behind this yard, travelers on Auburn-Folsom Road can see the face of the earth dike. Across the street from the water treatment facility is a retail center and associated parking lot with manicured landscaping.

Viewer Groups

Viewer groups in the project area, and their sensitivity to visual changes in the project corridor, are characterized below.

Travelers on Auburn-Folsom Road

Travelers on Auburn-Folsom Road include residents of the area, commuters, employees of businesses near Auburn-Folsom Road, and park users from the region and beyond. The primary users are assumed to be commuters and nonrecreational travelers. These travelers generally tend to focus on traffic rather than on surrounding scenery. For this reason, these travelers are considered to have low to moderate aesthetic sensitivity.

Residents

Auburn-Folsom Road is flanked by small residential developments, rural ranchette–style homes, and two mobile home parks. Most homes are screened from direct views of the roadway by vegetation, fences, or topography, but some, especially at the Whispering Pines Mobile Home Park, have more visual exposure to the road. Most residents have prolonged direct or indirect views of the project corridor and all are considered aesthetically sensitive.

Folsom Lake SRA Users

Recreational users of the Folsom Lake SRA include RV campers, bicyclists, hikers, and horseback riders. Currently, RV campers and trail users are exposed to views of Auburn-Folsom Road in several locations, including campgrounds. However, these park users are attracted to the Folsom Lake SRA for its scenic quality, and are therefore considered moderately to highly sensitive to adverse changes in views.

Businesses

One industrial facility and several businesses are located along the project corridor, primarily at the southern and northern ends. Employees of these facilities tend not to be focused on scenery, and are considered to have low sensitivity to visual changes in the corridor.

Sources of Light and Glare

South of the commercial area near Douglas Boulevard, the project corridor does not have street lighting. At signalized intersections, such as the Auburn-Folsom Road/Eureka Road intersection (Figure 7-6), there are approximately 7.6-meter-tall (25-foot) street light masts with "single cobra" fixtures. There is also a shorter down light at the gated entrance of the Woodchase development.

Regulatory Setting

Federal and State

There are no federal or state regulations that pertain to visual resources in the project area. The Reclamation has a NEPA guidance document, but this document does not contain any requirements specific to visual resources.

Local

Placer County General Plan

The Placer County General Plan contains the following applicable goals and policies (Placer County 1994):

Visual and Scenic Resources

Goal 1.K. To protect the visual and scenic resources of Placer County as important quality of life amenities for county residents and a principal asset in the promotion of recreation and tourism.

Policy 1.K.5. The County shall require that new roads, parking, and utilities be designed to minimize visual impacts. Unless limited by geological or engineering constraints, utilities should be installed underground and roadways and parking areas should be designed to fit the natural terrain.

Scenic Routes

Auburn-Folsom Road is designated as a Scenic Route in the Placer County General Plan. The Scenic Routes section of the Placer County General Plan Land Use Element identifies policies to protect scenic resources visible from scenic routes in the county. This section serves as the basis for review of the

visual implications of development along designated scenic roadway corridors. The element recognizes the visual value of the County's rural character and open space and establishes goals and policies to retain the rural character of the County's scenic roadways. Goals and policies relevant to the proposed project are listed below.

Goal 1.L. To develop a system of scenic routes serving the needs of residents and visitors to Placer County and to preserve, enhance, and protect the scenic resources visible from these scenic routes.

Policy 1.L.1. The County shall designate scenic routes within the county in order to preserve out-standing scenic quality within different geographic settings.

Policy 1.L.3. The County shall protect and enhance scenic corridors through such means as design review, sign control, underground utilities, scenic setbacks, density limitations, planned unit developments, grading and tree removal standards, open space easements, and land conservation contracts.

Policy 1.L.4. The County shall provide for landscaping and/or landscaped mounding along designated scenic corridors where desirable to maintain and improve scenic qualities and screen unsightly views.

Policy 1.L.5. The County shall encourage the development of trails, picnicking, observation points, parks, and roadside rests along scenic highways.

Policy 1.L.7. The County shall encourage the use of bicycles as an alternative mode of travel for recreational purposes in scenic corridors.

Policy 1.L.8. The County shall include aesthetic design considerations in road construction, reconstruction, or maintenance for all scenic routes under County jurisdiction.

Granite Bay Community Plan

The Granite Bay Community Plan states:

> The unique natural setting of the Granite Bay community is the primary factor in the creation of the quality of life of the community residents. The community contains the gentle oak and grassland foothills, flatter valley areas, valley stream corridors containing riparian habitat, floodplains, and groundwater aquifers. The community is endowed with a variety of landforms and environmental resources creating a mosaic of natural features and aesthetic qualities. The preservation of these natural features represents the single most important community conservation value.
>
> Granite Bay residents have repeatedly expressed their desire to maintain the community's rural atmosphere and residential character. The conservation of natural resources is implied in this desire and has been reinforced through community planning efforts and land use regulations. For these reasons, it is apparent that the foundation of a strong community conservation ethic exists.

> For the purpose of truly effective conservation, development and utilization of natural resources, however, there is a need for a more widespread understanding of how the ecosystem functions. The Conservation, Open Space, and Cultural Resources Elements are intended to contribute to this understanding. These Elements define conservation goals and policies and provide a framework for the conservation and utilization of natural, open space and cultural resources and protection of the aesthetic qualities of the community.

Goals and policies from the Community Plan that are relevant to the proposed project are listed below.

Conservation Element

Conservation Implementation Policy 4: Removal of vegetation shall be minimized and where removal is necessary, replanting erosion, maximize reoxygenation, and retain the aesthetic qualities of the community.

Open Space Element

Purpose. The purpose of the Open Space Element is to identify limited and valuable natural resources of the area that need to be preserved.

Goal 4. To protect the natural beauty and minimize disturbance of the natural terrain and vegetation.

Goal 7. To conserve the visual resources of the community, including the important vistas, such as those of the hillsides as seen from the valley below, and those of the valley as seen from the hillsides.

Policy 3. Encourage scenic or greenbelt corridors along major transportation routes. Roads and other public works shall incorporate beauty as well as utility, safety, and economy.

Other Open Space Guidance

The Community Plan classifies the project corridor as an example of one type of open space targeted for preservation:

> 3. Open Space for Outdoor Recreation
>
> Included in this category would be several outstanding scenic routes (Auburn-Folsom Road, Sierra College Boulevard). Also included would be greenbelts along major County roads to provide an aesthetically pleasing drive as well as creating a noise buffer. There would also be park sites and school property dedicated to playground use, as well as access points to areas such as Folsom Lake. Even smaller open space areas surrounding individual residences in rural areas when considered in the aggregate constitute a sizable area of visually open landscape.

Environmental Consequences

Criteria for Determining Significance under CEQA

Appendix G of the State CEQA Guidelines, Placer County thresholds, and standard professional practice were used to determine whether the proposed project would have a significant environmental impact. The proposed project may have a significant impact on visual resources under CEQA if it would

- cause impacts on a scenic vista or scenic highway;
- have demonstrable negative aesthetic effects;
- create adverse light or glare effects; or
- substantially damage "scenic resources," including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway.

Methods and Assumptions for the Impact Analysis

The evaluation of changes in the visual environment is based on the visual features of the landscape, their quality and character, and their importance to people. These features of the Auburn-Folsom Road landscape were assessed and are described under "Affected Environment." With this preliminary establishment of the baseline (existing) condition, the project can be systematically evaluated for its degree of visual impact. The degree of impact depends on the magnitude of change in the aesthetic resource (i.e., aesthetic character and quality) and on viewers' responses to and concern for those changes.

Numerous federal agencies and organizations have created or defined visual assessment methodologies to improve the quality and accuracy of visual analysis. The approach for this visual assessment is adapted from FHWA's visual impact assessment system (Federal Highway Administration 1983), in combination with other established visual assessment systems. The visual impact assessment process involves identifying

- relevant policies and concerns for protection of visual resources;
- visual resources (i.e., the visual character and quality) of the region, the immediate project area, and the project corridor;
- important viewing locations (e.g., roads) and the general visibility of the project area and site (documented using descriptions and photographs);
- viewer groups and their sensitivity;
- project-related changes to visual resources and views and the impacts that would result; and
- ways to mitigate adverse visual impacts.

Impacts

Planning- and Design-Related Impacts

Impact 7.1 Potential Inconsistency with Local Goals and Policies

The Placer County General Plan and the Granite Bay Community Plan contain goals and policies specific to scenic roads and corridors. These goals and policies are listed below.

Placer County General Plan

Policy 1.L.7: The County shall encourage the use of bicycles as an alternative mode of travel for recreational purposes in scenic corridors.

Policy 1.L.8: The County shall include aesthetic design considerations in road construction, reconstruction, or maintenance for all scenic routes under County jurisdiction.

Granite Bay Community Plan

Policy 3: Encourage scenic or greenbelt corridors along major transportation routes. Roads and other public works shall incorporate beauty as well as utility, safety, and economy.

The Community Plan also classifies the project corridor as an example of one type of open space targeted for preservation:

> 3. Open Space for Outdoor Recreation
>
> Included in this category would be several outstanding scenic routes (Auburn-Folsom Road, Sierra College Boulevard). Also included would be greenbelts along major County roads to provide an aesthetically pleasing drive as well as creating a noise buffer. There would also be park sites and school property dedicated to playground use, as well as access points to areas such as Folsom Lake. Even smaller open space areas surrounding individual residences in rural areas when considered in the aggregate constitute a sizable area of visually open landscape.

The proposed project involves widening the existing roadway along a designated scenic corridor. Because the project does not involve developing the scenic corridor and would preserve trails and park access points, this impact is considered less than significant. To ensure that Placer County DPW incorporates aesthetic value among its design considerations and remains consistent with visual policies, Mitigation Measures P7.1a, P7.1b, and P7.1c are recommended.

Construction-Related Impacts

Impact 7.2 Temporary Visual Impact Caused by Construction Activities

During construction of the proposed project, equipment and vehicles would be operating on and near Auburn-Folsom Road. Some vehicles and equipment would be stored in the project corridor after construction work hours.

Because of the presence of equipment, vehicles, and construction personnel, construction of the proposed project would temporarily degrade the visual quality of views of Auburn-Folsom Road. Also, dust and emissions rising from the construction site may be visible.

All viewer groups would be affected by this change in visual quality; however, residents and park users likely would be more sensitive to this change. Residents would have prolonged visual exposure to construction activities and equipment, and park users would be sensitive to the additional visual intrusion into the natural setting of the park. Travelers would also be somewhat sensitive to the temporary visual degradation, because Auburn-Folsom Road is considered a scenic corridor.

Although construction activities would affect the visual quality of the corridor, the impact would be temporary.

This impact is common to all build alternatives and is considered less than significant. Several practices and measures required to mitigate air quality impacts (see Chapter 4) would further reduce this impact. No mitigation is required.

Operation-Related Impacts

Impact 7.3 Degradation of Views and Increase in Glare

The proposed road widening could bring the roadway closer to residences or other buildings, resulting in a visual impact. During the day, residents and other viewers, such as campers, would have close-up views of passing vehicles. New lights installed at intersections would increase nighttime light in the project area. Although vegetation and topography would screen most nearby land uses from direct light, indirect, reflected light would be visible in the night sky above the roadway. Any increase in ambient light would have a negative effect on the Folsom Lake SRA (in particular, on nearby overnight campers).

This impact differs among alternatives, as described below.

Alternative 1: Widen Roadway to the West

In addition to the impact of reflected nighttime light, the new roadway under Alternative 1 would be very close (2.3–4.6 meters [7.5–15 feet]) to at least two homes and one business. This proximity would allow direct street lighting and headlight glare to intrude on homes at night (the business is closed at night and would not be affected). Residents would be highly sensitive to this intrusion. Also, close-up views of the roadway during the day would have a negative visual effect. This impact is considered significant. Implementation of Mitigation Measures P7.3a and P7.3b would reduce this impact to a less-than significant level.

Alternative 2: Widen Roadway to the East

Unlike Alternative 1, Alternative 2 would not bring the roadway (and associated headlight and streetlight glare) close to homes or businesses, because the widening would take place mostly on the east side. However, the impact of indirect light from new light fixtures is considered significant. Implementation of Mitigation Measure 7.3a would reduce this impact to a less-than-significant level.

Alternative 3: Widen Roadway Equally on Both Sides

Alternative 3 would not bring the roadway (and associated glare) close to homes or businesses, because the widening would take place on both sides of the existing roadway, thereby limiting the extent of construction on the west side. However, the impact of indirect light from new light fixtures is considered significant. Implementation of Mitigation Measure P7.3a would reduce this impact to a less-than-significant level.

Alternative 4: County DPW–Preferred Alternative

Alternative 4 would not bring the roadway (and associated glare) close to homes or businesses. However, the impact of indirect light from new light fixtures is considered significant. Implementation of Mitigation Measure P7.3a would reduce this impact to a less-than-significant level.

Impact 7.4 Degradation of Visual Quality Resulting from Tree Removal

The widening would require removal of trees and other vegetation along the entire project alignment. An arborist's report was prepared for the proposed project in June 2002. The arborist identified and inventoried all trees of more than 15 centimeters (6 inches) in diameter at breast height (dbh) within the project corridor. The removal of such trees and other vegetation would affect residents, park users, and travelers on Auburn-Folsom Road. Park users at the park facilities near Auburn-Folsom Road would be sensitive to the removal of trees, because the project corridor is visible from trails and campgrounds. Travelers on the scenic roadway would experience diminished visual quality and a change in the rural character of the corridor.

This impact differs among alternatives, as described below.

Alternative 1: Widen Roadway to the West

Alternative 1 would widen Auburn-Folsom Road primarily on the west side of the roadway. Some vegetation removal also would be required on the east side of the roadway. Alternative 1 would remove 371 trees, 296 of which are native. Ornamental vegetation and vegetative screens also would be removed. Travelers and park users would be affected and, under Alternative 1, some residents would be exposed to direct views of the roadway after screening vegetation is removed. This impact is considered significant. Implementation of Mitigation Measures P7.4a and P7.4b would reduce the effect of vegetation removal, but not to a less-than-significant level. Therefore, this impact is considered significant and unavoidable.

Alternative 2: Widen Roadway to the East

Alternative 2 would widen Auburn-Folsom Road primarily on the east side of the roadway, although some vegetation removal would be required on the west side of the roadway. Alternative 2 would remove 389 trees, 359 of which are native. In addition, smaller trees, ornamental vegetation, and some vegetative screens would be removed.

Under Alternative 2, fewer residents would be exposed to direct views of the roadway, compared to Alternative 1. However, users of campsites and trails in the Folsom Lake SRA would be more exposed to views of the roadway. Travelers on the scenic roadway also would experience diminished visual quality. This impact is considered significant. Implementation of Mitigation Measures P7.4a and P7.4b would reduce the effect of vegetation removal, but not to a less-than-significant level. Therefore, this impact is considered significant and unavoidable.

Alternative 3: Widen Roadway Equally on Both Sides

Under Alternative 3, Auburn-Folsom Road would be widened on both sides, requiring less vegetation removal on the west side (compared to Alternative 1) and less vegetation removal on the east side (compared to Alternative 2). A total of 364 trees would be removed, 318 of which are native. Although these trees and ornamental vegetation would be removed, the vegetative screens between the roadway and most homes would be preserved. Nevertheless, users of campsites and trails in the Folsom Lake SRA would be more exposed to views of the roadway. Travelers on the scenic roadway also would experience diminished visual quality. This impact is considered significant. Implementation of Mitigation Measures P7.4a and P7.4b would reduce the effect of vegetation removal, but not to a less-than-significant level. Therefore, this impact is considered significant and unavoidable.

Alternative 4: County DPW–Preferred Alternative

Under Alternative 4, Auburn-Folsom Road would be widened on alternating sides. A total of 346 trees would be removed, 313 of which are native. Although these trees and ornamental vegetation would be removed, the vegetative screens between the roadway and most homes would be preserved. Nevertheless, users of campsites and trails in the Folsom Lake SRA would be more exposed to views of the roadway. Travelers on the scenic roadway also would experience diminished visual quality. This impact is considered significant. Implementation

of Mitigation Measures P7.4a and P7.4b would reduce the effect of vegetation removal, but not to a less-than-significant level. Therefore, this impact is considered significant and unavoidable.

Impact 7.5 Degradation of Visual Quality Resulting from Cuts, Grading, and Other Changes in Topography

Construction of the proposed project would necessitate small changes in the topography and grade of land surrounding the existing roadway. Where the new roadway would cut into gentle slopes, the surrounding land would be graded to achieve stability. Placer County is considering the use of retaining walls as a design option. With or without retaining walls, residents and travelers would have frequent exposure to any changes in topography, which would constitute a slight degradation in visual quality. Park users on the east side of the road may notice the changes resulting from grading, if viewing them from the edge of the park or the trail at the top of the wing dam.

This impact differs among alternatives, as described below.

Alternative 1: Widen Roadway to the West

Under Alternative 1, most grading, cuts, and fill would take place on the west side of the roadway, although some changes would be made on the east side. Because the west side of the corridor is already developed with residential uses, there are few uphill slopes (requiring cuts). There are some locations (such as the vicinity of Woodchase Drive) where the roadway would cut into the hillside to the west and possibly require a retaining wall. This impact is considered less than significant. No mitigation is required.

Alternative 2: Widen Roadway to the East

Under Alternative 2, grading and cuts would take place on the east side of the roadway, although some changes would be made on the west side. Some existing cuts on the east side of the road would need to be expanded, and the natural granite may need to be buttressed by retaining walls. If installed, such retaining walls would be inconsistent with the natural character of the view to the east.

The changes in topography under Alternative 2 would constitute a degradation of visual quality. This impact is considered significant. Implementation of Mitigation Measure P7.5a would reduce this impact to a less-than-significant level.

Alternative 3: Widen Roadway Equally on Both Sides

Under Alternative 3, grading and cuts would take place on both sides of the roadway. Because both sides would be equally affected, the extent of cuts and grading on either the west or east side would be smaller than under Alternative 1 or Alternative 2.

Some existing cuts on the east side of the roadway would need to be expanded, and the natural granite may need to be buttressed by retaining structures. This impact is considered significant. Implementation of Mitigation Measure P7.5a would reduce this impact to a less-than-significant level.

Alternative 4: County DPW--Preferred Alternative

Under Alternative 4, grading and cuts would take place on both sides of the roadway. Grading and cuts would occur in patterns similar to Alternatives 1 and 2. The changes in topography may therefore constitute a degradation of visual quality. This impact is considered significant. Implementation of Mitigation Measure P7.5 would reduce this impact to a less-than-significant level.

Mitigation Measures

This section details the mitigation measures identified for the project alternatives. Mitigation measures are identified as either of the following.-

- *Proposed mitigation measures* are measures that the Placer County DPW, as project proponent, is either proposing as part of the project design or has agreed to implement.
- *Recommended mitigation measures* are measures that are identified in this environmental document but that the Placer County DPW has not chosen to implement, and which may be required by the Placer County Board of Supervisors if the project is approved.

Proposed Mitigation Measures

Mitigation Measure P7.1a: Preserve Existing Trail Access Points in Project Design

Placer County DPW shall ensure that any existing trailheads within the construction corridor are preserved or reconstructed after the project is complete.

Mitigation Measure P7.1b: Provide Class II Bikeway

Placer County DPW shall provide a Class II bikeway along Auburn-Folsom Road pursuant to the Placer County Bikeways Master Plan. The location, width, alignment, and surfacing of the bikeway shall be in accordance with the bikeway design standards listed in the Placer County General Plan.

Mitigation Measure P7.1c: Revegetate All Disturbed Areas

Placer County DPW or an approved contractor shall revegetate all disturbed areas. Revegetation undertaken between April 1 and October 1 shall include regular watering to ensure adequate growth. A winterization plan shall be provided with project Improvement Plans. It is Placer County DPW's responsibility to ensure proper installation and maintenance of erosion control/winterization during project construction. Placer County DPW shall provide for erosion control where roadside drainage is off of the pavement.

Placer County DPW shall maintain a letter of credit, surety bond, or cash deposit in the amount of 100% of an approved engineer's estimate for winterization and permanent erosion control work before Improvement Plan approval to guarantee protection against erosion and improper grading practices.

Mitigation Measure P7.3a: Select Street Lights to Minimize Exposure to Glare and Light

Streetlight(s), designed in accordance with the *American National Standard Practice for Roadway Lighting Manual,* shall be provided and installed to the satisfaction of Placer County DPW and PG&E at intersections along the project corridor, as needed.

Streetlights shall be of a type, height, and design to direct lighting downward, shielding, to the greatest extent practical, light exposure beyond that needed for proper intersection lighting.

Mitigation Measure P7.3b: Construct Fence between Affected Residences and Roadway

Placer County DPW shall construct a solid fence between the new roadway and the two affected residences. The fence shall be constructed of a solid, opaque material that is visually cohesive with the surrounding structures and landscape. The fence shall be high enough to block direct headlight glare.

Mitigation Measure P7.4a: Obtain a Tree Permit

Before any construction activity, including grading or other site disturbance, Placer County DPW shall acquire a Tree Permit for the removal of trees 15 centimeters (6 inches) dbh or larger and multitrunked trees with an aggregate diameter of 30 centimeters (10 inches) dbh or more.

Mitigation Measure P7.4b: Mitigate Tree Removal

Trees identified for removal and trees with disturbance within their driplines shall be replaced along the corridor as feasible.

1. Trees removed from Reclamation property shall be replaced on Reclamation property on an inch-by-inch basis. For example, if 254 centimeters (100 inches) of tree diameter are proposed to be removed, the replacement trees shall be equal to 254 centimeters (100 inches) in diameter (aggregate). If feasible, seedlings should be from acorns collected within 30 miles of the project location in Placer or Sacramento Counties in the American River watershed and between the elevations of 100 and 800 feet. A 3-year monitoring and maintenance plan for the trees and any irrigation shall be required. The expectation is that there will be 100% survival for the replacement trees at the end of 3 years.
2. In lieu of 50% of the mitigation for tree removal that is not on Reclamation property, a contribution to the Placer County Tree Preservation Fund shall be required. The value is based on 50% of the overall replacement estimate, which shall be submitted to the Placer County Development Review Committee (DRC) for review and approval.

3. The trees shall be installed by the contractor and inspected and approved by Placer County DPW before completion of the project. At its discretion, the DRC may establish an alternate deadline for installation of replacement trees if weather or other circumstances prevent the completion of this requirement before completion of the project.
4. For native trees removed from private lands, Placer County DPW may either:

- replace the trees on the private lands with one 15-gallon native tree for each tree removed or
- contribute money into the Placer County Tree Preservation Fund.

Mitigation Measure P7.4c: Revegetate and Restore All Disturbed Areas to Minimize Visual Quality Impacts and Provide Screening

Placer County DPW or an approved contractor shall revegetate and restore all disturbed areas. Revegetation undertaken between April 1 and October 1 shall include regular watering to ensure adequate growth. Restoration of trees and shrubs shall provide the screening for affected properties. Revegetation of disturbed areas shall be consistent with the surrounding area.

The County DPW shall prepare a restoration and revegetation plan for the trees and vegetation removed from Reclamation property. This plan shall address the mitigation of the removal of oaks and other trees from Reclamation property. The plan shall be prepared in consultation with Reclamation and shall provide screening to mitigate the increased visibility of the roadway from recreation facilities (campgrounds and trails).

Mitigation Measure P7.5: Enhance Aesthetics of Retaining Walls, Soundwalls, and Other Structural Elements

Placer County DPW shall design and construct the visible surfaces of vertical, linear structural elements, including all retaining walls and soundwalls, to maximize aesthetic appearance and to achieve visual unity with the existing landscape character. The design shall be unified with the existing landscape in terms of color, proportion, texture, and material types and finishes. Design features that may be used to achieve enhanced aesthetics include:

1. horizontal and vertical articulation of linear features to visually break up large masses (e.g., terracing sections of retaining walls or offsetting sections of soundwalls);
2. use of rough-textured surfaces to minimize glare, reduce potential for graffiti, and blend with the rugged appearance of the natural vegetation and rock outcrops;
3. use of native vegetation incorporated into retaining walls and as a screen for other structural elements;
4. use of warm, earthy hues; and
5. consistent architectural detailing among all structural elements to unify the roadway corridor.

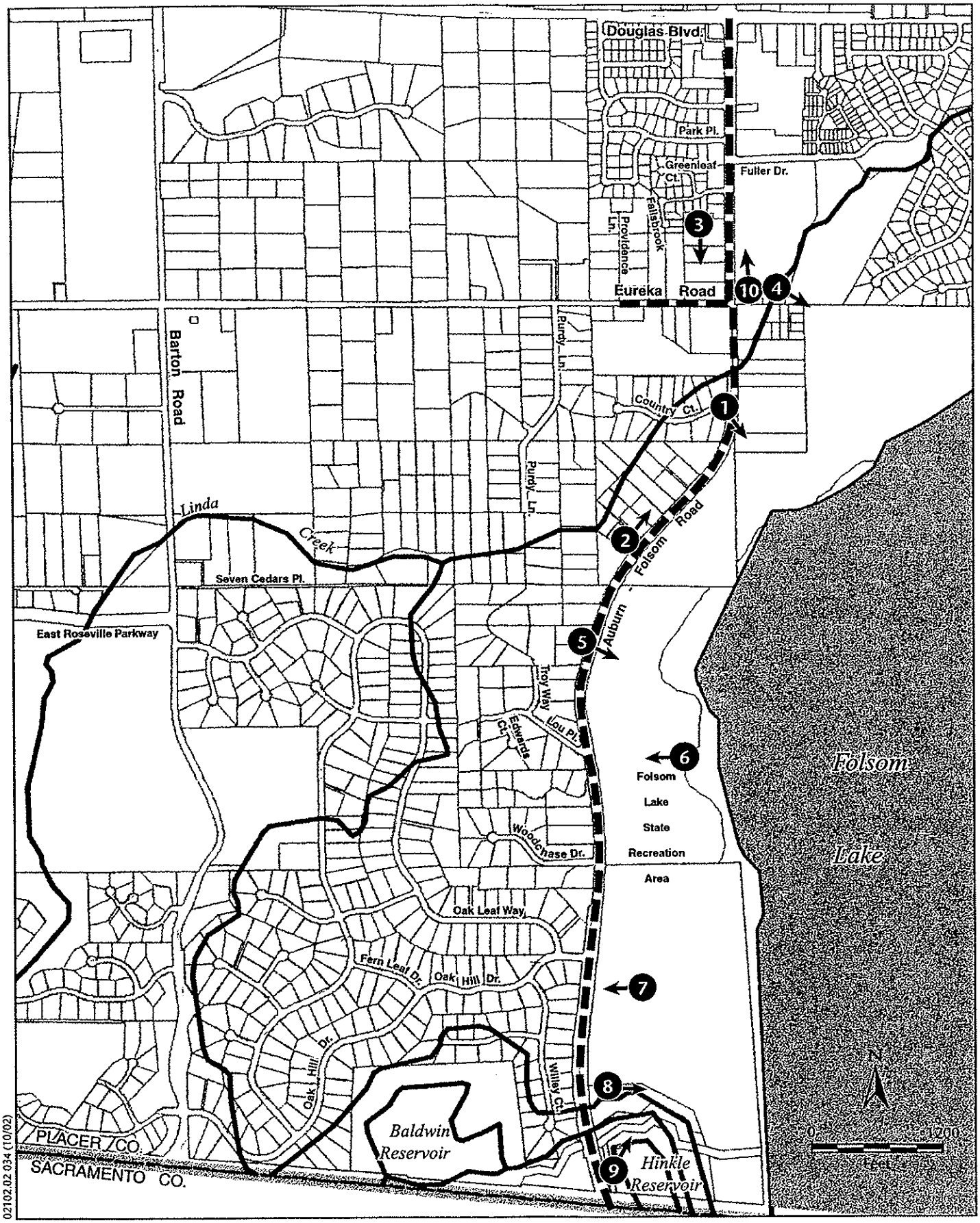


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Figure 7-1
Project Site and Photograph Locations

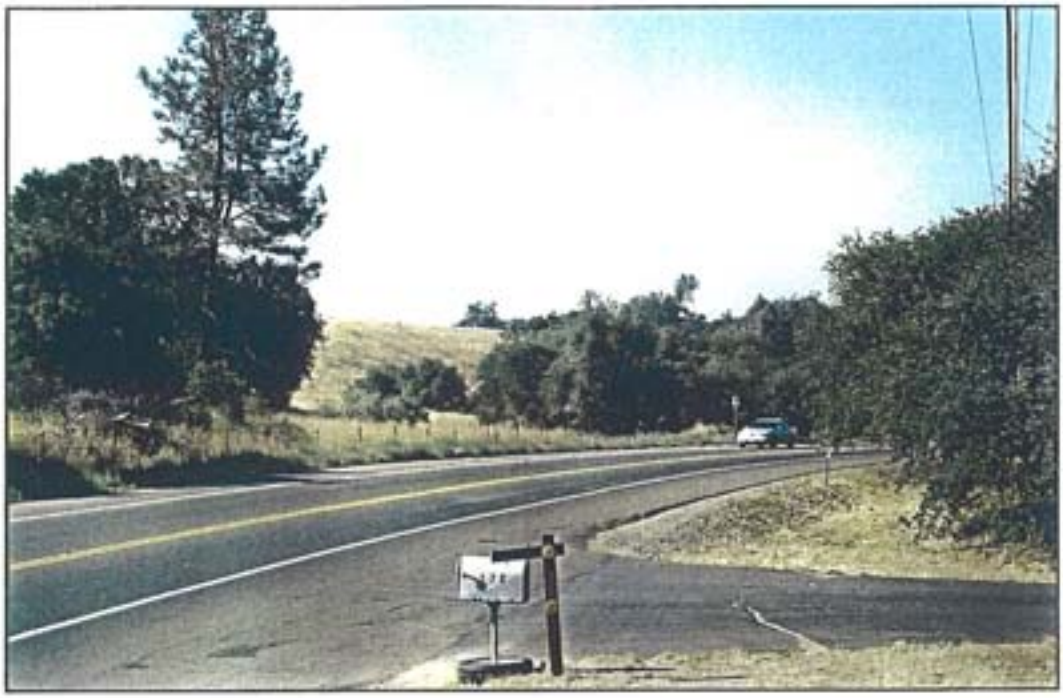

Photo 1. Looking southeast across Auburn-Folsom Road, toward the grass-covered earth dike of Folsom Lake. Note the overhead power lines, unimproved shoulders, and naturalistic vegetation.

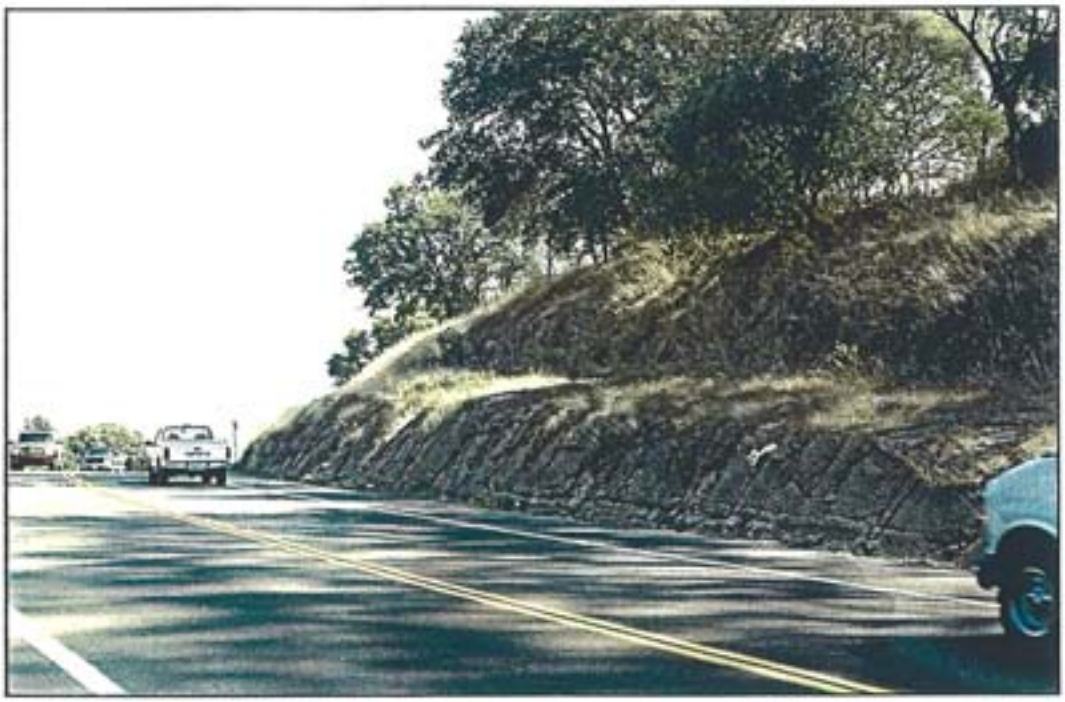

Photo 2. Looking northeast across Auburn-Folsom Road. Note the unvegetated road cut.

Photo 3. Looking south at the Whispering Pines Mobile Home Park. Note the proximity of the home to the existing roadway.

Photo 4. Residence on east side of project corridor, north of the Folsom SRA. Note the deep setback, the formal fencing style, the naturalistic landscaping, and generally well-maintained appearance.

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Figure 7-3
Photographs 3 and 4

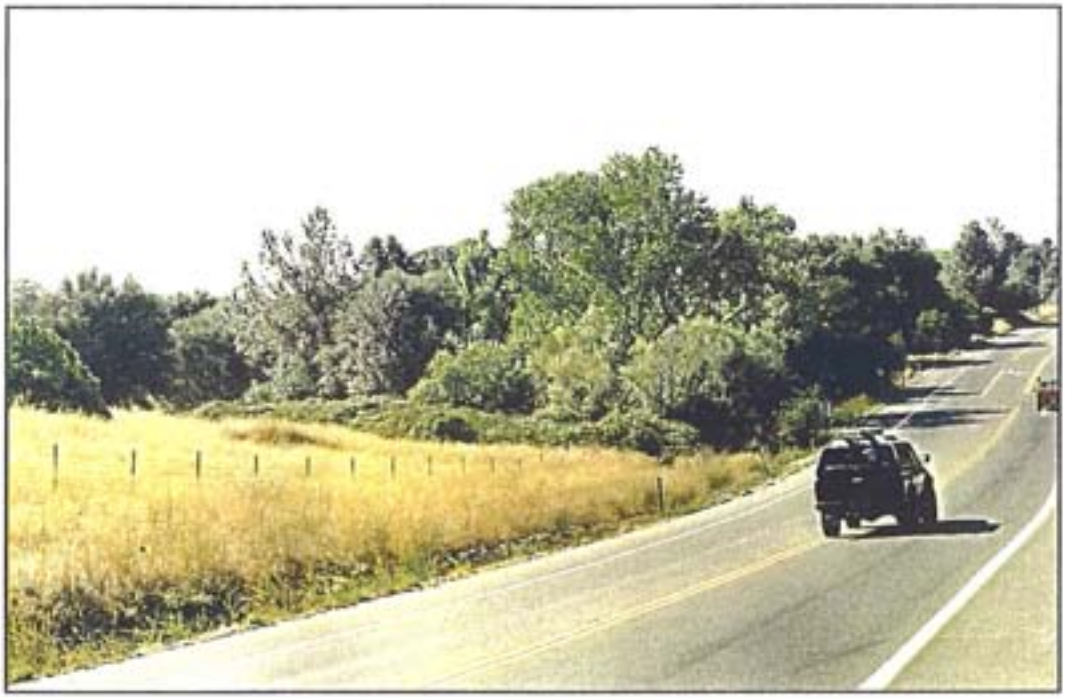

Photo 5. Looking southeast from the roadway to the Folsom SRA. Elevated portions of Auburn-Folsom Road allow several such expansive views of the corridor.

Photo 6. Auburn-Folsom Road, as seen from the paved trail on top of the Folsom Lake earth dike. Note overhead utility lines, naturalistic vegetation, and adjacent residences.

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Figure 7-4
Photographs 5 and 6

Photo 7. Looking west from the RV campground in the Folsom SRA, traffic on Auburn-Folsom Road is visible through the vegetation (as evidenced by white truck).

Photo 8. Looking east from the shoulder of Auburn-Folsom Road, near the vehicle entrance to the Folsom SRA. Note the proximity of the recreational trail to the roadway (as evidenced by cyclist).

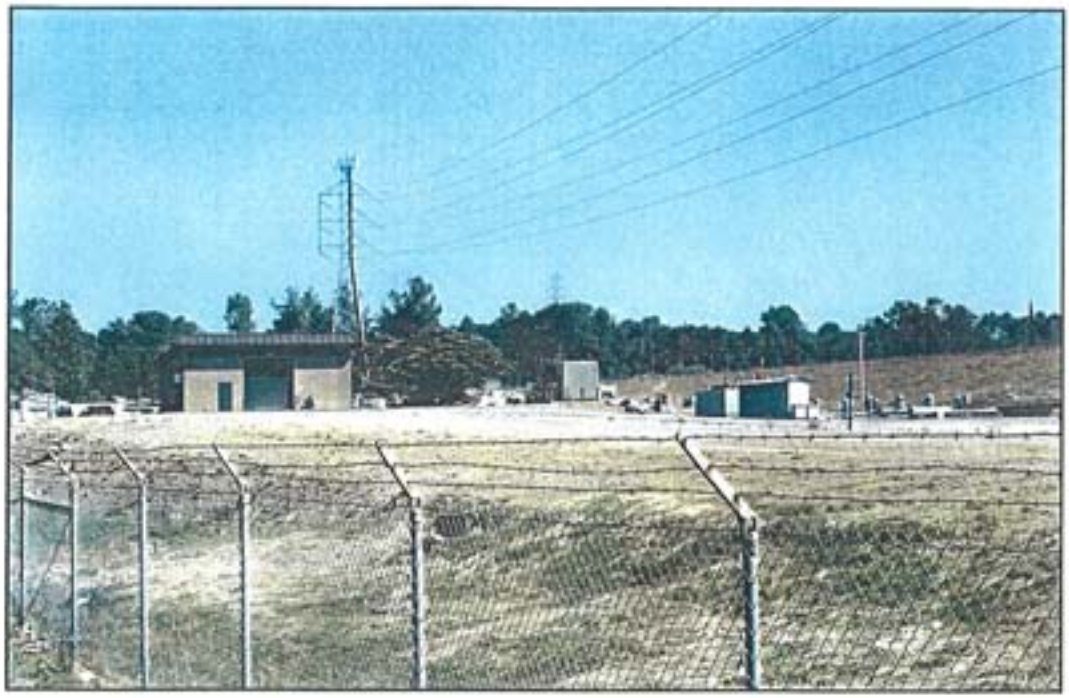


Photo 9. The San Juan Water District facility in the southeast portion of the project corridor, viewed from the shoulder of Auburn-Folsom Road. Note the security fencing, overhead utility lines, unvegetated earth, and outbuildings.

Photo 10. Looking north at the intersection of Auburn-Folsom Road and Eureka Road. Note the three single-cobra light fixtures on approximately 25-foot-tall masts.

Recommended Mitigation Measures

There are no recommended aesthetics mitigation measures.

Table 7-1. Visual Resources/Aesthetics Impact Summary Table

	Alt. 1: Widening to the West	Alt. 2: Widening to the East	Alt. 3: Widening Equally on Both Sides	Alt. 4: County DPW–Preferred
VISUAL RESOURCES/AESTHETICS				
Impact 7.1 Potential Inconsistency with Local Goals and Policies				
Quantitative Comparison	NA	NA	NA	NA
Significance Before Mitigation	LS	LS	LS	LS
Mitigation Measures	P7.1a: Preserve Existing Trail Access Points in Project Design P7.1b: Provide Class II Bikeway P7.1c: Revegetate All Disturbed Areas	P7.1a: Preserve Existing Trail Access Points in Project Design P7.1b: Provide Class II Bikeway P7.1c: Revegetate All Disturbed Areas	P7.1a: Preserve Existing Trail Access Points in Project Design P7.1b: Provide Class II Bikeway P7.1c: Revegetate All Disturbed Areas	P7.1a: Preserve Existing Trail Access Points in Project Design P7.1b: Provide Class II Bikeway P7.1c: Revegetate All Disturbed Areas
Significance After Mitigation	LS	LS	LS	LS
Impact 7.2 Temporary Visual Impact Caused by Construction Activities				
Quantitative Comparison	NA	NA	NA	NA
Significance Before Mitigation	LS	LS	LS	LS
Mitigation Measures	None required	None required	None required	None required
Significance After Mitigation	LS	LS	LS	LS
Impact 7.3 Degradation of Views and Increase in Glare				
Quantitative Comparison	Two homes within 15 feet of new roadway	Zero homes within 15 feet of new roadway	Zero homes within 15 feet of new roadway	Zero homes within 15 feet of new roadway
Significance Before Mitigation	S	S	S	S
Mitigation Measures	P7.3a: Select Street Lights to Minimize Exposure to Glare and Light P7.3b: Construct Fence between	P7.3a: Select Street Lights to Minimize Exposure to Glare and Light	P7.3a: Select Street Lights to Minimize Exposure to Glare and Light	P7.3a: Select Street Lights to Minimize Exposure to Glare and Light

Table 7-1. Visual Resources/Aesthetics Impact Summary Table

	Alt. 1: Widening to the West	Alt. 2: Widening to the East	Alt. 3: Widening Equally on Both Sides	Alt. 4: County DPW–Preferred
	Affected Residences and Roadway			
Significance After Mitigation	LS	LS	LS	LS
Impact 7.4 Degradation of Visual Quality Resulting from Tree Removal				
Quantitative Comparison	371 trees removed, 296 are native	389 trees removed, 359 are native	364 trees removed, 318 are native	346 trees removed, 313 are native
Significance Before Mitigation	S	S	S	S
Mitigation Measures	P7.4a: Obtain a Tree Permit P7.4b: Mitigate Tree Removal P7.4c: Revegetate and Restore All Disturbed Areas to Minimize Visual Quality Impacts and Provide Screening	P7.4a: Obtain a Tree Permit P7.4b: Mitigate Tree Removal P7.4c: Revegetate and Restore All Disturbed Areas to Minimize Visual Quality Impacts and Provide Screening	P7.4a: Obtain a Tree Permit P7.4b: Mitigate Tree Removal P7.4c: Revegetate and Restore All Disturbed Areas to Minimize Visual Quality Impacts and Provide Screening	P7.4a: Obtain a Tree Permit P7.4b: Mitigate Tree Removal P7.4c: Revegetate and Restore All Disturbed Areas to Minimize Visual Quality Impacts and Provide Screening
Significance After Mitigation	SU	SU	SU	SU
Impact 7.5 Degradation of Visual Quality Resulting from Cuts, Grading, and Other Changes in Topography				
Quantitative Comparison	NA	NA	NA	NA
Significance Before Mitigation	LS	S	S	S

Table 7-1. Visual Resources/Aesthetics Impact Summary Table

	Alt. 1: Widening to the West	Alt. 2: Widening to the East	Alt. 3: Widening Equally on Both Sides	Alt. 4: County DPW–Preferred
Mitigation Measures	None required	P7.5: Enhance Aesthetics of Retaining Walls, Soundwalls, and Other Structural Elements	P7.5: Enhance Aesthetics of Retaining Walls, Soundwalls, and Other Structural Elements	P7.5: Enhance Aesthetics of Retaining Walls, Soundwalls, and Other Structural Elements
Significance After Mitigation	LS	LS	LS	LS

Key:

SU = Significant and unavoidable.

S = Significant.

PS = Potentially significant.

LS = Less than significant.

NI = No impact.

NA = Not applicable.

Chapter 8

Biological Resources

This chapter provides information on biological resources located in the project area. A discussion of federal, state, and local laws, policies, and regulations that influence biological resources is also presented in this chapter. Impacts on biological resources that may result from the project are identified, and mitigation measures to avoid, minimize, and compensate for potential significant impacts on biological resources are described.

Affected Environment

Environmental Setting

Methods

The methods used to identify biological resources in the study area comprised a prefield investigation, coordination with the resource agencies, and field surveys. Each of these elements is described in this section.

Prefield Investigation and Coordination with Resource Agencies

To prepare for the field surveys, biologists reviewed existing resource information related to the project area and coordinated with resource agencies to evaluate whether special-status species or their habitats could occur in the project area. Pertinent sources reviewed were:

- a California Natural Diversity Database (CNDDB) records search for the Folsom, Clarksville, Citrus Heights, Pilot Hill, Rocklin, Roseville, Carmichael, Buffalo Creek, and Folsom 7.5-minute U.S. Geological Survey (USGS) quadrangles (California Natural Diversity Database 2002) (Appendix O);
- the California Native Plant Society's (CNPS's) 2002 Inventory of Rare and Endangered Plants of California;

- a U.S. Fish and Wildlife Service (USFWS) list of special-status species (Appendix G);
- the tree inventory and assessment arborist report (Sierra Nevada Arborists 2002) (Appendix L);
- the Placer County General Plan (adopted 1994);
- the Granite Bay Community Plan (adopted 1989);
- the California Department of Parks and Recreation's 1979 Resource Inventory Report Auburn-Folsom Project, Volume One: Natural Resources; and
- discussions with state and federal resource agencies (Holly pers. comm., Douglas pers. comm.).

This information was used to develop lists of special-status species and other sensitive biological resources that could be present in the region. Species were included in these lists if they were known to occur in the project region and if their habitats could be located in the project vicinity. There is no suitable habitat for special-status fish in the project area; therefore, these species are not addressed in this EA/Draft EIR. Linda Creek is the only perennial stream in the study area that could support special-status fish, but fish passage is obstructed by a dam on the Granite Bay Golf Course.

Field Surveys

Biological surveys were conducted between March and August 2002 by Jones & Stokes biologists (see Table 8-1 for specific dates). For the purpose of this environmental document, the study area was defined based on the project boundaries and including an additional 30.5 meters (100 feet) beyond the project boundaries, from the edge of the pavement or up to a private property fence. Fenced residential yards were not surveyed as part of this study because they were not readily accessible during the surveys. Also, these residential areas did not appear to support suitable habitat for special-status species because they were largely dominated by landscape species.

Table 8-1. Biological Resource Survey and Wetland Delineation Dates

Survey Date	Survey Purpose
March 15, 2002	Reconnaissance-level survey
April 3, and May 2 and 3, 2002	Botanical surveys
May 22, 24, and 29, and July 11, 2002	Habitat assessment and biological surveys to document biological resources and to determine the occurrence or potential for special-status wildlife to occur in the study area
May 31 and August 9, 2002	Wetland delineation

The purpose of the biological field surveys was to:

- characterize biological communities and their associated wildlife habitat uses;
- document common and special-status wildlife species;
- identify and characterize habitat for special-status wildlife species;
- document special-status plants;
- delineate waters of the United States, including wetlands, that would be subject to federal regulations; and
- provide biological resource information to the Placer County DPW early in the project design phase for designing the project alternatives.

Methods and terms used to document special-status species and waters of the United States (including wetlands) are described below. A tree inventory and assessment was conducted by Sierra Nevada Arborists and is included as Appendix L.

Special-Status Species

Special-status species are defined as:

- species listed or proposed for listing as threatened or endangered under the federal Endangered Species Act (ESA) (Title 50, Code of Federal Regulations [CFR], Section 17.12 for listed plants, 50 CFR 17.11 for listed animals, and various notices in the Federal Register [FR] for proposed species);
- species that are candidates for possible future listing as threatened or endangered under ESA (67 FR 40657, June 13, 2002);
- species that are federal species of concern (i.e., former USFWS C1 or C2 candidates);
- species that are listed or proposed for listing by the State of California as threatened or endangered under the California Endangered Species Act (CESA) (Title 14, California Code of Regulations [CCR], Section 670.5);
- plants listed as rare under the California Native Plant Protection Act of 1977 (California Fish and Game Code, Section 1900 et seq.);
- plants considered by CNPS to be "rare, threatened, or endangered in California";
- species that meet the definitions of rare or endangered under the State CEQA Guidelines, Section 15380; and
- animals fully protected in California (California Fish and Game Code, Section 3511 [birds], 4700 [mammals], and 5050 [reptiles and amphibians]).

Special-Status Plant Surveys

Jones & Stokes botanists conducted botanical surveys between March and May 2002 to locate special-status plants identified as having the potential to occur in the study area (Table 8-2). Botanical surveys were conducted according to California Department of Fish and Game (DFG) and CNPS Botanical Survey Guidelines (California Native Plant Society 2002). The guidelines are intended to determine when a botanical survey is needed, who should be considered qualified to conduct such surveys, how surveys should be conducted, and what information should be contained in the survey report.

During the field surveys, all plants were identified to the level necessary to determine whether they qualified as special-status plants or were plant species with unusual or significant range extensions. In general, survey intensity varied depending on species richness, habitat type and quality, and the probability of special-status plants occurring in a particular habitat type. The botanists walked meandering transects through the study area and conducted more focused surveys in areas with the greatest potential for special-status plants to grow (e.g., open annual grassland and oak woodland communities). Surveys coincided with the identification periods of all of the special-status plants identified in Table 8-2.

Special-Status Wildlife Surveys

A Jones & Stokes wildlife biologist conducted a habitat-based field assessment to determine the presence, distribution, and amount of habitat capable of supporting special-status species identified as having potential to occur in the study area (Table 8-3). Field surveys were conducted on May 22, 24, and 29, 2002, and on July 11, 2002, by walking meandering transects through the study area. The biologist noted each habitat type present and evaluated it for potential to support special-status species.

In addition, several blue elderberry shrubs, which are the host plant for valley elderberry longhorn beetle (VELB) were located in the study area. VELB is listed as threatened under ESA. During the field surveys listed above, the biologist counted the number of elderberry stems considered suitable for VELB on each elderberry shrub and looked for the presence of exit holes on the stems, in accordance with the survey protocol established by USFWS (1999). The methods used to identify VELB and the results of field surveys are documented in a biological assessment (BA) for VELB (Appendix J). The BA will be submitted by Reclamation to USFWS to comply with Section 7 of ESA (16 United States Code [USC] 1536).

Delineation of Waters of the United States (Including Wetlands)

Waters of the United States is the encompassing term for areas under federal jurisdiction under Section 404 of the federal Clean Water Act. For the purpose of this analysis, waters of the United States are categorized as either *wetlands* or *other waters of the United States*. Wetlands are defined as "areas that are inundated or saturated by surface or groundwater at a frequency and duration

Table 8-2. Special-Status Plants Documented within the Study Area

Common Name	Scientific Name	Legal Status[a]			Geographic Distribution	Habitat Requirements	Blooming Period	Potential[b] to Occur in the Study Area[c]
		Federal	State	CNPS				
Big-scale balsamroot	*Balsamorhiza macrolepis* var. *macrolepis*	–	–	1B	San Francisco Bay region, Sierra Nevada foothills, Coast Ranges, eastern Cascade Ranges, and Sacramento Valley	Rocky annual grassland and fields and foothill woodland hillsides; sometimes on serpentine; below 1,402 meters (4,600 feet)	March–June	Moderate
Stebbin's morning-glory	*Calystegia stebbinsii*	E	E	1B	Northern Sierra Nevada foothills and El Dorado and Nevada Counties	Chaparral or woodland; on serpentine or gabbro; generally ± 305 meters (1,000 feet)	May–June	None
Pine Hill ceanothus	*Ceanothus roderickii*	E	R	1B	Northern Sierra Nevada foothills, Pine Hill, and El Dorado County	Chaparral or woodland; often on serpentine or gabbro soils; 300–610meters (980–2,000 feet)	May–June	None
Red Hills soaproot	*Chlorogalum grandiflorum*	SC	–	1B	Northern and central Sierra Nevada foothills and Amador, Placer, El Dorado, and Tuolumne Counties	Chaparral and foothill pine-blue oak woodland; on serpentine or gabbro soils; 305–503 meters (1,000–1,650 feet)	May–June	None
Brandegee's clarkia	*Clarkia biloba* ssp. *brandegeae*	–	–	1B	Northern Sierra Nevada foothills	Foothill woodland; below approximately 455 meters (1,500 feet)	May–July	Low
Hispid bird's-beak	*Cordylanthus mollis* ssp. *hispidus*	SC	–	1B	Central Valley and Alameda, Kern, Merced, Placer, and Solano Counties	Meadow, grassland, or playa; on alkaline soils; below 152 meters (500 feet)	June–September	None
El Dorado bedstraw	*Galium californicum* ssp. *sierrae*	E	R	1B	El Dorado County	Chaparral, woodland, or lower montane coniferous forest; on gabbro soils; 91–503 meters (330–1,650 feet)	May-June	None
Bogg's Lake hedge-hyssop	*Gratiola heterosepala*	–	E	1B	Inner north Coast Ranges, Central Sierra Nevada foothills, Sacramento Valley and Modoc Plateau, and Fresno, Lake, Lassen, Madera, Modoc, Placer, Sacramento, Shasta, San Joaquin, Solano, and Tehama Counties	Clay soils in areas of shallow water, lake margins, and vernal pool margins	April–June	None
Bisbee Peak rush-rose	*Helianthemum suffrutescens*	–	–	3	Amador, Calaveras, El Dorado, Sacramento, and Tuolumne Counties	Chaparral openings; often on serpentine, gabbro, or Ione soils; below 1,524 meters (5,000 feet)	April–May	None

Table 8-2. Continued

Common Name	Scientific Name	Legal Status[a]			Geographic Distribution	Habitat Requirements	Blooming Period	Potential[b] to Occur in the Study Area[c]
		Federal	State	CNPS				
Ahart's dwarf rush	*Juncus leiospermus* var. *ahartii*	SC	–	1B	Eastern Sacramento Valley, northeastern San Joaquin Valley, and Butte, Calaveras, Placer, Sacramento, and Yuba Counties	Vernal pool margins; 30.5–100 meters (100–330 feet)	March–May	None
Legenere	*Legenere limosa*	SC	–	1B	Lower Sacramento Valley (primary location); also north Coast Ranges, northern San Joaquin Valley, and Santa Cruz Mountains.	Deep, seasonally wet habitats, such as vernal pools, ditches, marsh edges, and river banks; below 152 meters (500 feet)	May–June	None
Pincushion navarretia	*Navarretia myersii* a.k.a. *N.m.*ssp. *m.*	–	–	1B	Central Valley and Amador, Lake, Merced, and Sacramento Counties	Edges of vernal pools; 18–91 meters (60–300 feet)	May	None
Sacramento Orcutt grass	*Orcuttia viscida*	E	E	1B	Endemic to Sacramento County	Vernal pools; below 100 meters (330 feet)	May–June	None
Layne's butterweed or ragwort	*Senecio layneae*	T	R	1B	Northern Sierra Nevada foothills and El Dorado and Tuolumne Counties	Chaparral and foothill woodland; on rocky serpentine or gabbro soils; 201–1,005 meters (660–3,300 feet)	April–July	None
El Dorado County mule ears	*Wyethia reticulata*	SC	–	1B	Endemic to El Dorado County	Chaparral, woodland, and lower montane coniferous forest; on clay or gabbro soils; 305–500 meters (1,000–1,640 feet)	May–July	None

Note: CNPS = California Native Plant Society.

[a] Status explanations:

– = no listing.

Federal

E = listed as endangered under the federal Endangered Species Act.
T = listed as threatened under the federal Endangered Species Act.
SC = species of concern; species for which existing information indicates it may warrant listing but for which substantial biological information to support a proposed rule is lacking.

Table 8-2. Continued

State

E = listed as endangered under the California Endangered Species Act.
R = listed as rare under the California Native Plant Protection Act. This category is no longer used for newly listed plants, but some plants previously listed as rare retain this designation.
-- = no listing.

California Native Plant Society

1B = List 1B species: rare, threatened, or endangered in California and elsewhere.
3 = List 3 species: plants about which more information is needed to determine their status.

[b] Definitions of levels of potential occurrence:

Moderate: California Natural Diversity Database or other documents record the known occurrence of the species in the vicinity of the project, or the presence of suitable habitat conditions, but the area lacks suitable microhabitat conditions.

Low: California Natural Diversity Database or other documents do not record the occurrence of the species in the vicinity of the project, or the habitat conditions in the area are of poor quality.

None: California Natural Diversity Database or other documents do not record the occurrence of the species in the vicinity of the project, or suitable habitat is not present in any condition.

[c] The study area is the area within a 16-kilometer (10-mile) radius of the Auburn-Folsom Road Project.

Table 8-3. Special-Status Wildlife Documented within the Study Area

Common Name	Scientific Name	Legal Status[a]		Distribution	Habitat	Potential to Occur in the Study Area[b]
		Federal	State			
Invertebrates						
Valley elderberry longhorn beetle	*Desmocerus californicus dimorphus*	T	–	Streamside habitats below 914 meters (3,000 feet) throughout the Central Valley and foothills of the Sierra Nevada and extending as far north as the Shasta/Tehama County line	Riparian and oak savanna habitats with elderberry shrubs; elderberries are host plant	High; several elderberry shrubs are present at or within 30.5 meters (100 feet) of the project corridor; the closest CNDDB record occurs 1.6 kilometers (1.0 mile) east of the project corridor
Vernal pool fairy shrimp	*Branchinecta lynchi*	T	–	Central Valley and central and south Coast Ranges from Tehama County to Santa Barbara County; isolated populations also in Riverside County	Common in vernal pools; also found in sandstone outcrop pools	None; closest CNDDB records exist approximately 6.4 kilometers (4 miles) from the project corridor; no vernal pools or other ephemeral water sources were observed at or within 76 meters (250 feet) of the project corridor
Vernal pool tadpole shrimp	*Lepidurus packardi*	E	–	Shasta County south to Merced County	Vernal pools and ephemeral stock ponds	None; closest CNDDB records exist approximately 9.7 kilometers (6 miles) from the project corridor; however, no vernal pools or other ephemeral water sources were observed at or within 76 meters (250 feet) of the project corridor
Midvalley fairy shrimp	*Branchinecta mesovallensis*	P	–	Fresno, Madera, Merced, Sacramento, San Joaquin, and Solano Counties	Vernal pools	None; no CNDDB records exist within the study area, and no vernal pools or other ephemeral water sources were observed at or within 76 meters (250 feet) of the project corridor

Table 8-3. Continued

Common Name	Scientific Name	Legal Status[a]		Distribution	Habitat	Potential to Occur in the Study Area[b]
		Federal	State			
Amphibians						
California red-legged frog	*Rana aurora draytoni*	T	SSC	Coast and coastal mountain ranges from Humboldt County to San Diego County; Sierra Nevada (midelevations, above 305 meters [1,000 feet], from Butte County to Fresno County)	Permanent and semipermanent aquatic habitats, such as creeks and cold water ponds, with emergent and submergent vegetation and riparian species along the edges; may estivate in rodent burrows or cracks during dry periods	None; no CNDDB records exist in the study area, and the species is believed to be extirpated from the project vicinity; no suitable ponds or breeding areas are present in the project corridor, and Linda Creek in the study area does not provide a migration corridor
California tiger salamander	*Ambystoma tigrinum californiense*	C	SSC	Central Valley, including Sierra Nevada foothills, up to approximately 305 meters (1,000 feet), and coastal region from Butte County south to northeastern San Luis Obispo County	Small ponds, lakes, or vernal pools in grasslands and oak woodlands for larvae; rodent burrows, rock crevices, or fallen logs for cover for adults and for summer dormancy	None; no CNDDB records exist within the study area; no suitable aquatic habitat is present at or within 76 meters (250 feet) of the project corridor
Western spadefoot toad	*Scaphiopus hammondii*	SC	SSC	Sierra Nevada foothills, Central Valley, Coast Ranges, and coastal counties in southern California	Shallow streams with riffles and seasonal wetlands, such as vernal pools in annual grasslands and oak woodlands	None; closest CNDDB records exist approximately 8.0 kilometers (5 miles) east of the project corridor; however, suitable aquatic habitat is not present at or within 76 meters (250 feet) of the project corridor
Reptiles						
Northwestern pond turtle	*Clemmys marmorata marmorata*	SC	SSC	From Oregon border of Del Norte and Siskiyou Counties south along coast to San Francisco Bay, inland through Sacramento Valley, and on western slope of Sierra Nevada; range overlaps with that of southwestern pond turtle through the Delta and Central Valley to Tulare County	Woodlands, grasslands, and open forests; occupies ponds, marshes, rivers, streams, and irrigation canals with muddy or rocky bottoms and aquatic vegetation, such as watercress, cattails, and water lilies	Moderate; closest CNDDB record occurs at Baldwin Reservoir approximately 0.32 kilometer (0.2 mile) east of the project corridor

Table 8-3. Continued

Common Name	Scientific Name	Legal Status[a]		Distribution	Habitat	Potential to Occur in the Study Area[b]
		Federal	State			
Giant garter snake	*Thamnophis gigas*	T	T	Central Valley from Fresno north to the Gridley/Sutter Buttes area; has been extirpated from areas south of Fresno	Sloughs, canals, and other small waterways with a prey base of small fish and amphibians; requires grassy banks and emergent vegetation for basking and areas of high ground protected from flooding during winter	None; no CNDDB records exist within the study area; the project corridor is not within the current range of this species
Birds						
Bald eagle	*Haliaeetus leucocephalus*	T	E	Nests in Siskiyou, Modoc, Trinity, Shasta, Lassen, Plumas, Butte, Tehama, Lake, and Mendocino Counties and in the Lake Tahoe Basin; reintroduced into central coast; winter range includes most of California, except southeastern deserts, very high altitudes in the Sierras, and east of Sierra Nevada south of Mono County; range expanding	Nests and roosts in coniferous forests within 1.6 kilometers (1 mile) of a lake, a reservoir, a stream, or the ocean	Moderate; winter visitor in the study area; Folsom Lake provides potential foraging habitat for this species; however, bald eagles do not nest in Placer County and would not be affected by tree removal activities
American peregrine falcon	*Falco peregrinus anatum*	D	E	Permanent resident in northern and southern Coast Ranges; may summer in Cascade and Klamath Ranges south through the Sierra Nevada to Madera County; winters in the Central Valley south through the Transverse and Peninsular Ranges and plains east of the Cascade Range	Nests and roosts on protected ledges of large cliff faces and on humanmade structures, such as large buildings and bridges; habitats vary, including wetlands, woodlands, other forested areas, agricultural areas, coastal habitats, and urban areas that support large populations of other bird species	Low; potential winter visitor; no suitable nesting habitat at the project site

Table 8-3. Continued

Common Name	Scientific Name	Legal Status[a]		Distribution	Habitat	Potential to Occur in the Study Area[b]
		Federal	State			
White-tailed kite	*Elanus caeruleus*	–	FP	Lowland areas west of Sierra Nevada from head of Sacramento Valley south, including coastal valleys and foothills, to western San Diego County at the Mexico border	Low foothills or valley areas with valley or live oaks, riparian areas, and marshes near open grasslands for foraging	Moderate; suitable nesting habitat present in woodland areas in the project corridor
Cooper's hawk	*Accipiter cooperii*	–	SSC	Throughout California, except high altitudes in the Sierra Nevada; winters in the Central Valley, southeastern desert regions, and plains east of the Cascade Range; permanent residents occupy the rest of the state	Nests primarily in riparian forests dominated by deciduous species; also nests in densely canopied forests from grey pine–oak woodland up to ponderosa pine; forages in open woodlands	Low; closest CNDDB record exists 8.0 kilometers (5 miles) south of the project corridor
Swainson's hawk	*Buteo swainsoni*	–	T	Lower Sacramento and San Joaquin Valleys, Klamath Basin, and Butte Valley; the state's highest nesting densities are near Davis and Woodland in Yolo County	Nests in oaks or cottonwoods in or near riparian habitats; forages in grasslands, irrigated pastures, and grain fields	None; closest nesting record exists approximately 14.5 kilometers (9 miles) east of the project corridor; the project corridor is not within current range of the Swainson's hawk
Northern harrier	*Circus cyaneus*	–	SSC	Throughout lowland California; has been recorded in fall at high elevations	Nests and forages in grasslands, meadows, marshes, and seasonal and agricultural wetlands providing tall cover	High; species was observed flying over the project corridor during the field surveys; marginal foraging habitat is available at and adjacent to the project corridor; however, the project corridor does not provide suitable nesting habitat for harriers
Western burrowing owl	*Athene cunicularia hypugea*	SC	SSC	Lowlands throughout California, including the Central Valley, northeastern plateau, southeastern deserts, and coastal areas; rare along southern coast	Occupies rodent burrows in sparse grassland, desert, and agricultural habitats	None; no CNDDB records exist in the study area

Table 8-3. Continued

Common Name	Scientific Name	Legal Status[a]		Distribution	Habitat	Potential to Occur in the Study Area[b]
		Federal	State			
Tricolored blackbird	*Agelaius tricolor*	SC	SSC	Permanent resident in the Central Valley from Butte County to Kern County; breeds at scattered coastal locations from Marin County south to San Diego County and at scattered locations in Lake, Sonoma, and Solano Counties; rare nester in Siskiyou, Modoc, and Lassen Counties	Nests in dense colonies in emergent marsh vegetation, such as tules and cattails, or upland sites with blackberries, nettles, thistles, and grain fields; habitat must be large enough to support 50 pairs; probably requires water at or near the nesting colony	None; although this species is known to nest in the study area (Holly pers. comm.), no suitable nesting habitat is present in or adjacent to the project corridor
Bank swallow	*Riparia riparia*	–	T	Occurs along the Sacramento River from Tehama County to Sacramento County; along the Feather and Lower American Rivers in the Owens Valley; and in the plains east of the Cascade Range in Modoc, Lassen, and northern Siskiyou Counties. Small populations near the coast, from San Francisco County to Monterey County	Nests in bluffs or banks, usually adjacent to water, where the soil consists of sand or sandy loam	None; no suitable bank habitat is present in the study area
Loggerhead shrike	*Lanius ludovicianus*	–	SSC	Resident and winter visitor in lowlands and foothills throughout California; rare on coastal slope north of Mendocino County, occurring only in winter	Prefers open habitats with scattered shrubs, trees, posts, fences, utility lines, or other perches	High; species is known to occur in the study area and suitable nesting habitat is present in woodland areas in the project corridor
Oak titmouse	*Baeolophus inornatus*	SLC	–	Throughout California, except the extreme northwest coastal region, north-central California, the San Joaquin Valley, and lowlands of the eastern and desert regions	Occupies woodland habitats dominated by oaks, including open broadleaved evergreen forests and riparian woodlands	High; species was observed in woodland habitat during the field surveys

Notes: CNDDB = California Natural Diversity Database.

Under "Distribution," figures expressed in meters (feet) denote elevations in relation to mean sea level.

[a] Status explanations:

– = no status.

Table 8-3. Continued

Federal

E = listed as endangered under the federal Endangered Species Act.
T = listed as threatened under the federal Endangered Species Act.
C = species for which the U.S. Fish and Wildlife Service has on file sufficient information on biological vulnerability and threat(s) to support issuance of a proposed rule to list.
SC = species of concern; species for which existing information indicates it may warrant listing but for which substantial biological information to support a proposed rule is lacking.
SLC = species of local concern.
D = delisted under the federal Endangered Species Act.
P = petitioned for listing as threatened or endangered under the federal Endangered Species Act.

State

E = listed as endangered under the California Endangered Species Act.
T = listed as threatened under the California Endangered Species Act.
FP = fully protected under the California Fish and Game Code.
SSC = species of special concern in California.

[b] The study area is the area within a 16-kilometer (10-mile) radius of the Auburn-Folsom Road project.

sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions" (33 CFR 328.3[b], 40 CFR 230.3). To be considered under federal jurisdiction, a wetland must support positive indicators for hydrophytic vegetation, hydric soil, and wetland hydrology. *Other waters of the United States* are seasonal or perennial bodies of water, including lakes, stream channels, drainages, ponds, and other surface water features, that exhibit an ordinary high-water mark (OHWM) but lack positive indicators for one or two of the three wetland parameters (33 CFR 328.4).

The methods used to delineate waters of the United States (including wetlands) are described in a separate wetland delineation report that will be submitted to the U.S. Army Corps of Engineers (Corps) for verification. This wetland delineation report is provided in Appendix I for reference purposes.

Biological Communities

The Auburn-Folsom Road project is located in the lower Sierra Nevada foothill region (elevations of 61–122 meters [200–400 feet] above mean sea level) where the predominant land uses are open space, rural residential, agricultural, and commercial. The biological communities and special-status species located in the study area are described below.

Seven biological communities were documented in the study area. Table 8-4 identifies the biological communities and associated acreages documented in the area. Biological communities were identified using the community descriptions in the Placer County General Plan. These descriptions are based on the Wildlife Habitat Relationships (Mayer and Laudenslayer 1988) and natural communities described in Holland (1986). Scientific names of plant and wildlife species mentioned in the text are provided in Appendix H. Waters of the United States (streams, freshwater marsh, and seasonal wetlands) documented in the study area are shown in Figure 8-1.

Table 8-4. Biological Communities Located in the Study Area

Biological Community	Study Area	
	Hectares	Acres
Grassland*	5.16	12.75
Blue oak–foothill pine woodland*	5.58	13.79
Valley foothill riparian forest*	0.19	0.47
Stream*	0.08	0.20
Freshwater marsh	0.02	0.05
Seasonal wetland	0.11	0.27
Landscaped/Ruderal Areas	>2	>5

Note:

* Biological community identified and described in the Placer County General Plan. (Foothill pine was previously known as "digger pine.")

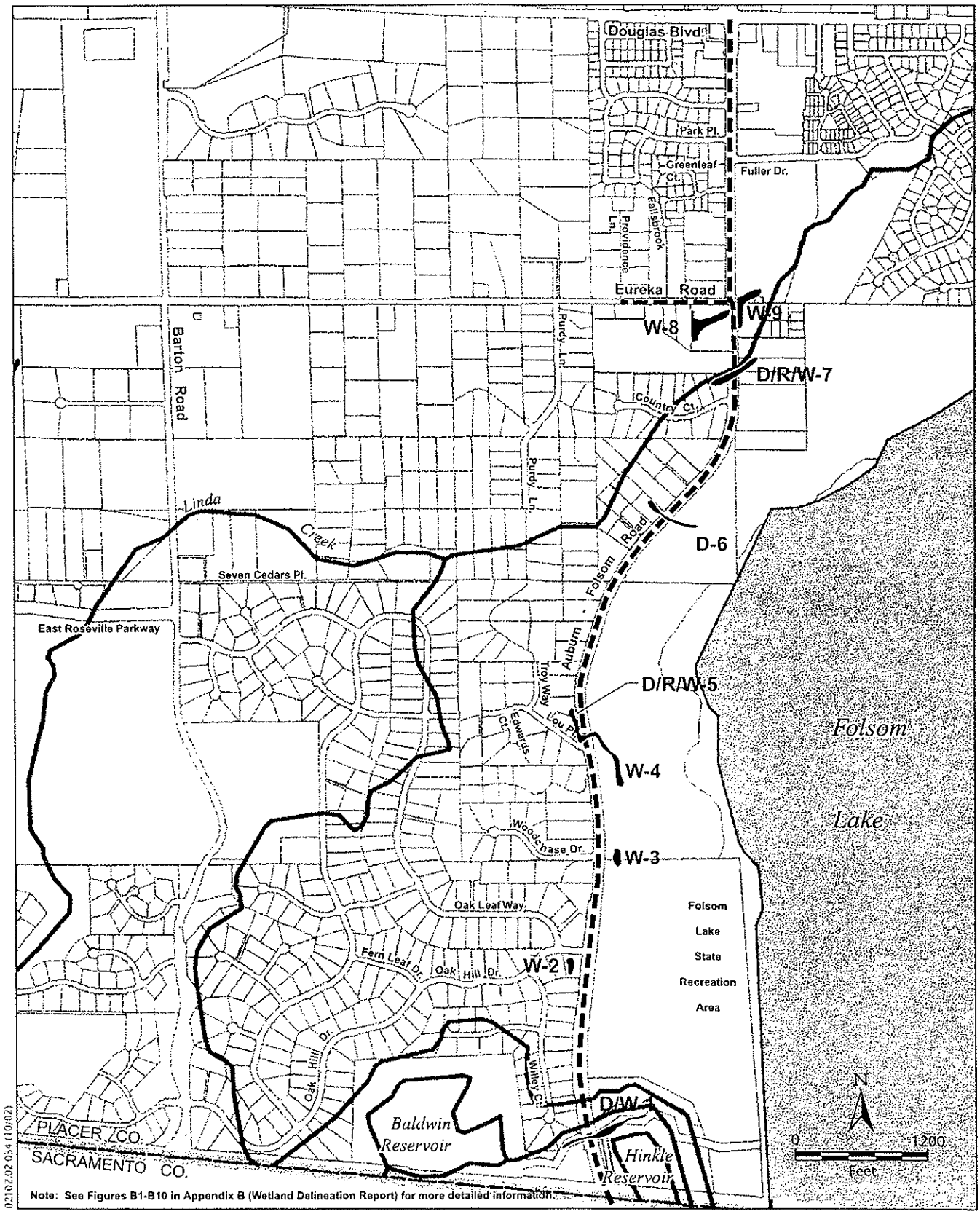
Grassland

Nonnative annual grassland is a common community that is located throughout the study area, with the largest occurrence on the east side of Auburn-Folsom Road. Nonnative annual grasslands consist of dense to sparse covers of annual grasses that often grow with a variety of showy annual forbs (both native and nonnative). Germination occurs with the onset of the late fall rains; growth, flowering, and seed-set occur from winter through spring; and plants are typically senescent through the summer and fall dry season (Holland 1986). Common plant species are wild oats, bromes, fescue, barbed goatgrass, Italian ryegrass, mustards, filarees, yellow star-thistle, California poppy, and lupines.

Grasslands support insects, amphibians, reptiles, and small birds and mammals that are preyed on by other wildlife, including red-tailed hawks, red-shouldered hawks, northern harriers, American kestrels, great-horned owls, California voles, deer mice, western harvest mice, California ground squirrels, and coyotes. Grasslands near open water and woodland habitats are used by the most wildlife species (compared to other grasslands) because they provide places for resting, breeding, and escape cover. Nonnative annual grassland in the study area is heavily disturbed from roadside activities, which reduces the quality of the habitat for wildlife and decreases the number of different species expected to occur there.

Blue Oak–Digger Pine Woodland

Blue oak–foothill pine woodland is located throughout the study area. This woodland consists of foothill pines (also referred to as "foothill" or "grey" pines



Jones & Stokes

Figure 8-1
General Location of Potential Waters of the United States Identified in and Adjacent to the Project Site

in current taxonomic literature) and blue oaks, intermixed with shrubs and with an understory dominated by introduced annuals. Pure stands of either blue oak or foothill pine do occur, but mixed stands are much more common (Holland 1986). In the study area, this oak woodland community is dominated by interior live oak, blue oak, foothill pine, buckeye, interior live oak, blue elderberry, poison oak, coyote bush, and annual grassland species described above. Valley oaks also grow in the oak woodland, along Linda Creek.

Oak woodlands provide high value to wildlife in the form of nesting sites, cover, and food. This community type commonly is used by species that require both woodlands and adjacent open areas, such as annual grasslands. Mammals, such as western gray squirrel and Virginia opossum, are found primarily in the canopy of oak woodlands. Birds associated with oak woodlands include acorn woodpecker, western scrub jay, yellow-billed magpie, American robin, and red-breasted nuthatch. Cavities in oak trees are important nesting sites for American kestrel, tree swallow, house wren, Bewick's wren, and western bluebird. Oak woodlands provide nesting sites for raptors, such as red-tailed hawk, red-shouldered hawk, and great-horned owl, and adjacent open grasslands provide foraging habitat for these species. Oak woodlands also provide an important food source for black-tailed deer, in the form of oak mast.

Valley Foothill Riparian Forest

Valley foothill riparian forest occurs along Linda Creek and a tributary stream, just south of Linda Creek. *Riparian* is used as a modifier of both wetland and nonwetland habitat types based on the presence of hydrophytic woody vegetation associated with an aquatic feature. Riparian species that characterize drainages and rivers in the study area include Fremont's cottonwood, blue elderberry, valley oak, willows, box elder, Oregon ash, and Himalayan blackberry. Herbaceous ground cover consists of creeping wildrye, sedge species, mugwort, Johnson grass, Bermuda grass, smilo grass, California wild rose, poison oak, and California wild grape.

Because the vegetation is diverse and well developed, riparian communities provide high-value habitat for many wildlife species. The multilayered riparian community provides escape cover, forage, and nesting opportunities for wildlife. Typical wildlife species that use riparian habitats in the plan area are Bewick's wren, song sparrow, black phoebe, red-shouldered hawk, raccoon, striped skunk, California vole, Botta's pocket gopher, and black-tailed deer.

Local, state, and federal agencies recognize riparian communities as sensitive natural communities.

Stream

The study area contains four streams that are characterized by well-defined beds and banks (Figure 8-1). Three of these streams are natural, and one appears to be

artificially created. The natural streams are Linda Creek and two tributary streams. Two of these streams are perennial and support valley foothill riparian forest along their banks, with some inclusions of freshwater marsh and seasonal wetlands in the OHWMs. The third stream is ephemeral and is dominated primarily by annual grassland species.

The artificial stream is a perennial drainage canal at the south end of the study area that feeds into Baldwin Reservoir (Figure 8-1). This canal (herein called the "Baldwin Reservoir canal") supports freshwater marsh and seasonal wetland communities (described below) within its OHWM.

The streams in the study area provide habitat for a variety of wildlife. Birds such as herons and belted kingfishers forage in these communities, primarily along the water's edge. Many species of insectivorous birds, including white-throated swift, barn swallow, cliff swallow, black phoebe, and ash-throated flycatcher, catch their prey over open water. Vegetation growing along the edges of streams provides nesting habitat for several bird species and foraging and refuge habitat for amphibians, reptiles, and mammals occupying the open water and adjacent grassland habitats.

The streams in the study area were delineated as waters of the United States and would be subject to state and federal regulations, including Section 404 of the Clean Water Act.

Freshwater Marsh

Freshwater marsh is associated with two of the streams in the study area (Figure 8-1). This type of wetland generally is dominated by perennial emergent wetland species (species that grow in wetland conditions more than 99% of the time) that often form a closed canopy and grow in areas that are permanently or seasonally flooded by slow-moving or stagnant fresh water. Freshwater marshes derive water from association with perennial or near-perennial surface water sources, such as overland flow from rivers or other surface water sources; ponded seasonal precipitation; and shallow groundwater tables. Freshwater marshes may be entirely vegetated or partially vegetated with an open water component, or may be dry in the summer months (Holland 1986). Soils of freshwater marshes form as alluvial fans or basin floors associated with fluvial processes. Soils primarily are fine-textured clay, silt loam, or silty clay loam.

Freshwater marsh vegetation is dominated by hydrophytic grasses and grasslike species. Dominant herbaceous hydrophytic vegetation includes hardstem bulrush, broad-leaved cattail, perennial peppergrass, curly dock, Baltic rush, water smartweed, willow smartweed, common scouring rush, and Bermuda grass. Freshwater marshes often support scattered riparian plants such as willows, Fremont's cottonwood, blue elderberry, Himalayan blackberry, and California blackberry.

Freshwater marshes are among the most productive wildlife habitats. They provide food, cover, and water for many species of amphibians, reptiles, birds, and mammals. Pacific treefrogs, western toads, common garter snakes, raccoons, and muskrats use emergent wetlands for foraging, rearing, or cover. Mallards, wood ducks, red-winged blackbirds, common yellowthroats, marsh wrens, and song sparrows also use these habitats for foraging and nesting.

Freshwater marshes in the study area would be considered jurisdictional wetlands by the Corps. This wetland type is recognized as a sensitive natural community by local, state, and federal agencies.

Seasonal Wetland

Two seasonal wetlands are located in the study area (Figure 8-1). One seasonal wetland is at the southwest corner of the Auburn-Folsom Road/Eureka Road intersection; the other is located at the southwest corner of the Auburn-Folsom Road/Oak Hill Road intersection (Figure 8-1). In general, seasonal wetlands develop in depressions in areas with a water table that is perched near the surface by bedrock or an impermeable soil horizon, such as a claypan or hardpan. Seasonal wetlands are inundated during the winter rainy season (generally between December and March) and are dry during the intervening months. Seasonal wetlands in the study area have seasonal wetland hydrology similar to that of vernal pools but lack the typical vernal pool flora. Seasonal wetlands in the study area support rabbit's-foot grass, spikerush, Italian ryegrass, curly dock, cocklebur, Mediterranean barley, and Harding grass.

Seasonal wetlands support a variety of invertebrates and amphibians (e.g., western toad, Pacific treefrog, and western terrestrial garter snake) that, in turn, provide food for many other wildlife species, such as great blue heron, great egret, mallard, American avocet, killdeer, and greater yellowlegs. Seasonal wetlands in the study area are dominated by emergent vegetation and do not provide suitable habitat for invertebrate species typically found in vernal pools.

One of the seasonal wetlands (W-8) would most likely be considered jurisdictional wetlands by the Corps and subject to regulation under Section 404 of the Clean Water Act. The second wetland (W-2) was determined to be isolated and not subject to Corps regulations (see the wetland delineation report in Appendix I). Regardless of Corps jurisdiction, local, state, and federal agencies recognize seasonal wetlands as sensitive natural communities.

Landscaped/Ruderal Areas

Landscaped/ruderal areas are located along both sides of the Auburn-Folsom Road corridor. This community type consists of landscaping and ruderal (weedy) areas associated with the San Juan Water District property, private residential properties, and commercial properties along both sides of Auburn-Folsom Road.

Common plant species found in this community are wild oats, bromes, fescue, ryegrass, mustards, filarees, and yellow star-thistle.

Because landscaped and ruderal areas typically are disturbed on a regular basis by human activity, they provide low-quality habitat for wildlife. Wildlife species commonly found in ruderal and disturbed areas include western meadowlark, Brewer's blackbird, American goldfinch, white-crowned sparrow, yellow-billed magpie, mourning dove, Virginia opossum, and black-tailed hare. American kestrels and red-tailed hawks frequently forage in this habitat.

Special-Status Species

Special-Status Plants

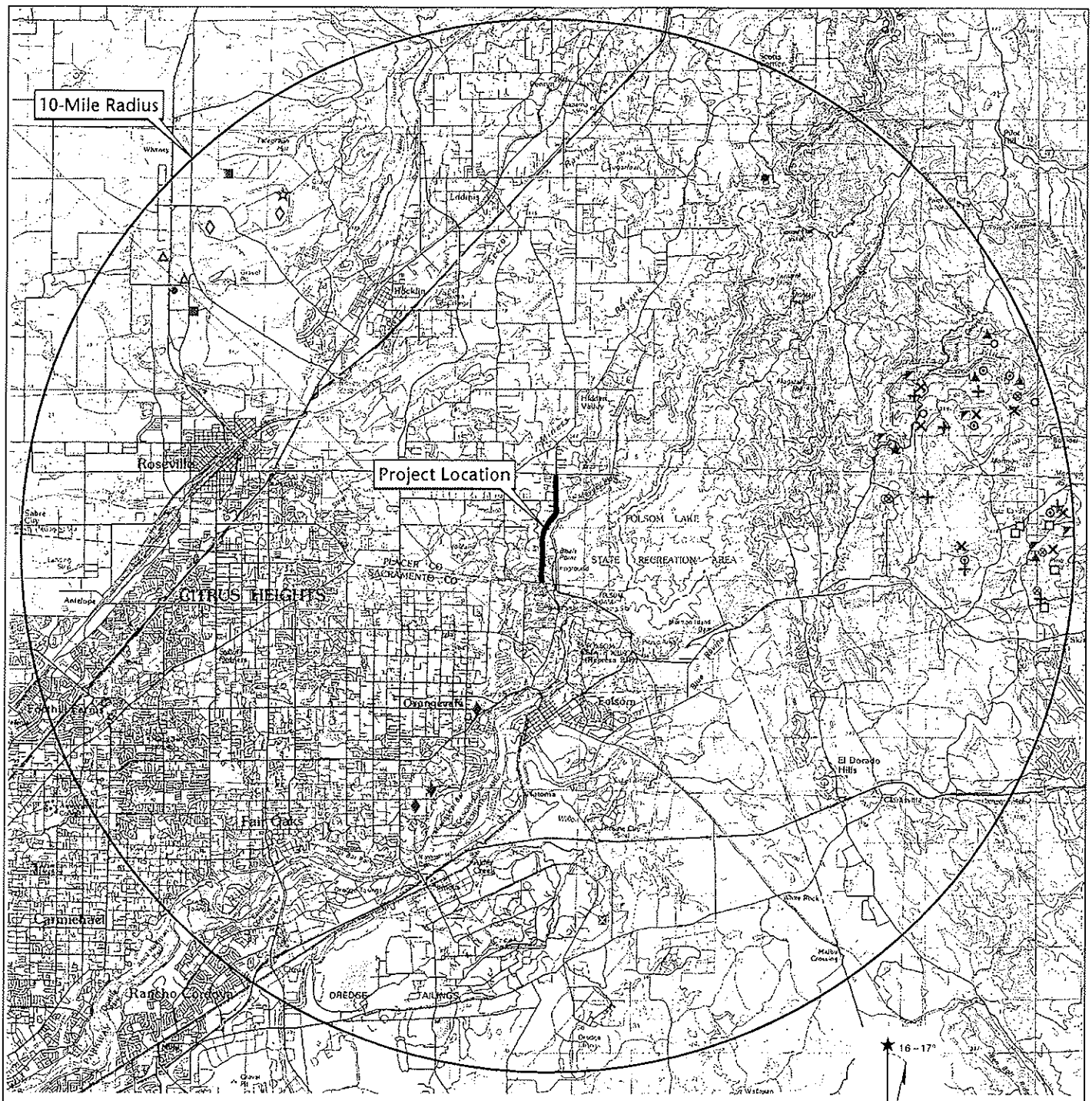
A 16-kilometer (10-mile) radius around the study area was the basis of a database search (California Natural Diversity Database 2002), the purpose of which was to identify special-status plants that had been documented in the region. This search identified 16 special-status plants as having been identified previously in the 16-kilometer (10-mile) radius area (Figure 8-2a). Most of these species have specific microhabitat requirements that are not present in the study area (e.g., vernal pools and serpentine soils).

One special-status plant, big-scale balsamroot (*Balsamorhiza macrolepis* var. *macrolepis*), was identified during the prefield investigation as having a moderate potential to occur in the study area because suitable habitat conditions are present. This species typically grows in woodlands and grasslands at elevations below 1,400 meters (4,600 feet) above mean sea level. Although the study area contains suitable habitat for big-scale balsamroot, this special-status plant and other species (identified in Table 8-2) have not been reported previously in the region and were not located during the spring and early summer botanical surveys.

Special-Status Wildlife

Based on a review of existing information (including a search of the CNDDB [2002]), species lists obtained from the USFWS (Appendix G), and species distribution and habitat requirements data, 20 special-status wildlife species were identified as having the potential to occur in the study area (Table 8-3). Also, non-special-status migratory birds and raptors could nest in the project area. Although these species are not considered special-status wildlife species, their occupied nests and eggs are protected by Sections 3503 and 3503.5 of the California Fish and Game Code and the federal Migratory Bird Treaty Act (MBTA).

The CNDDB (2002) search conducted for the project indicated that 10 special-status wildlife species (VELB, vernal pool fairy shrimp, vernal pool tadpole shrimp, western spadefoot toad, northwestern pond turtle, bank swallow,



- *Balsamorphiza macrolepis* var. *macrolepis*
- *Calystegia stebbinsii*
- *Ceanothus roderickii*
- *Chlorogalum grandiflorum*
- *Clarkia biloba* ssp. *brandegeae*
- *Cordylanthus mollis* ssp. *hispidus*
- *Downingia pusilla*
- *Fremontodendron decumbens*
- *Galium californicum* ssp. *sierrae*
- *Gratiola heterosepala*
- *Helianthemum suffrutescens*
- *Juncus leiospermus* var. *leiospermus*
- *Legenere limosa*
- *Orcuttia viscida*
- *Senecio layneae*
- *Wyethia reticulata*

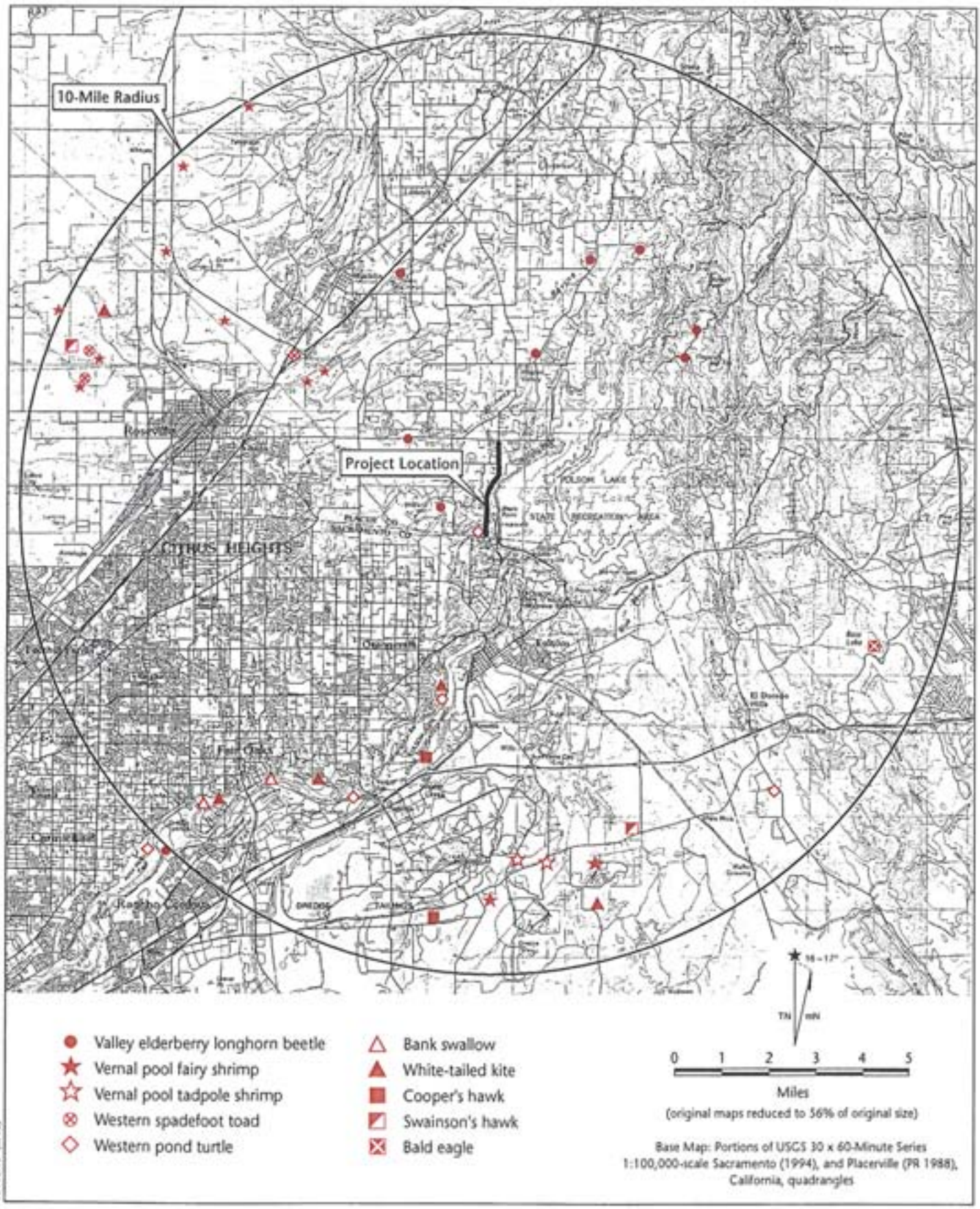
0 1 2 3 4 5
Miles
(original maps reduced to 56% of original size)

Base Map: Portions of USGS 30 x 60-Minute Series 1:100,000-scale Sacramento (1994), and Placerville (PR 1988), California, quadrangles

02102.02 (8/02)

Jones & Stokes

Figure 8-2a
Records of Special-Status Plant Species within 10 Miles of the Auburn-Folsom Road Widening Project



02102.02 (9/02)

Jones & Stokes

Figure 8-2b
Records of Special-Status Wildlife Species within 10 Miles of the Auburn-Folsom Road Widening Project

Swainson's hawk, Cooper's hawk, white-tailed kite, and bald eagle) have been observed within 16 kilometers (10 miles) of the project site. The approximate locations of these recorded observations are depicted on Figure 8-2b.

Of the 20 special-status wildlife species listed in Table 8-3, nine species (VELB, northwestern pond turtle, bald eagle, American peregrine falcon, Cooper's hawk, white-tailed kite, northern harrier, loggerhead shrike, and oak titmouse) were determined to have a low to high potential to occur in the study area on the basis of existing information and the presence of suitable habitat conditions in the area. A description of each of these nine species and their preferred habitat is provided below.

The remaining 11 wildlife species (vernal pool fairy shrimp, vernal pool tadpole shrimp, midvalley fairy shrimp, California red-legged frog, California tiger salamander, western spadefoot toad, giant garter snake, Swainson's hawk, western burrowing owl, bank swallow, and tricolored blackbird) were eliminated from further consideration because suitable habitat for these species is not present in the study area or because the species range does not extend into the study area. A brief explanation for the absence of these species and their habitats is provided in Table 8-3.

Valley Elderberry Longhorn Beetle

VELB is designated as threatened by USFWS. These beetles occur from as far south as Kern County to as far north as Shasta County (U.S. Fish and Wildlife Service 1999). The majority of specimens and recorded observations appear to be from the Sacramento/Davis area (Linsley and Chemsak 1972).

VELB occurs primarily along riparian corridors in areas containing its host plant, the blue elderberry (*Sambucus mexicanus*). The larvae of VELB bore through elderberry stems and trunks that are thicker than 2.5 centimeters (1 inch) in diameter. The greatest activity appears to be in areas where the riparian corridor also maintains a complement of other riparian woody plant species, such as willow, cottonwood, wild grape, and boxelder.

Numerous CNDDB (2002) observations for VELB have been recorded in the project vicinity; the closest recorded observation of VELB occurred approximately 1.6 kilometers (1 mile) east of the project area (California Natural Diversity Database 2002). During the prefield investigation, Jones & Stokes determined that there was a high potential for VELB to occur in the study area based on the presence of suitable habitat in the area and the close proximity of recorded sightings.

During the field surveys, nine elderberry shrubs were found in the study area. The distribution of elderberry shrubs along the project alignment was plotted on a topographic map of the project area using a global positioning system (GPS). For the exact location of individual shrubs, please see the BA (Appendix J). Table 8-5 lists the number of stems that were counted for each elderberry shrub located in the area. As indicated in Table 8-5, no VELB or exit holes were found in any of the elderberry shrub stems during the field survey, and none of the

elderberry shrubs occurs in riparian habitat. All elderberry shrubs in the study area grow in blue oak–foothill pine woodland.

Table 8-5. Summary of Stem Counts for Elderberry Shrubs along the Project Alignment

Shrub Identification Number	Presence of Exit Holes Y/N?	Riparian Habitat Y/N?	Number of Stems (by diameter)		
			2.5–7.6 cm (1–3 in.)	7.6–12.7 cm (3–5 in.)	>12.7 cm (>5 in.)
1	N	N	2	0	0
2	N	N	2	0	0
3	N	N	0	3	1
4	N	N	0	2	0
5	N	N	6	3	0
6	N	N	2	1	0
7	N	N	2	0	0
8	N	N	1	0	1
9	N	N	2	0	0

Northwestern Pond Turtle

Northwestern pond turtle is a state species of special concern and a federal species of concern. Two subspecies of western pond turtle, northwestern pond turtle and southwestern pond turtle, have overlapping ranges throughout the Central Valley, from Sacramento County in the north to Tulare County in the south. Western pond turtles are thoroughly aquatic, preferring the quiet waters of ponds, reservoirs, and sluggish streams (Stebbins 1985). They leave the water to bask on rocks or logs and to deposit eggs along the streambank or up to 0.4 kilometer (0.25 mile) in adjacent uplands (Jennings and Hayes 1994). The species may overwinter in upland sites, which may enable it to occupy creeks or waterways that dry up for several months each year (Holland and Bury 1992). Western pond turtles typically become active as early as March and return to overwintering sites by October or November (Holland 1991).

Three observations of northwestern pond turtle were recorded within 16 kilometers (10 miles) of the project site (Figure 8-2b) (California Natural Diversity Database 2002). The closest observation of this species was documented at Baldwin Reservoir, located approximately 0.3 kilometer (0.2 mile) east of Auburn-Folsom Road in the project area. No CNDDB (2002) records have documented northwestern pond turtle at Linda Creek or adjacent ponded habitats. Also, no northwestern pond turtles were found during the field surveys.

Baldwin Reservoir canal is an artificial, earth-bottomed canal that flows from the San Juan Water District treatment facility, through the project area, and into Baldwin Reservoir (Figure 8-1). In the study area, habitat along this canal provides some suitable foraging habitat for northwestern pond turtles. On the west side of Auburn-Folsom Road, the canal is heavily vegetated with cattails and willows, and does not provide suitable nesting or basking habitat. East of Auburn-Folsom Road, the canal contains some vegetation along the banks;

however, this portion appears to be routinely dredged and provides little to no suitable habitat for northwestern pond turtle. Adjacent habitat is developed or heavily disturbed by routine maintenance activities and does not provide suitable upland habitat for this species.

Linda Creek and its tributary provide minimal habitat for northwestern pond turtle. Linda Creek is heavily vegetated and shaded by a thick, overhanging overstory and does not provide suitable basking habitat for turtles. Also, Linda Creek is located in a residential/urban landscape west of Auburn-Folsom Road, reducing the suitability of the habitat for use by northwestern pond turtles. Linda Creek and its tributary are not connected to Baldwin Reservoir or any other known population of northwestern pond turtles. In the study area, there is a low potential for this species to be present in Linda Creek or its tributary.

White-Tailed Kite

White-tailed kite is a fully protected species under California Fish and Game Code, Section 3511. White-tailed kites have a restricted distribution in the United States, occurring only in California and western Oregon and along the Texas coast (American Ornithologists' Union 1983). The species is fairly common in California's Central Valley lowlands.

White-tailed kites nest in riparian and oak woodlands and forage in nearby grasslands, pastures, agricultural fields, and wetlands. Kites use nearby treetops for perching and nesting sites. Voles and mice are their common prey.

No white-tailed kites were observed in the study area during the field surveys; however, this species has been observed nesting in the vicinity of Folsom Lake during previous field surveys conducted for nearby projects. Woodland habitats in the study area provide suitable nesting habitat for white-tailed kites. Although this species was not observed nesting in the study area during the 2002 breeding season, there is a moderate to high potential for white-tailed kites to nest in the study area during subsequent breeding seasons, based on their occupancy of the project vicinity and the presence of suitable habitat.

Bald Eagle, American Peregrine Falcon, and Cooper's Hawk

Bald eagle and American peregrine falcon are state or federally listed as threatened or endangered species. Cooper's hawk is considered a state species of special concern.

The project area is not located in the present nesting range of bald eagle and peregrine falcon. However, these species could occur as winter visitors or migrants in and adjacent to the study area. Folsom Lake and the adjacent woodland areas provide foraging habitat for both species.

Cooper's hawks generally nest in groves or trees along waterways or near the edge of a field where a large food source (primarily other bird species) is available (Baicich and Harrison 1997). In the project vicinity, Cooper's hawks are known to nest in riparian woodlands along Lake Natoma and nearby dredge tailings approximately 8 to 14.5 kilometers (5 to 9 miles) south of the project

area (California Natural Diversity Database 2002) (Figure 8-2b). The study area is located along a heavily used roadway, and woodland habitats in the study area are located mostly within rural residential and urban landscapes. Because there is higher-quality habitat in the project vicinity, it is unlikely that Cooper's hawk would nest in the study area.

In conclusion, bald eagle, American Peregrine falcon, and Cooper's hawk could pass through the study area, but are not expected to nest in the study area or be affected by road-widening activities.

Loggerhead Shrike, Oak Titmouse, and Other Non Special-Status Migratory Birds, including Raptors

Nesting migratory birds, including raptors, are protected by federal and state laws, including MBTA (50 CFR 10 and 21) and the California Fish and Game Code, Sections 3503 and 3503.5. Several non-special-status migratory birds and raptors, including great-horned owl, red-shouldered hawk, red-tailed hawk, American kestrel, acorn woodpecker, Nuttall's woodpecker, tree swallow, house wren, and western bluebird, could breed in the study area based on the presence of suitable nesting habitat (mixed riparian and foothill woodlands).

In addition, two special-status migratory birds, loggerhead shrike and oak titmouse, were determined to have a high potential to nest in the study area. Loggerhead shrike is considered a species of special concern by DFG and occupies shrubs and small trees in lowland habitats throughout California. Oak titmouse is a species of local viability concern, as identified by USFWS (Appendix G). This bird was observed in the study area during the field survey, which coincided with the species' breeding season (generally between March 1 and August 15).

Swallows

Cliff swallows and barn swallows are not considered special-status wildlife species; however, their occupied nests and eggs are protected by both federal and state laws, including MBTA (50 CFR 10 and 21).

Cliff and barn swallows are two swallow species that frequently build mud nests on the underside of artificial structures, such as bridges. The two species winter in South America and arrive back in California to breed in February. Nesting occurs from April to August, and migration south occurs in September and October (Zeiner et al. 1990).

Suitable habitat for nesting swallows is present on the underside of a concrete box culvert located along Auburn-Folsom Road and across from the San Juan Water District treatment facility. Several remnant mud nests were observed on the underside of the culvert. However, most of the nests were not intact, and none was occupied during the May 29, 2002, field survey. Because swallows have nested in the study area in previous breeding seasons, as evidenced by the remnant nests, there is a moderate potential for swallows to nest in this area in subsequent breeding seasons.

Regulatory Setting

This section describes the federal, state, and local plans, policies, and laws relevant to biological resources in the project area.

Federal

National Environmental Policy Act

NEPA, as amended, is the basic national charter for protection of the environment. It establishes policy, sets goals (Section 101[b]), and provides a means (Section 102) for carrying out the policy. Section 102(2) of the act contains "action-forcing" provisions to ensure that federal agencies act according to the letter and spirit of the act. NEPA and its supporting federal regulations establish certain requirements that must be adhered to for any project "...financed, assisted, conducted, or approved by a federal agency...." In short, federal regulations require that a federal agency "...determine whether the proposed action may significantly affect the quality of the human environment."

Federal Endangered Species Act

ESA protects fish and wildlife species, and their habitats, that have been identified by USFWS or the National Marine Fisheries Service (NMFS) as threatened or endangered. *Endangered* refers to species, subspecies, or distinct population segments that are in danger of extinction through all or a significant portion of their range; *threatened* refers to species, subspecies, or distinct population segments that are likely to become endangered in the near future.

ESA is administered by USFWS and NMFS. In general, NMFS is responsible for protection of ESA-listed marine species and anadromous fishes, whereas other listed species are under USFWS jurisdiction. Provisions of Sections 7 and 9 of ESA are relevant to this project and are summarized below.

ESA Authorization Process for Federal Actions (Section 7)

Section 7 of ESA provides a means for authorizing *take* of threatened and endangered species by federal agencies. It applies to actions that are conducted, permitted, or funded by a federal agency. Under Section 7, the federal agency conducting, funding, or permitting an action (the lead federal agency) must consult with USFWS or NMFS, as appropriate, to ensure that the proposed action will not jeopardize endangered or threatened species or destroy or adversely modify designated critical habitat. If a proposed project "may affect" a listed species or designated critical habitat, the lead agency is required to prepare a BA evaluating the nature and severity of the expected effect. In response, USFWS or NMFS issues a biological opinion (BO), with a determination that the proposed action either:

- may jeopardize the continued existence of one or more listed species (*jeopardy finding*) or result in the destruction or adverse modification of critical habitat (*adverse modification finding*), or
- will not jeopardize the continued existence of any listed species (*no jeopardy finding*) or result in adverse modification of critical habitat (*no adverse modification finding*).

The BO issued by USFWS or NMFS may stipulate discretionary "reasonable and prudent" alternatives. If the project would not jeopardize a listed species, USFWS or NMFS issues an incidental take statement to authorize the proposed activity. For the proposed project, Reclamation will submit a BA for VELB to USFWS, in compliance with Section 7 of ESA (16 USC 1536).

ESA Prohibitions (Section 9)

Section 9 of ESA prohibits the *take* of any fish or wildlife species listed under ESA as endangered. *Take* of threatened species also is prohibited under Section 9, unless otherwise authorized by federal regulations.[1] *Take*, as defined by ESA, means "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." *Harm* is defined as "any act that kills or injures the species, including significant habitat modification." In addition, Section 9 prohibits removing, digging up, cutting, and maliciously damaging or destroying federally listed plants on sites under federal jurisdiction.

Migratory Bird Treaty Act

MBTA (16 USC 703) enacts the provisions of treaties between the United States, Great Britain, Mexico, Japan, and the Soviet Union and authorizes the U.S. Secretary of the Interior to protect and regulate the taking of migratory birds. It establishes seasons and bag limits for hunted species and protects migratory birds, their occupied nests, and their eggs (16 USC 703, 50 CFR 21, 50 CFR 10). Most actions that result in taking or in permanent or temporary possession of a protected species constitute violations of MBTA. Examples of permitted actions that do not violate MBTA are the possession of a hunting license to pursue specific gamebirds, legitimate research activities, display in zoological gardens, bird-banding, and other similar activities. USFWS is responsible for overseeing compliance with MBTA, and the U.S. Department of Agriculture's Animal Damage Control Officer makes recommendations on related animal protection issues.

Executive Order 13186 (January 10, 2001) directs each federal agency taking actions having or likely to have a negative impact on migratory bird populations to work with USFWS to develop a memorandum of understanding (MOU) that will promote the conservation of migratory bird populations. Protocols developed under the MOU must include the following agency responsibilities:

[1] In some cases, exceptions may be made for threatened species under ESA Section 4[d]; in such cases, USFWS or NMFS issues a "4[d] rule" describing protections for the threatened species and specifying the circumstances under which take is allowed.

- avoid and minimize, to the extent practicable, adverse impacts on migratory bird resources when conducting agency actions;
- restore and enhance habitat of migratory birds, as practicable; and
- prevent or abate the pollution or detrimental alteration of the environment for the benefit of migratory birds, as practicable.

The executive order is designed to assist federal agencies in their efforts to comply with MBTA, and does not constitute any legal authorization to take migratory birds.

Clean Water Act

The federal Clean Water Act was enacted as an amendment to the federal Water Pollution Control Act of 1972, which outlined the basic structure for regulating discharges of pollutants to waters of the United States. The Clean Water Act now serves as the primary federal law protecting the quality of the nation's surface waters, including lakes, rivers, and coastal wetlands.

The Clean Water Act empowers EPA to set national water quality standards and effluent limitations and includes programs addressing both point-source and nonpoint-source pollution. *Point-source pollution* is pollution that originates or enters surface waters at a single, discrete location, such as an outfall structure or an excavation or construction site. *Nonpoint-source pollution* originates over a broader area and includes urban contaminants in stormwater runoff and sediment loading from upstream areas. The Clean Water Act operates on the principle that all discharges into the nation's waters are unlawful unless specifically authorized by a permit; permit review is the Clean Water Act's primary regulatory tool.

The following paragraphs provide additional details on specific sections of the Clean Water Act.

Permits for Fill Placement in Waters and Wetlands (Section 404)

The Clean Water Act, Section 404, regulates the discharge of dredged and fill materials into waters of the United States. *Waters of the United States* refers to oceans, bays, rivers, streams, lakes, ponds, and wetlands, including any or all of the following:

- Areas within the OHWM of a stream, including nonperennial streams with a defined bed and bank and any stream channel that conveys natural runoff, even if it has been realigned
- Seasonal and perennial wetlands, including coastal wetlands

Applicants must obtain a permit from the Corps for all discharges of dredged or fill material into waters of the United States, including wetlands, before proceeding with a proposed activity. As stated by the Counsel for EPA's January 19, 2001, determination in response to the *Solid Waste Agency of Northern Cook County* vs. *United States Army Corps of Engineers* ruling, nonnavigable, isolated

waters may not be regulated by the Corps. As part of the wetland delineation and verification process, the Corps will determine whether the wetlands in the study area are isolated and therefore not regulated under Section 404 of the Clean Water Act.

The Corps may issue either an individual permit evaluated on a case-by-case basis or a general permit evaluated at a program level for a series of related activities. General permits are preauthorized and are issued to cover multiple instances of similar activities expected to cause only minimal adverse environmental effects. Nationwide Permits (NWPs) are a type of general permit issued to cover particular fill activities. Each NWP specifies particular conditions that must be met in order for the NWP to apply to a particular project. Waters of the United States in the project corridor are under the jurisdiction of the Corps's Sacramento District.

Compliance with Clean Water Act Section 404 requires compliance with several other environmental laws and regulations. The Corps cannot issue an individual permit or verify the use of a general permit until the requirements of NEPA, ESA, and the National Historic Preservation Act (see Chapter 10, "Cultural Resources") have been met. In addition, the Corps cannot issue or verify any permit until a water quality certification, or a waiver of certification, has been issued pursuant to the Clean Water Act, Section 401.

Certain activities are exempt from the Section 404 permitting process. Exempt activities include:

- farming, ranching, and forestry activities that are considered normal and ongoing (as of 1985 conditions), such as plowing, harvesting, and minor drainage of upland areas to waters of the United States;
- construction and maintenance of stock ponds and irrigation ditches;
- maintenance of drainage ditches;
- construction of temporary sedimentation basins in upland areas;
- construction and maintenance of farm, forest, and mining roads in accordance with best management practices (BMPs) and
- other activities regulated by an approved program of BMPs authorized by the Clean Water Act, Section 208(b)(4).

Section 404 permits may be issued only for the project's least environmentally damaging practicable alternative. That is, authorization of a proposed discharge is prohibited if there is a practicable alternative that would have less adverse impacts and lacks other significant adverse consequences.

Permits for Stormwater Discharge (Section 402)

The Clean Water Act, Section 402, regulates construction-related stormwater discharges to surface waters through the National Pollutant Discharge Elimination System (NPDES) program, administered by EPA. In California, the State Water Resources Control Board (SWRCB) is authorized by EPA to oversee

the NPDES program through the Regional Water Quality Control Boards (RWQCBs) (see the related discussion under "Porter-Cologne Water Quality Control Act," below). The project corridor and vicinity are under the jurisdiction of the Central Valley RWQCB.

NPDES permits are required for projects that disturb more than 0.4 hectare (1 acre) of land. The NPDES permitting process requires the applicant to file a public notice of intent to discharge stormwater and to prepare and implement a Storm Water Pollution Prevention Plan (SWPPP). The SWPPP includes a site map and a description of proposed construction activities. In addition, it describes the BMPs that will be implemented to prevent soil erosion and discharge of other construction-related pollutants (e.g., petroleum products, solvents, paints, cement) that could contaminate nearby water resources. Permittees are required to conduct annual monitoring and reporting to ensure that BMPs are correctly implemented and effective in controlling the discharge of stormwater-related pollutants.

Water Quality Certification (Section 401)

Under the Clean Water Act, Section 401, applicants for a federal license or permit to conduct activities that may result in the discharge of a pollutant into waters of the United States must obtain certification from the state in which the discharge would originate, or, if appropriate, from the interstate water pollution control agency with jurisdiction over affected waters at the point where the discharge would originate. Therefore, all projects that have a federal component and may affect state water quality (including projects that require federal agency approval, such as issuance of a Section 404 permit) must also comply with Clean Water Act Section 401.

Fish and Wildlife Coordination Act

The Fish and Wildlife Coordination Act requires consultation with USFWS when the waters of any stream or other body of water are proposed, authorized, permitted, or licensed to be impounded, diverted, or otherwise controlled or modified under a federal permit or license (16 USC 661-667[e]). Most USFWS comments on applications for permits under Section 404 of the Clean Water Act or Section 10 of the River and Harbors Act are conveyed to the Corps through the consultation process required by this coordination act.

USFWS provides advisory comments and recommends mitigation measures to avoid impacts on wetlands or modify activities that may directly affect wetlands. Mitigation recommended by USFWS may include restoring or creating habitat to avoid a net loss of wetland functions and values. Although consultation with USFWS is required, the Corps is not required to implement USFWS recommendations.

Executive Order 11990—Protection of Wetlands

Executive Order 11990 (issued in 1977) is an overall wetland policy for all agencies managing federal lands, sponsoring federal projects, or providing federal funds to state and local projects. It requires federal agencies to follow procedures for avoidance, mitigation, and preservation, with public input, before proposing new construction in wetlands. When federal lands are proposed for lease or sale to nonfederal parties, Executive Order 11990 requires that the lease or conveyance contain restrictions to protect and enhance the wetlands on the property. The restrictions of this executive order apply to wetlands on military installations proposed for closure. In this capacity, Executive Order 11990 can affect the sale of federal lands with wetlands.

Compliance with Section 404 permit requirements may constitute compliance with the requirements of Executive Order 11990.

State

California Environmental Quality Act

CEQA is the regulatory framework by which California public agencies identify and mitigate significant environmental impacts. A project normally has a significant environmental impact on biological resources if it substantially affects a rare or endangered species or the habitat of that species; substantially interferes with the movement of resident or migratory fish or wildlife; or substantially diminishes habitat for fish, wildlife, or plants. The State CEQA Guidelines define rare, threatened, or endangered species as those listed under CESA and ESA, as well as any other species that meets the criteria of the resource agencies or local agencies—for example, the DFG-designated species of special concern and CNPS-listed species. The State CEQA Guidelines state that the lead agency preparing an EIR must consult with and receive written findings from DFG concerning project impacts on species listed as endangered or threatened. The effects of a proposed project on these resources are important in determining whether the project has significant environmental impacts under CEQA.

California State Wetlands Conservation Policy

The Governor of California issued an executive order on August 23, 1993, that created a California State Wetlands Conservation Policy. This policy is being implemented by an interagency task force that is jointly headed by the State Resources Agency and the California Environmental Protection Agency (Cal-EPA). The policy has three goals (Cylinder et al. 1995):

- to ensure no overall net loss and a long-term net gain in wetlands acreage and values in a manner that fosters creativity, stewardship, and respect for private property;

- to reduce the procedural complexity of state and federal wetlands conservation program administration; and
- to encourage partnerships that make restoration, landowner incentives, and cooperative planning the primary focus of wetlands conservation.

Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act (Porter-Cologne Act) articulates with the Clean Water Act. The act, passed in 1975, provides for the development and periodic review of Water Quality Control Plans (Basin Plans) that designate beneficial uses of California's major rivers and groundwater basins and establish narrative and numerical water quality objectives for those waters (Central Valley Regional Water Quality Control Board 1998). Basin plans are primarily implemented by using the NPDES permitting system to regulate waste discharges so that water quality objectives are met.

California Fish and Game Code

Fully Protected Species

The California Fish and Game Code provides protection from take for a variety of species, referred to as *fully protected species*. Section 5050 lists protected amphibians and reptiles. Section 3515 prohibits take of fully protected fish species. Eggs and nests of all birds are protected under Section 3503, nesting birds (including raptors and passerines) under Sections 3503.5 and 3513, birds of prey under Section 3503.5, and fully protected birds under Section 3511. Migratory nongame birds are protected under Section 3800. Mammals are protected under Section 4700. The California Fish and Game Code defines *take* as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." Except for take related to scientific research, all take of fully protected species is prohibited.

Streambed Alteration Agreements (Section 1600 et seq.)

DFG has jurisdictional authority over wetland resources associated with rivers, streams, and lakes under California Fish and Game Code, Sections 1600–1607. DFG has the authority to regulate all work under the jurisdiction of the State of California that would substantially divert, obstruct, or change the natural flow of a river, stream, or lake; substantially change the bed, channel, or bank of a river, stream, or lake; or use material from a streambed. Activities of agencies that are project proponents are regulated under Section 1601. Activities of private individuals who are project proponents are regulated under Section 1603.

In practice, DFG marks its jurisdictional limit at the top of the stream or lake bank or the outer edge of the riparian vegetation, where present, and sometimes extends its jurisdiction to the edge of the 100-year floodplain. Because riparian habitats do not always support wetland hydrology or hydric soils, wetland boundaries, as defined by Section 404, sometimes include only portions of the riparian habitat adjacent to a river, stream, or lake. Therefore, jurisdictional

boundaries under Section 1600 may encompass a greater area than those regulated under Section 404.

DFG enters into a streambed alteration agreement with an applicant and can impose conditions on the agreement to ensure that no net loss of wetland values or acreage will be incurred. The streambed or lakebed alteration agreement is not a permit but, rather, a mutual agreement between DFG and the applicant.

Sections 3503 and 3503.5

Section 3503 of the California Fish and Game Code prohibits the killing of birds or the destruction of bird nests. Section 3503.5 prohibits the killing of raptor species and the destruction of raptor nests.

Local

This section summarizes local policies and ordinances that pertain to biological resources that could affect or be affected by the proposed project. The policies were obtained from the Placer County General Plan and Granite Bay Community Plan.

Placer County General Plan

The Placer County General Plan (Placer County 1994) Natural Resources Element contains policies to protect creeks, wetland communities, riparian areas, and wildlife species throughout Placer County.

The following policies from the Conservation Element are applicable to the project.

Policy 6.A.3. The County shall require development projects proposing to encroach into a creek corridor or creek setback to do one or more of the following, in descending order or desirability:

a. avoid the disturbance of riparian vegetation;

b. replace riparian vegetation (on-site, in-kind);

c. restore another section of the creek (in-kind); and/or

d. pay a mitigation fee for restoration elsewhere (e.g., wetland mitigation banking program).

Policy 6.A.7. The County shall discourage grading activities during the rainy season, unless adequately mitigated, to avoid sedimentation of creeks and damage to riparian habitat.

Policy 6.B.1. The County shall support the "no net loss" policy for wetland areas regulated by the U.S. Army Corps of Engineers, U.S. Fish and Wildlife Service,

and California Department of fish and Game. Coordination with these agencies at all levels of project review shall continue to ensure that appropriate mitigation measures and the concerns of these agencies are adequately addressed.

Policy 6.B.2. The County shall require new development to mitigate wetland loss in both regulated and non-regulated wetlands to achieve "no net loss" through any combination of the following, in descending order or desirability: (1) avoidance; (2) where avoidance is not possible, minimization of impacts on the resource; or (3) compensation, including use of a mitigation banking program that provides the opportunity to mitigate impacts to rare, threatened, or endangered species and/or habitat which supports these species in wetland and riparian areas.

Policy 6.C.1. The County shall identify and protect significant ecological resource areas and other unique wildlife habitats critical to protecting and sustaining wildlife populations. Significant ecological resource areas include the following:

a. wetland areas including vernal pools;

b. stream environment zones;

c. any habitat for rare, threatened, or endangered animals or plants;

d. critical deer winter ranges (winter and summer), migratory routes and fawning habitat;

e. large areas of non-fragmented natural habitat, including Blue Oak Woodlands, Valley Foothill Riparian, and vernal pool habitat;

f. identifiable wildlife movement zones, including but not limited to, non-fragmented stream environment zones, avian and mammalian migratory routes, and known concentration areas of waterfowl within the Pacific Flyway; and

g. important spawning areas for anadramous fish.

Policy 6.C.6. The County shall support preservation of the habitats of rare, threatened, endangered, and/or other special-status species. Federal and state agencies, as well as other resource conservation organizations shall be encouraged to acquire and manage endangered species' habitats.

6.C.10. The County shall use the California Wildlife Habitat Relationships (WHR) system as a standard descriptive tool and guide for environmental assessment in the absence of a more detailed site-specific system.

Tree Preservation

Placer County acknowledges the value of native trees and has adopted Article 12.16, Tree Preservation, which seeks to preserve native trees wherever possible, especially within designated tree preservation zones. The proposed project would be located in a county-designated tree preservation zone. This article contains general countywide requirements (Placer County Code 12.16.030), tree

preservation zones (Placer County Code 12.16.040), tree permit exemptions (Placer County Code 12.16.050), and a tree replacement program and penalties (Placer County Code 12.16.080). A copy of Article 12.16, Tree Preservation, is provided in Appendix M.

Granite Bay Community Plan

The Granite Bay Community Plan (1989) Conservation Element contains policies to protect and conserve natural resources in the plan area. The following policies from the Conservation Element are applicable to the project.

Policy A-4. Removal of vegetation shall be minimized and where removal is necessary, replanting erosion, maximize reoxygenation, and retain the aesthetic qualities of the community.

Policy A-18. Environmental impact studies shall take into consideration the impacts of development proposals on wildlife habitats.

Policy A-23. Site specific surveys shall be required prior to development to delineate wetlands in the Granite Bay Community Plan area. All development proposals involving wetlands shall be coordinated with the California Department of fish and Game, Corps of Engineers, and U.S. Fish and Wildlife Service. A "no-net-loss" policy requiring preservation of all wetland sites or preservation of priority wetlands and compensation for wetland losses should continue to be implemented by these agencies.

Environmental Consequences

Criteria for Determining Significance

The State CEQA Guidelines and professional standards were used to determine whether the proposed project would have a significant impact on biological resources.

State CEQA Guidelines

According to the State CEQA Guidelines, a project would have a significant impact on biological resources if it would

- have a substantial adverse effect, either directly or through habitat modification, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations or by DFG or USFWS;

- have a substantial adverse effect on federally protected wetlands, as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, and coastal wetlands) through direct removal, filling, hydrological interruption, or other means;
- interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;
- conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; or
- conflict with the provisions of an adopted habitat conservation plan (HCP), natural communities conservation plan (NCCP), or other approved local, regional, or state habitat conservation plan.

Standard Professional Practice

Standard professional practice was also used to determine whether an impact on biological resources would be significant. The proposed project likely would cause a significant impact if it would result in:

- documented resource scarcity and sensitivity, both locally and regionally;
- decreased local and regional distribution of common and sensitive biological resources;
- long-term degradation of a sensitive plant community because of substantial alteration of land forms or site conditions (e.g., alteration of wetland hydrology);
- substantial loss of a plant community and associated wildlife habitat;
- fragmentation or isolation of wildlife habitats, especially riparian and wetland communities;
- substantial disturbance of wildlife because of human activities;
- avoidance by fish of biologically important habitat for substantial periods, which may increase mortality or reduce reproductive success;
- disruption of natural wildlife movement corridors;
- substantial reduction in local population size, attributable to direct mortality or habitat loss, lowered reproductive success, or habitat fragmentation of:
  - species qualifying as rare and endangered under CEQA,
  - species that are state-listed or federally listed as threatened or endangered, or
  - portions of local populations that are candidates for state or federal listing and federal and state species of concern; or
- substantial reduction or elimination of species diversity or abundance.

Methods and Assumptions for the Impact Analysis

This biological resources impact analysis is based on preliminary design drawings (Appendix A) and site-specific information gathered during field surveys. To the extent possible, the mitigation measures described for potential impacts on sensitive biological resources were developed through coordination with resource agencies. Additional compensatory mitigation for impacts on wetlands, riparian habitats, and VELB may also be identified as conditions of project permits (e.g., the Section 404 Clean Water Act permit from the Corps, the Section 1601 streambed alteration agreement from DFG, and the Section 7 ESA Authorization Process from USFWS) and will be implemented as part of the project.

Impact Assumptions

Construction activities associated with the proposed project could result in temporary, short-term, or long-term impacts (defined below under "Impact Mechanisms") on biological resources in the study area. In assessing the magnitude of possible impacts, the following project understandings and assumptions were made regarding construction-related impacts on biological resources.

- No new temporary or permanent access roads will be constructed. Where possible, the Placer County DPW will access the construction area from Auburn-Folsom Road.
- If fill material is placed in a waterway (e.g., Linda Creek), it will be placed in a way that will not hinder the flow of water. It is assumed that the natural streamflow will distribute the material throughout the downstream system.
- All material-stockpiling areas and staging areas will be located either within the work zone in nonsensitive areas or at designated disturbed sites outside the work zone. All materials will be disposed of at the nearest approved commercial disposal site.
- Removing portions of uncommon and biologically unique habitats, such as riparian woodland, could lead to a localized decrease in those habitat types and could result in the direct loss of special-status species (e.g., VELB) or their habitats.
- Floristic surveys were conducted in the study area. No special-status plants were located during 2002 botanical surveys. Therefore, the proposed project would not affect special-status plants, and these species are not discussed in the following section.
- Construction of the proposed project would result in the disturbance of common natural and artificial communities (e.g., grassland and landscaped/ruderal areas). The loss or disturbance of these communities is not considered significant from a botanical perspective; therefore, impacts on these communities are not discussed in this section.

Impact Mechanisms

Biological resources could be directly or indirectly affected during construction activities associated with the proposed project. Impacts on biological resources fall into the three categories: temporary, short-term, and long-term. These categories are defined below.

- A *temporary* impact is one that would occur only during construction and/or subsequent restoration.
- A *short-term* impact is one that would last from the time construction ceases to 3 years after construction and/or subsequent restoration.
- A *long-term* impact would last longer than 3 years after construction and/or subsequent restoration and typically would be associated with road construction and future road maintenance activities. In some cases, a long-term impact could be considered a permanent impact.
- *Direct* and *indirect* effects described for VELB were determined using the definitions identified under ESA.

The following types of activities could cause impacts on biological resources.

- Grading and paving activities during road widening
- Temporary stockpiling and sidecasting of soil, construction materials, or other construction wastes
- Soil compaction, dust, and water runoff from the construction site
- Creation and use of equipment access routes through Linda Creek and other drainages
- Construction-related noise (from equipment)
- Site preparation for temporary water bypass structures
- Development of soil stockpiling areas to contain material from excavation and access road construction
- Stream dewatering or installation of temporary water-diversion structures
- Degradation of water quality in wetlands and creeks, resulting from construction runoff containing petroleum products

Impacts

The biological resources impacts associated with the project are common to all alternatives; variations among alternatives are described.

Construction-Related Impacts

Impact 8.1 Potential Disturbance or Loss of Waters of the United States (Including Wetlands)

Construction activities associated with the proposed project would result in the disturbance or loss of seasonal wetlands, freshwater marsh wetlands, and streams that are considered waters of the United States and provide important habitat functions. These biological communities would be affected directly during grading and material stockpiling activities. Some waters of the United States would be temporarily affected, and other wetlands in the construction corridor would be permanently affected.

Most of the wetlands in the study area have been previously disturbed. Some of these wetland communities have successfully reestablished after previous construction and road maintenance activities and support similar wetland characteristics as adjacent, undisturbed wetlands. Wetlands in the project area that are not disturbed on a regular basis likely are resilient and reestablish naturally over time if a hydrological connection is maintained and the soil (with seedbank) has not been displaced.

Impacts on wetlands adjacent to the area of direct impact are considered temporary because

- construction activities would be relatively short in duration within any wetland or other water of the United States,
- construction activities would not substantially alter wetland hydrologic functions,
- native soils and plant material would be replaced immediately after construction to allow wetlands to reestablish after construction activities are complete,
- natural landscape contours will be restored to preproject conditions.

Although temporary, the loss or degradation of waters of the United States could result in degradation of sensitive plant communities, fragmentation or isolation of important wildlife habitats, or disruption of natural wildlife movement corridors.

This impact differs among alternatives, as described below.

Alternative 1: Widen Roadway to the West

This alternative would result in the loss of 0.033 hectare (0.084 acre) of waters of the United States, including wetlands. This impact is considered significant. Implementation of Mitigation Measures P8.1a through P8-1h would reduce this impact to a less-than-significant level and ensure no net loss of wetland acreage and habitat value.

Alternative 2: Widen Roadway to the East

This alternative would result in the loss of 0.038 hectare (0.095 acre) of waters of the United States, including wetlands. This impact is considered significant. Implementation of Mitigation Measures P8.1a through P8-1h would reduce this impact to a less-than-significant level and ensure no net loss of wetland acreage and habitat value.

Alternative 3: Widen Roadway Equally on Both Sides

This alternative would result in the loss of 0.030 hectare (0.075 acre) of waters of the United States, including wetlands. This impact is considered significant. Implementation of Mitigation Measures P8.1a through P8-1h would reduce this impact to a less-than-significant level and ensure no net loss of wetland acreage and habitat value.

Alternative 4: County DPW–Preferred Alternative

This alternative would result in the loss of 0.04 hectare (0.10 acre) of waters of the United States, including wetlands. This impact is considered significant. Implementation of Mitigation Measures P8.1a through P8-1h would reduce this impact to a less-than-significant level and ensure no net loss of wetland acreage and habitat value.

Impact 8.2 Potential Loss or Disturbance of Valley Foothill Riparian Forest

Construction activities associated with the proposed project would result in the disturbance or loss of valley foothill riparian forest that is located along two natural streams in the study area. Riparian trees and shrubs would be removed during road widening and construction activities around Linda Creek and a tributary stream located south of Linda Creek.

The loss or degradation of valley foothill riparian forest could result in degradation of sensitive plant communities, fragmentation or isolation of important wildlife habitats, or disruption of natural wildlife movement corridors.

This impact differs among alternatives, as described below.

Alternative 1: Widen Roadway to the West

This alternative would result in the loss of 0.02 hectare (0.05 acre) of valley foothill riparian forest. This impact is considered significant. Implementation of Mitigation Measures P8.2a through P8.2d would reduce this impact to a less-than-significant level and ensure no net loss of riparian acreage and habitat value.

Alternative 2: Widen Roadway to the East

This alternative would result in the loss of 0.04 hectare (0.11 acre) of valley foothill riparian forest. This impact is considered significant. Implementation of Mitigation Measures P8.2a through P8.2d would reduce this impact to a less-than-significant level and ensure no net loss of riparian acreage and habitat value.

Alternative 3: Widen Roadway Equally on Both Sides

This alternative would result in the loss of 0.03 hectare (0.07 acre) of valley foothill riparian forest. This impact is considered significant. Implementation of Mitigation Measures P8.2a through P8.2d would reduce this impact to a less-than-significant level and ensure no net loss of riparian acreage and habitat value.

Alternative 4: County DPW–Preferred Alternative

This alternative would result in the loss of 0.04 hectare (0.10 acre) of valley foothill riparian forest. This impact is considered significant. Implementation of Mitigation Measures P8.2a through P8.2d would reduce this impact to a less-than-significant level and ensure no net loss of riparian acreage and habitat value.

Impact 8.3 Loss or Disturbance of Blue Oak–Digger Pine Woodland and Native Trees

Construction activities associated with the proposed project would result in the disturbance or loss of an oak woodland community and individual native trees. Native trees associated with the woodland community would be removed or affected during trenching, staging, trimming for equipment access, and other construction-related activities. Although the woodland community is dominated by native trees that are common in the project region (blue oak, interior live oak, foothill pine), the loss of trees could conflict with the Placer County policy protecting native trees in the county.

This impact differs among alternatives, as described below and as shown in Table 8-6.

Table 8-6. Impacts on Trees by Alternative

	Alternative 1: Widen Roadway to the West		Alternative 2: Widen Roadway to the East		Alternative 3: Widen Equally on Both Sides		Alternative 4: County DPW–Preferred	
Tree Losses by Type	Number of Trees	Inches	Number of Trees	Inches	Number of Trees	Inches	Number of Trees	Inches
Native oaks	195	4,432	267	5,454	254	5,457	242	4,921
Other natives	101	1,391	92	1,669	64	1,157	71	1,247
Nonnatives	75	1,468	30	538	46	706	33	531
Total	371	7,291	389	7,661	364	7,320	346	6,699

Source: Sierra Nevada Arborists. Summary Comparison of Tree Losses by Location, Type, and Size. October 15, 2002.

Alternative 1: Widen Roadway to the West

This alternative would result in the loss of 371 trees, including 195 oaks and 101 other native trees. This impact is considered significant. Implementation of

Mitigation Measures P8.3a through P8.3e would reduce this impact to a less-than-significant level.

Alternative 2: Widen Roadway to the East

This alternative would result in the loss of 389 trees, including 267 oaks and 92 other native trees. This impact is considered significant. Implementation of Mitigation Measures P8.3a through P8.3e would reduce this impact to a less-than-significant level.

Alternative 3: Widen Roadway Equally on Both Sides

This alternative would result in the loss of 364 trees, including 254 oaks and 64 other native trees. This impact is considered significant. Implementation of Mitigation Measures P8.3a through P8.3e would reduce this impact to a less-than-significant level.

Alternative 4: County DPW–Preferred Alternative

This alternative would result in the loss of 346 trees, including 242 oaks and 71 other native trees. This impact is considered significant. Implementation of Mitigation Measures P8.3a through P8.3e would reduce this impact to a less-than-significant level.

Impact 8.4 Potential Mortality of Individual Valley Elderberry Longhorn Beetles or Disturbance of Habitat

Construction activities associated with the proposed project could result in the mortality of individuals or disturbance of habitat for VELB, a species federally listed as threatened. VELB could be directly affected by road-widening activities (including grading, paving, and equipment staging) that occur within 6 meters (20 feet) of the dripline of an elderberry shrub. These impacts may involve the removal of the shrub or the destruction of stems. VELB could be indirectly affected by increased accumulation of dust on shrubs resulting from ground-disturbing activities, soil compaction around the root system of a shrub, or removal of associate woodland species. These activities could result in the death of the shrub and loss of VELB habitat after the project has been completed. It is assumed that shrubs located between 6 and 30.5 meters (between 20 and 100 feet) of the construction area would not be directly affected but could be indirectly affected by the proposed project.

This impact differs among alternatives, as listed in Table 8-7 and described below.

Table 8-7. Summary of Stem Counts for Elderberry Shrubs Directly Affected by Each Build Alternative

Alternative	Shrubs Directly Affected*	Total Number of Stems (By Diameter)		
		2.5–7.6 cm (1–3 in.)	7.6–12.7 cm (3–5 in.)	>12.7 cm (>5 in.)
Alternative 1: Widening to the West	#2, 6, 8	5	1	1
Alternative 2: Widening to the East	#2, 6, 7, 8, 9	9	1	1
Alternative 3: Widening Equally on Both Sides	#2, 6, 7, 8, 9	9	1	1
Alternative 4: County DPW–Preferred	#2, 6, 7, 8, 9	9	1	1

*Identification numbers are shown in Figure 3 of Appendix J, the BA for VELB.

Alternative 1: Widen Roadway to the West

This alternative would result in direct impacts on three shrubs and indirect impacts on four shrubs. This impact is considered significant because it would result in direct loss of habitat for a federally listed species. Implementation of Mitigation Measures P8.4a through P8.4f would reduce this impact to a less-than-significant level.

Alternative 2: Widen Roadway to the East

This alternative would result in direct impacts on five shrubs and indirect impacts on three shrubs. This impact is considered significant because it would result in direct loss of habitat for a federally listed species. Implementation of Mitigation Measures P8.4a through P8.4f would reduce this impact to a less-than-significant level.

Alternative 3: Widen Roadway Equally on Both Sides

This alternative would result in direct impacts on five shrubs and indirect impacts on three shrubs. This impact is considered significant because it would result in direct loss of habitat for a federally listed species. Implementation of Mitigation Measures P8.4a through P8.4f would reduce this impact to a less-than-significant level.

Alternative 4: County DPW-Preferred Alternative

This alternative would result in direct impacts on five shrubs and indirect impacts on four shrubs. This impact is considered significant because it would result in direct loss of habitat for a federally listed species. Implementation of Mitigation Measures P8.4a through P8.4f would reduce this impact to a less-than-significant level.

Impact 8.5 Potential Mortality of Northwestern Pond Turtles

Construction activities associated with the proposed project could result in the mortality of northwestern pond turtles. Northwestern pond turtle is a state species of special concern and a federal species of concern. Although no northwestern pond turtles were observed in the study area during 2002 field surveys, this species has been documented in Baldwin Reservoir, approximately 0.32 kilometer (0.2 mile) west of the project area. Population declines of this species have been attributed to a variety of factors, including habitat loss resulting from urbanization, water projects, and agricultural conversion. This species is subject to further population declines caused by continued habitat loss and disturbance. Construction equipment operating in and adjacent to the Baldwin Reservoir canal could result in the direct mortality of turtles.

This impact is common to all build alternatives and is considered potentially significant, because the loss of an individual northwestern pond turtle could substantially decrease the local population if the present population is small. Implementation of Mitigation Measure P8.5 would reduce this impact to a less-than-significant level.

Impact 8.6 Potential Disturbance of Nesting Loggerhead Shrike, Oak Titmouse, White-Tailed Kite, and Non-Special-Status Nesting Migratory Birds and Raptors

Construction of the proposed project would involve removing trees and shrubs. This activity could disturb nesting special-status and non-special-status migratory birds and raptors or remove occupied nests if construction occurs during the breeding season (which is generally between March 1 and August 15). This disturbance could cause nest abandonment and the death of young or the loss of reproductive potential at active nests located in or near the study area. Focused surveys for nesting migratory birds and raptors were not conducted; however, many migratory birds, including oak titmouse, northern mockingbird, Bewick's wren, American goldfinch, yellow-rumped warbler, and bushtit were observed in the riparian forest and blue oak–foothill pine woodland in the study area during May and July 2002 field surveys. Although no nesting raptors were observed in the study area, potential nesting habitat was identified in the riparian and blue oak–foothill pine woodland habitats for white-tailed kite, a fully protected species under the California Fish and Game code, and for three non-special-status raptors (red-tailed hawk, red-shouldered hawk, American kestrel, and great horned owl).

Although migratory birds are not colonial nesters, they do have relatively small territories, and numerous birds could nest in the riparian and blue oak–foothill pine woodland habitat that would be removed or disturbed by construction activities. Urban development in the project vicinity has resulted in an overall decrease in available nesting habitat for migratory birds. The loss of a large number of migratory birds in the study area could result in local population

declines. In addition, construction activities that result in the mortality of migratory birds would violate MBTA.

White-tailed kites and non-special-status raptors listed above are locally and regionally abundant. Because these species are not colonial nesters and generally do not nest in high densities, it is unlikely that the proposed project would result in a substantial decrease in the local population of these species. However, all raptor nests are protected under Section 3503 (active bird nests) and 3503.5 (active raptor nests) of the California Fish and Game Code, and construction activities associated with the project could be in violation of this code if raptor nests are removed.

This impact is common to all build alternatives. The impact is considered potentially significant: significance depends on whether nesting migratory birds and raptors are disturbed during construction activities and whether the resulting population declines are large and affect the viability of local populations.

Implementation of Mitigation Measures P8.6a and P8.6b would reduce this impact to a less-than-significant level and would avoid violating the MBTA and the California Fish and Game Code.

Impact 8.7 Potential Disturbance of Nesting Cliff and Barn Swallows

Construction of the proposed project could result in the disturbance of nesting cliff and barn swallows during culvert modifications. Potential habitat for these species is located on the underside of a box culvert at the crossing of Auburn-Folsom Road over the Baldwin Reservoir canal. Although no active swallow nests were observed during the May 2002 field surveys, the remnants of swallow nests were observed on the underside of the concrete box culvert, which provides evidence of use by nesting swallows in previous breeding seasons. Cliff and barn swallows are not considered special-status species, but their occupied nests and eggs are protected by federal and state laws, including MBTA and the California Fish and Game Code, Sections 3503, 3513, and 3800 (50 CFR 10 and 21). USFWS is responsible for overseeing compliance with MBTA, and DFG is responsible for overseeing compliance with the California Fish and Game Code.

This impact is common to all build alternatives. It is considered potentially significant: significance depends on whether nesting swallows are disturbed during construction and whether the resulting population declines are large and affect the viability of local populations. Because the box culvert is relatively narrow (approximately 3 meters [10 feet]), it could support only a small colony of nesting swallows. Therefore, construction-related activities would not be expected to affect the viability of local swallow populations. However, construction activities that result in the mortality of swallows would violate MBTA.

Implementation of Mitigation Measure P8.7 would reduce this impact to a less-than-significant level and avoid violating MBTA.

Impact 8.8 Potential Disturbance of Common Wildlife Species

Construction activities associated with the proposed project would remove habitat for many common wildlife species. During construction, individuals of many common species would be displaced to adjacent lands. Because the project corridor (i.e., the area of disturbance) is linear and is located along an already developed corridor, the temporary displacement of common wildlife is not likely to lead to a substantial reduction of species diversity or abundance in the project region.

This impact is common to all build alternatives and is considered less than significant. No mitigation is required.

Mitigation Measures

This section details the mitigation measures identified for the project alternatives. Mitigation measures are identified as either of the following.

- *Proposed mitigation measures* are measures that the Placer County DPW, as project proponent, is either proposing as part of the project design or has agreed to implement.
- *Recommended mitigation measures* are measures that are identified in this environmental document but that the Placer County DPW has not chosen to implement, and which may be required by the Placer County Board of Supervisors if the project is approved.

Proposed Mitigation Measures

Mitigation Measure P8.1a: Obtain a Section 404 Permit from the Corps

The project is subject to review and approval by the Corps. It is Placer County DPW's responsibility to obtain a Clean Water Act Section 404 permit from the Corps before beginning any grading, clearing, or excavation.

Mitigation Measure P8.1b: Obtain a Section 401 Water Quality Certification or Waiver from the Central Valley RWQCB

As a condition of the Section 404 permit, the project is subject to review and approval by the Central Valley RWQCB. It is Placer County DPW's responsibility to obtain a Clean Water Act Section 401 certificate or waiver from the RWQCB before beginning any grading, clearing, or excavation.

Mitigation Measure P8.1c: Obtain a Section 1601 Streambed Alteration Agreement from DFG

The project is subject to review by DFG. It is Placer County DPW's responsibility to obtain a streambed alteration agreement from DFG before beginning any grading, clearing, or excavation.

Mitigation Measure P8.1d: Pay Appropriate Environmental Document Review Fee

Pursuant to Section 21089(b) of the California Public Resources Code and Section 711.4 et seq. of the California Fish and Game Code, the approval of this project shall not be considered final unless the specified fees are paid to DFG. The fees currently required are $880 for projects with environmental impact reports and $1,280 for projects with negative declarations; however, the actual fee paid will be that in effect at the time payment occurs. Without the appropriate fee, the Notice of Determination (which the County is required to file within 5 days of project approval) is not operative, vested, or final, and shall not be accepted by the County Clerk.

Mitigation Measure P8.1e: Install Temporary Construction Fencing to Protect Wetlands

Placer County DPW shall install a 1.2-meter-tall (4-foot-tall), brightly colored (usually yellow or orange), synthetic mesh–material fence (or an equivalent approved by the Development Review Committee [DRC]) at the following location before allowing any construction equipment to be moved onto the site and before any construction activities take place.

1. Adjacent to any and all wetlands, drainages, and creeks that are within 15.2 meters (50 feet) of any proposed construction activity

No construction activities, including grading, shall be allowed until this condition is satisfied. Any encroachment within wetland areas must first be approved by the DRC. No grading, clearing, or storage of equipment or machinery, or similar activity, may occur until a representative of the DRC has inspected and approved all temporary construction fencing. This restriction applies to both onsite and offsite improvements. The temporary fencing shall be maintained until all construction activities are complete. No grading, trenching, or movement of construction equipment shall be allowed within fenced areas.

Mitigation Measure P8.1f: Avoid and Minimize Disturbance of Waters of the United States, Including Wetlands

To the extent possible, Placer County DPW shall avoid and minimize impacts on waters of the United States (including wetlands) by implementing the following measures.

1. Redesign or modify the project to avoid direct and indirect impacts on wetlands and streams, if feasible.
2. Avoid construction activities in saturated or ponded wetlands and streams during the wet season (spring and winter) to the maximum extent possible.

Where such activities are unavoidable, protective practices, such as use of padding or vehicles with balloon tires, shall be employed.

3. Where determined necessary by resource specialists, use geotextile cushions and other materials (e.g., timber pads, prefabricated equipment pads, geotextile fabric) in saturated conditions to minimize damage to the substrate and vegetation.
4. Stabilize exposed slopes and streambanks immediately upon completion of construction activities. Other waters of the United States shall be restored in a manner that encourages vegetation to reestablish to its preproject condition and reduces the effects of erosion on the drainage system.
5. In highly erodible stream systems, stabilize banks using a nonvegetative material that will bind the soil initially and break down within a few years. If the project engineers determine that more aggressive erosion control treatments are needed, use geotextile mats, excelsior blankets, or other soil stabilization products.
6. During construction, remove trees, shrubs, debris, or soils that are inadvertently deposited below the ordinary high-water mark of streams in a manner that minimizes disturbance of the drainage bed and bank.
7. In-stream construction within the ordinary high-water mark of Linda Creek shall be restricted to the low-flow period of April through October.
8. All activities shall be completed promptly to minimize their duration and resultant impacts.

These measures shall be incorporated into contract specifications and implemented by the construction contractor.

Mitigation Measure P8.1g: Confine Construction Equipment and Associated Activities to the Designated Work Zone in Areas That Support Wetland Resources

Construction equipment shall be confined to a designated work zone (that includes access roads) along the project corridor. Before construction begins, the work zone shall be clearly staked and flagged. During construction, construction monitors and resource monitors shall ensure that construction equipment and associated activities avoid disturbing sensitive resources outside the designated work zones.

Mitigation Measure P8.1h: Compensate for the Loss of Waters of the United States

If waters of the United States (including wetlands) are filled as part of the project, Placer County DPW shall compensate for permanent impacts to ensure no net loss of habitat functions and values. The compensation shall be provided at a minimum ratio of 2:1 (2 acres restored or created for every 1 acre filled) and may be a combination of onsite restoration/creation, offsite restoration, or mitigation credits. Compensation ratios shall be based on site-specific information and determined through coordination with state and federal agencies, as part of the permitting process for the project. Compensation options are

presented below; however, any wetlands affected on Reclamation land must be restored on Reclamation land.

1. Purchase mitigation bank credits at a USFWS-approved ecosystem preservation bank. Wildland's Sheridan Ranch Conservation Bank in Placer County ranges from $44,000/acre for wetland mitigation. Before approval of the Improvement Plans, Placer County DPW shall provide written evidence to the DRC that compensatory habitat has been established through the purchase of mitigation credits. The amount to be paid shall be the fee that is in effect at the time the fee is paid. The estimated fee per alternative is as follows.

   Alternative 1: Widen Roadway to the West
   $7,392

   Alternative 2: Widen Roadway to the East
   $8,360

   Alternative 3: Widen Roadway Equally on Both Sides
   $6,600

   Alternative 4: County DPW–Preferred Alternative
   $8,800

OR

2. Contribute funds, equal to the amount needed to purchase mitigation bank credits, to restoration of wetlands and other waters in the Folsom Lake SRA, American River corridor, or other nearby lands that are publicly managed and will be protected in perpetuity. Placer County DPW shall coordinate with appropriate individuals to determine whether there is a potential to create, restore, or enhance waters of the United States at nearby preserved lands.

OR

3. Develop a wetland restoration plan that involves creating or enhancing wetland habitat on site or next to the project area. Potential creation and enhancement sites shall be evaluated by the County and Reclamation to determine whether this is a feasible option. If Placer County DPW determines that onsite or offsite restoration is possible, a restoration plan will be developed that describes where and when restoration will occur and who will be responsible for developing, implementing, and monitoring the restoration plan. When this option is selected, restoration will be selected in an appropriate area in close proximity to the project area.

Mitigation Measure P8.2a: Install Temporary Construction Fencing to Protect Trees

Placer County DPW shall install a 1.2-meter-tall (4-foot-tall), brightly colored (usually yellow or orange), synthetic mesh–material fence (or an equivalent approved by the DRC) at the following location before allowing any construction

equipment to be moved onto the site and before any construction activities take place.

1. At the limits of construction, outside the dripline of all trees that are 15.2 centimeters (6 inches) dbh (diameter at breast height), or 25.4 centimeters (10 inches) dbh aggregate for multitrunk trees, within 15.2 meters (50 feet) of any grading, road improvements, underground utilities, or other development activity, or as otherwise shown on the site plan. All trees that are to be saved shall be fenced.

No construction activity, including grading, shall be allowed until this condition is satisfied. Any encroachment within these areas, such as within the driplines of trees to be saved, must first be approved by the DRC. No grading, clearing, or storage of equipment or machinery, or similar activity, may occur until a representative of the DRC has inspected and approved all temporary construction fencing. The temporary fencing shall be maintained until all construction activities are complete. No grading, trenching, or movement of construction equipment shall be allowed within fenced areas.

Protection for native trees on slopes shall include installation of a silt fence. A silt fence shall be installed at the upslope base of the protective fence to prevent soil from drifting down over the root zone.

Efforts shall be made to save trees where feasible. These efforts may include the use of retaining walls or other techniques commonly associated with tree preservation.

The temporary construction fencing and a note reflecting this condition shall be shown on the Improvement Plans.

Mitigation Measure P8.2b: Compensate for Permanent Impacts on Riparian Communities

Placer County DPW shall compensate for permanent impacts on riparian communities by implementing one or a combination of the following options. The compensation shall be provided at a minimum ratio of 2:1 (2 acres restored or created for every 1 acre filled) and may be a combination of onsite restoration/creation, offsite restoration, or mitigation credits. Compensation ratios shall be based on site-specific information and determined through coordination with state and federal agencies, as part of the permitting process for the project. Compensation options are presented below; however, any riparian communities affected on Reclamation land must be restored on Reclamation land.

1. Purchase mitigation bank credits at a locally approved bank. Wildland's Sheridan Ranch Conservation Bank in Placer County ranges from $49,000/acre for riparian mitigation. Before approval of the Improvement Plans, Placer County DPW shall provide written evidence to the DRC that compensatory habitat has been established through the purchase of mitigation credits. The amount to be paid shall be the fee that is in effect at the time the fee is paid. The estimated fee per alternative is as follows.

The estimated fee per alternative is as follows.

Alternative 1: Widen Roadway to the West
$4,900

Alternative 2: Widen Roadway to the East
$10,780

Alternative 3: Widen Roadway Equally on Both Sides
$6,860

Alternative 4: County DPW–Preferred Alternative
$9,800

OR

2. Contribute funds for riparian restoration activities in the Folsom Lake SRA, American River corridor, or other public lands. Placer County DPW shall contact appropriate individuals to determine whether there is a potential to create, restore, or enhance riparian habitat within these preserves.

OR

3. Develop a riparian restoration plan that involves creating or enhancing riparian habitat in the project area. Potential creation and enhancement sites shall be evaluated by the County and Reclamation to determine whether this is a feasible option. If Placer County DPW determines that onsite or offsite restoration is possible, a restoration plan will be developed that describes where and when restoration will occur and who will be responsible for developing, implementing, and monitoring the restoration plan.

Mitigation Measure P8.2c: Update the Tree Survey Report for the Selected Alternative

Placer County DPW shall provide the DRC with an updated tree survey report (by an International Society of Arboriculture- [ISA-] Certified Arborist) depicting the exact locations of the following:

1. trees that are 15.2 centimeters (6 inches) dbh (diameter at breast height) or larger and that grow within 15.2 meters (50 feet) of any grading, road improvements, underground utilities, or other activities;
2. multitrunk trees that are 25.4 centimeters (10 inches) dbh or more (aggregate) and that grow within 15.2 meters (50 feet) of any grading, road improvements, underground utilities, or other activities;
3. trees that are 45.7 centimeters (18 inches) dbh or larger and that are located along the roadway corridor; and
4. trees that would be disturbed by offsite improvements (e.g., road improvements, underground utilities).

The tree survey report shall list the sizes (diameter at 1.2 meters [4 feet] above the ground), species of trees, spot elevations, and approximate driplines. The

report also shall identify the trees to be saved, without disturbance, and those to be removed. The locations of trees to be saved and those to be removed shall be shown on the survey map and superimposed over the grading plan. This map also shall show all proposed improvements, including any underground utilities. The survey report shall be reviewed and approved by the DRC before any construction activity, including preliminary clearing or grading.

Mitigation Measure P8.2d: Avoid and Minimize Disturbance of Riparian Communities

To the extent possible, Placer County DPW shall avoid impacts on riparian communities by implementing the following measures.

1. Redesign or modify the project to avoid direct and indirect impacts on riparian habitats, if feasible.
2. Protect riparian habitats that are located near the project area by installing temporary construction fencing to protect the riparian vegetation. Depending on site-specific conditions, this buffer may be narrower or wider than 6 meters (20 feet). The locations of the fencing shall be marked in the field with stakes and flagging and shown on the construction drawings. The construction specifications shall contain clear language that prohibits construction-related activities, vehicle operation, material and equipment storage, and other surface-disturbing activities within the fenced environmentally sensitive areas.
3. Minimize the potential for long-term loss of riparian vegetation by trimming vegetation rather than removing the entire shrub. Shrubs that need to be trimmed shall be cut at least 0.3 meter (1 foot) above ground level to leave the root systems intact and allow for more rapid regeneration. Cutting shall be limited to the minimum area necessary within the construction zone. Cutting shall be allowed only for shrubs (all trees shall be avoided) in areas that do not provide habitat for sensitive species. To protect nesting birds, Reclamation does not allow pruning or removal of woody riparian vegetation from March 15 to July 31.
4. Require the contractor to perform any necessary pruning, including pruning for utility line clearance, using the "Pruning Guidelines" adopted by the California Department of Forestry and Fire Protection.
5. Inspect the areas that undergo vegetative pruning and tree removal immediately before construction, immediately after construction, and 1 year after construction to determine the amount of existing vegetative cover, cover that has been removed, and cover that resprouts. If, after 1 year, these areas have not resprouted sufficiently to return the cover to the preproject level, the contractor will be responsible for replanting the areas with the same species to reestablish the cover to the preproject condition.

Mitigation Measure P8.3a: Obtain a Tree Permit

Before any construction activity, including grading or other site disturbance, Placer County DPW shall acquire a Tree Permit for the removal of trees 15 centimeters (6 inches) dbh or larger and multitrunked trees with an aggregate diameter of 30 centimeters (10 inches) dbh or more.

Mitigation Measure P8.3b: Mitigate Tree Removal

Trees identified for removal and trees with disturbance within their driplines shall be replaced along the corridor as feasible.

1. Trees removed from Reclamation property shall be replaced on Reclamation property on an inch-by-inch basis. For example, if 254 centimeters (100 inches) of tree diameter are proposed to be removed, the replacement trees shall be equal to 254 centimeters (100 inches) in diameter (aggregate). If feasible, seedlings should be from acorns collected within 30 miles of the project location in Placer or Sacramento Counties in the American River watershed and between the elevations of 100 and 800 feet. A 3-year monitoring and maintenance plan for the trees and any irrigation shall be required. The expectation is that there will be 100% survival for the replacement trees at the end of 3 years. Tree replacement on Reclamation property shall take place in close proximity to the project corridor.
2. In lieu of 50% of the mitigation for tree removal that is not on Reclamation property, a contribution to the Placer County Tree Preservation Fund shall be required. The value is based on 50% of the overall replacement estimate, which shall be submitted to the Placer County Development Review Committee (DRC) for review and approval.
3. The trees shall be installed by the contractor and inspected and approved by Placer County DPW before completion of the project. At its discretion, the DRC may establish an alternate deadline for installation of replacement trees if weather or other circumstances prevent the completion of this requirement before completion of the project.
4. For native trees removed from private lands, Placer County DPW may either:
   - replace the trees on the private lands with one 15-gallon native tree for each tree removed or
   - contribute money into the Placer County Tree Preservation Fund.

Mitigation Measure P8.3c: Revegetate All Disturbed Areas

Placer County DPW or an approved contractor shall revegetate all disturbed areas. Revegetation undertaken between April 1 and October 1 shall include regular watering to ensure adequate growth. A winterization plan shall be provided with project Improvement Plans. It is Placer County DPW's responsibility to ensure proper installation and maintenance of erosion control/winterization during project construction. Placer County DPW shall provide for erosion control where roadside drainage is off of the pavement.

Placer County DPW shall maintain a letter of credit, surety bond, or cash deposit in the amount of 100% of an approved engineer's estimate for winterization and permanent erosion control work before Improvement Plan approval to guarantee protection against erosion and improper grading practices.

Mitigation Measure P8.3d: Install Temporary Construction Fencing to Protect Trees

Placer County DPW shall install a 1.2-meter-tall (4-foot-tall), brightly colored (usually yellow or orange), synthetic mesh–material fence (or an equivalent approved by the DRC) at the following location before allowing any construction equipment to be moved onto the site and before any construction activities take place.

1. At the limits of construction, outside the dripline of all trees that are 15.2 centimeters (6 inches) dbh (diameter at breast height), or 25.4 centimeters (10 inches) dbh aggregate for multitrunk trees, within 15.2 meters (50 feet) of any grading, road improvements, underground utilities, or other development activity, or as otherwise shown on the site plan. All trees that are to be saved shall be fenced.

No construction activity, including grading, shall be allowed until this condition is satisfied. Any encroachment within these areas, such as within the driplines of trees to be saved, must first be approved by the DRC. No grading, clearing, or storage of equipment or machinery, or similar activity, may occur until a representative of the DRC has inspected and approved all temporary construction fencing. The temporary fencing shall be maintained until all construction activities are complete. No grading, trenching, or movement of construction equipment shall be allowed within fenced areas.

Protection for native trees on slopes shall include installation of a silt fence. A silt fence shall be installed at the upslope base of the protective fence to prevent soil from drifting down over the root zone.

Efforts shall be made to save trees where feasible. These efforts may include the use of retaining walls or other techniques commonly associated with tree preservation.

The temporary construction fencing and a note reflecting this condition shall be shown on the Improvement Plans.

Mitigation Measure P8.3e: Update the Tree Survey Report for the Selected Alternative

Placer County DPW shall provide the DRC with an updated tree survey report (by an ISA-Certified Arborist) depicting the exact locations of the following:

1. trees that are 15.2 centimeters (6 inches) dbh (diameter at breast height) or larger and that grow within 15.2 meters (50 feet) of any grading, road improvements, underground utilities, or other activities;
2. multitrunk trees that are 25.4 centimeters (10 inches) dbh or more (aggregate) and that grow within 15.2 meters (50 feet) of any grading, road improvements, underground utilities, or other activities;
3. trees that are 45.7 centimeters (18 inches) dbh or larger and that are located along the roadway corridor; and

4. trees that would be disturbed by offsite improvements (e.g., road improvements, underground utilities).

The tree survey report shall list the sizes (diameter at 1.2 meters [4 feet] above the ground), species of trees, spot elevations, and approximate driplines. The report also shall identify the trees to be saved, without disturbance, and those to be removed. The locations of trees to be saved and those to be removed shall be shown on the survey map and superimposed over the grading plan. This map also shall show all proposed improvements, including any underground utilities. The survey report shall be reviewed and approved by the DRC before any development activity on site, including preliminary clearing or grading.

Mitigation Measure P8.4a: Complete Section 7 ESA Consultation with USFWS for Potential Impacts on VELB

The project is subject to review and approval by USFWS. It is Placer County DPW's responsibility to obtain approval from USFWS before beginning any grading, clearing, or excavation.

Mitigation Measure P8.4b: Establish a Minimum 6-Meter-Wide (20-Foot-Wide) Buffer around All Elderberry Shrubs That Will Not Be Removed

Before any ground-disturbing activity, Placer County DPW shall ensure that a minimum 1.2-meter-tall (4-foot-tall) temporary, plastic mesh–type construction fence (Tensor Polygrid or equivalent) is installed at least 6 meters (20 feet) around the driplines of elderberry shrubs that are within 30.5 meters (100 feet) of the construction area but that will not be removed. This fencing is intended to prevent encroachment by construction vehicles and personnel. The exact location of the fencing shall be determined by a qualified biologist, with the goal of protecting sensitive biological resources (i.e., habitat for VELB). The fencing shall be strung tightly on posts set at a maximum interval of 3 meters (10 feet). The fencing shall be installed in a way that prevents equipment from enlarging the work area beyond the area necessary to complete the work. The fencing shall be checked and maintained weekly until all construction is completed. This buffer zone shall be marked by a sign stating, "This is habitat of the valley elderberry longhorn beetle, a threatened species, and must not be disturbed. This species is protected by the Endangered Species Act of 1973, as amended. Violators are subject to prosecution, fines, and imprisonment."

No construction activity, including grading, shall be allowed until this condition is satisfied. No grading, clearing, storage of equipment or machinery, or other disturbance or activity may occur until a representative of Reclamation has inspected and approved all temporary construction fencing. The fencing and a note reflecting this condition shall be shown on the Improvement Plans.

Mitigation Measure P8.4c: Implement Dust Control Measures

Placer County DPW shall ensure that dust control measures are implemented for all ground-disturbing activities in the project area. These measures may include application of water to graded and disturbed areas that are unvegetated. To avoid attracting Argentine ants, at no time shall water be sprayed within the driplines of elderberry plants.

Mitigation Measure P8.4d: Transplant Elderberry Shrubs That Cannot Be Avoided

Placer County DPW shall ensure that all elderberry shrubs with one or more stems measuring 2.5 centimeters (1.0 inch) or more in diameter, and that cannot be avoided during construction, shall be transplanted to a conservation area in accordance with USFWS's *Conservation Guidelines for Valley Elderberry Longhorn Beetle* (U.S. Fish and Wildlife Service 1999). In the event that an elderberry shrub is unlikely to survive transplantation because of poor condition or location, the shrub may be exempted from transplantation at the discretion of USFWS.

Implementation of Alternative 1 would require transplanting three elderberry shrubs, and implementation of Alternative 2, 3, or 4 would require transplanting five elderberry shrubs.

Mitigation Measures P8.4e: Compensate for the Removal or Destruction of Valley Elderberry Longhorn Beetle Habitat

Placer County DPW shall compensate for the removal or destruction of all elderberry stems that measure 2.5 centimeters (1 inch) or more at ground level (VELB habitat) and that are located within 6 meters (20 feet) of construction activities. Compensation shall include planting replacement elderberry seedlings or cuttings and associated native plantings within a USFWS-approved conservation area at a ratio between 1:1 and 8:1 (new plantings to affected stems), depending on the diameter of the stem at ground level (see Table 8-6), the presence or absence of exit holes, and whether the shrub is located in riparian habitat as indicated in the USFWS guidelines for VELB.

Placer County DPW shall compensate for all shrubs that are directly affected (i.e., removed/transplanted or destroyed) by the project. Placer County DPW shall compensate for direct effects on VELB habitat as described below. All calculations for compensation of VELB habitat are provided in the BA (Appendix J).

Purchase credits at the Wildland's Sheridan Ranch Conservation Bank in Placer County, a USFWS-approved mitigation bank. The cost to establish a conservation area for VELB at this bank is estimated to be $1,500 per unit; each unit includes five elderberry seedlings and five associated riparian plantings. Only whole units can be purchased using compensation ratios identified in the USFWS guidelines for VELB and based on stem counts listed in Table 8-6. Alternative 1 would require the purchase of two mitigation credits (nine elderberry seedlings and seven native plantings), for an approximate cost of $3,000, and Alternatives 2, 3, and 4 would require the purchase of three mitigation credits (14 elderberry seedlings and 11 native plantings) for an approximate cost of $4,500. The exact cost to purchase mitigation credits for project-related impacts would be determined during formal consultation with USFWS.

Mitigation Measure P8.4f: Conduct Mandatory Contractor/Worker Awareness Training for Construction Personnel

Before any work occurs in the project area, including grading, a USFWS-approved biologist shall conduct mandatory contractor/worker awareness training for construction personnel. If new construction personnel are added to the project, the contractor shall ensure that the personnel receive the mandatory training before starting work. This measure is also specified in the BA for the proposed project.

Mitigation Measure P8.5: Conduct a Preconstruction Survey for Northwestern Pond Turtle at the Baldwin Reservoir Canal

Placer County DPW shall retain a qualified wildlife biologist to conduct a preconstruction northwestern pond turtle survey at the Baldwin Reservoir canal. The preconstruction survey shall be conducted at most 24 hours before the start of construction activities at the canal. If a northwestern pond turtle is located in the construction area, the biologist shall relocate the turtle downstream of the project area, toward Baldwin Reservoir, and an exclusion fence shall be installed to prevent the movement of turtles back into the construction area.

Mitigation Measure P8.6a: Conduct a Focused Preconstruction Survey for Raptor Nests and Nesting Birds

Before grading and during the raptor nesting season (March through July), a qualified raptor biologist shall conduct a focused survey for raptor nests in areas potentially affected by project implementation. If construction is proposed to take place during the raptor breeding season, no construction activity shall take place within 152.4 meters (500 feet) of an active nest until the young have fledged (as determined by a qualified raptor biologist). A note to this effect shall be placed on the Improvement Plans. A copy of the survey shall be provided to the Placer County DPW, Reclamation, and DFG. If an active raptor nest is identified on site, appropriate mitigation measures shall be developed and implemented in consultation with DFG.

Mitigation Measure P8.6b: Avoid Disturbance of Nesting Special-Status and Non-Special-Status Migratory Birds and Raptors

To avoid impacts on nesting loggerhead shrike, oak titmouse, white-tailed kite, or other non-special-status migratory birds and raptors, Placer County DPW shall implement the following avoidance and minimization measures.

1. To the extent possible, shrub and tree removal activities associated with the project shall be conducted outside the breeding season (which generally occurs between March 1 and August 15) for migratory birds and raptors.
2. If shrub and tree removal activities are to take place during the breeding season for these species, a qualified wildlife biologist shall be hired to conduct focused nest surveys for active loggerhead shrike, oak titmouse, white-tailed kite, and non-special-status migratory bird and raptor nests.
3. If active loggerhead shrike, white-tailed kite, or other non-special-status raptor nests are found in the project area, and if construction activities must occur during the nesting period, Placer County DPW shall consult DFG to

determine and implement appropriate "no-disturbance" buffers around the nest sites until the young have fledged (as determined by a qualified biologist).

4. If active oak titmouse or other non-special-status migratory bird nests are found in the project area, and if construction activities must occur during the nesting period, Placer County DPW shall consult USFWS to develop and implement a memorandum of understanding (MOU) to promote the conservation of migratory bird populations.

Mitigation Measure P8.7: Avoid Disturbance of Nesting Swallows
To avoid impacts on nesting swallows, Placer County DPW shall implement the following avoidance and minimization measures.

1. To the extent possible, construction activities that could disturb nesting swallows shall be conducted outside the breeding season (which generally occurs between March 1 and September 1) for these species.
2. If construction activities are to take place during the swallows' breeding season, Placer County DPW shall hire a qualified biologist to inspect the concrete box culvert at the Baldwin Reservoir canal during the swallows' nonbreeding season. If nests are found and are abandoned, they may be removed. To avoid damaging active nests, nests must be removed before the breeding season begins (March 1). A permit from DFG and USFWS is required if active nests must be removed.
3. After nests are removed, the underside of the concrete box culvert at the Baldwin Reservoir canal shall be covered with 1.3- to 1.9-centimeter (0.5- to 0.75-inch) mesh net or poultry wire. All net installation shall occur before March 1. The netting shall be anchored so swallows cannot attach their nests to the bridge through gaps in the net.
4. If netting of the concrete box culvert at the Baldwin Reservoir canal does not occur by March 1 and swallows colonize the bridge, modifications to this structure shall not begin before September 1 of that year or until the young have fledged and all nest use has been completed.
5. If appropriate steps are taken to prevent swallows from constructing new nests, work can proceed at any time of the year.

Recommended Mitigation Measures

There are no recommended biological resources mitigation measures.

Table 8-8. Biological Resources Impact Summary Table

	Alt. 1: Widening to the West	Alt. 2: Widening to the East	Alt. 3: Widening Equally on Both Sides	Alt. 4: County DPW–Preferred
BIOLOGICAL RESOURCES				
Impact 8.1 Potential Disturbance or Loss of Waters of the United States (Including Wetlands)				
Quantitative Comparison	Loss of 0.033 hectare (0.084 acre) of waters of the United States, including wetlands	Loss of 0.038 hectare (0.095 acre) of waters of the United States, including wetlands	Loss of 0.030 hectare (0.075 acre) of waters of the United States, including wetlands	Loss of 0.04hectare (0.10 acre) of waters of the United States, including wetlands
Significance Before Mitigation	S	S	S	S
Mitigation Measures	P8.1a: Obtain a Section 404 Permit from the Corps P8.1b: Obtain a Section 401 Water Quality Certification or Waiver from the Central Valley RWQCB P8.1c: Obtain a Section 1601 Streambed Alteration Agreement from DFG P8.1d: Pay Appropriate Environmental Document Review Fee P8.1e: Install Temporary Construction Fencing to Protect Wetlands P8.1f: Avoid and Minimize Disturbance of Waters of the United States, Including Wetlands	P8.1a: Obtain a Section 404 Permit from the Corps P8.1b: Obtain a Section 401 Water Quality Certification or Waiver from the Central Valley RWQCB P8.1c: Obtain a Section 1601 Streambed Alteration Agreement from DFG P8.1d: Pay Appropriate Environmental Document Review Fee P8.1e: Install Temporary Construction Fencing to Protect Wetlands P8.1f: Avoid and Minimize Disturbance of Waters of the United States, Including Wetlands	P8.1a: Obtain a Section 404 Permit from the Corps P8.1b: Obtain a Section 401 Water Quality Certification or Waiver from the Central Valley RWQCB P8.1c: Obtain a Section 1601 Streambed Alteration Agreement from DFG P8.1d: Pay Appropriate Environmental Document Review Fee P8.1e: Install Temporary Construction Fencing to Protect Wetlands P8.1f: Avoid and Minimize Disturbance of Waters of the United States, Including Wetlands	P8.1a: Obtain a Section 404 Permit from the Corps P8.1b: Obtain a Section 401 Water Quality Certification or Waiver from the Central Valley RWQCB P8.1c: Obtain a Section 1601 Streambed Alteration Agreement from DFG P8.1d: Pay Appropriate Environmental Document Review Fee P8.1e: Install Temporary Construction Fencing to Protect Wetlands P8.1f: Avoid and Minimize Disturbance of Waters of the United States, Including Wetlands

Table 8-8. Biological Resources Impact Summary Table

	Alt. 1: Widening to the West	Alt. 2: Widening to the East	Alt. 3: Widening Equally on Both Sides	Alt. 4: County DPW–Preferred
	P8.1g: Confine Construction Equipment and Associated Activities to the Designated Work Zone in Areas That Support Wetland Resources P8.1h: Compensate for the Loss of Waters of the United States	P8.1g: Confine Construction Equipment and Associated Activities to the Designated Work Zone in Areas That Support Wetland Resources P8.1h: Compensate for the Loss of Waters of the United States	P8.1g: Confine Construction Equipment and Associated Activities to the Designated Work Zone in Areas That Support Wetland Resources P8.1h: Compensate for the Loss of Waters of the United States	P8.1g: Confine Construction Equipment and Associated Activities to the Designated Work Zone in Areas That Support Wetland Resources P8.1h: Compensate for the Loss of Waters of the United States
Quantitative Comparison of Mitigation Requirements	Option 1 of P8.1i would cost $7,392	Option 1 of P8.1i would cost $8,360	Option 1 of P8.1i would cost $6,600	Option 1 of P8.1i would cost $8,800
Significance After Mitigation	LS	LS	LS	LS
Impact 8.2 Potential Loss or Disturbance of Valley Foothill Riparian Forest				
Quantitative Comparison	Loss of 0.02 hectare (0.05 acre) of valley foothill riparian forest	Loss of 0.04 hectare (0.11 acre) of valley foothill riparian forest	Loss of 0.03 hectare (0.07 acre) of valley foothill riparian forest	Loss of 0.04hectare (0.10 acre) of valley foothill riparian forest
Significance Before Mitigation	S	S	S	S
Mitigation Measures	P8.2a: Install Temporary Construction Fencing to Protect Trees P8.2b: Compensate for Permanent Impacts on Riparian Communities P8.2c: Update the Tree Survey Report for the Selected Alternative P8.2d: Avoid and Minimize Disturbance of Riparian Communities	P8.2a: Install Temporary Construction Fencing to Protect Trees P8.2b: Compensate for Permanent Impacts on Riparian Communities P8.2c: Update the Tree Survey Report for the Selected Alternative P8.2d: Avoid and Minimize Disturbance of Riparian Communities	P8.2a: Install Temporary Construction Fencing to Protect Trees P8.2b: Compensate for Permanent Impacts on Riparian Communities P8.2c: Update the Tree Survey Report for the Selected Alternative P8.2d: Avoid and Minimize Disturbance of Riparian Communities	P8.2a: Install Temporary Construction Fencing to Protect Trees P8.2b: Compensate for Permanent Impacts on Riparian Communities P8.2c: Update the Tree Survey Report for the Selected Alternative P8.2d: Avoid and Minimize Disturbance of Riparian Communities

Table 8-8. Biological Resources Impact Summary Table

	Alt. 1: Widening to the West	Alt. 2: Widening to the East	Alt. 3: Widening Equally on Both Sides	Alt. 4: County DPW–Preferred
Quantitative Comparison of Mitigation Requirements	Option 1 of P8.2b would cost $4,900	Option 1 of P8.2b would cost $10,780	Option 1 of P8.2b would cost $6,860	Option 1 of P8.2b would cost $9,800
Significance After Mitigation	LS	LS	LS	LS
Impact 8.3 Loss or Disturbance of Blue Oak–Digger Pine Woodland and Native Trees				
Quantitative Comparison	Loss of 371 trees, including 195 oaks and 101 other native trees	Loss of 389 trees, including 267 oaks and 92 other native trees	Loss of 364 trees, including 254 oaks and 64 other native trees	Loss of 346 trees, including 242 oaks and 71 other native trees
Significance Before Mitigation	S	S	S	S
Mitigation Measures	P8.3a: Obtain a Tree Permit P8.3b: Mitigate Tree Removal P8.3c: Revegetate All Disturbed Areas P8.3d: Install Temporary Construction Fencing to Protect Trees P8.3e: Update the Tree Survey Report for the Selected Alternative	P8.3a: Obtain a Tree Permit P8.3b: Mitigate Tree Removal P8.3c: Revegetate All Disturbed Areas P8.3d: Install Temporary Construction Fencing to Protect Trees P8.3e: Update the Tree Survey Report for the Selected Alternative	P8.3a: Obtain a Tree Permit P8.3b: Mitigate Tree Removal P8.3c: Revegetate All Disturbed Areas P8.3d: Install Temporary Construction Fencing to Protect Trees P8.3e: Update the Tree Survey Report for the Selected Alternative	P8.3a: Obtain a Tree Permit P8.3b: Mitigate Tree Removal P8.3c: Revegetate All Disturbed Areas P8.3d: Install Temporary Construction Fencing to Protect Trees P8.3e: Update the Tree Survey Report for the Selected Alternative
Significance After Mitigation	LS	LS	LS	LS
Impact 8.4 Potential Mortality of Individual Valley Elderberry Longhorn Beetles or Disturbance of Habitat				
Quantitative Comparison	Direct impacts on three shrubs and indirect impacts on four shrubs	Direct impacts on five shrubs and indirect impacts on three shrubs	Direct impacts on five shrubs and indirect impacts on three shrubs	Direct impacts on five shrubs and indirect impacts on four shrubs
Significance Before Mitigation	S	S	S	S
Mitigation Measures	P8.4a: Complete	P8.4a: Complete	P8.4a: Complete	P8.4a: Complete

Table 8-8. Biological Resources Impact Summary Table

	Alt. 1: Widening to the West	Alt. 2: Widening to the East	Alt. 3: Widening Equally on Both Sides	Alt. 4: County DPW–Preferred
	Section 7 ESA Consultation with USFWS for Potential Impacts on VELB P8.4b: Establish a Minimum 6-Meter-Wide (20-Foot-Wide) Buffer around All Elderberry Shrubs That Will Not Be Removed P8.4c: Implement Dust Control Measures P8.4d: Transplant Elderberry Shrubs That Cannot Be Avoided P8.4e: Compensate for the Removal or Destruction of Valley Elderberry Longhorn Beetle Habitat P8.4f: Conduct Mandatory Contractor/Worker Awareness Training for Construction Personnel	Section 7 ESA Consultation with USFWS for Potential Impacts on VELB P8.4b: Establish a Minimum 6-Meter-Wide (20-Foot-Wide) Buffer around All Elderberry Shrubs That Will Not Be Removed P8.4c: Implement Dust Control Measures P8.4d: Transplant Elderberry Shrubs That Cannot Be Avoided P8.4e: Compensate for the Removal or Destruction of Valley Elderberry Longhorn Beetle Habitat P8.4f: Conduct Mandatory Contractor/Worker Awareness Training for Construction Personnel	Section 7 ESA Consultation with USFWS for Potential Impacts on VELB P8.4b: Establish a Minimum 6-Meter-Wide (20-Foot-Wide) Buffer around All Elderberry Shrubs That Will Not Be Removed P8.4c: Implement Dust Control Measures P8.4d: Transplant Elderberry Shrubs That Cannot Be Avoided P8.4e: Compensate for the Removal or Destruction of Valley Elderberry Longhorn Beetle Habitat P8.4f: Conduct Mandatory Contractor/Worker Awareness Training for Construction Personnel	Section 7 ESA Consultation with USFWS for Potential Impacts on VELB P8.4b: Establish a Minimum 6-Meter-Wide (20-Foot-Wide) Buffer around All Elderberry Shrubs That Will Not Be Removed P8.4c: Implement Dust Control Measures P8.4d: Transplant Elderberry Shrubs That Cannot Be Avoided P8.4e: Compensate for the Removal or Destruction of Valley Elderberry Longhorn Beetle Habitat P8.4f: Conduct Mandatory Contractor/Worker Awareness Training for Construction Personnel
Quantitative Comparison of Mitigation Requirements	P8.4d requires transplanting of 3 elderberry shrubs Option 1 of P8.4e would cost $3,000 Option 3 of P8.4d would require 0.03 hectare (0.08 acre) of conservation area	P8.4d requires transplanting of 5 elderberry shrubs Option 1 of P8.4e would cost $4,500 Option 3 of P8.4d would require 0.05 hectare (0.12 acre) of conservation area	P8.4d requires transplanting of 5 elderberry shrubs Option 1 of P8.4e would cost $4,500 Option 3 of P8.4d would require 0.05 hectare (0.12 acre) of conservation area	P8.4d requires transplanting of 5 elderberry shrubs Option 1 of P8.4e would cost $4,500 Option 3 of P8.4d would require 0.05 hectare (0.12 acre) of conservation area

Table 8-8. Biological Resources Impact Summary Table

	Alt. 1: Widening to the West	Alt. 2: Widening to the East	Alt. 3: Widening Equally on Both Sides	Alt. 4: County DPW–Preferred
Significance After Mitigation	LS	LS	LS	LS
Impact 8.5 Potential Mortality of Northwestern Pond Turtles				
Quantitative Comparison	NA	NA	NA	NA
Significance Before Mitigation	PS	PS	PS	PS
Mitigation Measures	P8.5: Conduct a Preconstruction Survey for Northwestern Pond Turtle at the Baldwin Reservoir Canal	P8.5: Conduct a Preconstruction Survey for Northwestern Pond Turtle at the Baldwin Reservoir Canal	P8.5: Conduct a Preconstruction Survey for Northwestern Pond Turtle at the Baldwin Reservoir Canal	P8.5: Conduct a Preconstruction Survey for Northwestern Pond Turtle at the Baldwin Reservoir Canal
Significance After Mitigation	LS	LS	LS	LS
Impact 8.6 Potential Disturbance of Nesting Loggerhead Shrike, Oak Titmouse, White-Tailed Kite, and Non-Special-Status Nesting Migratory Birds and Raptors				
Quantitative Comparison	NA	NA	NA	NA
Significance Before Mitigation	PS	PS	PS	PS
Mitigation Measures	P8.6a: Conduct a Focused Preconstruction Survey for Raptor Nests and Nesting Birds P8.6b: Avoid Disturbance of Nesting Special-Status and Non-Special-Status Migratory Birds and Raptors	P8.6a: Conduct a Focused Preconstruction Survey for Raptor Nests and Nesting Birds P8.6b: Avoid Disturbance of Nesting Special-Status and Non-Special-Status Migratory Birds and Raptors	P8.6a: Conduct a Focused Preconstruction Survey for Raptor Nests and Nesting Birds P8.6b: Avoid Disturbance of Nesting Special-Status and Non-Special-Status Migratory Birds and Raptors	P8.6a: Conduct a Focused Preconstruction Survey for Raptor Nests and Nesting Birds P8.6b: Avoid Disturbance of Nesting Special-Status and Non-Special-Status Migratory Birds and Raptors
Significance After Mitigation	LS	LS	LS	LS
Impact 8.7 Potential Disturbance of Nesting Cliff and Barn Swallows				
Quantitative Comparison	NA	NA	NA	NA
Significance Before Mitigation	PS	PS	PS	PS

Table 8-8. Biological Resources Impact Summary Table

	Alt. 1: Widening to the West	Alt. 2: Widening to the East	Alt. 3: Widening Equally on Both Sides	Alt. 4: County DPW–Preferred
Mitigation Measures	P8.7: Avoid Disturbance of Nesting Swallows	P8.7: Avoid Disturbance of Nesting Swallows	P8.7: Avoid Disturbance of Nesting Swallows	P8.7: Avoid Disturbance of Nesting Swallows
Significance After Mitigation	LS	LS	LS	LS
Impact 8.8 Potential Disturbance of Common Wildlife Species				
Quantitative Comparison	NA	NA	NA	NA
Significance Before Mitigation	LS	LS	LS	LS
Mitigation Measures	None required	None required	None required	None required
Significance After Mitigation	LS	LS	LS	LS

Key:

SU = Significant and unavoidable.

S = Significant.

PS = Potentially significant.

LS = Less than significant.

NI = No impact.

NA = Not applicable.

Chapter 9

Earth Resources

This chapter describes the geology, soils, and minerals of the project area, identifies known geologic and seismic hazards, discusses regulations and policies relevant to the proposed project, and identifies potential impacts of the project on geology, soils, and minerals. The content of this chapter is based on the preliminary geotechnical report prepared for the proposed project (Anderson Consulting Group 2002), the most recent maps and earth resource information published by the U.S. Geological Survey (USGS), the California Geological Survey (CGS) (previously known as the California Division of Mines and Geology), SCS, and the professional knowledge and experience of Jones & Stokes earth scientists.

Affected Environment

Environmental Setting

Geology

The project corridor is located at the base of the Sierra Nevada foothills, which flank the eastern side of the Sacramento Valley. Topography in the general vicinity of the project corridor is nearly level to moderately steep, with slopes ranging from 2 to 30% (Rogers 1980).

The relatively large-scale geologic map compiled by Anderson Consulting Group (2002) (Figure 9-1), based on Division of Mines and Geology Open File Report 84-50 (Loyd 1984) and reconnaissance-level field surveys, shows three geologic units in the proposed project corridor: Mesozoic granitic rocks of the Sierra Nevada Batholith, the Mehrten Formation, and Quaternary alluvium and colluvium. All three units are common in the foothills of the Sierra Nevada. There are no unique geologic features or formations in or adjacent to the project corridor.

The Mesozoic granitic rock intruded the area approximately 128 million years ago and ranges in composition from granite to diorite. The condition of granitic rock exposed on road cuts within the project corridor ranges from slightly to completely weathered. The Mehrten Formation rock units shown in Figure 9-1 were deposited on top of the granitic rock units from 3 to 5 million years ago.

The Mehrten Formation rock units observed on roadcuts in the proposed project corridor consist of Mehrten Conglomerate, which comprises rounded to subrounded cobbles in a moderately cemented siltstone-sandstone matrix. (Anderson Consulting Group 2002).

The Quaternary alluvial and colluvial deposits shown in Figure 9-1 are thin layers of unconsolidated sediments and soil materials that have been deposited on top of the granitic and Mehrten Formation rock units. Although not shown in Figure 9-1, Anderson Consulting Group (2002) also observed small units of fill material along portions of the project alignment where the original grade has been raised for the existing roadway.

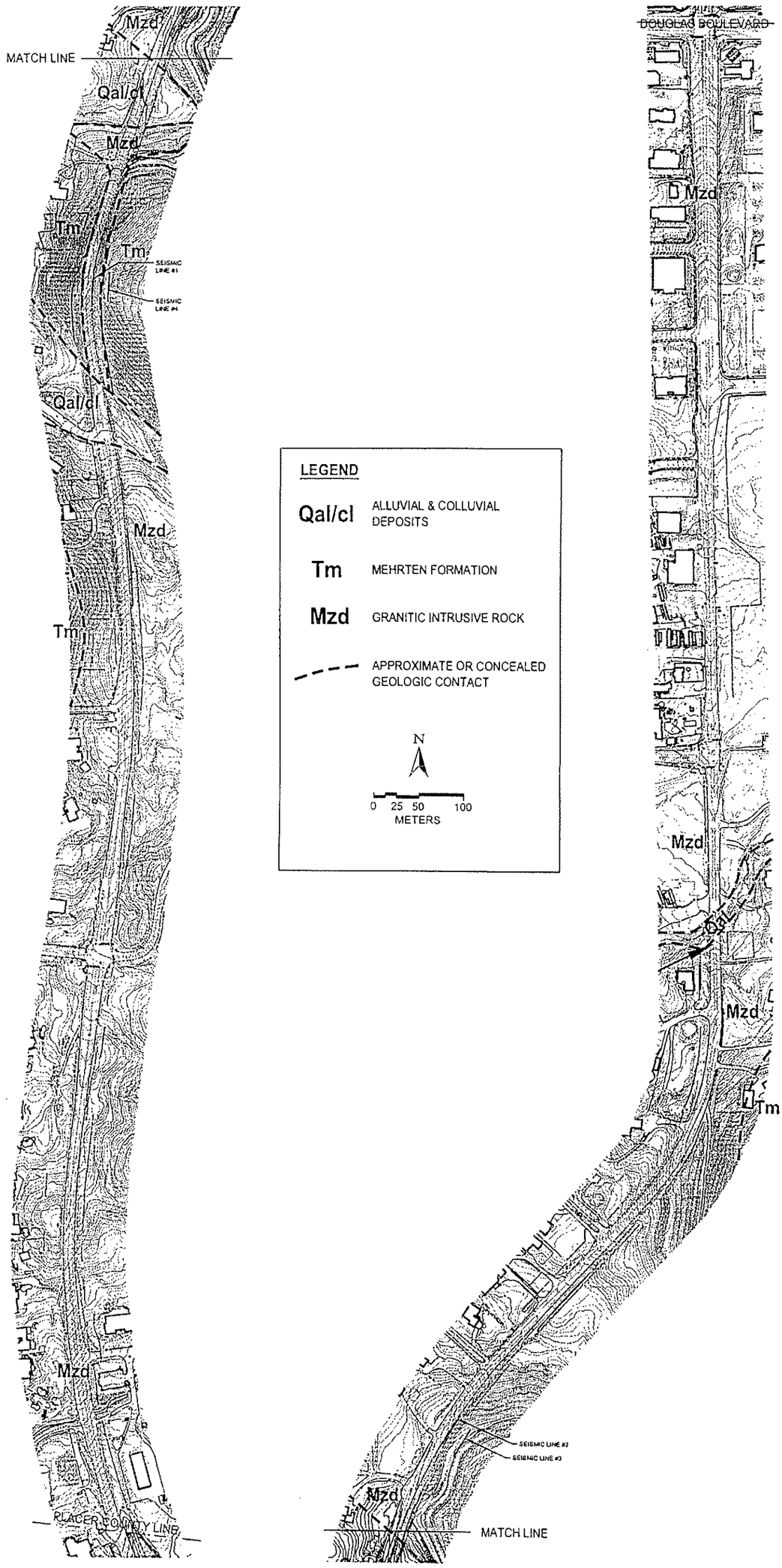
Soils

The soil survey of western Placer County (Rogers 1980) indicates that there are eight soil map units located in and adjacent to the project corridor (Figure 9-2, Table 9-1).

Most of the project corridor is underlain by soil map units 106, 107, 110, 111, and 113. All of these map units primarily comprise the Andregg coarse sandy loam soil, which is a well-drained, moderately deep, and relatively coarse-textured soil that formed from weathered granitic bedrock. Largely because of its coarse texture, the Andregg coarse sandy loam soil has moderately rapid permeability and a low shrink-swell potential. In map unit 113, the Andregg soil is interspersed with soils of the Shenandoah series, which are somewhat poorly drained soils that have a clayey, very slowly permeable subsurface horizon. When disturbed, runoff from the above-listed soil map units ranges from medium to rapid, and the erosion hazard ranges from moderate to high. The differences in runoff potential and erosion hazard between these map units primarily are caused by differences in slope gradient (Table 9-1).

A small portion of the southern half of the project corridor is underlain by soil map unit 152, which primarily comprises the Inks cobbly loam soil. The Inks cobbly loam soil is a well-drained, moderately deep to deep soil that formed from the andesitic conglomerate of the Mehrten Formation (described above). It typically consists of a cobbly loam surface layer underlain by very cobbly clay loam and hard conglomerate bedrock at a depth of approximately 130 centimeters (51 inches). It is moderately permeable and has a low shrink-swell potential. When disturbed, runoff from map unit 152 ranges from medium to rapid, and the erosion hazard ranges from slight to high.

Most of the northern quarter of the proposed project corridor is underlain by soil map unit 196, which primarily comprises well-drained cut and fill materials that often contain rocks and fragments of concrete, asphalt, and other debris. Rogers (1980) indicates that when disturbed, runoff from map unit 196 is typically very rapid and the hazard of erosion is moderate.



Source: Anderson Consulting Group 2002.

02102.02.001

Jones & Stokes

Figure 9-1
Geologic Map of the Project Corridor and Vicinity

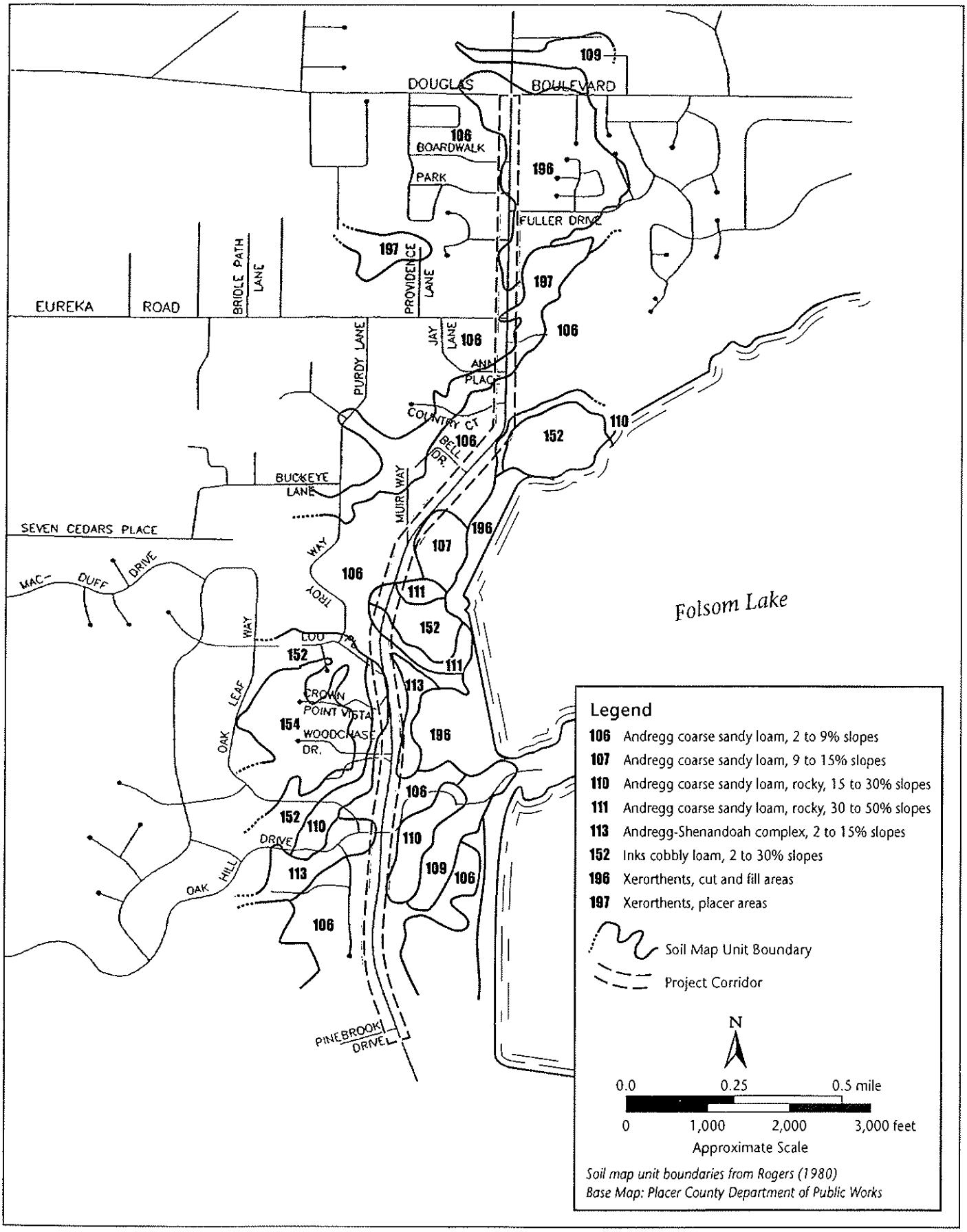


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Figure 9-2
Soil Map of the Project Corridor and Vicinity

Table 9-1. Soil Map Units Located in the Project Corridor

Soil Map Unit		Parent Material	Texture	Depth to Bedrock (inches)	Shrink-Swell Potential	Permeability	Runoff Potential	Erosion Hazard
106	Andregg coarse sandy loam, 2–9% slopes	Weathered granitic bedrock	Coarse sandy loam	29	Low	Moderately rapid	Medium	Moderate
107	Andregg coarse sandy loam, 9–15% slopes	Weathered granitic bedrock	Coarse sandy loam	29	Low	Moderately rapid	Medium	Moderate
110	Andregg coarse sandy loam, rocky, 15–30% slopes	Weathered granitic bedrock	Coarse sandy loam	29	Low	Moderately rapid	Medium–rapid	High
111	Andregg coarse sandy loam, rocky, 30–50% slopes	Weathered granitic bedrock	Coarse sandy loam	29	Low	Moderately rapid	Rapid	High
113	Andregg–Shenandoah complex, 2–15% slopes	Weathered granitic bedrock	Coarse sandy loam, sandy loam, clay	29–34	Low–high	Moderately rapid v. slow	Medium	Moderate
152	Inks cobbly loam, 2–30% slopes	Andesitic conglomerate	Cobbly loam, very cobbly clay loam	51	Low	Moderate	Medium–rapid	Slight–high
196	Xerorthents, cut and fill areas	Mixed soil materials	Various	ND	Variable	Variable	Very rapid	Moderate
197	Xerorthents, placer areas	Placer mine tailings	Stone, cobble, gravel, sand, silt	Variable	Variable	Variable	Variable	Variable

Notes: Properties listed are for the dominant soil map unit component(s).
ND = no data available.

Source: Rogers 1980.

The portions of the proposed project alignment next to Linda Creek are underlain by soil map unit 197, which primarily comprises placer mine tailings. The tailings consist of poorly sorted or stratified stones, cobbles, and gravels that contain variable amounts of sand and silt. The physical properties of the tailings are highly variable and were not well characterized by Rogers (1980).

Geologic and Seismic Hazards

Slope Instability

Slope stability is a function of many factors, including rainfall, slope gradient, rock and soil type, slope orientation, vegetation, seismic conditions, and human activities. During his general discussion of geologic hazards in Placer County, Livingston (1976) indicated that steep slopes formed on fractured granitic rock may be susceptible to landslides and rock falls. Most of existing granitic cut slopes in the project corridor are steep (1:1 or steeper), but were found to be stable in their current configuration (Anderson Consulting Group 2002). The relative stability of natural slopes in the project corridor were not addressed directly by Anderson Consulting Group (2002), but because they are generally less steep than manufactured cut slopes in the area, it can be assumed that these slopes are also stable and generally not susceptible to landslides or rock falls.

Expansive and Compressible Soils

High shrink-swell or "expansive" soils are typically those that contain a high percentage of expansive phyllosilicate clay minerals such as montmorillonite. Expansive soils swell when wet and shrink when dry and can cause substantial damage to foundations and roadways in the process. Most of the damage caused by expansive soils and sediments can be avoided through the implementation of proper design and construction techniques.

As described above and in Table 9-1, most of the soils along the proposed alignment are coarse or moderately coarse textured and have a low shrink-swell potential. Potentially expansive soils occur only at depth in a small section of the project corridor (Table 9-1, Figure 9-2).

Anderson Consulting Group (2002) found no evidence of soft, compressible soils along the project corridor during its literature review and reconnaissance-level field surveys.

Faults and Fault Rupture

The California State Geology and Mining Board (the Board) has established policies and criteria for the classification of known faults in California based on the presence or absence of a detectable fault trace and the recentness of fault displacement (Hart and Bryant 1997). Detectable fault traces that show evidence

of displacement during the last 10,000-11,000 years (i.e., Holocene faults) are defined as *active* and are considered to have the greatest potential for surface rupture. Detectable fault traces that show evidence of displacement between 10,000 and 1.6 million years ago (i.e., Quaternary faults) are defined as *potentially active,* and are considered to have less potential for surface rupture. The Board has not established an official category for faults that show no evidence of displacement during the last 1.6 million years (i.e., pre-Quaternary faults). Although such faults are not deemed "inactive", they are considered to have a relatively low potential for surface rupture.

No known faults or fault zones are located in or adjacent to the proposed project corridor (Jennings 1994). As such, the potential for surface fault rupture to adversely affect the proposed project is extremely low.

Faults and fault zones located in the general vicinity of the project area include the Deadman Fault, which crosses the northern arm of Folsom Lake, the Maidu Fault, which is located approximately 1.6–4.8 kilometers (1–3 miles) east of the lake, and the Bear Mountains Fault Zone, which crosses the southern arm of the lake. None of these faults/fault zones, nor any of the other known faults and fault zones located within 64 kilometers (40 miles) of the project area, are considered to be active or potentially active by the CGS (Jennings 1994).

Seismic Ground Shaking

The proposed project area is located in a region of California characterized by relatively little seismic activity. In 1996, CDMG released a probabilistic seismic hazard assessment for the state of California (Open-File Report 96-08) to aid in the assessment of seismic ground shaking hazards in California (Peterson et al. 1996). The report contains a probabilistic seismic hazard map that depicts the peak horizontal ground acceleration values exceeded in a given region of California at a 10% probability in 50 years (i.e., a 0.2% probability in 1 year). The peak horizontal ground acceleration values depicted on the map represent probabilistic estimates of the ground shaking intensity likely to occur in different regions of California as a result of characteristic earthquake events on active and potentially active faults in California, and can be used to assess the relative seismic ground shaking hazard for a given region. The probabilistic peak horizontal ground acceleration values for the proposed project corridor range from 0.0g to 0.2g (where *g* is equal to the acceleration due to gravity), which indicate that the ground shaking hazard in the project corridor is very low-among the lowest in the state.

Liquefaction

Liquefaction is a process by which soils and sediments lose shear strength and fail during episodes of intense seismic ground shaking. The susceptibility of a given soil or sediment to liquefaction is primarily a function of local groundwater conditions and inherent soil properties such as texture and bulk density. Poorly

consolidated, well-graded, and water-saturated fine sands and silts located within 15 meters (50 feet) of the surface typically are considered the most susceptible to liquefaction.

Information contained in the soil survey and on the relatively large scale geologic map compiled by Loyd (1984) (Figure 9-1) suggest that most of the soils and underlying geologic units that occur within the project corridor (described above) do not posses properties that would make them susceptible to liquefaction. Further, there is no indication that the project corridor is underlain by a shallow groundwater table for a significant duration during normal rainfall years (Rogers 1980). When considered in conjunction with the low seismic ground shaking hazard associated with the project vicinity (Peterson et al. 1996), this information suggests that the potential for liquefaction to occur in the project area is low.

Mineral Resources

According to the most recent Placer County General Plan Background Report (Placer County 1994) and the CGS mineral land classification of Placer County (Loyd 1995), known mineral resources in Placer County include aggregate (sand, gravel and decomposed granite), clay, gold, quartz, stone (granite, limestone, and crushed quarry rock), and other minerals and ores. No potential mineral resource sites or active mineral extraction operations are located in or immediately next to the project area. The closest mineral extraction sites to the project area are a sand and gravel operation and a placer gold mining operation located near the intersection of Douglas Boulevard and Sierra College Boulevard.

Regulatory Setting

Federal

Section 402 of the Federal Clean Water Act

Section 402 of the Clean Water Act mandates that certain types of construction activity comply with the requirements of the U.S. Environmental Protection Agency's (EPA's) National Pollutant Discharge Elimination System (NPDES) stormwater program. Phase I of the NPDES storm water program regulations are currently in effect and require that construction activities disturbing 2 or more total hectares (5 or more total acres) obtain coverage under the NPDES general construction activity storm water permit issued by the California State Water Resources Control Board (SWRCB). Phase II of the NPDES storm water regulation goes into effect in March 2003, and requires that construction activities disturbing between 0.4 and 2.0 hectares (1 and 5 acres) also obtain coverage under the NPDES general construction activity storm water permit.

Because the proposed project would result in the disturbance of an area greater than 0.4 hectare (1 acre), the project proponent would need to obtain coverage

under the NPDES general construction activity storm water permit. The Central Valley Regional Water Quality Control Board (RWQCB) administers the NPDES stormwater permit program for Placer County. Obtaining coverage under the NPDES general construction activity permit generally requires that the project applicant (i) file a notice of intent with the SWRCB describing the proposed construction activity *before* construction begins; (ii) prepare a Storm Water Pollution Prevention Plan (SWPPP) that describes the best management practices (BMPs) that will be implemented to control accelerated erosion, sedimentation, and other pollutants during and after project construction; and (iii) file a notice of termination with the SWRCB when construction is complete and the construction area has been permanently stabilized.

Local

Placer County Grading and Erosion Prevention Ordinance

The Placer County grading and erosion prevention ordinance (Article 15.48 of Placer County Code) was enacted for the purpose of regulating grading on property within the unincorporated area of Placer County, in part to ensure that land grading activities do not result in accelerated erosion and sedimentation or the construction of potentially unstable cut and fill slopes. The ordinance requires project proponents to apply for and receive a grading permit from the Placer County Department of Public Works prior to the commencement of project construction. Grading conducted by or under the supervision or control of a public agency that assumes full responsibility for the work is typically exempt from this permit requirement. Because the proposed project would be implemented by the Placer County Department of Public Works, it would be exempt from obtaining a grading permit. However, the County Department of Public Works would still need to comply with other conditions and requirements listed in the County grading and erosion prevention ordinance, which would include but not be limited to the preparation of engineered grading plan and the preparation of a detailed erosion and sediment control plan.

Environmental Consequences

Criteria for Determining Significance under CEQA

Appendix G of the State CEQA Guidelines and standard professional practice were used to determine whether the proposed project would have a significant environmental effect. The proposed project may have a significant effect on earth resources, or may be affected by existing earth resource conditions or conditions that would result from implementation of the proposed project, if it would

- expose people or structures to substantial adverse effects resulting from the rupture of a known earthquake fault, seismic ground shaking, seismically induced landslides, or liquefaction;
- be located on a geologic unit or soil that is unstable or would become unstable as a result of the construction or operation of the proposed project;
- result in substantial change in topography or ground surface relief features;
- result in the destruction or substantial modification of any unique geologic features;
- result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state;
- result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan;
- result in substantial accelerated soil erosion and/or the loss of a substantial amount of topsoil;
- be located on an expansive soil that would create substantial risks to life or property; or
- have soils incapable of supporting the use of onsite wastewater disposal systems.

Methods and Assumptions for the Impact Analysis

The following impact analysis is based on a review of relevant maps, reports, and other literature published by CGS, USGS, and SCS; a review of and the professional opinions rendered in a preliminary geotechnical report prepared for the proposed project by Anderson Consulting Group; and (iii) the professional opinion of Jones & Stokes earth scientists.

Impacts

Construction-Related Impacts

Impact 9.1 Potential Construction-Related Soil Erosion and Sedimentation

Construction of the proposed project would involve land clearing, land grading, and other ground-disturbing activities that could temporarily increase soil erosion rates during and shortly after project construction. Construction-related erosion could result in the loss of a substantial amount of nonrenewable topsoil and could adversely affect water quality in nearby surface waters (as discussed in Chapter 5), such as Linda Creek.

This impact is common to all build alternatives and is considered significant. Implementation of Mitigation Measures P9.1a–e would reduce this potential impact to a less-than-significant level.

Impact 9.2 Destruction of Unique Geologic Features

No unique geologic features are located in or adjacent to the project corridor. Therefore, there would be no impact under any of the build alternatives. No mitigation is required.

Impact 9.3 Substantial Alteration of Existing Topography

Construction of the proposed project would involve the widening of existing roadway and would not substantially modify landforms or topography in the vicinity of the project corridor.

This impact is common to all build alternatives and is considered less than significant. No mitigation is required.

Operation-Related Impacts

Impact 9.4 Potential Mass Wasting

All of the existing cut slopes in the project corridor are steep (1:1 or steeper), but have been found to be stable in their current configuration (Anderson Consulting Group 2002). Likewise, natural slopes in the project corridor show no evidence of being unstable. The cut slopes that would be manufactured during implementation of the proposed project are not expected to be steeper than existing cut slopes, and would likely have similar factor of safety. If potential slope instabilities are identified during the final design stages of the proposed project, they would be stabilized through the implementation of appropriate, standard engineering methods. Therefore, onsite and offsite landslides or other types of mass wasting are unlikely to result from the construction or operation of the proposed project.

This impact is common to all build alternatives and is considered less than significant. No mitigation is required.

Impact 9.5 Potentially Expansive Soils and Sediments

Soils along most of project corridor are coarse- or moderately coarse-textured, have a low shrink-swell potential (i.e., are nonexpansive), and are underlain by nonexpansive bedrock. Accordingly, it is unlikely that the proposed project would be adversely affected by expansive soils. If expansive soils are discovered during final design stages of the proposed project, proven geotechnical methods

would be used to avoid or minimize the potential for expansive soils and sediments to damage project-related structures. The exact methods that would be used to address potential expansive soil issues are not known at this time, but likely would include the selective placement of expansive fill materials, the use of imported, non-expansive fill materials, and/or (iii) other methods of ground improvement.

This impact is common to all build alternatives and is considered less than significant. No mitigation is required.

Impact 9.6 Potential Surface Fault Rupture

No known faults are located in or adjacent to the project corridor. Therefore, the potential for fault rupture to affect the proposed project is extremely low.

There would be no impact under any of the build alternatives. No mitigation is required.

Impact 9.7 Potential Strong Seismic Ground Shaking and Liquefaction

The seismic ground shaking and liquefaction hazards associated with the project area are low (Peterson et al. 1996). In addition, the proposed project would be constructed in accordance with applicable building codes and standards to avoid or minimize damage from seismic ground shaking during and earthquake. Therefore, the potential for the proposed project to be adversely affected by seismic ground shaking or liquefaction is very low, and this impact is considered less than significant. No mitigation is required.

Impact 9.8 Reduction of the Availability of a Known Locally or Regionally Important Mineral Resources

The project area is located far from, and would not adversely affect access to, any known potential mineral resource areas or active mineral resource extraction sites (Placer County 1994, Loyd 1995). Therefore, the proposed project would have no impact on the availability of known locally or regionally important mineral resources.

There would be no impact under any of the build alternatives. No mitigation is required.

Mitigation Measures

This section details the mitigation measures identified for the project alternatives. Mitigation measures are identified as either of the following.

- *Proposed mitigation measures* are measures that the Placer County DPW, as project proponent, is either proposing as part of the project design or has agreed to implement.
- *Recommended mitigation measures* are measures that are identified in this environmental document but that the Placer County DPW has not chosen to implement, and which may be required by the Placer County Board of Supervisors if the project is approved.

Proposed Mitigation Measures

Mitigation Measure P9.1a: Prepare and Implement Improvement Plans, Specifications, and Cost Estimates

Placer County DPW shall prepare Improvement Plans, specifications, and cost estimates (per the requirements of Section II of the LDM. The plans shall show all conditions for the project as well as pertinent topographical features both on site and off site. All existing and proposed utilities and easements, on site and adjacent to the project, that may be affected by planned construction, shall be shown on the plans. All landscaping and irrigation facilities in the public right-of-way (or public easements), or landscaping within sight-distance areas at intersections, shall be included in the Improvement Plans. If the Design/Site Review process and/or DRC review is required as a condition of project approval, said review process shall be completed before submittal of Improvement Plans. Record drawings shall be prepared and signed by a California Registered Civil Engineer at Placer County DPW's expense before acceptance by the County of site improvements.

All proposed grading, drainage improvements, and vegetation and tree removal shall be shown on the Improvement Plans, and all work shall conform to provisions of the County Grading Ordinance (Chapter 29, Placer County Code) that are in effect at the time of submittal. No grading, clearing, or tree disturbance shall occur until the Improvement Plans are approved and all temporary construction fencing has been installed and inspected by a member of the DRC. All cut/fill slopes shall be at 2:1 (horizontal:vertical) unless a soils report supports a steeper slope and Placer County DPW concurs with said recommendation.

Mitigation Measure P9.1b: Prepare and Implement an Erosion and Sediment Control Plan

Placer County DPW or a certified contractor working on behalf of Placer County shall prepare an erosion and sediment control plan before construction activities begin. The plan shall be prepared and approved before construction activities begin. The following measures shall be addressed in the plan.

1. All graded areas shall be covered with protective materials, such as mulch, or reseeded with adaptive plant species. The plan shall include details regarding seed material, fertilizer, and mulching.
2. Protocols for the handling of construction and maintenance materials, such as sanitary wastes and petroleum products, shall be developed to minimize the chance of spill and to provide prompt corrective action should spill occur.
3. All graded areas and soil piles shall be mounded to minimize erosion potential.
4. Drainage outfalls shall be designed and positioned to avoid erosion. Energy dissipators shall be installed where necessary.
5. Erosion control measures shall include best management practices (BMPs) to minimize water quality impacts; BMPs include filter berm, sandbag, or straw-bale barriers; siltation retention fences; vegetated buffer strips; vegetated swales; and spill containment provisions.
6. Temporary sediment catchment basins shall be constructed where necessary to prevent sediment from being transported to permanent detention basins and drainages. The locations and size of the temporary basins shall be shown in the erosion and sediment control plan.
7. Grading shall not be permitted after October 15 or before May 1. Grading may be permitted outside of these dates if the Director of DPW determines that such work can be completed before the onset of weather conditions that would prevent the work from being adequately winterized or completed.
8. Revegetation shall begin when the graded area has attained finished grade, but not later than October 1 (to ensure germination by October 30).

Mitigation Measure P9.1c: Revegetate All Disturbed Areas

Placer County DPW or an approved contractor shall revegetate all disturbed areas. Revegetation undertaken between April 1 and October 1 shall include regular watering to ensure adequate growth. A winterization plan shall be provided with project Improvement Plans. It is Placer County DPW's responsibility to ensure proper installation and maintenance of erosion control/winterization during project construction. Placer County DPW shall provide for erosion control where roadside drainage is off of the pavement.

Placer County DPW shall maintain a letter of credit, surety bond, or cash deposit in the amount of 100% of an approved engineer's estimate for winterization and permanent erosion control work before Improvement Plan approval to guarantee protection against erosion and improper grading practices.

Mitigation Measure P9.1d: Review Proposed Grading Plans

If, at any time during construction, a field review by County personnel indicates a significant deviation from the proposed grading shown on the Improvement Plans, specifically with regard to slope heights, slope ratios, erosion control, winterization, tree disturbance, and/or pad elevations and configurations, the plans shall be reviewed by the DRC and DPW for a determination of substantial conformance to the project approval conditions before any further work proceeds. Failure of the DRC and DPW to make a determination of substantial

conformance may serve as grounds for the revocation/modification of the project approval by the appropriate hearing body.

Mitigation Measure P9.1e: Remove Unsuitable Fill Material or Debris
Any unsuitable fill or debris identified in the Geotechnical Engineering Report(s) (to be prepared and submitted with the Improvement Plans) or discovered during construction shall be hauled off site to an appropriately permitted facility. The applicant may propose to treat unsuitable soils to make them suitable.

Recommended Mitigation Measures

There are no recommended earth resources mitigation measures.

Table 9-2. Earth Resources Impact Summary Table

	Alt. 1: Widening to the West	Alt. 2: Widening to the East	Alt. 3: Widening Equally on Both Sides	Alt. 4: County DPW–Preferred
EARTH RESOURCES				
Impact 9.1 Potential Construction-Related Soil Erosion and Sedimentation				
Quantitative Comparison	NA	NA	NA	NA
Significance Before Mitigation	S	S	S	S
Mitigation Measures	P9.1a: Prepare and Implement Improvement Plans, Specifications, and Cost Estimates P9.1b: Prepare and Implement an Erosion and Sediment Control Plan P9.1c: Revegetate All Disturbed Areas P9.1d: Review Proposed Grading Plans P9.1e: Remove Unsuitable Fill Material or Debris	P9.1a: Prepare and Implement Improvement Plans, Specifications, and Cost Estimates P9.1b: Prepare and Implement an Erosion and Sediment Control Plan P9.1c: Revegetate All Disturbed Areas P9.1d: Review Proposed Grading Plans P9.1e: Remove Unsuitable Fill Material or Debris	P9.1a: Prepare and Implement Improvement Plans, Specifications, and Cost Estimates P9.1b: Prepare and Implement an Erosion and Sediment Control Plan P9.1c: Revegetate All Disturbed Areas P9.1d: Review Proposed Grading Plans P9.1e: Remove Unsuitable Fill Material or Debris	P9.1a: Prepare and Implement Improvement Plans, Specifications, and Cost Estimates P9.1b: Prepare and Implement an Erosion and Sediment Control Plan P9.1c: Revegetate All Disturbed Areas P9.1d: Review Proposed Grading Plans P9.1e: Remove Unsuitable Fill Material or Debris
Significance After Mitigation	LS	LS	LS	LS
Impact 9.2 Destruction of Unique Geologic Features				
Quantitative Comparison	NA	NA	NA	NA
Significance Before Mitigation	NI	NI	NI	NI
Mitigation Measures	None required	None required	None required	None required
Significance After Mitigation	NI	NI	NI	NI
Impact 9.3 Substantial Alteration of Existing Topography				
Quantitative Comparison	NA	NA	NA	NA

Table 9-2. Earth Resources Impact Summary Table

	Alt. 1: Widening to the West	Alt. 2: Widening to the East	Alt. 3: Widening Equally on Both Sides	Alt. 4: County DPW–Preferred
Significance Before Mitigation	LS	LS	LS	LS
Mitigation Measures	None required	None required	None required	None required
Significance After Mitigation	LS	LS	LS	LS
Impact 9.4 Potential Mass Wasting				
Quantitative Comparison	NA	NA	NA	NA
Significance Before Mitigation	LS	LS	LS	LS
Mitigation Measures	None required	None required	None required	None required
Significance After Mitigation	LS	LS	LS	LS
Impact 9.5 Potentially Expansive Soils and Sediments				
Quantitative Comparison	NA	NA	NA	NA
Significance Before Mitigation	LS	LS	LS	LS
Mitigation Measures	None required	None required	None required	None required
Significance After Mitigation	LS	LS	LS	LS
Impact 9.6 Potential Surface Fault Rupture				
Quantitative Comparison	NA	NA	NA	NA
Significance Before Mitigation	NI	NI	NI	NI
Mitigation Measures	None required	None required	None required	None required
Significance After Mitigation	NI	NI	NI	NI
Impact 9.7 Potential Strong Seismic Ground Shaking and Liquefaction				
Quantitative Comparison	NA	NA	NA	NA
Significance Before Mitigation	LS	LS	LS	LS
Mitigation Measures	None required	None required	None required	None required
Significance After Mitigation	LS	LS	LS	LS

Table 9-2. Earth Resources Impact Summary Table

	Alt. 1: Widening to the West	Alt. 2: Widening to the East	Alt. 3: Widening Equally on Both Sides	Alt. 4: County DPW–Preferred
Impact 9.8 Reduction of the Availability of a Known Locally or Regionally Important Mineral Resources				
Quantitative Comparison	NA	NA	NA	NA
Significance Before Mitigation	NI	NI	NI	NI
Mitigation Measures	None required	None required	None required	None required
Significance After Mitigation	NI	NI	NI	NI

Key:

SU = Significant and unavoidable.

S = Significant.

PS = Potentially significant.

LS = Less than significant.

NI = No impact.

NA = Not applicable.

Chapter 10

Cultural Resources

This chapter discusses the cultural resource setting of the project area, the federal and state regulatory context for the proposed project, and the project's potential impacts on cultural resources.

Cultural resource is the term used to describe several different types of properties, including archaeological, architectural, and traditional cultural properties (TCPs). Archaeological sites include both prehistoric and historic deposits. Architectural properties include buildings, bridges, and infrastructure. TCPs include locations of importance to a particular group. TCPs are most often important to Native American groups because of the role the location has in traditional ceremonies or activities.

Affected Environment

Environmental Setting

The following sections present a brief summary of the cultural and historic background and setting to provide the context for the inventory and analysis of historical resources in the project area. A more detailed discussion of the environmental setting, inventory methods, and resource evaluation can be found in the cultural resources inventory report prepared by Jones & Stokes (2002).

Prehistoric and Ethnographic Context

The project area is located at the foot of the Sierra Nevada, on the edge of the Sacramento Valley. There is little archaeological evidence of human use of the area during the late and early Holocene eras (12,000 to 6000 B.C.); however, the limitations of the archaeological record do not necessarily mean that the area was not used. Most Pleistocene and Holocene sites are buried deeply in accumulated gravels and silts, or have eroded away. More archaeological information is available about people in the area beginning around 3000 B.C. Native Californians used the region between 3000 B.C. and the mid-1700s, broadening their subsistence strategy and developing more diverse technological strategies.

The indigenous people that occupied the project area at the time of European contact are called the Nisenan, or the Southern Maidu. The Nisenan language, together with the languages of the Maidu and Konkow, their northern neighbors, form the Maiduan language family, which is of Penutian linguistic stock (Shipley 1978). Ethnographic work with the Nisenan is summarized in Wilson and Towne (1978).

Early Nisenan contact with Europeans appears to have been limited to the southern reaches of their territory. Spanish expeditions began to cross Nisenan territory in the early 1800s. Unlike the valley Nisenan, the groups in the foothills remained relatively unaffected by the European presence until the discovery of gold at Coloma in 1848. In the 2 or 3 years after the discovery, Nisenan territory was overrun by settlers from all over the world. Gold seekers and the settlements that sprang up to support them were nearly fatal to the native inhabitants. The sudden onslaught of humanity brought disease and violent conflict to the indigenous groups who lived in the area. Survivors worked as wage laborers and domestic help and lived on the edges of foothill towns. Although nearly obliterated, the descendants of the Nisenan still live in Placer County today, and continue to rebuild their cultural identity.

Historic Context

Placer County

Placer County was formed in 1851 from parts of Sutter and Yuba Counties. The City of Auburn has been the only county seat. Settlement of the area around Folsom Reservoir by nonnative people did not begin until after gold discovery in 1848. The thousands of miners that swarmed up the American River and its tributaries established camps and towns at the sites of major discoveries. These communities along the North Fork American River in Placer County included Beals Bar, Horseshoe Bar, Smith's Bar, and Rattlesnake Bar (Kyle 1990).

Before the discovery of gold in 1848, there was only a rudimentary trail system in the Sierra Nevada. Most of the early, nonnative routes extended east to west across the range. These early trails provided travelers with ways across the imposing granite mass to the fertile central and coastal valleys. The establishment of hundreds of mining camps and towns provided the impetus to build improved roads and trails throughout the Sierra Nevada. The first trail to the Folsom region was the Coloma Road. Laid out by John Sutter in 1847–1848, it followed the south bank of the American River from Sutter's Fort to Sutter's sawmill in Coloma. During the Gold Rush era, this road was extended, with a branch leading to Mormon Island and Negro Hill. Other thoroughfares in the region included Auburn-Folsom Road, which connected those two settlements. After the gold deposits played out and the miners left the region, many of the roads and trails fell into disuse and disrepair. The main roads that survived, like Auburn-Folsom Road, were rerouted in the 1950s to accommodate Folsom Reservoir (Waechter et al. 1994).

During the first years of the Gold Rush, much of the mining took place at the river's bank or in the natural channel. As these surface deposits began play out, methods of gold extraction shifted to hard rock and hydraulic mining that required large amounts of water high above the natural river channels. To convey water to the mining sites, miners built long ditches and flumes that brought water by gravity. Because the construction and maintenance of these systems was costly, miners often formed joint stock companies to raise the necessary capital. One of the first was the Natoma Water and Mining Company, which set up a successful system of canals along the South Fork American River in 1851 (Waechter et al. 1994).

North Fork Ditch Company

In spring 1854, the primary shareholder in the Natoma Water and Mining Company organized the American River Water and Mining Company to deliver water to miners on the North Fork American River. By the following December, the company began delivering water from its North Fork Ditch to Rattlesnake Bar. By 1857, the North Fork Ditch extended for about 39 kilometers (24 miles) from its diversion dam at Tamaroo Bar to a point opposite of the town of Folsom known as Big Gulch (Ashland). The main ditch, reservoirs, and more than 97 kilometers (60 miles) of lesser flumes and ditches supplied water to mining areas, with some water diverted for agricultural purposes. In 1899, the American River Water and Mining Company was reorganized as the North Fork Ditch Company. This company sold water primarily to the burgeoning agricultural areas of Fair Oaks and Orangevale. This operation lasted until 1909, when the American Canyon Water Company bought the North Fork Ditch Company. In 1954, ownership of the North Fork Ditch and the system passed to the San Juan Suburban Water Company (English pers. comm., Waechter et al. 1994).

Rose Spring Ditch

The Rose Spring Ditch was built around 1900 as part of the North Fork Ditch Company system. It was built to provide agricultural and domestic water to south Placer County. When Folsom Dam was completed in 1956, part of the Rose Spring Ditch was inundated, requiring the Corps to construct new conveyance facilities. Pipeline work completed in the late 1960s eliminated the need for the Rose Spring Ditch as a conveyance system. Much of the old system has given way to development and has disappeared from view (English pers. comm.).

Cultural Resources in the Study Area

Methods and Results

To identify cultural resources in the project area, Jones & Stokes conducted a literature review and record search, historic map research, consultation with

Native Americans, and an intensive pedestrian survey. Additional information on the sources consulted is available in the cultural resources inventory report prepared by Jones & Stokes (2002).

The record search indicated that three previous studies have been conducted in the project area (Chavez 1980, Napoli 2002, Windmiller 2002). The North Fork Mining Ditch is the only known historic resource located in the project area.

Jones & Stokes professional archaeologists and a professional historian conducted an intensive pedestrian survey of the project area in May and June 2002. The project area was surveyed by walking parallel transects spaced 10–12 meters (33–39 feet) apart where access and visibility permitted. The area surveyed for the proposed project was a 30.5-meter (100-foot) corridor along both sides of Auburn-Folsom Road. In addition, a 30.5-meter (100-foot) section of Eureka Road, extending westward from the intersection of Auburn-Folsom Road, was surveyed. No archaeological resources were identified in the project area. Only one historic resource was identified in the project area that had the potential to be eligible for listing in the National Register of Historic Places (NRHP) or the California Register of Historical Resources (CRHR). That single historic resource is the Rose Spring Ditch, described below.

Rose Spring Ditch

The remaining segments of the Rose Spring Ditch are located in Placer County, near Folsom Lake. The historic alignment of the Rose Spring Ditch meanders from a point near the eastern terminus of Eureka Road southwesterly for about 305 meters (1,000 feet), where it crosses Auburn-Folsom Road. From there, the alignment extends southerly down the west side of Auburn-Folsom Road for about 213 meters (700 feet), where it turns southeast, back across the alignment of Auburn-Folsom Road. Currently, the ditch is unrecognizable along both of these segments.

From that point, the alignment continues in a southwesterly direction, roughly paralleling Auburn-Folsom Road for about 610 meters (2,000 feet) on a bench above the roadway. This section appears to be the most intact segment of remaining ditch in the alignment. The visible portions of the ditch are remarkably uniform along this section. In general, the ditch in this area is an earth-lined conduit that is roughly "U" shaped with steep side walls and a curving bottom. It is 1.8–2.4 meters (6–8 feet) deep, with a top width of 2.4–3.7 meters (8–12 feet) across and bottom width of 0.6–1.2 meters (2–4 feet). Berms on the downslope side of the ditch are about 3.7 meters (12 feet) high, with a crown of between 2.4 and 3.7 meters (8 and 12 feet) across. The channel of the ditch is overgrown with grasses and low bushes. Mature trees were observed growing in the channel or in the berm at several locations. The ditch was not carrying water when it was observed. At one location near the north end of the segment, the ditch is carried underground in a 61-centimeter-diameter (24-inch-diameter) cast iron pipe. The pipe opening features board-form concrete head and wing walls and a short concrete flume. The south end of the segment terminates in a similar arrangement that appears to carry the conduit under

Auburn-Folsom Road at a point about 152 meters (500 feet) north of the intersection with Lou Place. Although clearly visible on the east side of the road where it goes into the pipe, the Rose Spring Ditch is not recognizable where the alignment emerges on the west side of Auburn-Folsom Road.

From the point north of the Auburn-Folsom Road/Lou Place intersection, the historic alignment of the Rose Spring Ditch meanders in a southwesterly direction, following the contours of a low hill for several hundred meters (several thousand feet) to a point near Barton Road. From there, it extends nearly due south for about 305 meters (1,000 feet), where it turns northeast and extends along the northern edge of Baldwin Reservoir. The alignment continues in an easterly direction to a point where it crosses Auburn-Folsom Road yet again, north of the San Juan Water District headquarters building. It then turns south towards Hinkle Reservoir. This section of the alignment was examined at several locations; however, no recognizable ditch segment was visible.

The segment of the Rose Spring Ditch in the project area does not appear to meet the criteria for listing in either the NRHP or the CRHR, primarily because it lacks integrity to its period of significance. The period of significance for the Rose Spring Ditch is around 1900, which is the estimated period of design and initial completion of the ditch. This period of significance can also relate to the canal's association with corporate water conveyance in the northern Mother Lode region. Along much of it historic alignment, the ditch either no longer exists or is not recognizable as an artificial water conveyance feature. Because it lacks integrity to convey its period of significance, the Rose Spring Ditch does not appear to meet the criteria for listing in either the NRHP or the CRHR.

Native American Consultation

On April 22, 2002, Jones & Stokes cultural resources staff contacted the Native American Heritage Commission (NAHC). A list of potentially interested Native American representatives and a search of the NAHC's sacred lands database was requested. NAHC responded with a list of seven Native American representatives of the area. The search of the sacred lands database did not identify any sacred sites in the project area.

Letters were sent to the seven Native American representatives, informing them of the project and requesting their input and concerns. As of October 2, 2002, there were no responses. Follow-up telephone calls were placed to ensure the receipt of the contact letters and to determine whether any of the representatives had any concerns. Follow-up telephone calls were made beginning on May 15, 2002. To date, no Native American representatives have expressed concerns regarding the proposed project.

Regulatory Setting

Federal

The proposed project would require approval by Reclamation for right-of-way takes. Any permitting federal agency is required to comply with Section 106 of the National Historic Preservation Act (NHPA) of 1966, as amended, and its implementing regulations (Title 36, Code of Federal Regulations [CFR], Part 800). Section 106 of the NHPA requires that, before beginning any undertaking, a federal agency must take into account the effects of the undertaking on historic properties and afford the Advisory Council on Historic Preservation (ACHP) an opportunity to comment on these actions. The Section 106 review process involves a four-step procedure:

- Initiate the Section 106 process by establishing the undertaking, developing a plan for public involvement, and identifying other consulting parties.
- Identify historic properties by determining the scope of efforts, identifying cultural resources, and evaluating their eligibility for inclusion in the NRHP.
- Assess adverse effects by applying the significance criteria (see "Criteria for Determining Significance," below) to effects on *historic properties* (resources that are eligible for inclusion in the NRHP).
- Resolve adverse effects by consulting with the State Historic Preservation Officer (SHPO) and other consulting agencies, including the Advisory Council if necessary, to develop an agreement that addresses the treatment of historic properties.

Specific regulations regarding compliance with Section 106 state that, although the tasks necessary to comply with Section 106 may be delegated to others, the federal agency (in this case, Reclamation) is ultimately responsible for ensuring that the Section 106 process is completed according to statute.

State

Cultural resources are defined as buildings, sites, structures, or objects, each of which may have historic, architectural, archaeological, cultural, or scientific importance. Under the State CEQA statutes, an impact on a cultural resource is considered significant if a project would result in an effect that may change the significance of the resource (Public Resources Code, Section 21084.1). Demolition, replacement, substantial alteration, and relocation of historic properties are actions that would change the significance of an historic resource (Title 14, California Code of Regulations [CCR], Section 15064.5). Before the level of significance of impacts can be determined and appropriate mitigation measures developed, the significance of cultural resources must be determined. The following steps are normally taken in a cultural resources investigation to comply with CEQA.

- Identify cultural resources.
- Evaluate the significance of the cultural resources based on established thresholds of significance.
- Evaluate the effects of a project on all cultural resources.
- Develop and implement measures to mitigate the effects of the project on significant cultural resources.

Because the project also is located on nonfederal land in California, it is necessary to comply with state laws pertaining to the inadvertent discovery of human remains of Native American origin. The procedures that must be followed if burials of Native American origin are discovered on nonfederal land in California are described under "Impacts," below.

Local

Placer County General Plan

The Placer County General Plan Recreational and Cultural Resources section contains goals, policies, and implementation programs to protect historical and archaeological resources. The plan includes the following relevant policies.

Policy 5.D.3. The County shall solicit the views of the Native American Heritage Commission and/or the local Native American community in cases where development may result in disturbance to sites containing evidence of Native American activity and/or to sites of cultural importance.

Policy 5.D.7. The County shall require that discretionary development projects are designed to avoid potential impacts to significant paleontological or cultural resources whenever possible. Unavoidable impacts, whenever possible, shall be reduced to a less than significant level and/or shall be mitigated by extracting maximum recoverable data. Determinations of impacts, significance, and mitigation shall be made by qualified archaeological (in consultation with recognized local Native American groups), historical, or paleontological consultants, depending on the type of resource in question.

Granite Bay Community Plan

The Granite Bay Community Plan Cultural Resources Element contains the following applicable goals and policies.

Goal 1. Preserve and enhance all significant historic and archaeological sites and features.

Policy 1. Identify and protect from destruction and abuse all representative and unique historical and archaeological sites.

Environmental Consequences

Criteria for Determining Significance

Federal

Under federal regulations, a project has an effect on a historic property when the undertaking could alter the characteristics of the property that may qualify the property for inclusion in the NRHP; such alterations include alteration of location, setting, or use. An undertaking may be considered to have an adverse effect on a historic property when the effect may diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association. Adverse effects on historic properties include, but are not limited to,

- physical destruction or alteration of all or part of the property;
- isolation of the property from, or alteration of, the property's setting when that character contributes to the property's qualifications for listing in the NRHP;
- introduction of visual, audible, or atmospheric elements that are out of character with the property or that alter its setting;
- neglect of a property, resulting in its deterioration or destruction; or
- transfer, lease, or sale of the property (36 CFR 800.9).

State

According to the State CEQA Guidelines (14 CCR 15064.5), a project with an effect that may cause a substantial adverse change in the significance of a historic resource is a project that may have a significant effect on the environment (14 CCR 15064.5[b]). CEQA further states that a substantial adverse change in the significance of a resource means the physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of a historic resource would be materially impaired. Actions that would materially impair the significance of a historic resource are any actions that would demolish or adversely alter those physical characteristics of an historical resource that convey its historical significance and qualify it for inclusion in the CRHR or in a local register or survey that meet the requirements of Sections 5020.1(k) and 5024.1(g) of the Public Resources Code.

Methods and Assumptions for the Impact Analysis

The evaluation of impacts on cultural resources is based on the cultural significance of potentially affected resources and on the severity of anticipated impacts. Criteria for assessing the degree of impact are described below.

Impacts

Only one historic structure was located in the project area: the Rose Spring Ditch. The ditch does not appear to meet the criteria for listing in the NRHP or the CRHR. No significant archaeological resources were identified in the project area. Therefore, there are no significant cultural resources in the project area.

It is possible that unidentified, buried archaeological materials could be discovered during construction activities. The following section identifies potential impacts, as well as mitigation measures to reduce impacts to a less-than-significant level.

Construction-Related Impacts

Impact 10.1 Potential Damage to Previously Unidentified Buried Archaeological Resources

Buried archaeological resources that were not identified during field surveys could be inadvertently unearthed during ground-disturbing activities, which could result in the demolition or substantial damage of significant historical resources.

This impact is common to all alternatives and is considered potentially significant. Implementation of Mitigation Measure P10.1 would reduce this impact to a less-than-significant level.

Impact 10.2 Potential Damage to Previously Unidentified Human Remains

According to California Health and Safety Code, six or more human burials at one location constitute a cemetery (Section 8100), and disturbance of Native American cemeteries is a felony (Section 7052).

Buried human remains that were not identified during field surveys could be inadvertently unearthed during excavation activities, which could result in damage to these remains.

This impact is common to all alternatives and is considered potentially significant. Implementation of Mitigation Measure P10.2 would reduce this impact to a less-than-significant level.

Mitigation Measures

This section details the mitigation measures identified for the project alternatives. Mitigation measures are identified as either of the following.

- *Proposed mitigation measures* are measures that the Placer County DPW, as project proponent, is either proposing as part of the project design or has agreed to implement.
- *Recommended mitigation measures* are measures that are identified in this environmental document but that the Placer County DPW has not chosen to implement, and which may be required by the Placer County Board of Supervisors if the project is approved.

Proposed Mitigation Measures

Mitigation Measure P10.1: Stop Work If Cultural Deposits Are Discovered During Ground-Disturbing Activities

If any archaeological artifacts, such as stone tools, or unusual amounts of shell or bone are uncovered during any construction activities, all work must stop immediately in the area (within 30.5 meters [100 feet] of the find) and a qualified archaeologist retained to evaluate the deposit. The Placer County Planning Department and Placer County Department of Museums must also be contacted for review of the archaeological find(s). Placer County DPW shall implement the recommended treatment measures, which typically include avoiding the site, capping the site with fill material, or implementing data recovery programs, such as excavation or detailed documentation.

If cultural resources are discovered during construction activities, the construction contractor, Placer County DPW, Placer County Department of Museums, and Reclamation (if on Reclamation property) shall verify that work has been halted until appropriate treatment measures are implemented. Concurrence shall be obtained from the applicable federal and/or county agency on any measures to be implemented before construction activities resume in the area of the find.

Mitigation Measure P10.2: Comply with State/Federal Laws Pertaining to the Discovery of Human Remains

If human remains are discovered on private property during construction, the Placer County Coroner and NAHC must also be contacted. Work in the area may only proceed after authorization is granted by the Placer County Planning Department. A note to this effect shall be provided on the Improvement Plans for the project.

If human remains are discovered on Reclamation property during construction, the Reclamation archaeologist, the Placer County Coroner, and NAHC shall be contacted. Work in the area may proceed only after authorization is granted by Reclamation. All activity at such a site on Reclamation property must comply with the federal Native American Grave Protection and Repatriation Act (NAGPRA) (43 CFR Part 10).

If discovered human remains are of Native American origin, Placer County DPW and its contractors shall comply with state and federal laws relating to the disposition of Native American burials, which falls within the jurisdiction of NAHC (Public Resources Code, Section 5097). If human remains are discovered or recognized in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until

- the coroner of Placer County has been informed and has determined that no investigation of the cause of death is required and,
- if the remains are of Native American origin,
  - the descendants of the deceased Native Americans have made a recommendation to the landowner or the person responsible for the excavation work for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods, as provided in Public Resources Code, Section 5097.98, or
  - NAHC is unable to identify a descendant or the descendant fails to make a recommendation within 24 hours after being notified by NAHC.

According to California Health and Safety Code, six or more human burials at one location constitute a cemetery (Section 8100), and disturbance of Native American cemeteries is a felony (Section 7052). Section 7050.5 requires that excavation be stopped in the vicinity of discovered human remains until the coroner can determine whether the remains are those of a Native American. If the remains are determined to be Native American, the coroner must contact NAHC.

Recommended Mitigation Measures

There are no recommended cultural resources mitigation measures.

Table 10-1. Cultural Resources Impact Summary Table

	Alt. 1: Widening to the West	Alt. 2: Widening to the East	Alt. 3: Widening Equally on Both Sides	Alt. 4: County DPW--Preferred
CULTURAL RESOURCES				
Impact 10.1 Potential Damage to Previously Unidentified Buried Archaeological Resources				
Quantitative Comparison	NA	NA	NA	NA
Significance Before Mitigation	PS	PS	PS	PS
Mitigation Measures	P10.1: Stop Work If Cultural Deposits Are Discovered During Ground-Disturbing Activities	P10.1: Stop Work If Cultural Deposits Are Discovered During Ground-Disturbing Activities	P10.1: Stop Work If Cultural Deposits Are Discovered During Ground-Disturbing Activities	P10.1: Stop Work If Cultural Deposits Are Discovered During Ground-Disturbing Activities
Significance After Mitigation	LS	LS	LS	LS
Impact 10.2 Potential Damage to Previously Unidentified Human Remains				
Quantitative Comparison	NA	NA	NA	NA
Significance Before Mitigation	PS	PS	PS	PS
Mitigation Measures	P10.2: Comply with State/Federal Laws Pertaining to the Discovery of Human Remains	P10.2: Comply with State/Federal Laws Pertaining to the Discovery of Human Remains	P10.2: Comply with State/Federal Laws Pertaining to the Discovery of Human Remains	P10.2: Comply with State/Federal Laws Pertaining to the Discovery of Human Remains
Significance After Mitigation	LS	LS	LS	LS

Key:

SU = Significant and unavoidable.

S = Significant.

PS = Potentially significant.

LS = Less than significant.

NI = No impact.

NA = Not applicable.

Chapter 11
Trails

This chapter describes the setting and existing trails network in the project area that would be affected by the proposed project, as well as the planning and policy documents that govern the development of trails in the project area. Both bikeways and multiple-use trails are present in the project area. This section evaluates the potential impacts on these trails. The project area is part of the planning area for the Placer County General Plan and for the Granite Bay Community Plan.

Affected Environment

Environmental Setting

Auburn-Folsom Road is a primary connector route between the City of Auburn and the City of Folsom. The roadway begins in the City of Folsom, north of the Lake Natoma Crossing bridge over the American River, intersects with Folsom Dam Road, and continues to the City of Auburn in Placer County. South of Folsom Dam Road, Auburn-Folsom Road (known as Folsom-Auburn Road) is a four-lane roadway. The roadway has become a primary connector route for commuter traffic between the Roseville and Rocklin area and the Folsom/eastern Sacramento County area.

Bikeways

As part of the Granite Bay Community Plan, an extensive system of bikeways has been developed and adopted for the project area. Figure 11-1 shows existing and planned bikeways in the project area. Existing bikeways in the project area include a Class III bikeway along Auburn-Folsom Road. This bikeway is proposed to be upgraded to a Class II bikeway as part of the proposed project. The inclusion of a bicycle lane along Auburn-Folsom Road was listed in the Granite Bay Community Plan Recreation Element (Placer County 1987) as part of Priority Number 1 for trails under the Proposed Priority Plan for Acquisition and Development of Public Park Facilities. Bicycle trails were also listed in the plan as the highest demand for specific recreational facilities.

Figure 11-2 shows the three bikeway design criteria for the following three classes of bikeways.

- Class I bikeways are off-road rights-of-way for use primarily by bicycles and pedestrians. All motor vehicles are prohibited from using these trails, and crossflows by motor vehicles are minimized. These facilities often are called bike paths or bike trails. The Bikeway Master Plan for the plan area does not include any Class I bikeways.
- Class II bikeways are on-street, striped lanes that are dedicated to bicycles. Although use of these bikeways by motor vehicles and pedestrians is prohibited, vehicle parking and pedestrian and vehicle crossflows are permitted. These facilities often are called bike lanes.
- Class III bikeways are on-street routes designated by signs or other pavement markings. They share the right-of-way with motor vehicles and pedestrians. These facilities often are called bike routes.

Multiple-Use Trails

The Granite Bay Community Plan identifies several existing and proposed multiple-use and equestrian trails. Sections of multiple-use trails are located along the edge of the Folsom Lake SRA. A multiple-use trail runs along the west side of Auburn-Folsom Road, at the southern end of the project area, from the County line to Oak Hill Drive. Improvements to the trail are proposed as part of the project. The improved trail would extend from the County line to Oak Hill Drive, but would be upgraded to meet County design standards.

There is an extensive trail network in the Folsom Lake SRA, to the east of the project area. This trail network runs parallel to the roadway within the boundaries of the Folsom Lake SRA. Trails include hiking, biking, and equestrian facilities.

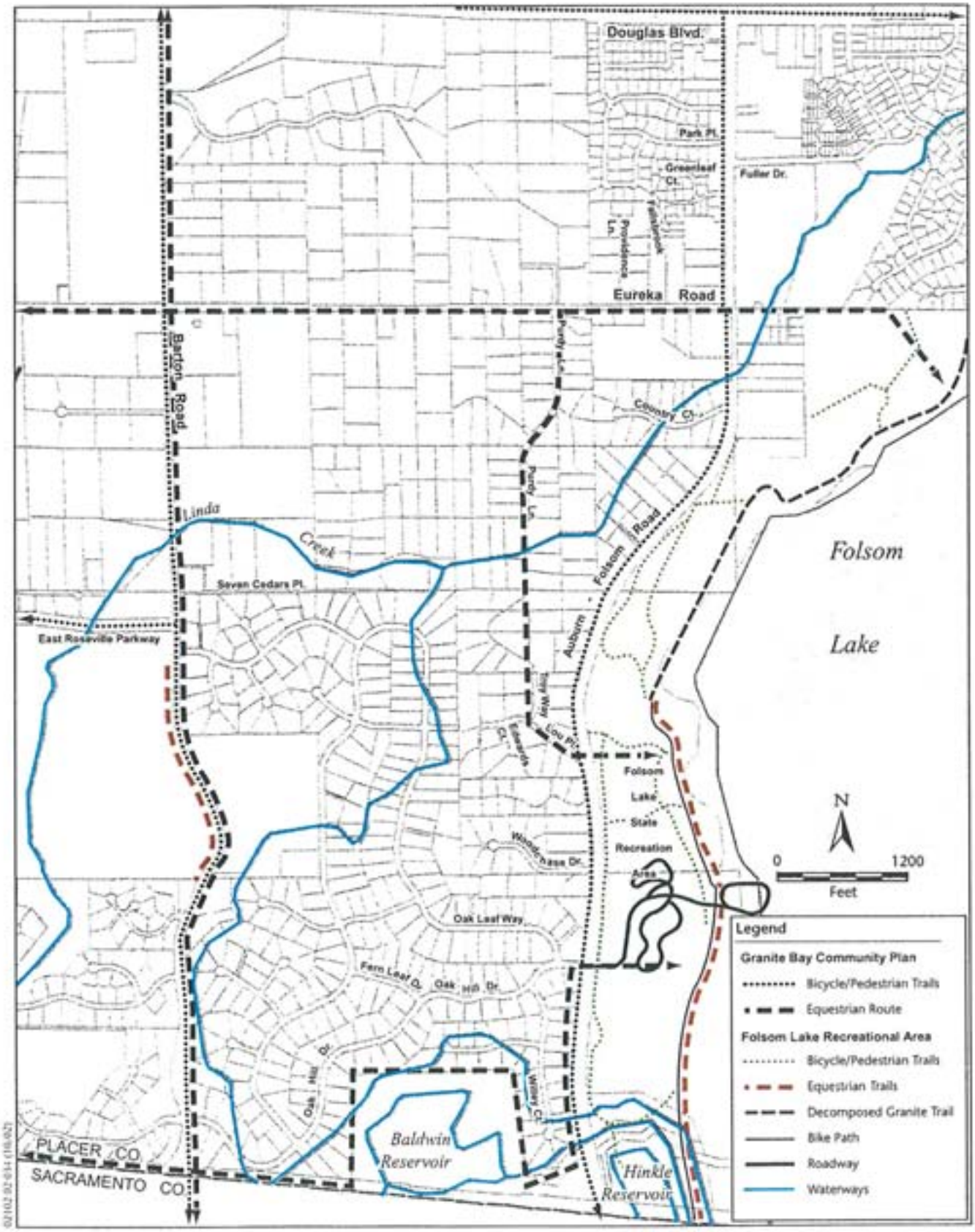
Regulatory Setting

Local

Placer County General Plan

The Placer County General plan contains the following policies for bikeway and trail development that relate to the project.

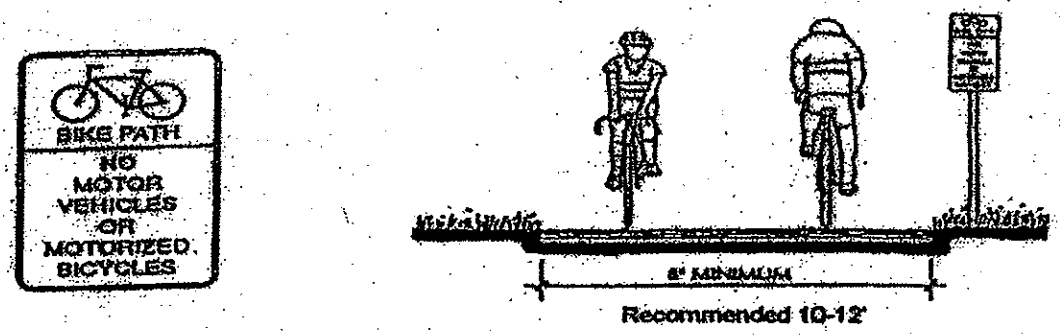
Policy 3.D.1. The County shall promote the development of a comprehensive and safe system of recreational and commuter bicycle routes that provides connections between the County's major employment and housing areas and between its existing and planned bikeways.



Jones & Stokes

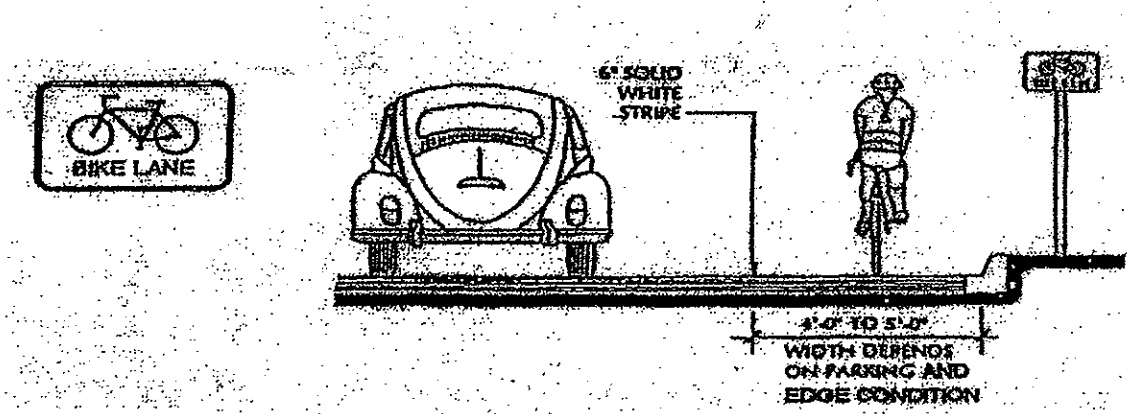
Figure 11-1
Existing and Planned Trail Network

Class I Bike Path



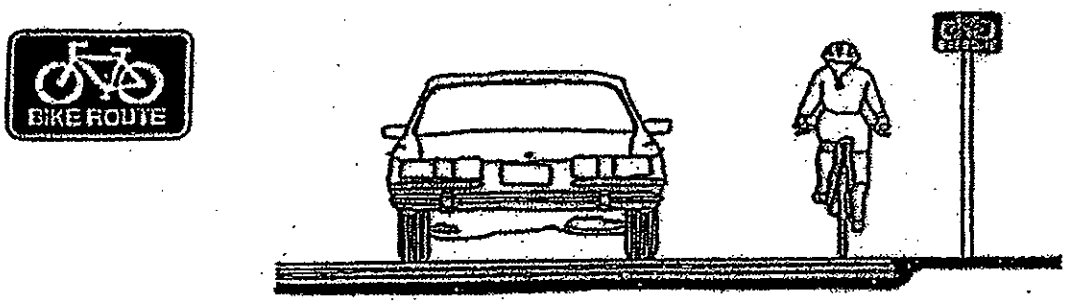
Class I Bikeway - Typically called a bike path or trail, it provides for bicycle travel on a paved right of way completely separated from any street or highway.

Class II Bike Lane



Class II Bikeway - Referred to as a bike lane. Provides a striped and stenciled lane for one way travel on a street or highway. The right-of-way could be shared with vehicle parking.

Class III Bike Route



Class III Bikeway - Referred to as a bike route. Provides for shared use with pedestrian or motor vehicle traffic and is identified only by signing.

Source: DKS Associates, Southeast Placer County Transportation Study

Jones & Stokes

Figure 11-2
Bikeway Design Criteria

Policy 3.D.2. The County shall work with neighboring jurisdictions to coordinate planning and development of the County's bikeways and multi-purpose trails with those of neighboring jurisdictions.

Policy 5.C.1. The County shall support the development of a countywide trail system designed to achieve the following objectives:

a) Provide safe, pleasant, and convenient travel by foot, horse, or bicycle;

b) Link residential areas, schools, community buildings, parks, and other community facilities within residential developments. Whenever possible, trails should connect to the countywide trail system, regional trails, and the trail or bikeways plans of cities;

c) Provide access to recreation areas, major waterways, and vista points;

d) Provide for multiple uses (i.e., pedestrian, equestrian, bicycle);

e) Use public utility corridors such as power transmission line easements, railroad rights-of-way, irrigation district easements, and roadways;

f) Whenever feasible, be designed to separate equestrian trails from cycling paths, and to separate trails from the roadway by the use of curbs, fences, landscape buffering, and/or spatial distance;

g) Connect commercial areas, major employment centers, institutional uses, public facilities, and recreational areas with residential areas; and

h) Protect sensitive open space and natural resources.

Policy 5.C.3. The County shall work with other public agencies to coordinate the development of equestrian, pedestrian, and bicycle trails.

Granite Bay Community Plan

The Granite Bay Community Plan also includes policies related to the development of trails and bikeways. The specific transportation policies of the Transportation/Circulation Element that relate to trails and bikeways are listed below. The Granite Bay Community Plan is currently being revised. Revised versions of the plan and the circulation element are being considered by the County. Various elements of the existing plan may change as a result of this revision.

Policy 14. Trails and paths intended for general circulation shall provide reasonably direct and convenient routes of travel for potential users. Routes for trails and paths intended primarily for recreational use should enhance the recreation experience. Regional trails are needed for inter-community travel and to provide access to state and county parks. Regional trails should be located so

that they serve the needs of the public and minimize any infringement on the privacy of local residents.

Policy 15. Regional bikeways should facilitate travel between communities and provide access to parks. Regional bikeways should be located on or along collector or arterial roads. County or state funds should be sought for construction of regional bikeways.

Policy 16. The local public path and trail system shall be linked with the existing private and regional systems and the road system.

Policy 17. Trails and paths may be located in the right-of-way of roads, in their own rights-of-way, or in recorded easements over private properties.

Policy 18. Paths for use by pedestrians generally shall be located in the right-of-way of public roads, rather than on easements between private properties.

Policy 20. Local bikeways shall primarily serve the needs of local residents by providing safe and enjoyable circulation within the community.

Environmental Consequences

Criteria for Determining Significance under CEQA

Appendix G of the State CEQA Guidelines and standard professional practice were used to determine whether the proposed project would have a significant environmental effect. The proposed project may have a significant effect on trails if it would conflict with the existing plans and policies related to trails or would potentially disrupt the use and connection of the existing trail network.

Methods and Assumptions for the Impact Analysis

The following impact analysis is based on a review of relevant maps, local plans and policies, transportation elements, and professional judgement.

Impacts

Operation-Related Impacts

Impact 11.1 Inconsistency with Local Plans and Policies Related to the Development of Bikeways and Trails

The development plan for bikeways and multiple-use trails in the project area is identified in the Granite Bay Community Plan and in the Placer County General

Plan. The Granite Bay Community Plan requires that the trails be developed during the appropriate roadway improvement project. The specific planning policies are listed above under "Regulatory Setting." Failure to develop the trails and bikeways in accordance with the Granite Bay Community Plan and Placer County General Plan would be considered a significant impact. Placer County DPW is proposing to install an on-street Class II bikeway along Auburn-Folsom Road. This action is consistent with the planning policies. However, the plans also require the development of equestrian and pedestrian trails along Auburn-Folsom Road. Placer County DPW is not proposing any additional equestrian or pedestrian trails along the project corridor, and this is inconsistent with both the Placer County General Plan and the Granite Bay Community Plan. Placer County DPW is proposing to upgrade the multiple-use trail at the southern end of the project area. However, this action would not add any equestrian or pedestrian trails to the project area. This impact is common to all build alternatives and is considered significant. Mitigation Measures P11.1a, P11.1b, and P11.1c are included to ensure consistency with the applicable planning documents and to reduce this impact to a less-than-significant level.

Impact 11.2 Disruption of Trail Use or Connectivity in the Existing Trail Network

The widening of Auburn-Folsom Road from two lanes to four could disrupt the connections of the existing trail network in the project area. Many of the trails and bikeways in the project area have been designed or planned to connect with the trails in Folsom Lake SRA. Disruption of these connections could substantially alter the use and value of the existing trails and bikeways. Increasing the roadway width from two lanes to four also would increase the hazard of crossing the roadway. However, authorized pedestrian crossings are limited to controlled intersections. To maintain the connectivity of the trail networks, Placer County DPW will provide pedestrian or bike crossings where trails or bikeways are currently planned to cross Auburn-Folsom Road. As noted under "Regulatory Setting," the Circulation Element of the Granite Bay Community Plan is currently being revised. The most recent draft of the plan eliminates some of the previously identified trails, such as the equestrian trail at Lou Place. In the event that this plan and Circulation Element are revised, some of the identified impacts may also change (most notably, the need for a signal at Lou Place).

This impact is common to all build alternatives and is considered less than significant. Mitigation Measure P11.2 is provided to ensure connectivity.

Mitigation Measures

This section details the mitigation measures identified for the project alternatives. Mitigation measures are identified as either of the following.

- *Proposed mitigation measures* are measures that the Placer County DPW, as project proponent, is either proposing as part of the project design or has agreed to implement.
- *Recommended mitigation measures* are measures that are identified in this environmental document but that the Placer County DPW has not chosen to implement, and which may be required by the Placer County Board of Supervisors if the project is approved.

Proposed Mitigation Measures

Mitigation Measure P11.1a: Provide Class II Bikeways

Placer County DPW shall provide Class II bikeways along Auburn-Folsom Road pursuant to the Placer County Bikeways Master Plan. The location, width, alignment, and surfacing of the bikeways shall be in accordance with the bikeway design standards listed in the Placer County General Plan.

Mitigation Measure P11.1b: Improve Equestrian Trail in Accordance with Standard County Design Conditions

Placer County DPW shall install a multiple-use (equestrian/pedestrian) trail as part of the project improvement, as described below.

1. Placer County DPW shall construct/improve a 4.6-meter-wide (15-foot-wide) (or as otherwise approved by the Parks Division) meandering public trail easement along the western side of Auburn-Folsom Road, from the County line to Oak Hill Drive and within the landscape buffer.
2. The trail shall be constructed of decomposed granite, unless otherwise approved by the Parks Division. A trail tread and drainage appurtenances shall be installed and clearing, seeding, and planting shall be implemented as necessary for erosion control.
3. The trail tread shall be located as far from the edge of pavement of the adjoining street right-of-way as possible.

Mitigation Measure P11.2: Install a Traffic Signal at the Auburn-Folsom Road/Lou Place Intersection

Placer County DPW shall install a traffic signal at the Auburn-Folsom Road/Lou Place intersection or shall provide equal or better means of trail connectivity at other locations. In the event that the Circulation Element of the Granite Bay Community Plan is revised and the equestrian trail at Lou Place is eliminated, this mitigation measure would no longer be necessary.

Recommended Mitigation Measures

There are no recommended mitigation measures for trails.

Table 11-1. Trails Impact Summary Table

	Alt. 1: Widening to the West	Alt. 2: Widening to the East	Alt. 3: Widening Equally on Both Sides	Alt. 4: County DPW–Preferred
TRAILS				
Impact 11.1 Inconsistency with Local Plans and Policies Related to the Development of Bikeways and Trails				
Quantitative Comparison	NA	NA	NA	NA
Significance Before Mitigation	LS	LS	LS	LS
Mitigation Measures	P11.1a: Provide Class II Bikeways P11.1b: Improve Equestrian Trail in Accordance with Standard County Design Conditions	P11.1a: Provide Class II Bikeways P11.1b: Improve Equestrian Trail in Accordance with Standard County Design Conditions	P11.1a: Provide Class II Bikeways P11.1b: Improve Equestrian Trail in Accordance with Standard County Design Conditions	P11.1a: Provide Class II Bikeways P11.Ib: Improve Equestrian Trail in Accordance with Standard County Design Conditions
Significance After Mitigation	LS	LS	LS	LS
Impact 11.2 Disruption of Trail Use or Connectivity in the Existing Trail Network				
Quantitative Comparison	NA	NA	NA	NA
Significance Before Mitigation	LS	LS	LS	LS
Mitigation Measures	P11.2: Install a Traffic Signal at the Auburn-Folsom Road/Lou Place Intersection	P11.2: Install a Traffic Signal at the Auburn-Folsom Road/Lou Place Intersection	P11.2: Install a Traffic Signal at the Auburn-Folsom Road/Lou Place Intersection	P1I.2: Install a Traffic Signal at the Auburn-Folsom Road/Lou Place Intersection
Significance After Mitigation	LS	LS	LS	LS

Key:

SU = Significant and unavoidable.

S = Significant.

PS = Potentially significant.

LS = Less than significant.

NI = No impact.

NA = Not applicable.

Chapter 12

Cumulative and Growth-Inducing Impacts

Introduction

This chapter discusses the cumulative and growth-inducing impacts of the proposed project. A cumulative impact is defined as the overall impact resulting from the incremental impact of a proposed project when combined with the impacts of other past, present, and reasonably foreseeable future projects (State CEQA Guidelines, Section 15355). Growth-inducing impacts are the effects of a project that encourage or facilitate growth or development.

CEQA Requirements

Cumulative Impacts

The State CEQA Guidelines require a reasonable analysis of the significant cumulative impacts of a proposed project (Section 15130). The cumulative impact analysis may be less detailed than the analysis of the project's individual effect.

A cumulative impact is created as a result of the combination of the project evaluated in an EIR with other projects causing related impacts. Cumulative impacts can result from individually minor, but collectively significant, projects occurring over a period of time (State CEQA Guidelines, Section 15355).

An EIR does not need to discuss impacts that do not result in part from the project it evaluates, but it is required discuss the cumulative impacts of a project when the project's incremental effect is cumulatively considerable (State CEQA Guidelines, Section 15130). When a lead agency determines that the incremental effect is not cumulatively considerable, the agency does not need to consider that impact significant, but it must briefly describe its basis for that determination.

Cumulative impacts may be discussed in the form of either:

- a list of past, present, or reasonably foreseeable probable future projects producing related cumulative impacts; or

- a summary of projections contained in an adopted general plan or related planning document, or in a prior adopted or certified environmental document.

Growth-Inducing Impacts

Section 15126.2 of the State CEQA Guidelines provides guidance for analyzing the growth-inducing impacts of a project. The growth inducement analysis should discuss ways in which a proposed project could foster economic or population growth or the construction of additional housing, either directly or indirectly, in the surrounding environment. Projects that would remove obstacles to population growth could lead to increased demand for existing community service facilities, so consideration must be given to this impact. Growth in an area is not necessarily considered beneficial, detrimental, or of little significance to the environment.

Cumulative Impact Assessment

The proposed project was identified in 1992 as one out of fourteen planned Road Network Improvements under the Capital Improvement Project (CIP) program in the Granite Bay Community Plan. The 1994 Placer County General Plan includes the proposed project under the Circulation Plan. The cumulative impacts of the proposed project have been evaluated using the plan approach; both the impacts of the proposed project and buildout of the general plan and community plan are evaluated.

This analysis determines that the proposed project would not result in any increase in the significance of impacts over what would occur with implementation of the general plan or community plan. The cumulative impacts associated with the proposed project are consistent with those projected in the Placer County General Plan and Granite Bay Community Plan, and have been analyzed in the general plan EIR.

CEQA also requires that the cumulative impact analysis consider whether impacts that are individually less than significant may make a cumulatively considerable contribution to a significant effect.

The cumulative impacts of the project related to traffic, air, and noise have been analyzed using a project-specific analysis that allows for quantification of the cumulative increases in traffic, air pollution, and noise levels. The cumulative analysis for traffic found that four intersections would operate at LOS D or worse. Although these intersections were found to operate deficiently, the delay was decreased when compared to the cumulative no-project condition. The cumulative analysis for air quality and noise found that the proposed project would not significantly contribute to cumulative projected changes in air quality or noise. As with traffic, cumulative noise impacts decreased with project

implementation when compared to the no-project condition. Therefore, cumulative impacts are considered less than significant

Conclusion

The proposed project would contribute to cumulative impacts on air quality, noise, and traffic. However, the cumulative increases related to traffic, air quality, and noise were determined to be less than significant. The cumulative impacts on other resources are consistent with the cumulative impacts identified for the implementation of the Placer County General Plan and the Granite Bay Community Plan.

Growth-Inducing Impact Assessment

Pursuant to Section 15126 (g) of State CEQA Guidelines, an EIR must address whether a project will directly or indirectly foster growth. Section 15126 (g) reads as follows:

> [An EIR shall] discuss the ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Included in this are projects which would remove obstacles to population growth (a major expansion of waste water treatment plant might, for example, allow for more construction in service areas). Increases in the population may further tax existing community service facilities so consideration must be given to this impact. Also discuss the characteristic of some projects which may encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively. It must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment.

The proposed project does not directly induce the construction of additional housing in the surrounding environment. The project does not include any housing construction.

Approval of the proposed project would improve safety along Placer County's Auburn-Folsom Road corridor, improve traffic conditions for the Granite Bay community, and accommodate expected increases in local and regional traffic volumes on Auburn-Folsom Road.

The improvement of roadway facilities does not in itself facilitate growth or necessarily induce other activities that may significantly affect the environment. In contrast, extending a new sewer or water line or constructing a new road often is considered growth facilitating or indirectly growth inducing because the absence of a water or sewer line or road access is a clear physical obstacle to growth. Placer County is required to provide adequate county-designated roadway facilities within the county's jurisdiction, whether or not the proposed project is constructed.

However, the project improves roadway facilities, which will serve residents and businesses in the community. Improved facilities may affect the decisions of relocating homebuyers and businesses. This effect may result in increased relocations to the area and increased growth for the area. However, the quality of roadway facilities is only one factor in such considerations. Other factors affect the magnitude, timing, and type of economic and population growth. These factors include local government planning, economic climate, quality of life, and availability of public services and natural resources.

Approval of the proposed project would improve safety along Placer County's Auburn-Folsom Road corridor, improve traffic conditions for the Granite Bay community, and accommodate expected increases in local and regional traffic volumes on Auburn-Folsom Road. Adequate roadway facilities are a component of continued economic and regional growth. However, the effect on growth of changes in roadway facilities is anticipated to be minor. No direct or indirect growth-inducing impacts or growth-facilitating impacts are anticipated to be caused by the proposed project.

Conclusion

The proposed project does not eliminate obstacles to growth because Placer County is required to provide adequate county roadway facilities for all residents and businesses, and to accommodate expected increases in local and regional traffic volumes within the county's jurisdiction. The proposed project fulfills part of this objective. Although the improvement of roadway facilities in the area would increase the overall appeal of the area to residential and commercial development, the effect would be minor and would constitute only a small part of the relocation decision. Therefore, the proposed project is not anticipated to result in direct or indirect growth-inducing impacts or growth-facilitating impacts.

Chapter 13

Consultation, Coordination, and Integration with Other Federal Requirements

Placer County, in cooperation with Reclamation, has coordinated the environmental review of the proposed project with appropriate federal, state, and local agencies, concerned organizations, and interested citizens, as described below.

Notice of Preparation of an EA/EIR

In April 2002, in compliance with CEQA, Placer County published an NOP of an EA/EIR. The NOP included a detailed project description and an initial study. The NOP was distributed to federal, state, and local agencies and interested members of the public for a 30-day review. Written comments were received on the NOP and are on file at the Placer County Planning Department.

Responsible Agencies

CEQA defines a responsible agency as "a public agency which proposes to carry out or approve a project for which a lead agency is preparing or has prepared an EIR." Placer County is the state lead agency for the proposed project, and the following agencies have been identified as responsible agencies:

- California Department of Parks and Recreation—issues related to Folsom Lake SRA
- DFG—streambed alteration agreement under Section 1601 of the California Fish and Game Code
- Central Valley RWQCB—water quality certification under Section 401 of the Clean Water Act
- PCFCWCD—modification or changes related to Linda Creek and culverts along the project alignment

Permits and Required Coordination

In addition to the permits identified above, the following permit is required:

- Corps permit under Section 404 of the Clean Water Act—the Corps has jurisdiction over waters of the United States, including wetlands. Placer County has prepared a preliminary wetland delineation report and will submit it to the Corps for verification.

Coordination also has been conducted with the following agencies:

- USFWS—USFWS has jurisdiction for conserving wildlife, fisheries, and plants through the Fish and Wildlife Coordination Act, the MBTA, and ESA. Placer County coordinated the analysis in the EA/Draft EIR with USFWS. The Reclamation will submit a biological assessment to USFWS that addresses potential impacts on VELB. The Reclamation will request initiation of a formal consultation under Section 7 of ESA regarding the proposed project.
- State Office of Historic Preservation—Section 106 of NHPA requires federal agencies to take into account the effects of their undertakings on historic properties that are listed or eligible for listing in the NRHP. Placer County has completed a cultural resources analysis of the proposed project, and no historic properties were identified within the area of potential effects. The Reclamation will submit cultural documentation to the State Office of Historic Preservation and request concurrence that responsibilities defined under Section 106 of the NHPA have been met.
- PCAPCD—PCAPCD has jurisdiction over air quality issues in Placer County. Analysis of the potential air quality impacts of the proposed project has been coordinated with the district.
- PCFCWCD—PCFCWCD has jurisdiction over drainage and flood control issues in Placer County. Analysis of the hydraulic impacts of the proposed project has been coordinated with the district.

Public Outreach Program

Placer County has an extensive public outreach effort for the project that includes public workshops/public meetings, meetings with citizen groups, newsletters, press releases, and several websites on the Internet.

Public Workshops/Public Meetings

Public workshops/public meetings have been held on the following dates:

- November 6, 2001—Project introduction and introduction to the three basic alternatives
- February 26, 2002—Presentation of the three revised alternatives and environmental review, and a scoping meeting on the NOP of an EA/EIR

Meetings with Citizen Groups

As described below, Placer County DPW staff has met with several citizen groups to discuss the project.

Granite Bay Municipal Advisory Council

- May 2, 2001—Project introduction, including distribution of the April 23, 2001, newsletter
- October 2, 2001—Announcement of the upcoming public workshop (November 6, 2001)
- November 7, 2001—Discussion of the results of the November 6, 2001, public workshop and question-and-answer session
- January 14, 2002—Discussion of the project with Alan Telford, Chairman of the Granite Bay Municipal Advisory Council (MAC) Transportation Committee
- February 26, 2002—Announcement of the upcoming public workshop (February 26, 2002) and progress report

Other Citizen Groups

- November 13, 2001—Folsom Lake Estates Homeowners Association; presentation of the information that was presented at the November 6, 2001, public workshop
- November 14, 2001—Discussion of the project at Supervisor Gaines' "Coffee" community meeting
- February 19, 2002—Meeting with the newly formed "Friends of the Auburn-Folsom Road" citizens group

Newsletters

More than 500 copies of each project newsletter were mailed or emailed. The distribution list for newsletters is made up of primarily Granite Bay residents who live near the project corridor. The list also includes several community associations, personnel from various public agencies, the Granite Bay MAC, the

Placer County Board of Supervisors, and local business people who have an interest in the project. Three newsletters have been mailed out to date:

- April 23, 2001—Project introduction
- October 12, 2001—Public workshop announcement for the November 6, 2001, public workshop
- January 30, 2002—Public workshop announcement for the February 26, 2002, public workshop

Press Releases

- May 22, 2001—Project introduction
- October 29, 2001—Public workshop announcement for the November 6, 2001, public workshop
- February 14, 2002—Public workshop announcement for the February 26, 2002, public workshop

Internet

Several web pages have been created for the Auburn-Folsom Road Four-Lane Widening Project as part of the Placer County website. A project description, background information, a project location map, schedule, and a news page are included on the website. All of the project-related newsletters and press releases have been posted, in addition to information about the City of Folsom's Folsom-Auburn Road widening project. The NOP of an EA/EIR, initial study, and environmental impact assessment questionnaire have also been posted on the website. The Granite Bay MAC maintains an extensive web page that includes a link to the Placer County Auburn-Folsom Road Widening Project web pages. The Granite Bay MAC has also posted synopses of all of the project newsletters and the project discussions held at the Granite Bay MAC meetings.

Chapter 14
List of Preparers

Placer County

- **Charlie Ebeling, P.E.** Project Manager. Associate Engineer, Placer County Department of Public Works. B.S., 1996, Civil Engineering, California State University, Chico. California licensed Traffic Engineer TR 2149. Six years of experience in civil and traffic engineering specializing in design and project management of highway and bridge transportation projects.
- **Edward G. McCarthy, P.E.** Senior Civil Engineer, Transportation Division, Placer County Department of Public Works. B.S., 1977, Transportation Engineering, California Polytechnic State University, San Luis Obispo. California licensed Civil Engineer C 31046. Twenty-five years of experience in civil engineer and public works program management.

Jones & Stokes

- **Kim Erickson.** Project Manager. B.S., 1980, environmental planning and management, University of California, Davis. Twenty years of experience preparing environmental documents.
- **Lynn Finley.** Project Coordinator. B.S., 1995, Environmental Engineering, Montana Tech, University of Montana, Butte. Seven years of experience in analysis and management of environmental studies, with a focus on air quality, hazardous materials, energy, and industrial projects; environmental regulatory analysis and compliance audits and assistance; and point-, area-, and mobile source–air quality impact studies.
- **Angela Alcala.** Wildlife Biologist. B.S., 1999, wildlife, fisheries, and conservation biology, University of California, Davis. Three years of experience conducting surveys for wildlife species and habitats, assessing impacts on special-status wildlife species, and monitoring projects for regulatory compliance.
- **Barry Scott.** Senior Archaeologist. M.S., 1988, anthropology, California State University, Sacramento. B.A., 1983, anthropology, California State University, Sacramento. Twenty years of experience managing cultural resource investigations for large, linear projects involving coordination with multiple federal and state agencies and Native American groups to facilitate

compliance with Section 106 of NHPA, NEPA, CEQA, and other state, federal, and local requirements.

- **Chris Elliott.** Landscape Architect. B.S., 1994, landscape architecture, University of California, Davis. Eight years of experience in visual resources analysis, arborist services, habitat design, and corridor management planning.
- **Christian Fish.** Cultural Resource Specialist. B.A., 1995, art (art history emphasis), California State University, Northridge. Seven years of experience in archaeological site testing, data recovery, survey, inventory and evaluation, and document preparation.
- **Dave Buehler.** Senior Environmental Scientist and Specialist in Environmental Acoustics and Vibration. B.S., 1980, civil engineering, California State University, Sacramento. Conducts special studies and prepares assessments for CEQA documentation to evaluate the effects of environmental noise and vibration. Extensive experience applying methodology and criteria recommended by FHWA to evaluate traffic noise impacts and mitigation.
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- **Simon Page.** Environmental Specialist. B.S., 1987, soil and water science, University of California, Davis. Fifteen years of experience in CEQA/NEPA compliance and impact analysis, water resources studies, hydrologic and hydraulic modeling, restoration planning and impact analysis, environmental documentation, and project coordination.

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- **Heather Ogston.** Editor. B.A., 1998, archaeology and philosophy, Kenyon College, Gambier, Ohio. Three years of experience reviewing and editing environmental documents.
- **Jody Job.** Publication Specialist. Twenty years of experience preparing documents for publication.

Chapter 15
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Auburn-Folsom Road Widening Project

From the Placer County Line North to Douglas Boulevard

Environmental Assessment/ Draft Environmental Impact Report

Volume 2 of 2—Technical Appendices

Federal Lead Agency:
U.S. Bureau of Reclamation

State Lead Agency:
Placer County

State Clearinghouse Number 2002042036

March 2003

Auburn-Folsom Road Widening Project

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530/886-3521

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916/737-3000

March 2003

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Technical Appendices

Appendix A. Preliminary Design Drawings

Appendix B. Written Comments on the Notice of Preparation

Appendix C. Placer County Best Available Air Quality Mitigation Measures

Appendix D. Air Quality Modeling Data

Appendix E. Background Information on Acoustics

Appendix F. Noise Modeling Data (Data is Bound Separately Due to Technical Content)

Appendix G. U.S. Fish and Wildlife Service Sensitive Species List

Appendix H. Scientific and Common Names of Species Mentioned in the Text

Appendix I. Wetland Delineation

Appendix J. Biological Assessment

Appendix K. Linda Creek Hydraulic Study (Data is Bound Separately Due to Technical Content)

Appendix L. Arborist Report and Tree Removal Analysis

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Appendix O. California Natural Diversity Database Search Results

Appendix P. Traffic Data (Data is Bound Separately Due to Technical Content)

Appendix A

Preliminary Design Drawings

This appendix contains the following preliminary engineering design drawings for the proposed project:

- Study Area
- Alternative 1: Widen Roadway to the West
- Alternative 2: Widen Roadway to the East
- Alternative 3: Widen Roadway Equally on Both Sides
- Alternative 4: County DPW–Preferred Alternative

Study Area

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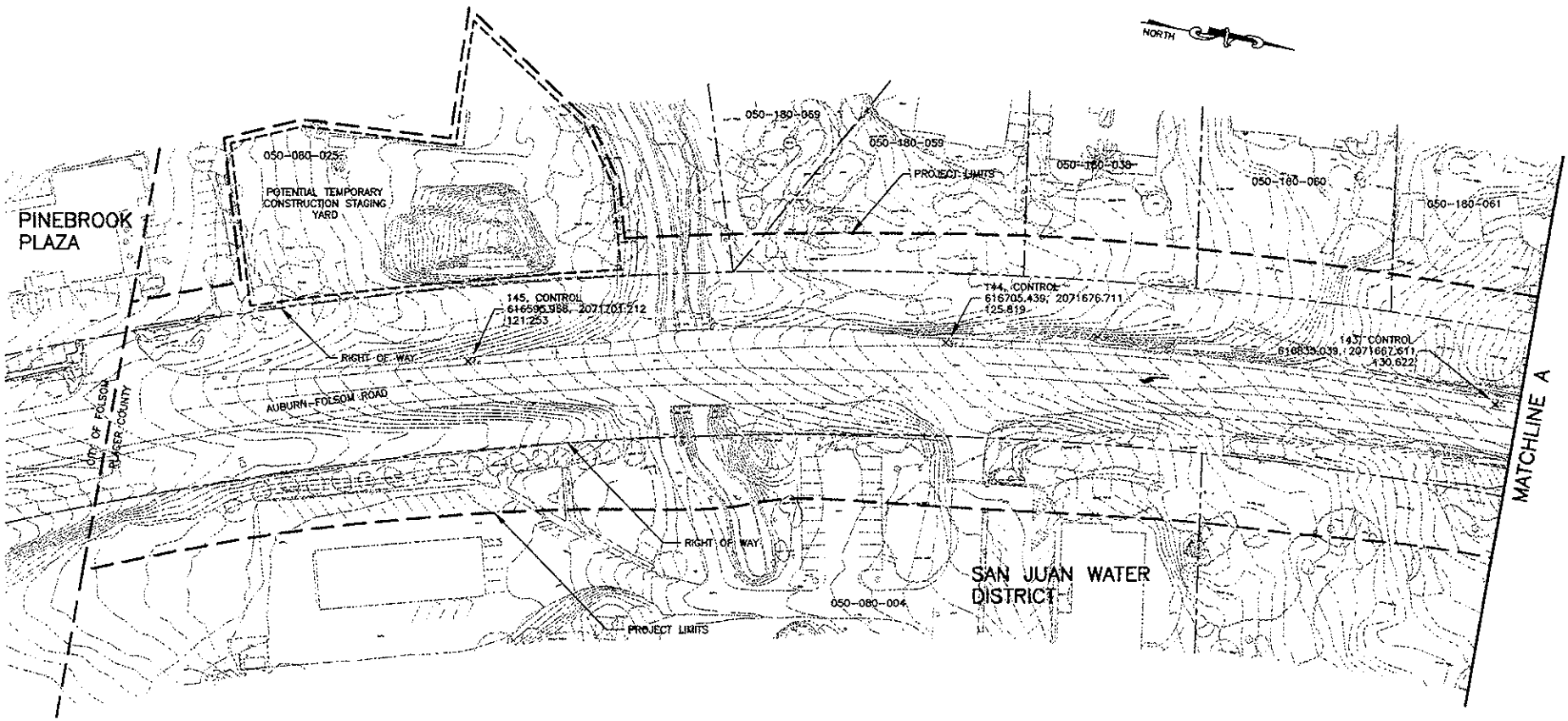

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DESIGNED: S. ESELING 052102
DRAWN: S. ESELING 052102
CHECKED: E. MCCARTHY 052102
DATE:

PLACER COUNTY PROJECT NUMBER: PC 2784

AUBURN-FOLSOM ROAD
4-LANE WIDENING PROJECT
PROJECT STUDY LIMITS

COUNTY OF PLACER
DEPARTMENT OF PUBLIC WORKS
TRANSPORTATION DIVISION

SHEET NO. 1 OF 11

PRELIMINARY DESIGN PLANS
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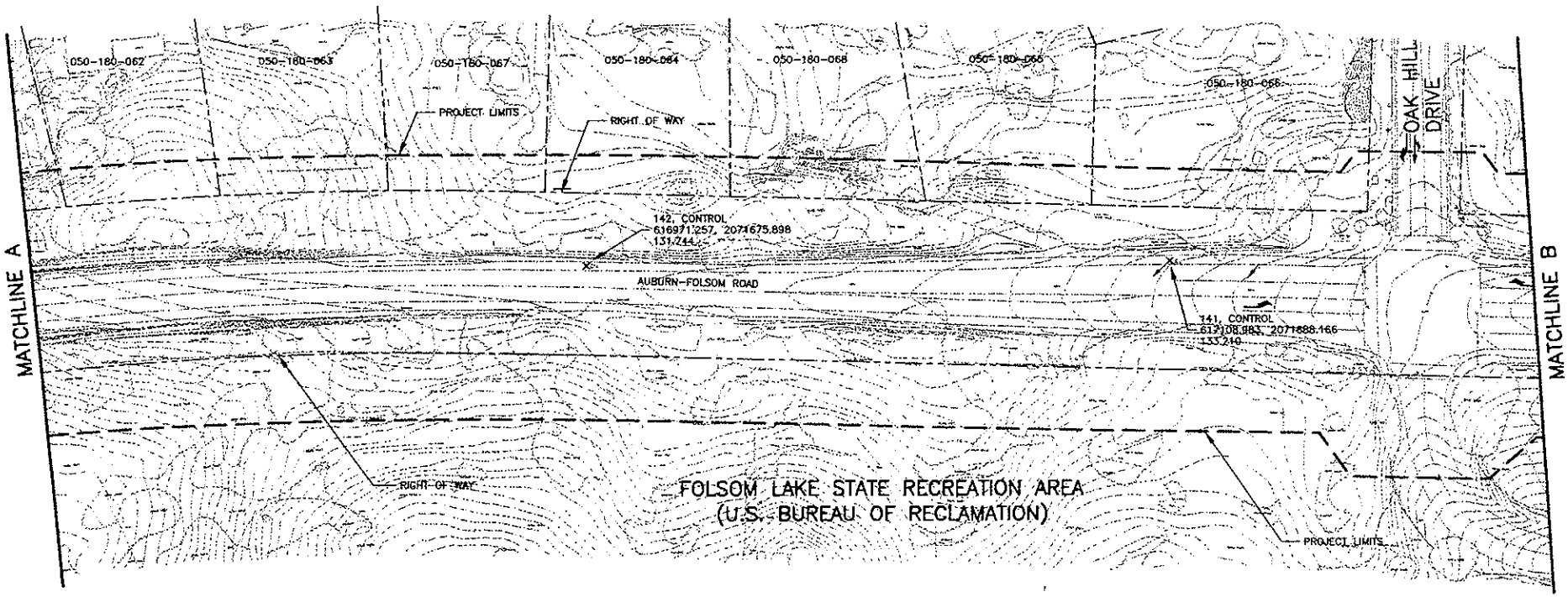

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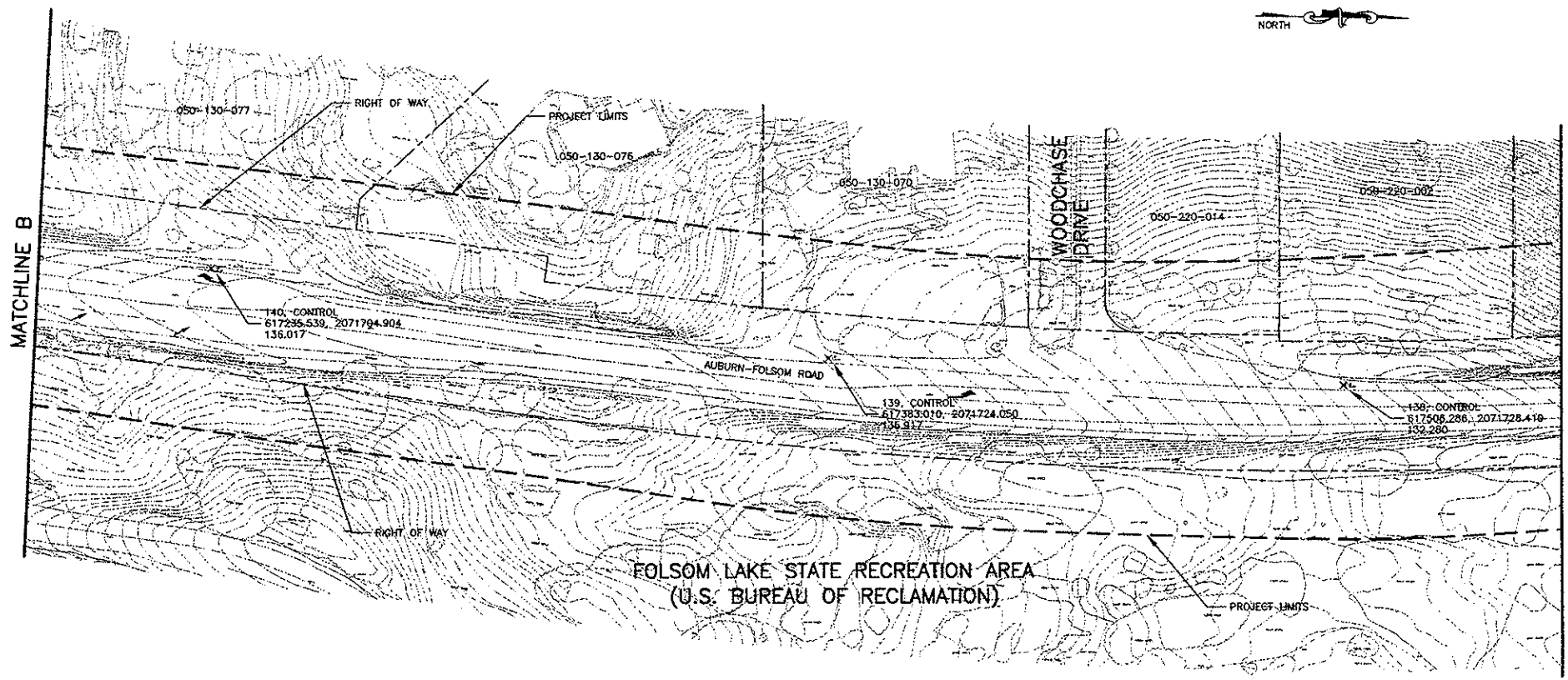

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PLACER COUNTY PROJECT NUMBER: PC 2764

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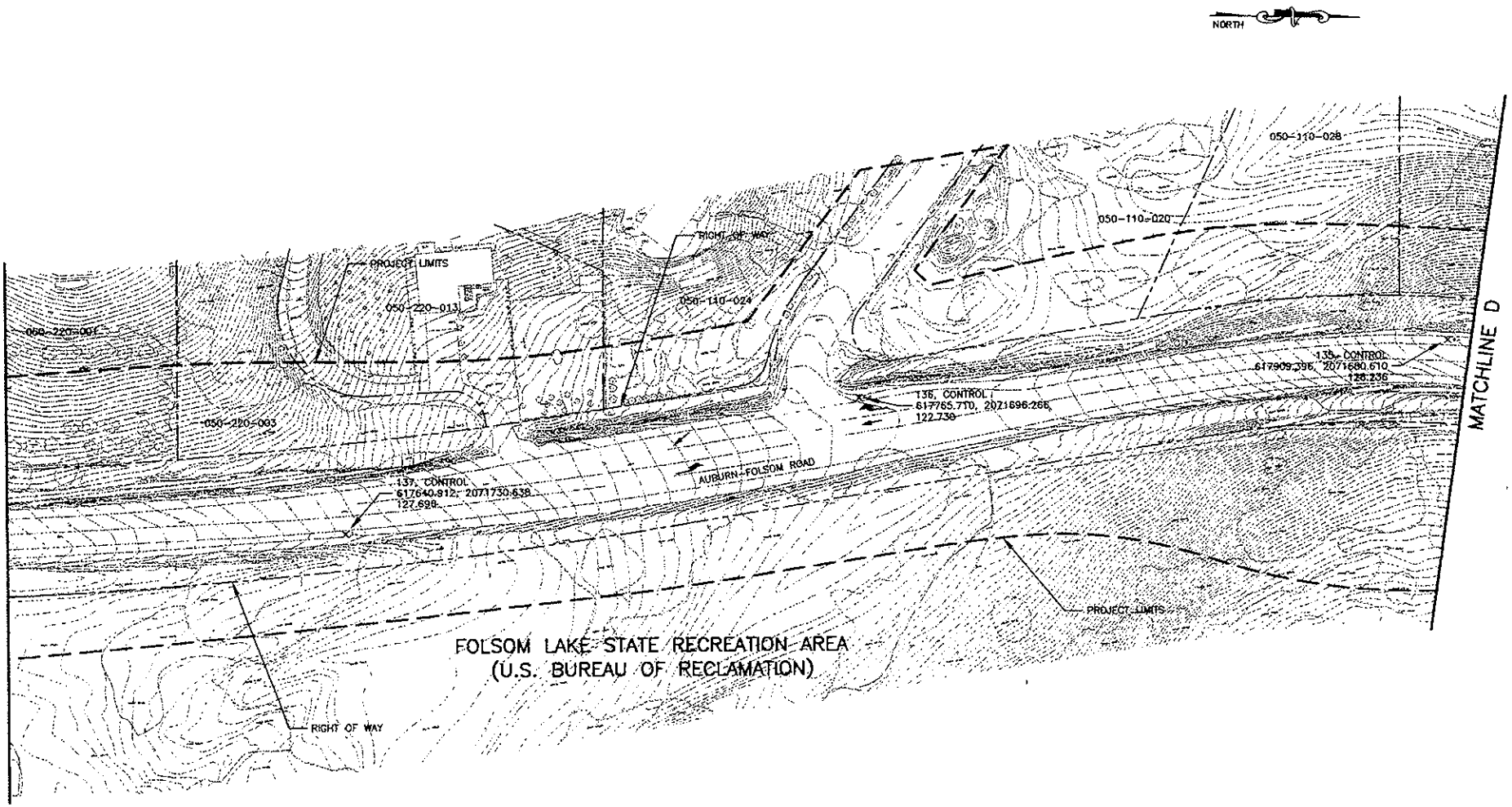

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AUBURN-FOLSOM ROAD
4-LANE WIDENING PROJECT
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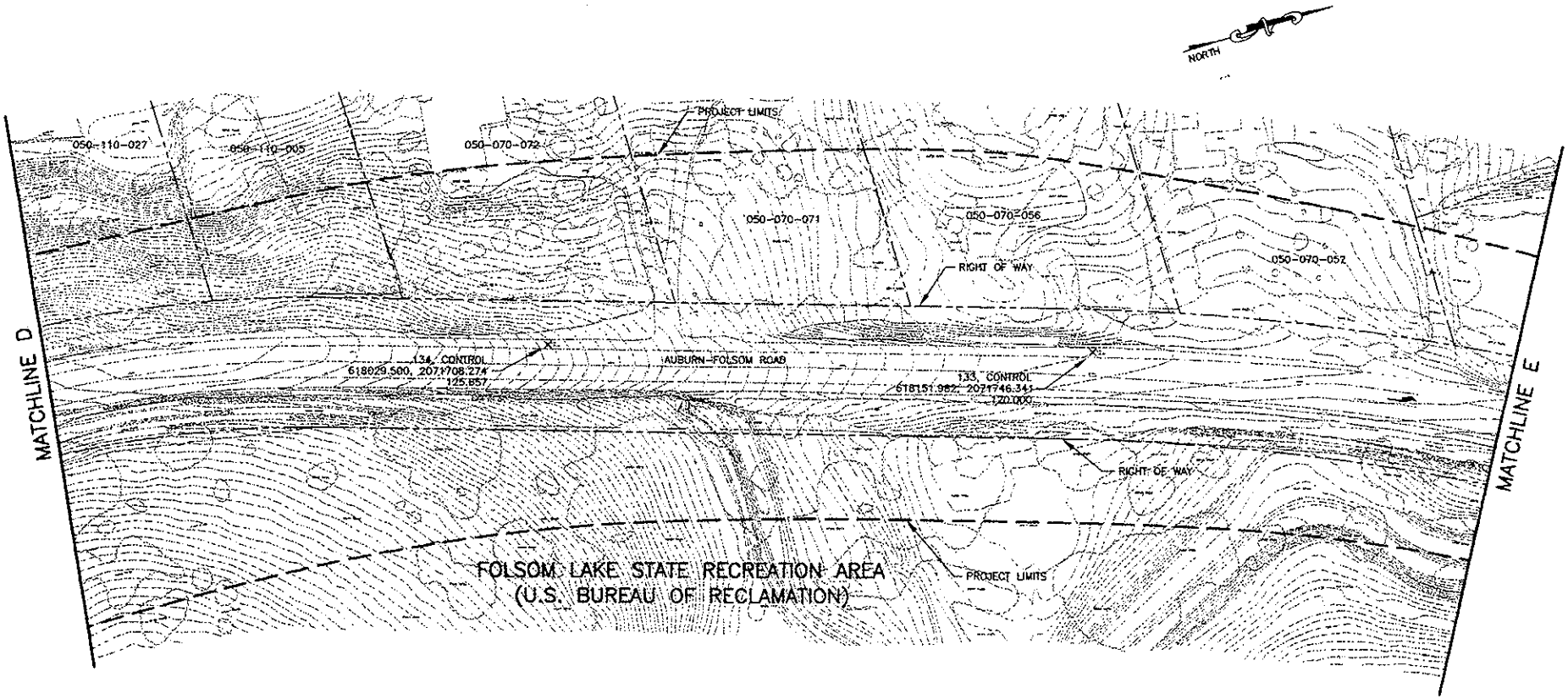

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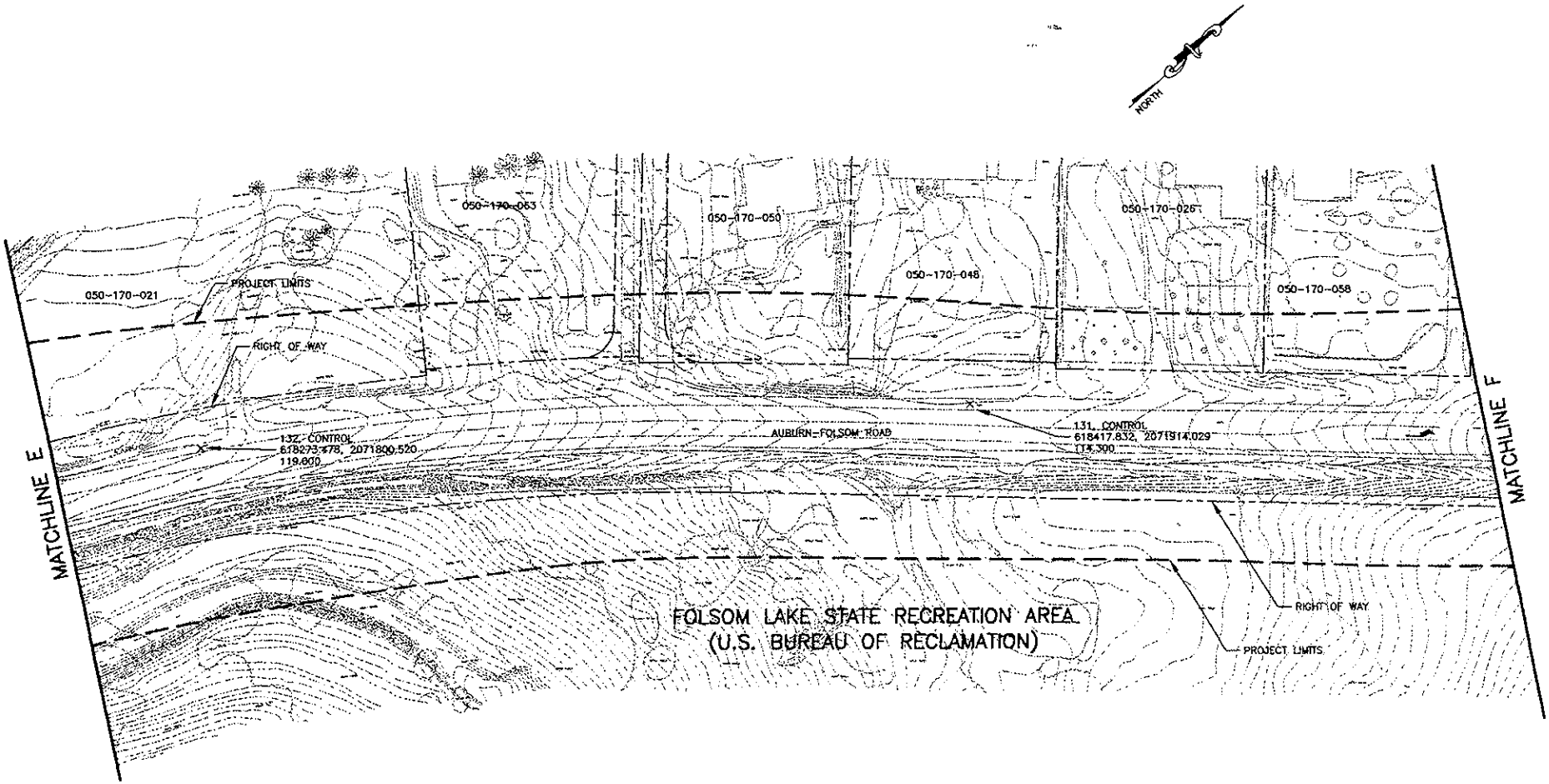

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CHECKED:	E. MCCARTHY	05/21/92

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AUBURN-FOLSOM ROAD
4-LANE WIDENING PROJECT
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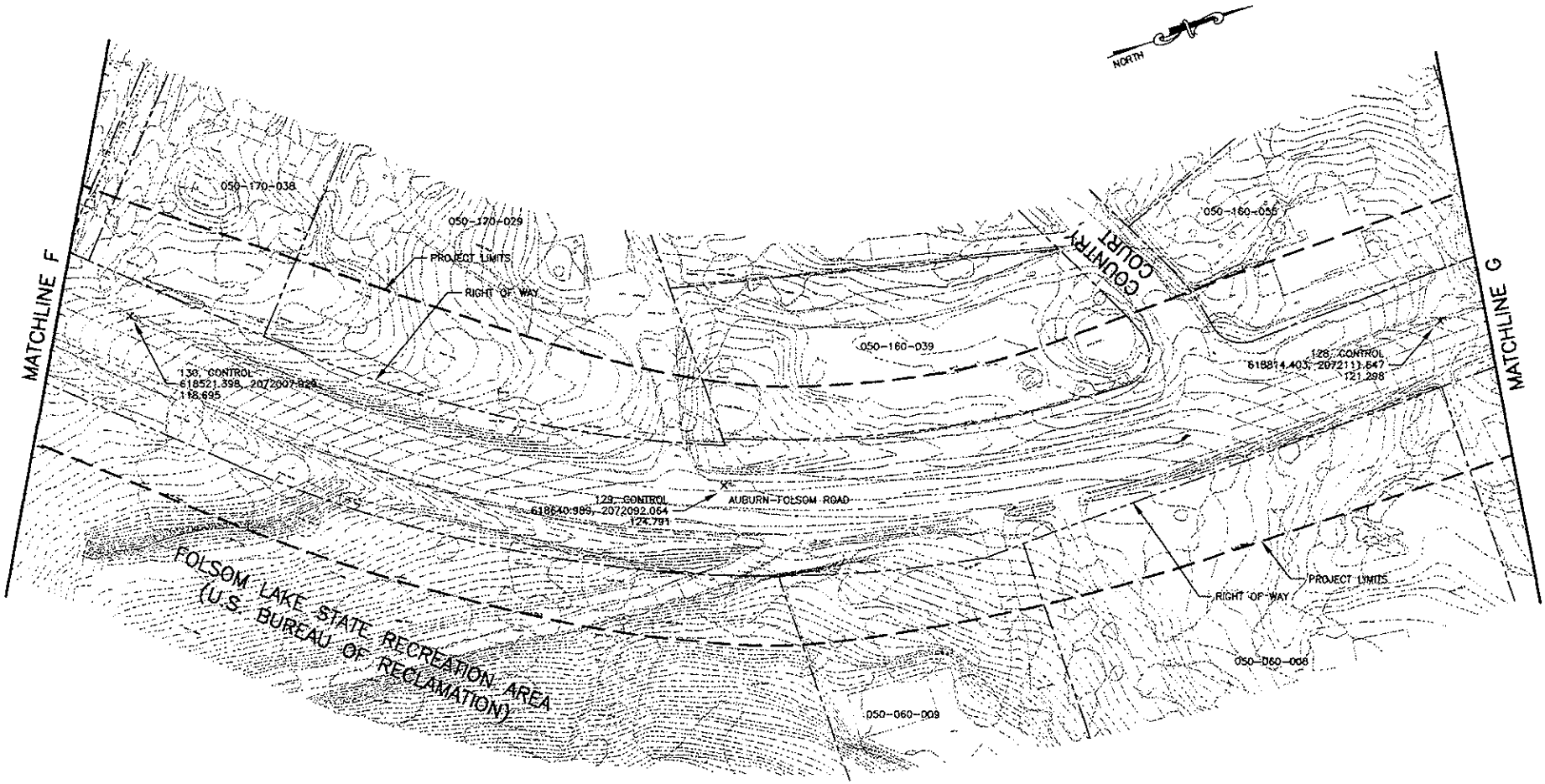

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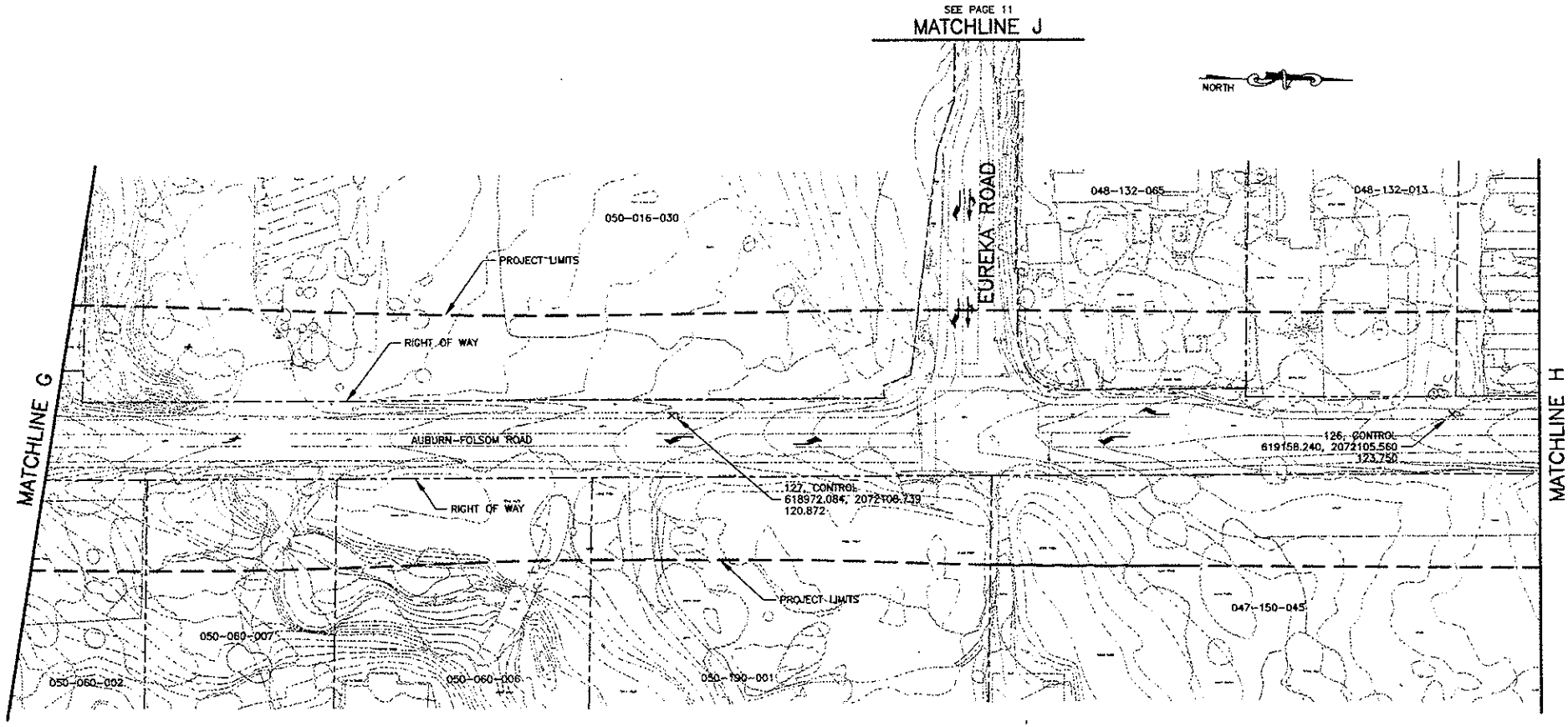
PRELIMINARY DESIGN PLANS
NOT FOR CONSTRUCTION



NOTES:
1) THE CONTROL POINTS SHOWN INDICATE:
POINT NUMBER, DESCRIPTION
NORTHING, EASTING
ELEVATION
2) RIGHT-OF-WAY AND PROPERTY LINES ARE SHOWN IN APPROXIMATE LOCATIONS FOR REFERENCE PURPOSES ONLY

FOR REDUCED PLANS ORIGINAL SCALE IS IN CENTIMETERS 0 1 2 3 4 5

SCALE
HORIZONTAL: 1:500
VERTICAL: N.A.

DESIGNED: C. EBELING 09/21/02
DRAWN: C. EBELING 09/21/02
CHECKED: E. MCCARTHY 09/21/02

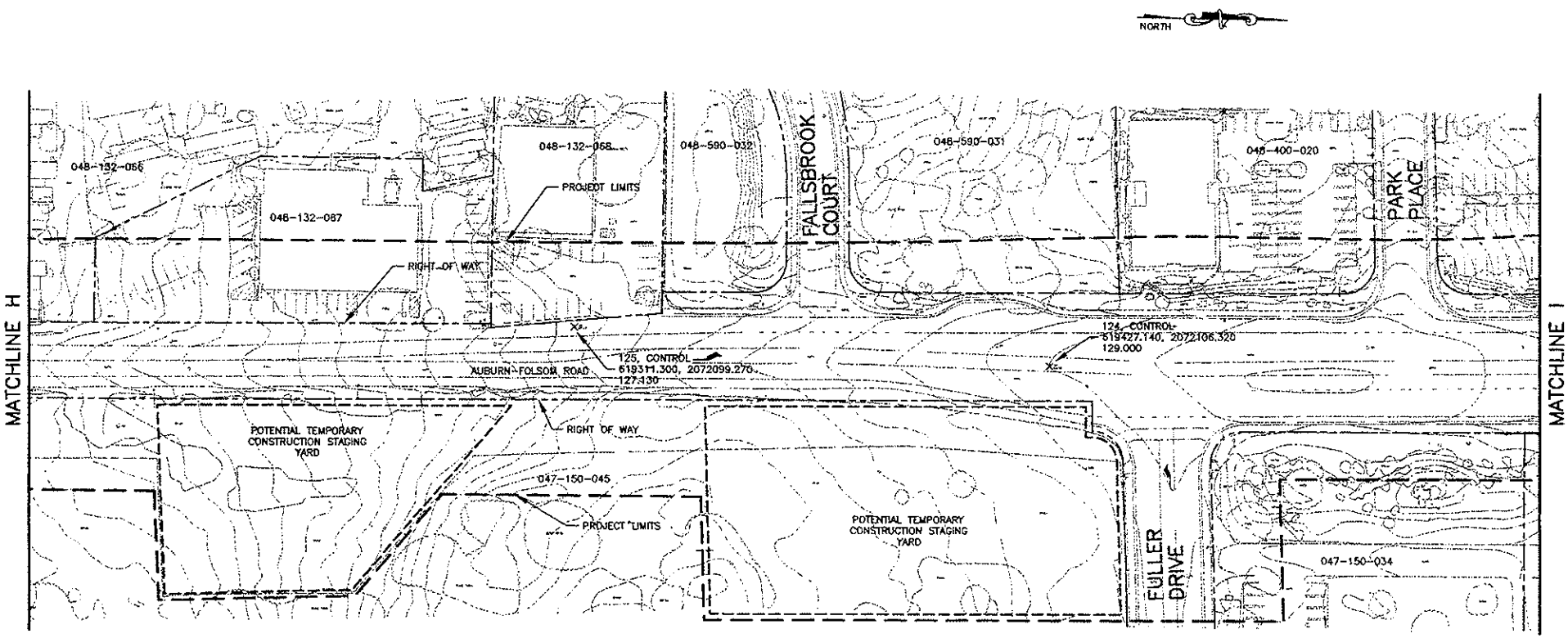
PLACER COUNTY PROJECT NUMBER: PC 2264

AUBURN-FOLSOM ROAD
4-LANE WIDENING PROJECT
PROJECT STUDY LIMITS

COUNTY OF PLACER
DEPARTMENT OF PUBLIC WORKS
TRANSPORTATION DIVISION

SHEET NO. 8 OF 11

PRELIMINARY DESIGN PLANS
NOT FOR CONSTRUCTION



NOTES:
1) THE CONTROL POINTS SHOWN INDICATE:
POINT NUMBER, DESCRIPTION
NORTHING, EASTING
ELEVATION
2) RIGHT-OF-WAY AND PROPERTY LINES ARE SHOWN IN APPROXIMATE LOCATIONS FOR REFERENCE PURPOSES ONLY

FOR REDUCED PLANS
ORIGINAL SCALE IS IN CENTIMETERS 0 1 2 3 4 5

SCALE
HORIZONTAL: 1:500
VERTICAL: N.A.

PLACER COUNTY
PROJECT NUMBER:
PC 2764

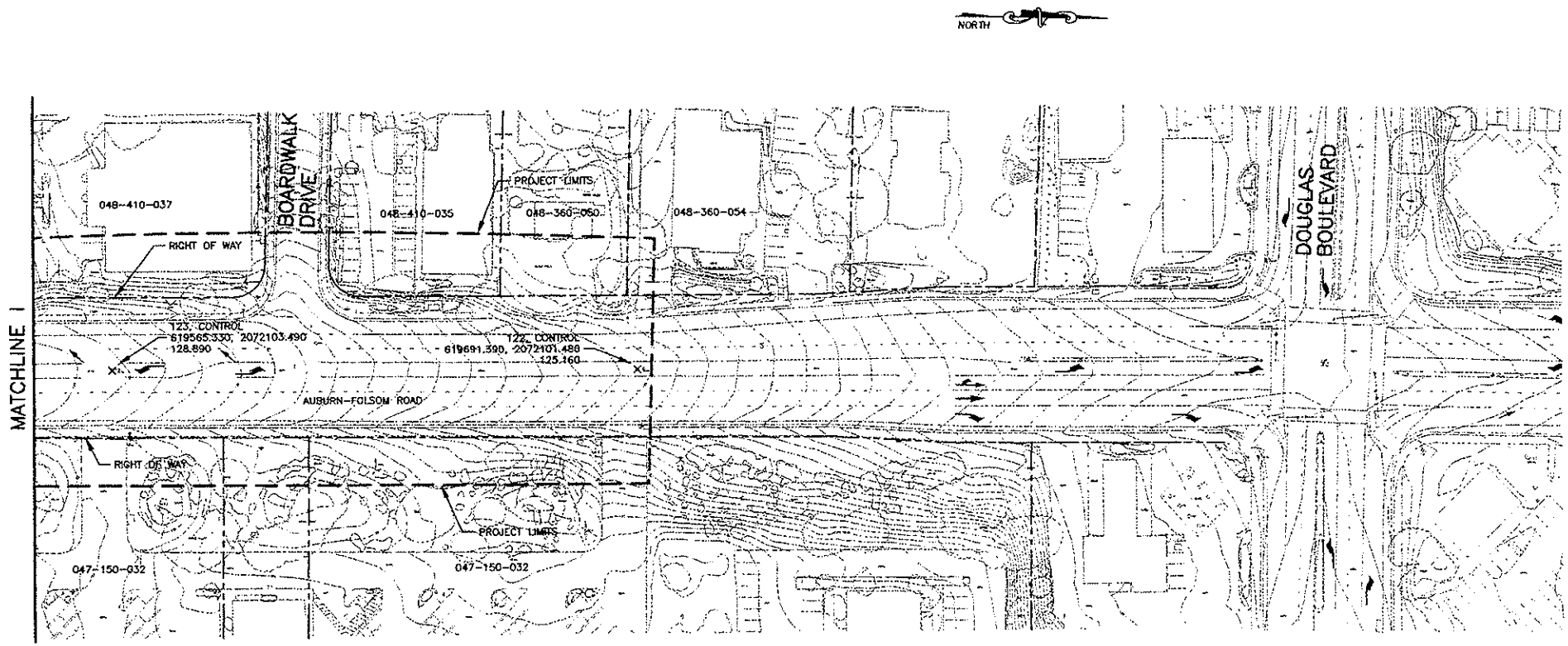
DESIGNED: C. EBELING 052102
DRAWN: C. EBELING 052102
CHECKED: E. MCCARTHY 052102
DATE:

AUBURN-FOLSOM ROAD
4-LANE WIDENING PROJECT
PROJECT STUDY LIMITS

COUNTY OF PLACER
DEPARTMENT OF PUBLIC WORKS
TRANSPORTATION DIVISION

SHEET NO.
9
OF
11

PRELIMINARY DESIGN PLANS
NOT FOR CONSTRUCTION



NOTES:
1) THE CONTROL POINTS SHOWN INDICATE:
POINT NUMBER, DESCRIPTION
NORTHING, EASTING
ELEVATION
2) RIGHT-OF-WAY AND PROPERTY LINES ARE SHOWN IN APPROXIMATE LOCATIONS FOR REFERENCE PURPOSES ONLY

FOR REDUCED PLANS
ORIGINAL SCALE IS IN CENTIMETERS 0 1 2 3 4 5

SCALE
HORIZONTAL: 1:500
VERTICAL: N.A.

PLACER COUNTY
PROJECT NUMBER:
PC 2764

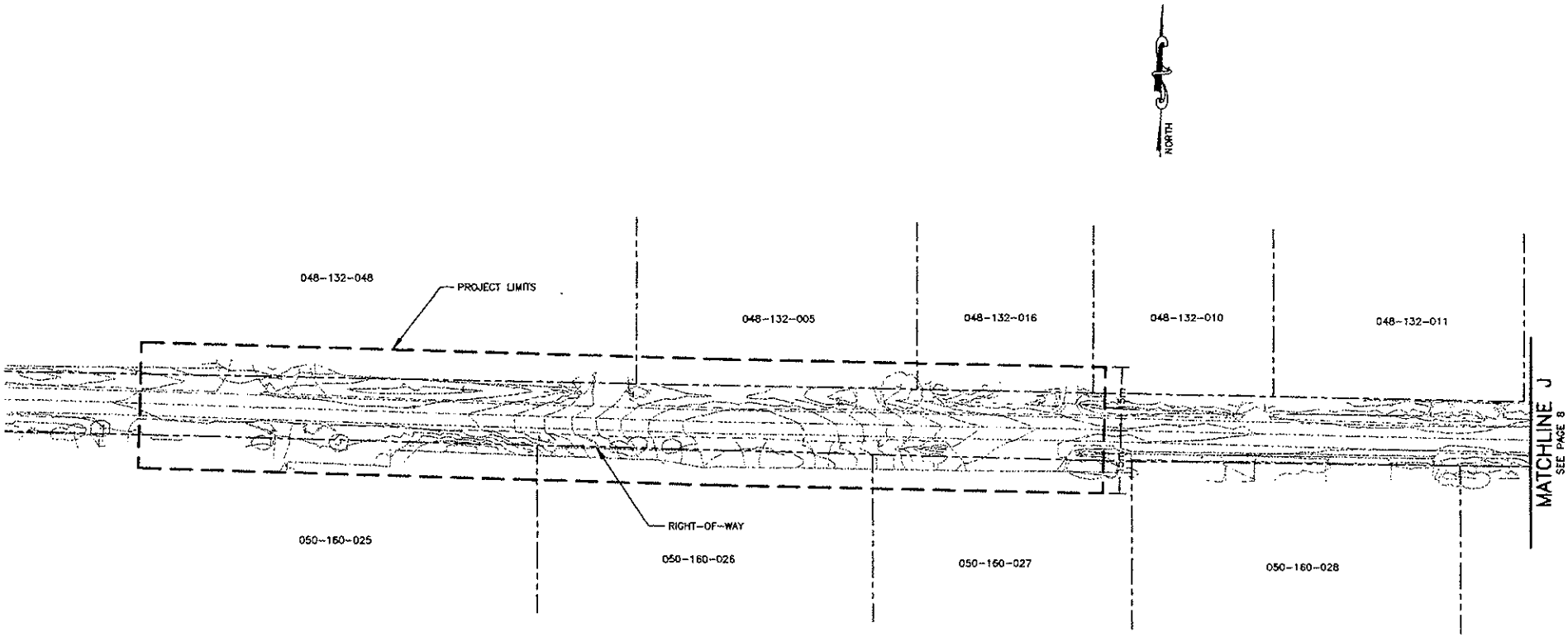
DESIGNED: C. EBELING DATE: 052102
DRAWN: C. EBELING 052102
CHECKED: E. MCCARTHY 052102

AUBURN-FOLSOM ROAD
4-LANE WIDENING PROJECT
PROJECT STUDY LIMITS

COUNTY OF PLACER
DEPARTMENT OF PUBLIC WORKS
TRANSPORTATION DIVISION

SHEET NO.
10
OF
11

PRELIMINARY DESIGN PLANS
NOT FOR CONSTRUCTION



NOTES:
1) THE CONTROL POINTS SHOWN INDICATE:
POINT NUMBER, DESCRIPTION
NORTHING, EASTING
ELEVATION
2) RIGHT-OF-WAY AND PROPERTY LINES ARE SHOWN IN APPROXIMATE LOCATIONS FOR REFERENCE PURPOSES ONLY

FOR REDUCED PLANS
ORIGINAL SCALE IS IN CENTIMETERS 0 1 2 3 4 5

SCALE
HORIZONTAL: 1:500
VERTICAL: N.A.

PLACER COUNTY
PROJECT NUMBER:
PC 2764

DESIGNED: C. EBELING 052102
DRAWN: C. EBELING 052102
CHECKED: E. MCCARTHY 052102
DATE:

AUBURN-FOLSOM ROAD
4-LANE WIDENING PROJECT
PROJECT STUDY LIMITS

COUNTY OF PLACER
DEPARTMENT OF PUBLIC WORKS
TRANSPORTATION DIVISION

SHEET NO.
11
OF
11

PRELIMINARY DESIGN PLANS
NOT FOR CONSTRUCTION

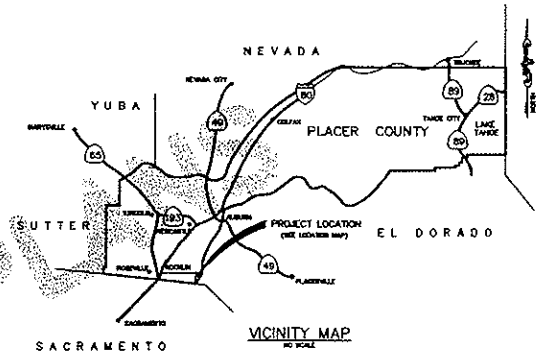
COUNTY OF PLACER

DEPARTMENT OF PUBLIC WORKS

PRELIMINARY DESIGN PLANS FOR:

AUBURN–FOLSOM ROAD 4–LANE WIDENING PROJECT

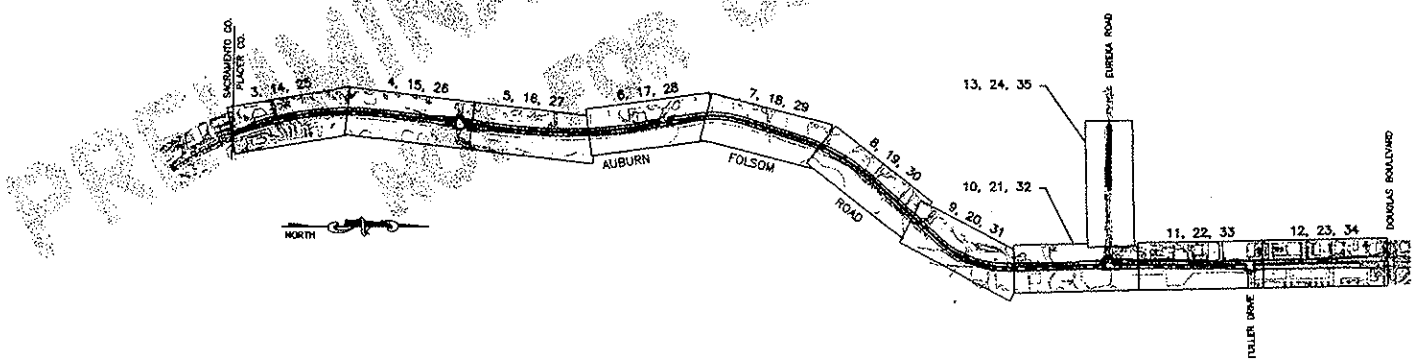
FROM THE PLACER COUNTY LINE NORTH TO DOUGLAS BOULEVARD GRANITE BAY, CA



VICINITY MAP
NO SCALE

SHEET INDEX:

1. TITLE SHEET
2. TYPICAL SECTIONS
3–13. PLAN & PROFILE ALTERNATIVE 1 – WIDENING TO THE WEST
14–24. PLAN & PROFILE ALTERNATIVE 2 – WIDENING TO THE EAST
25–35. PLAN & PROFILE ALTERNATIVE 3 – WIDENING EQUALLY ON BOTH SIDES



NOTE:

1) THE RIGHT–OF–WAY LINES SHOWN ARE FOR REFERENCE PURPOSES ONLY. RIGHT–OF–WAY HAS NOT BEEN SURVEYED.

2) THE PRELIMINARY DESIGN PLANS FOR THE EUREKA ROAD PORTION OF THE PROJECT ARE THE SAME FOR EACH PROJECT ALTERNATIVE.

FOR REDUCED PLANS ORIGINAL SCALE IS IN CENTIMETERS 0 1 2 3 4 5

PRELIMINARY DESIGN PLANS NOT FOR CONSTRUCTION

SCALE
HORIZONTAL: N.A.
VERTICAL: N.A.

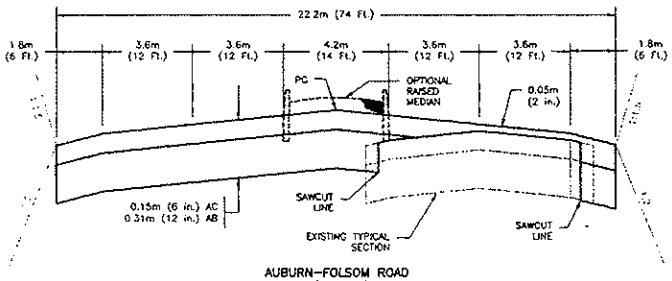
DESIGNED: C. FERLING 7/31/02
DRAWN: C. FERLING 7/31/02
CHECKED: E. McCARTHY 7/31/02

PLACER COUNTY PROJECT NUMBER: 2784

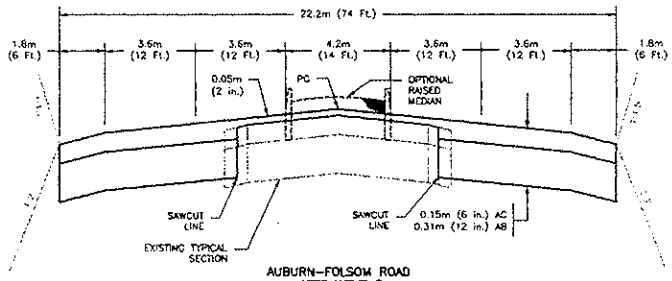
COUNTY OF PLACER
DEPARTMENT OF PUBLIC WORKS
TRANSPORTATION DIVISION

AUBURN–FOLSOM ROAD 4–LANE
WIDENING PROJECT
TITLE SHEET

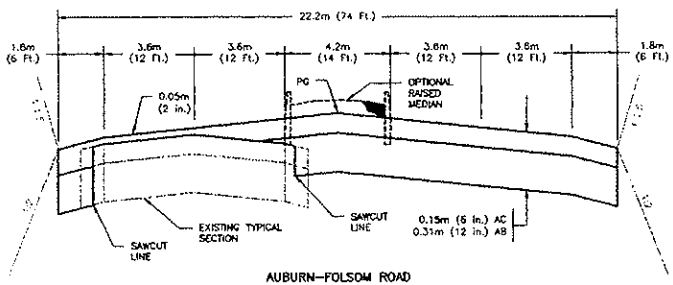
PRELIMINARY DESIGN PLANS
NOT FOR CONSTRUCTION



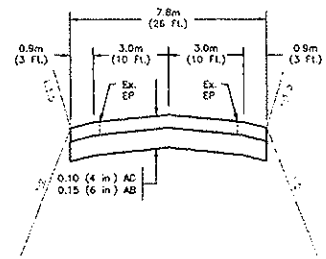
AUBURN–FOLSOM ROAD
ALTERNATIVE 1
WIDENING TO THE WEST



AUBURN–FOLSOM ROAD
ALTERNATIVE 3
WIDENING ON BOTH SIDES



AUBURN–FOLSOM ROAD
ALTERNATIVE 2
WIDENING TO THE EAST



EUREKA ROAD
(RECONSTRUCT SECTION)

FOR REDUCED PLANS
ORIGINAL SCALE IS IN CENTIMETERS 0 1 2 3 4 5

SCALE
HORIZONTAL: 1:100
VERTICAL: 1:20

PLACER COUNTY PROJECT NUMBER: 2264

DESIGNED: S. FIELING 7/31/03
DRAWN: S. FIELING 7/31/03
CHECKED: E. McCARTHY 7/31/03

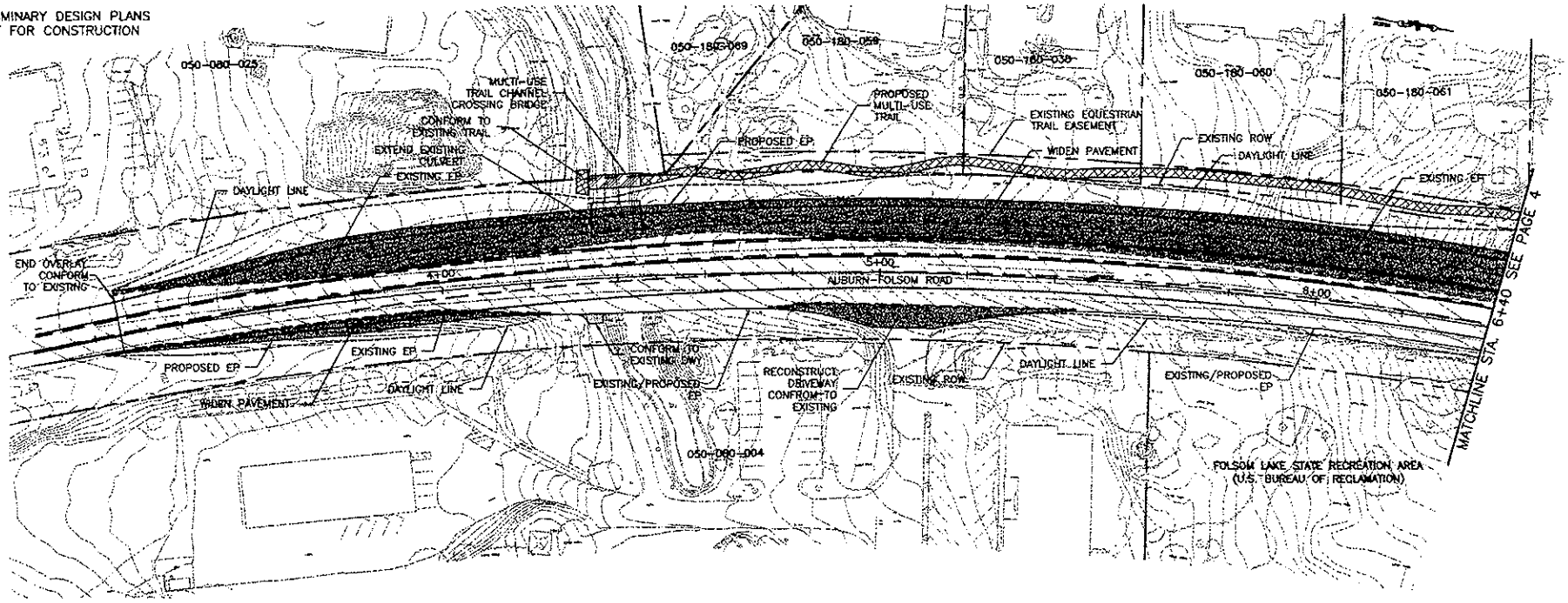
AUBURN–FOLSOM ROAD 4–LANE WIDENING PROJECT
TYPICAL SECTIONS

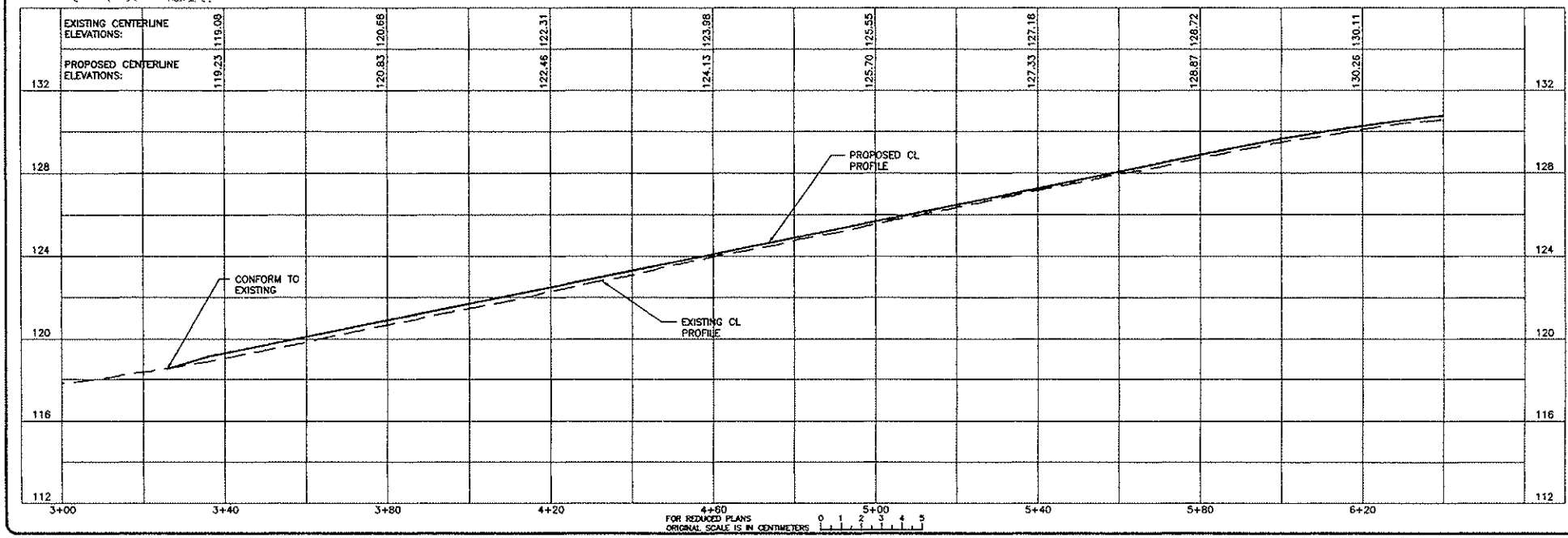
COUNTY OF PLACER
DEPARTMENT OF PUBLIC WORKS
TRANSPORTATION DIVISION

SHEET NO. 2 OF 35

Alternative 1:
Widening to the West

PRELIMINARY DESIGN PLANS
NOT FOR CONSTRUCTION





SCALE
HORIZONTAL: 1:500
VERTICAL: 1:100

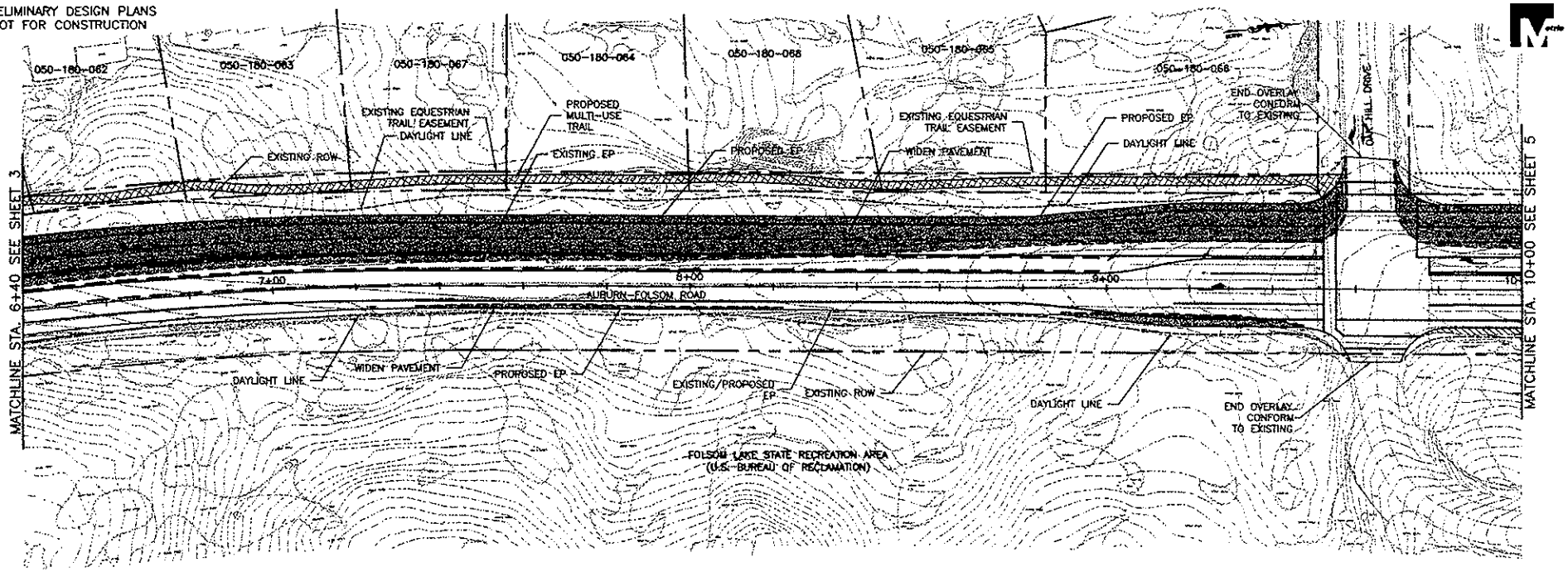
PLACER COUNTY PROJECT NUMBER: PC 2784
DESIGNED: S. EKELING 7/31/02
DRAWN: S. EKELING 7/31/02
CHECKED: E. McCARTHY 7/31/02
DATE:

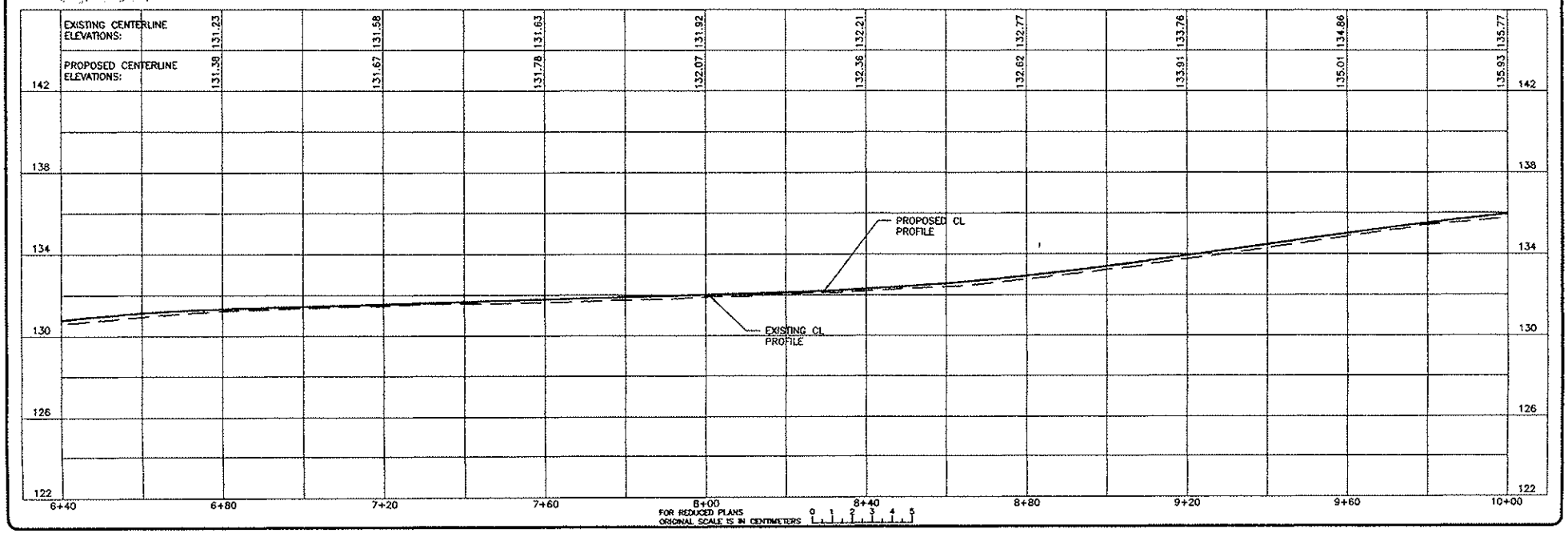
AUBURN-FOLSOM ROAD 4-LANE WIDENING PROJECT
ALTERNATIVE 1 - WIDENING TO THE WEST

COUNTY OF PLACER
DEPARTMENT OF PUBLIC WORKS
TRANSPORTATION DIVISION

SHEET NO. 3 OF 35

PRELIMINARY DESIGN PLANS
NOT FOR CONSTRUCTION





SCALE
HORIZONTAL: 1:500
VERTICAL: 1:100

PLACER COUNTY PROJECT NUMBER: PC 2784

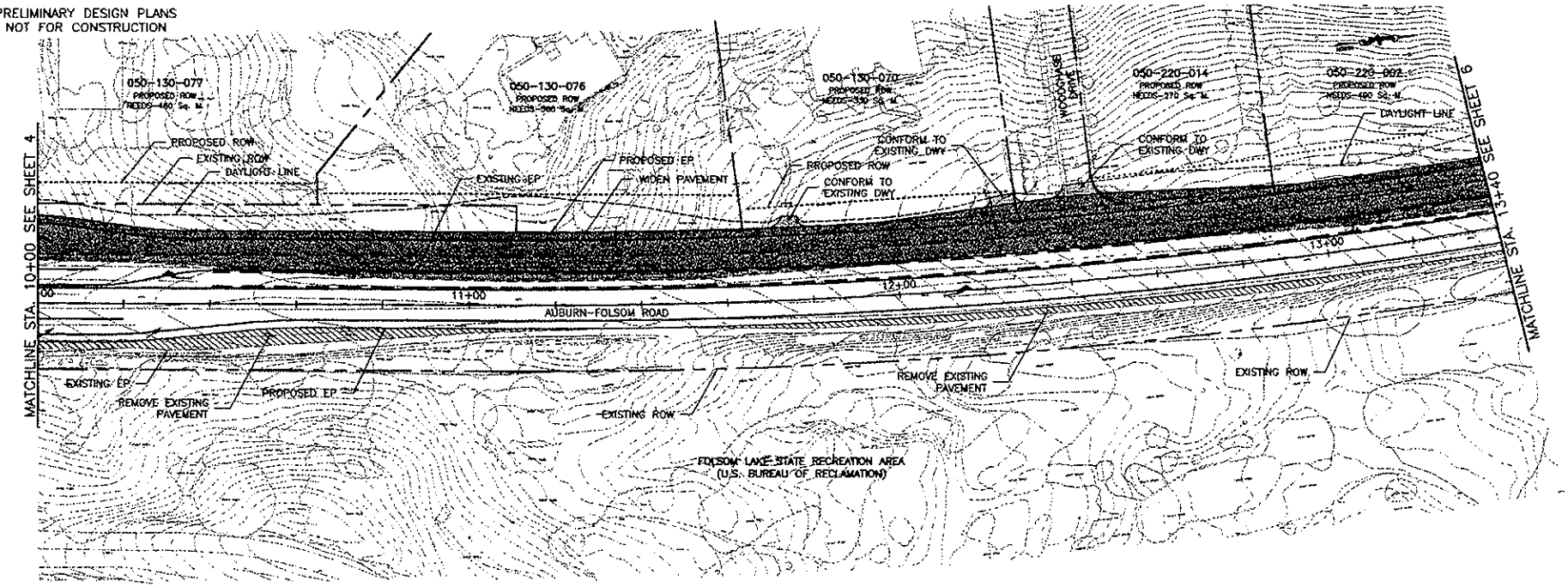
DESIGNED: C. ERELING 7/31/02
DRAWN: C. ERELING 7/31/02
CHECKED: E. McCARTHY 7/31/02
DATE:

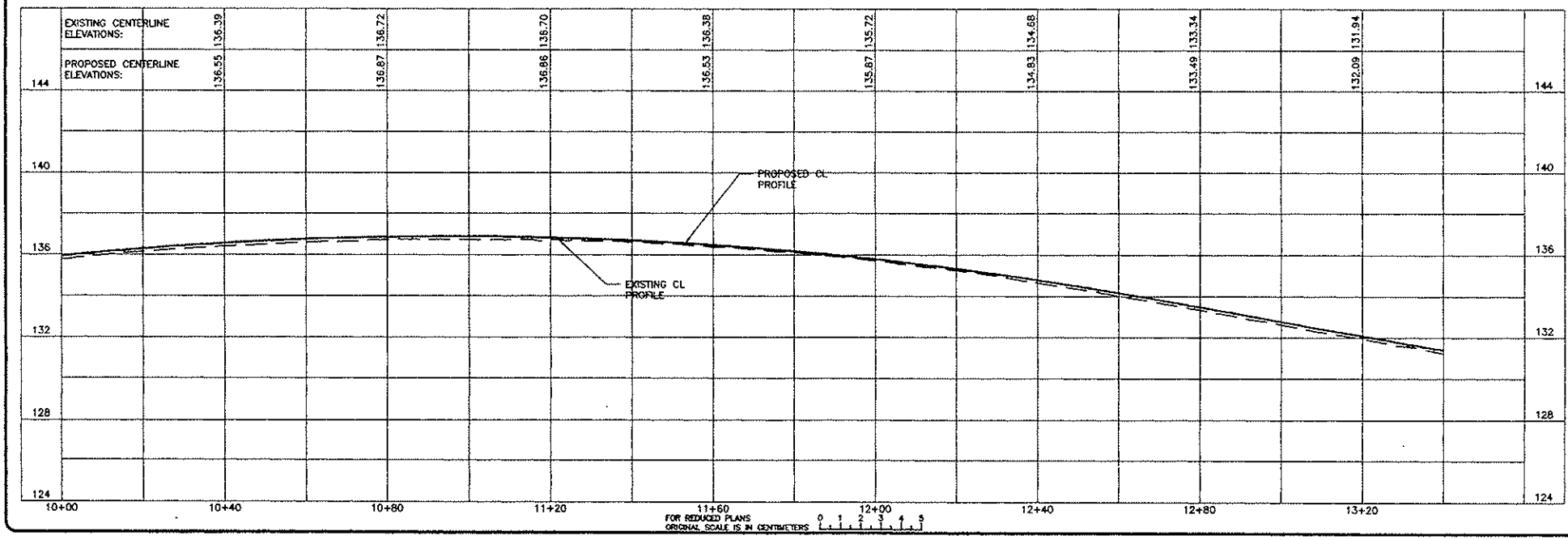
AUBURN-FOLSOM ROAD 4-LANE
WIDENING PROJECT
ALTERNATIVE 1 - WIDENING TO THE WEST

COUNTY OF PLACER
DEPARTMENT OF PUBLIC WORKS
TRANSPORTATION DIVISION

SHEET NO.
4
OF
35

PRELIMINARY DESIGN PLANS
NOT FOR CONSTRUCTION





SCALE
HORIZONTAL: 1:500
VERTICAL: 1:100

DESIGNED: S. EBELING 7/31/02
DRAWN: S. EBELING 7/31/02
CHECKED: E. McCARTHY 7/31/02

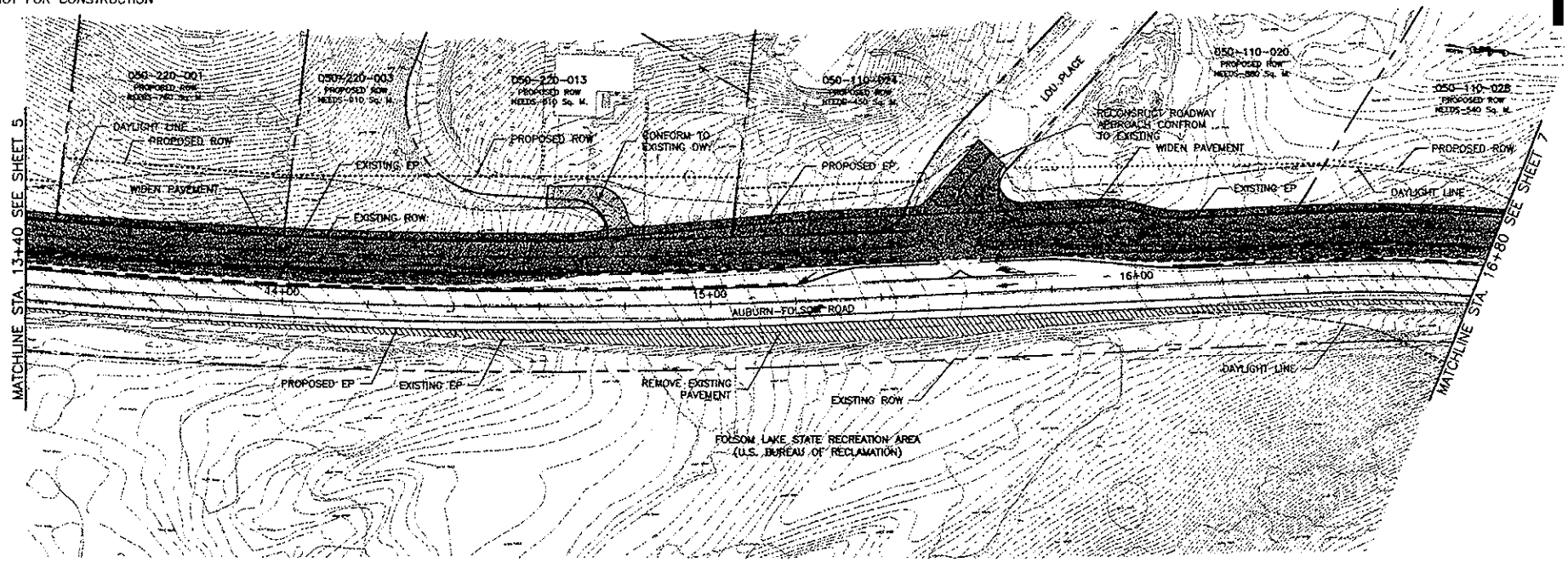
PLACER COUNTY PROJECT NUMBER: PC 2264

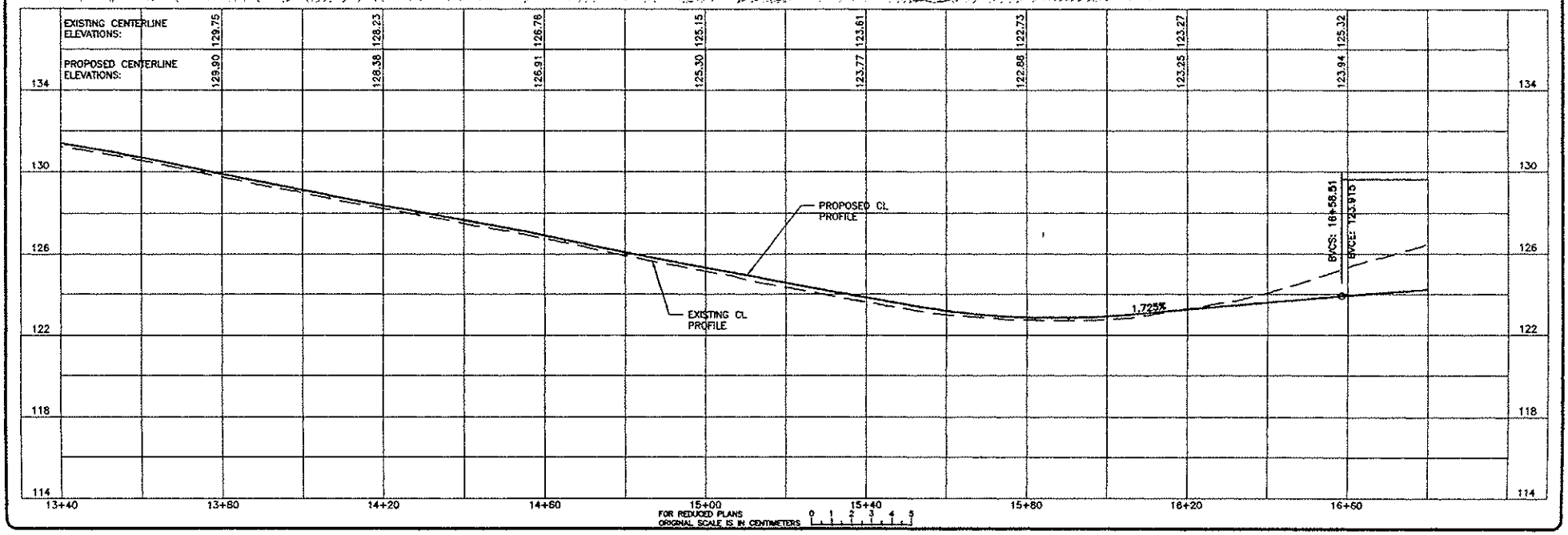
AUBURN-FOLSOM ROAD 4-LANE WIDENING PROJECT
ALTERNATIVE 1 - WIDENING TO THE WEST

COUNTY OF PLACER
DEPARTMENT OF PUBLIC WORKS
TRANSPORTATION DIVISION

SHEET NO. 5 OF 35

PRELIMINARY DESIGN PLANS
NOT FOR CONSTRUCTION





SCALE
HORIZONTAL: 1:500
VERTICAL: 1:100

DATE
DESIGNED: S. DRELING 7/31/02
DRAWN: S. DRELING 7/31/02
CHECKED: E. McCARTHY 7/31/02

PLACER COUNTY PROJECT NUMBER:
PC 2764

AUBURN-FOLSOM ROAD 4-LANE WIDENING PROJECT
ALTERNATIVE 1 - WIDENING TO THE WEST

COUNTY OF PLACER
DEPARTMENT OF PUBLIC WORKS
TRANSPORTATION DIVISION

SHEET NO.
6
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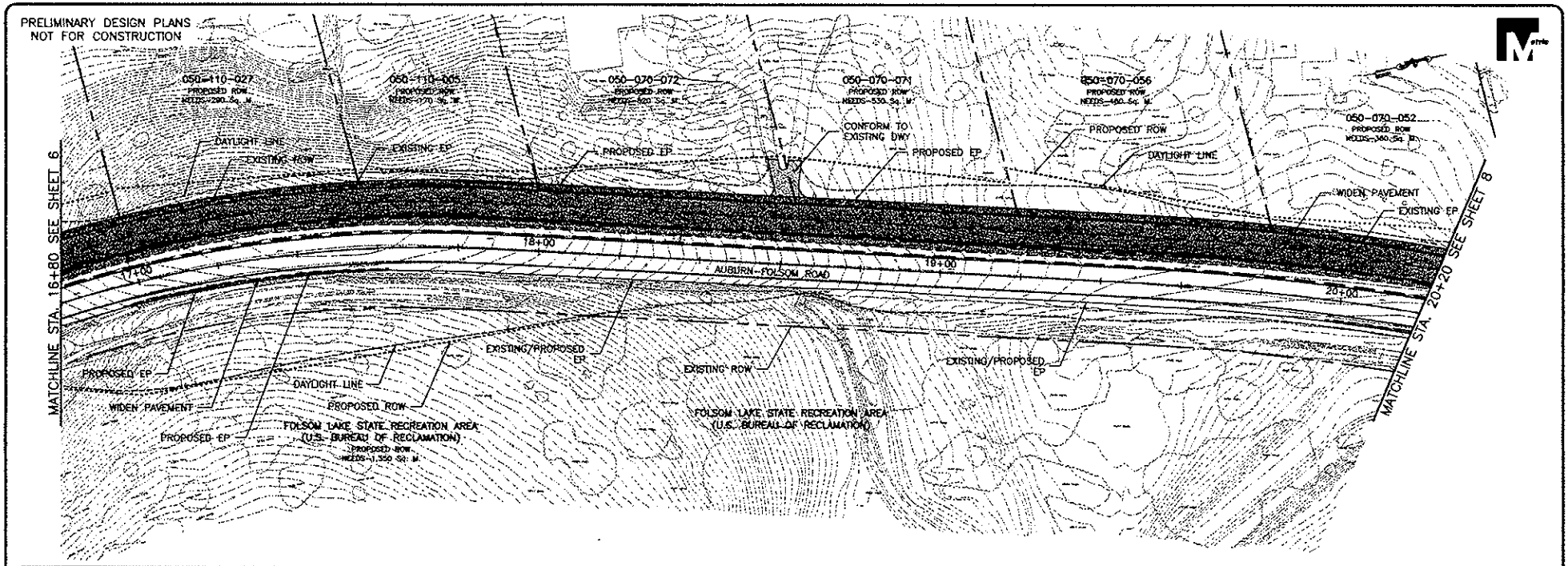
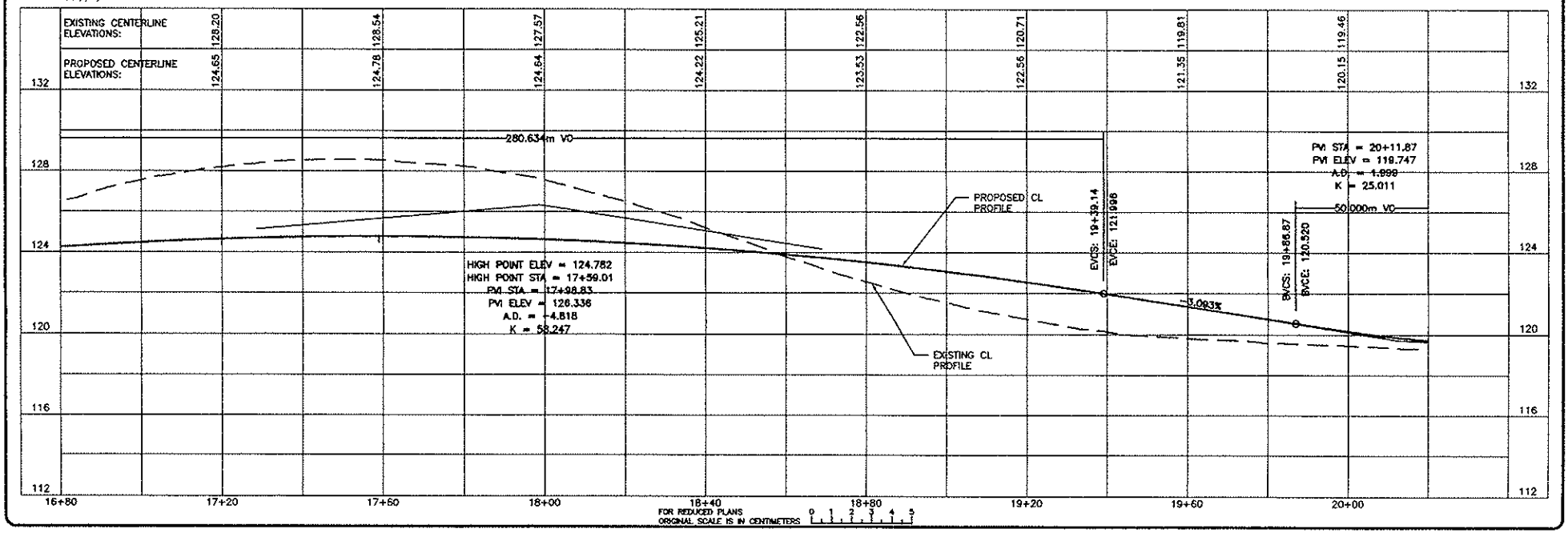
PRELIMINARY DESIGN PLANS
NOT FOR CONSTRUCTION





SCALE
HORIZONTAL: 1:500
VERTICAL: 1:100

DATE
DESIGNED: C. EBELING 7/31/02
DRAWN: C. EBELING 7/31/02
CHECKED: E. McCARTHY 7/31/02

PLACER COUNTY PROJECT NUMBER:
PC 2784

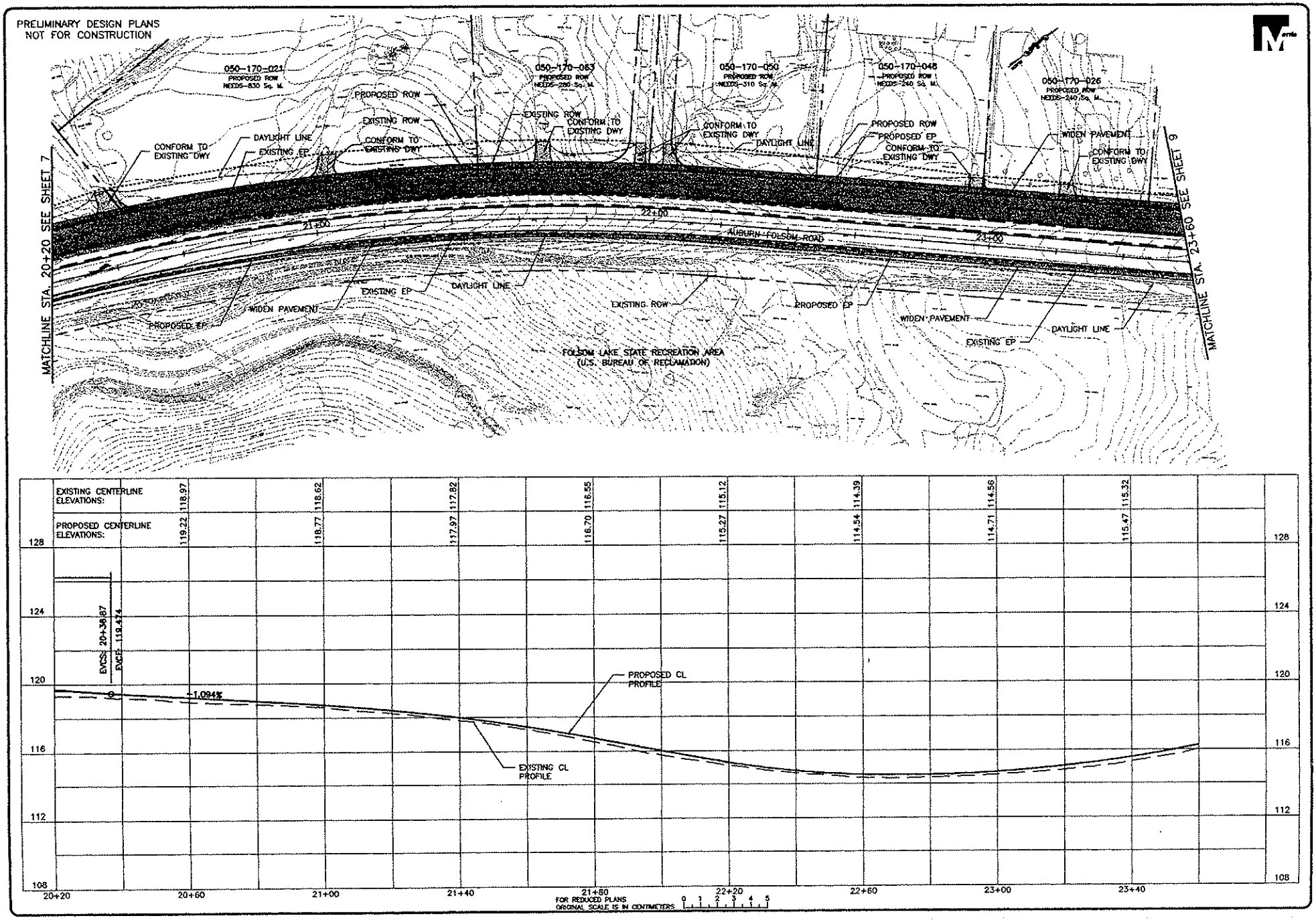
AUBURN-FOLSOM ROAD 4-LANE WIDENING PROJECT

"A" ALTERNATIVE 1 - WIDENING TO THE WEST

COUNTY OF PLACER
DEPARTMENT OF PUBLIC WORKS
TRANSPORTATION DIVISION

SHEET NO. 7 OF 35

PRELIMINARY DESIGN PLANS
NOT FOR CONSTRUCTION



SCALE
HORIZONTAL: 1:300
VERTICAL: 1:100

PLACER COUNTY PROJECT NUMBER: PC 2764

DESIGNED: C. ERLUND 7/31/02
DRAWN: C. ERLUND 7/31/02
CHECKED: E. McCARTHY 7/31/02

DATE:

AUBURN-FOLSOM ROAD 4-LANE
WIDENING PROJECT
ALTERNATIVE 1 - WIDENING TO THE WEST

COUNTY OF PLACER
DEPARTMENT OF PUBLIC WORKS
TRANSPORTATION DIVISION

SHEET NO.
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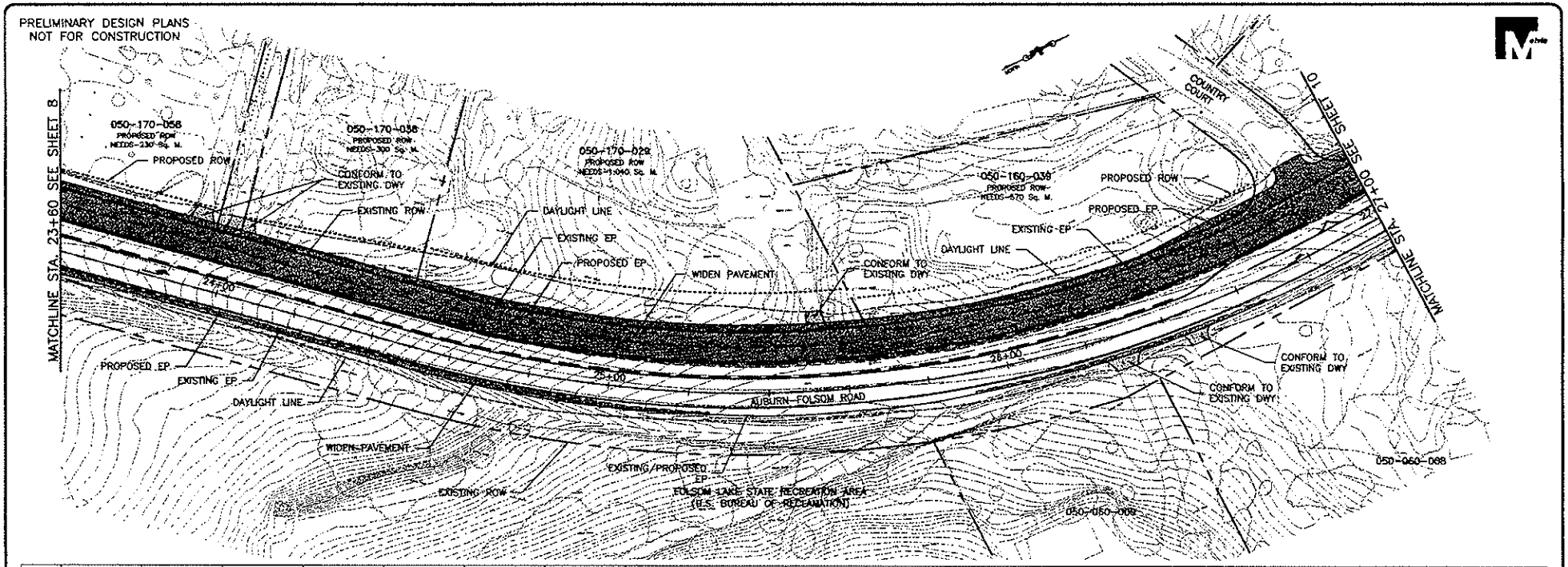
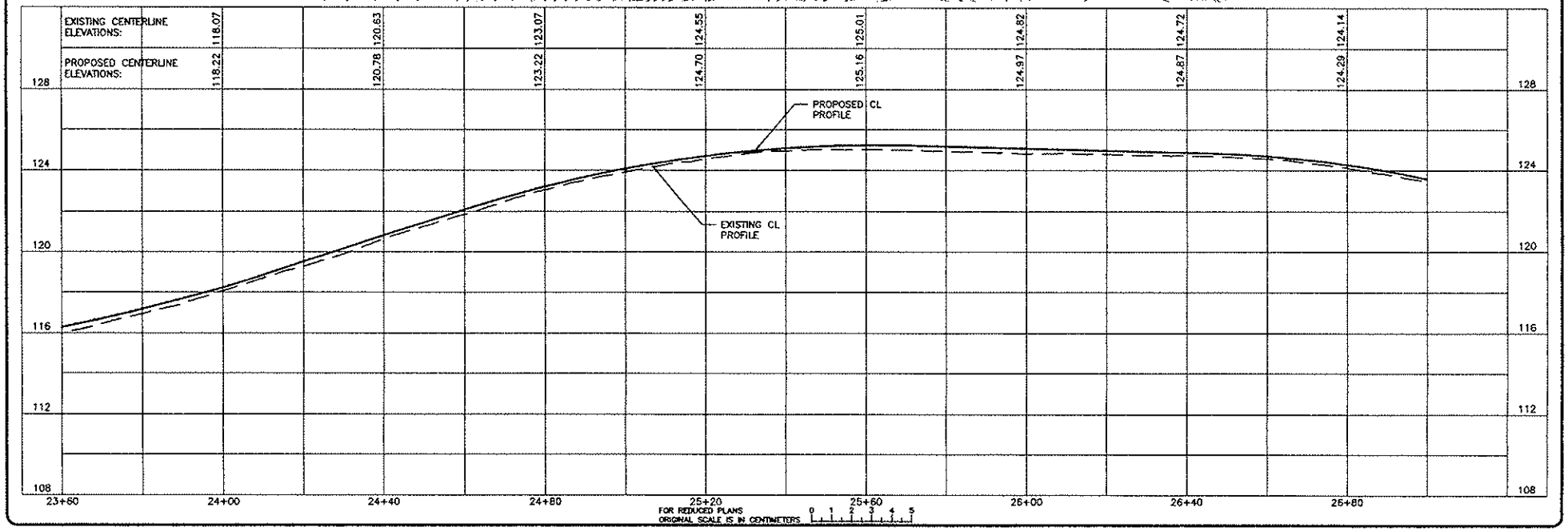
PRELIMINARY DESIGN PLANS
NOT FOR CONSTRUCTION





SCALE
HORIZONTAL: 1:500
VERTICAL: 1:100

DATE:
DESIGNED: S. EBELING 7/31/02
DRAWN: S. EBELING 7/31/02
CHECKED: E. LACASTRO 7/31/02

PLACER COUNTY PROJECT NUMBER:
PC 2764

AUBURN-FOLSOM ROAD 4-LANE WIDENING PROJECT
* ALTERNATIVE 1 - WIDENING TO THE WEST

COUNTY OF PLACER
DEPARTMENT OF PUBLIC WORKS
TRANSPORTATION DIVISION

SHEET NO.
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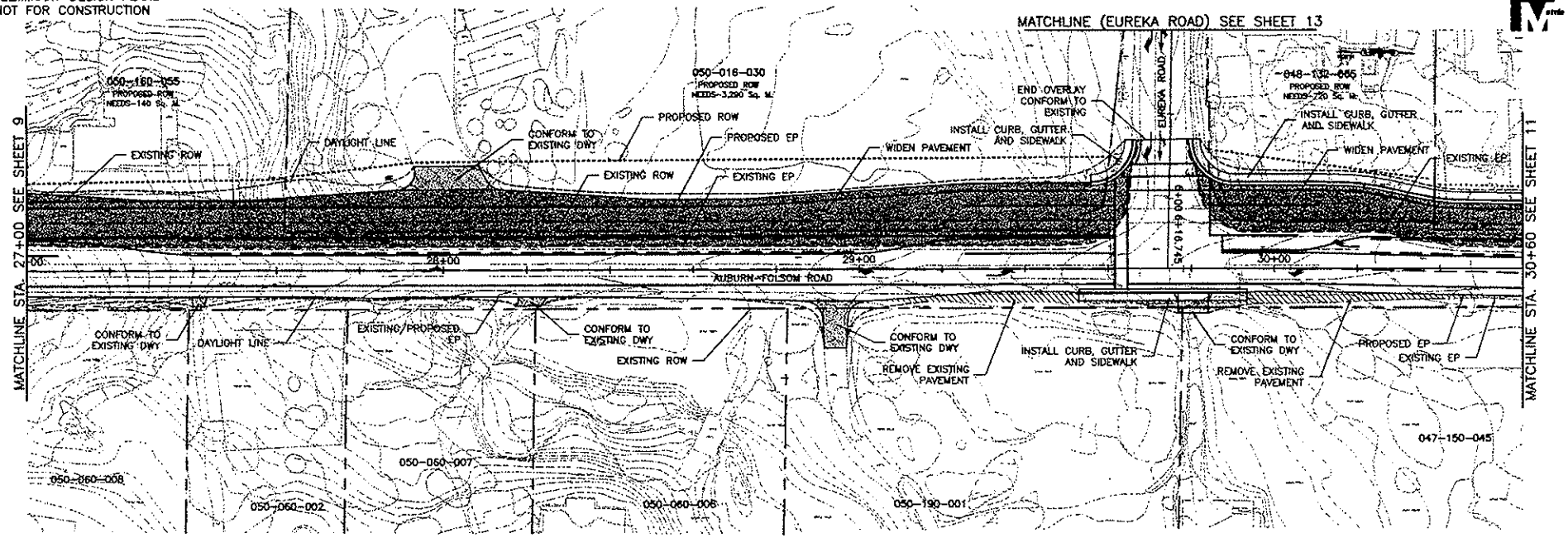
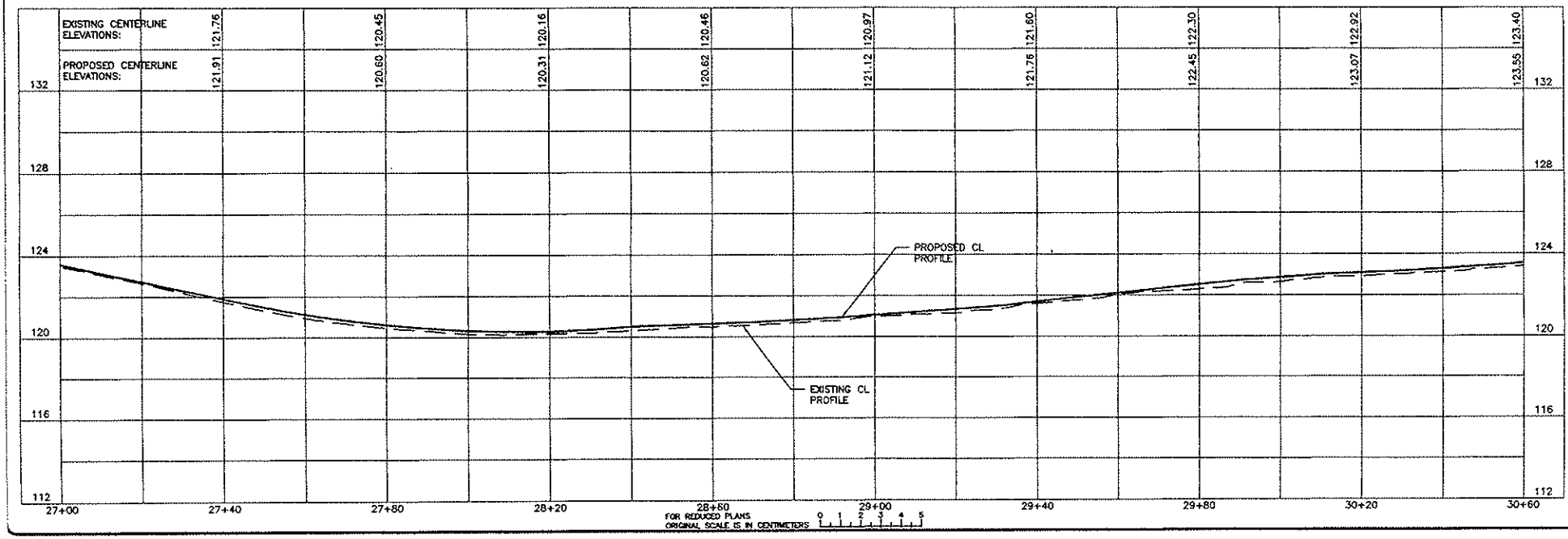
PRELIMINARY DESIGN PLANS
NOT FOR CONSTRUCTION





SCALE
HORIZONTAL: 1:500
VERTICAL: 1:100

DATE:
DESIGNED: C. EBELING 7/31/02
DRAWN: C. EBELING 7/31/02
CHECKED: E. McCARTHY 7/31/02

PLACER COUNTY PROJECT NUMBER:
EC 2764

AUBURN-FOLSOM ROAD 4-LANE WIDENING PROJECT
ALTERNATIVE 1 - WIDENING TO THE WEST

COUNTY OF PLACER
DEPARTMENT OF PUBLIC WORKS
TRANSPORTATION DIVISION

SHEET NO.
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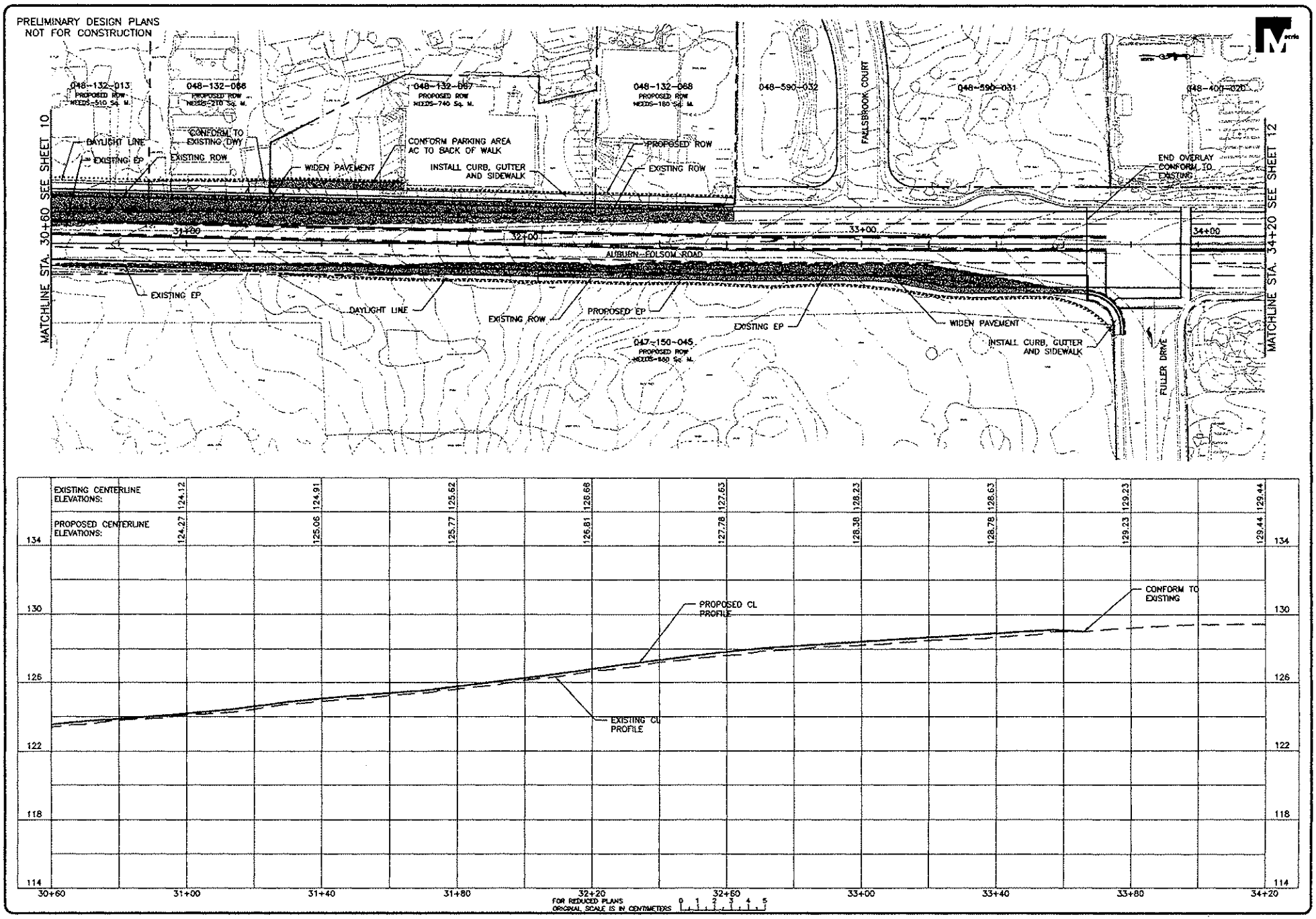
OF
35

PRELIMINARY DESIGN PLANS
NOT FOR CONSTRUCTION



SCALE
HORIZONTAL: 1:500
VERTICAL: 1:100

		DATE
DESIGNED:	C. EBELING	7/31/02
DRAWN:	C. EBELING	7/31/02
CHECKED:	R. McCARTHY	7/31/02

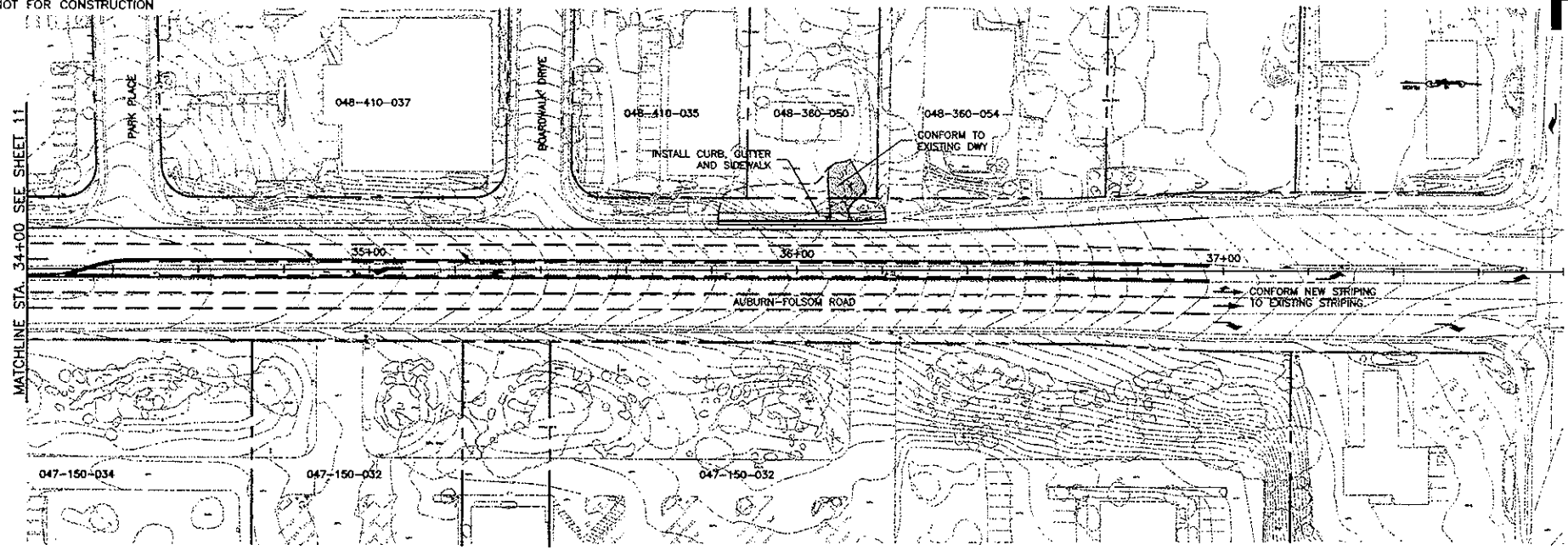
PLACER COUNTY PROJECT NUMBER: ESC 2764

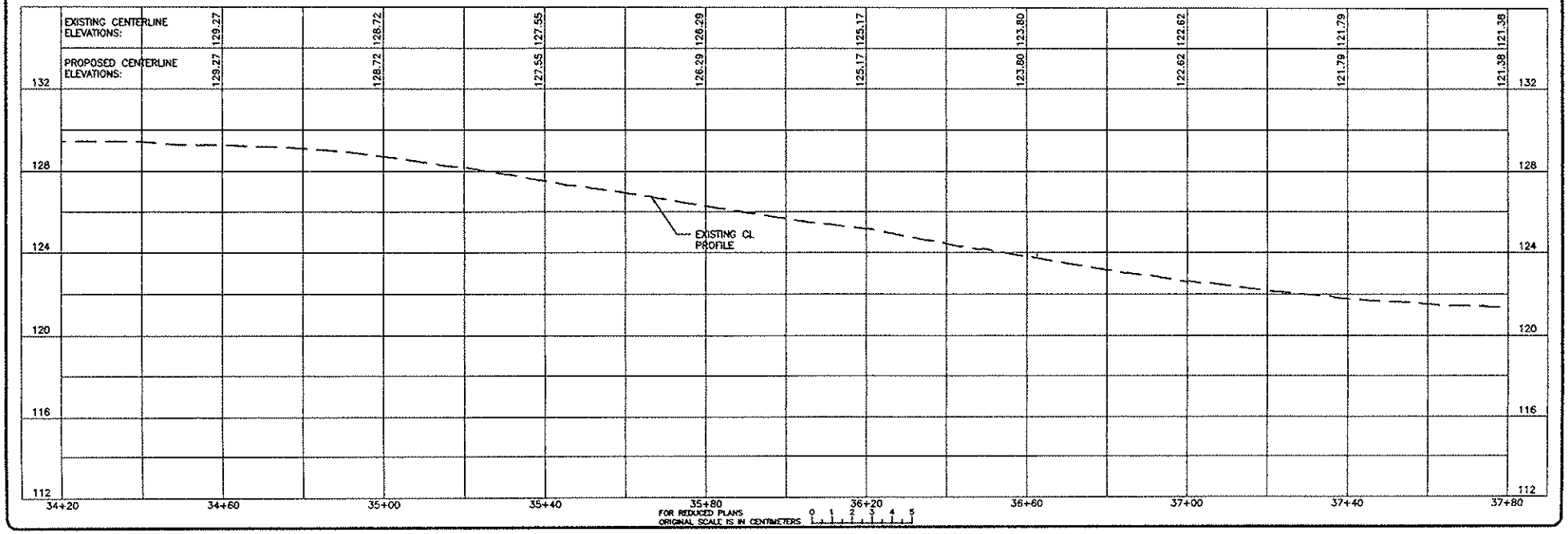
AUBURN-FOLSOM ROAD 4-LANE WIDENING PROJECT
ALTERNATIVE 1 - WIDENING TO THE WEST

COUNTY OF PLACER
DEPARTMENT OF PUBLIC WORKS
TRANSPORTATION DIVISION

SHEET NO. 11 OF 35

PRELIMINARY DESIGN PLANS
NOT FOR CONSTRUCTION





SCALE
HORIZONTAL: 1:500
VERTICAL: 1:100

DATE:
DESIGNED: C. EBELING 7/31/02
DRAWN: C. EBELING 7/31/02
CHECKED: E. McCARTHY 7/31/02

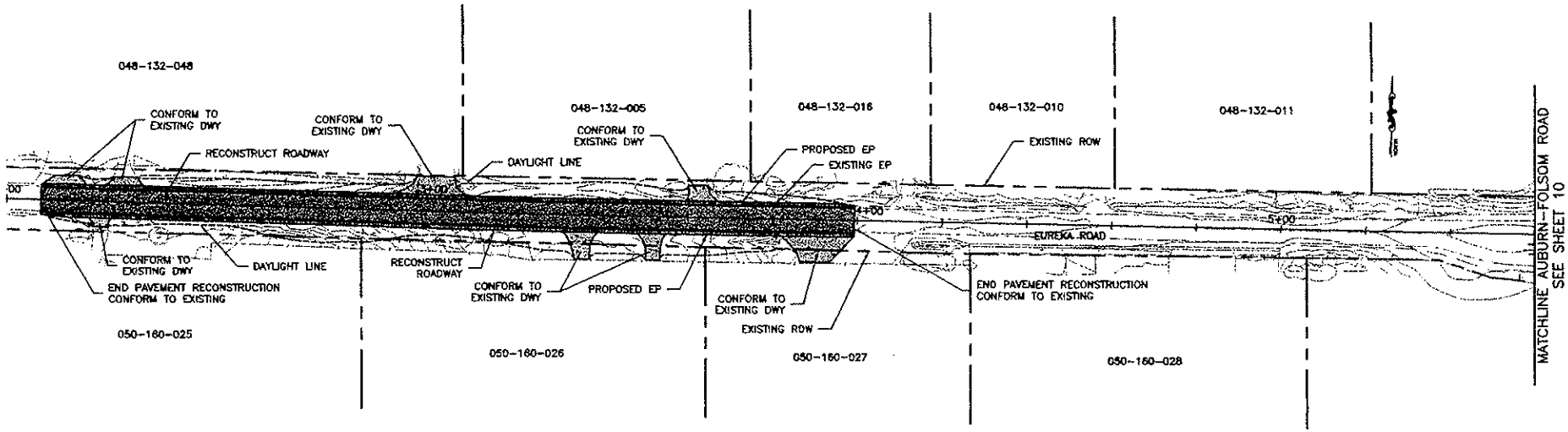
PLACER COUNTY PROJECT NUMBER:
PC 2784

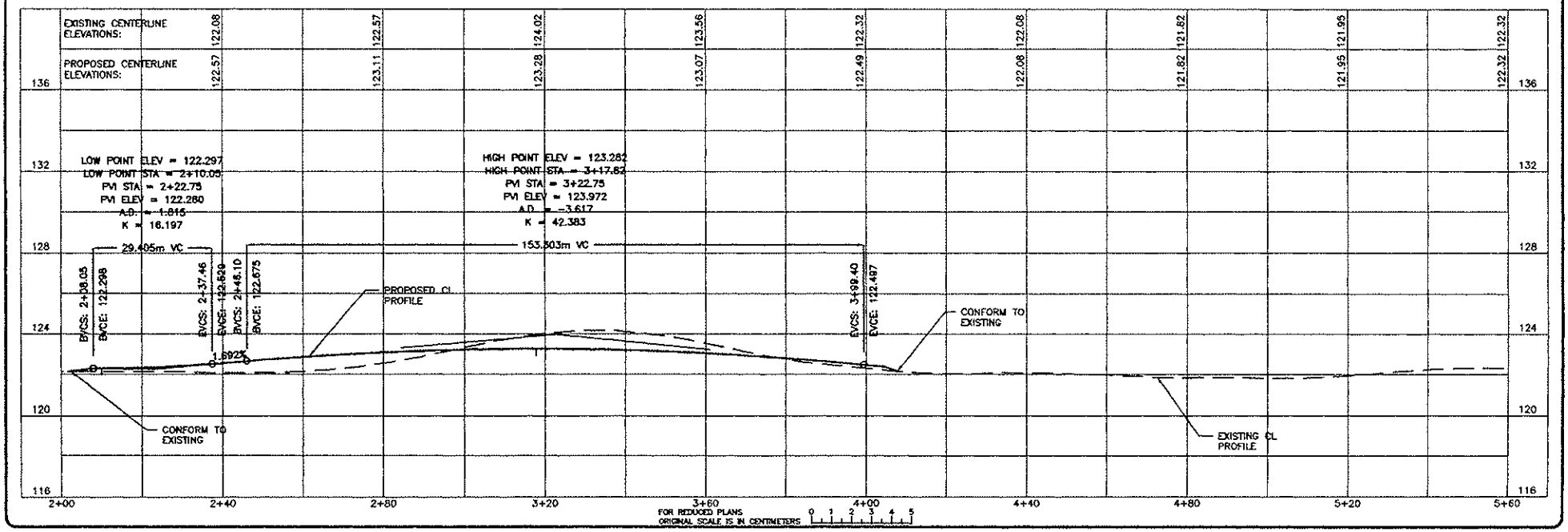
AUBURN-FOLSOM ROAD 4-LANE WIDENING PROJECT
ALTERNATIVE 1 - WIDENING TO THE WEST

COUNTY OF PLACER
DEPARTMENT OF PUBLIC WORKS
TRANSPORTATION DIVISION

SHEET NO. 12 OF 35

PRELIMINARY DESIGN PLANS
NOT FOR CONSTRUCTION





SCALE
HORIZONTAL: 1:500
VERTICAL: 1:100

PLACER COUNTY PROJECT NUMBER: PC 2764
DESIGNED: S. EBELING DATE: 7/31/02
DRAWN: S. EBELING 7/31/02
CHECKED: K. McCARTHY 7/31/02

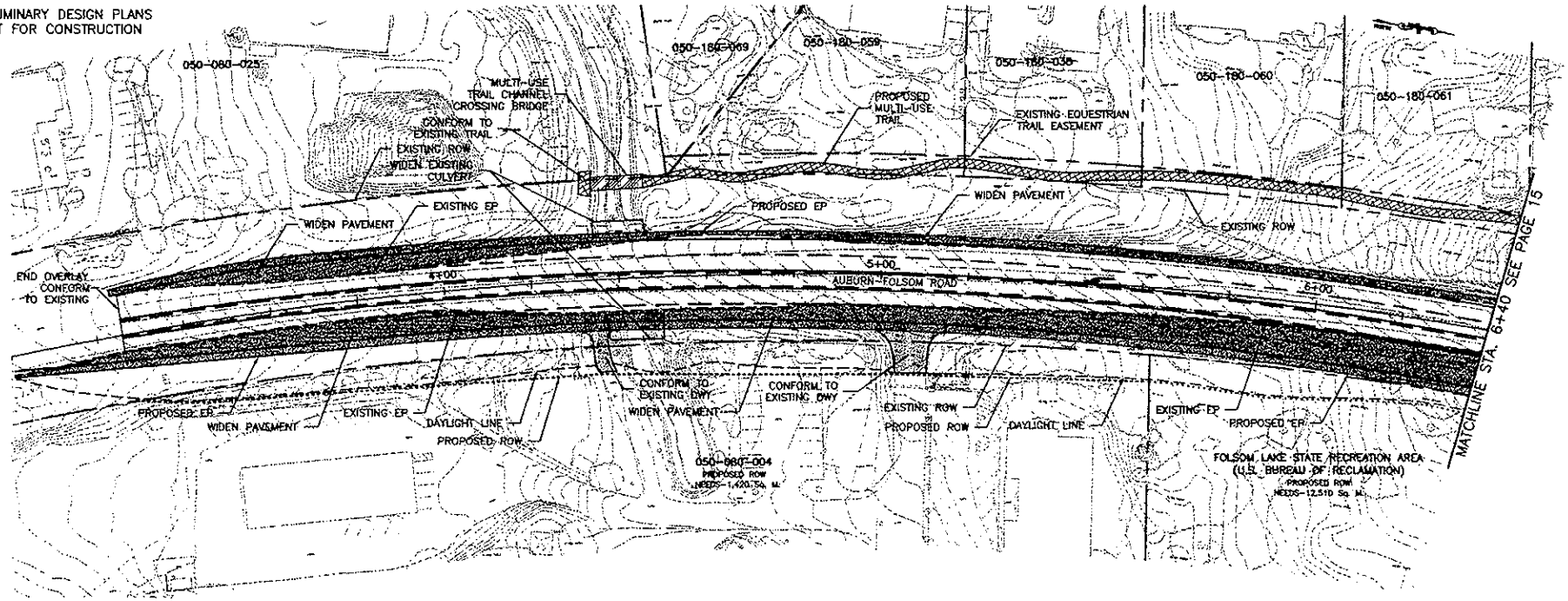
AUBURN-FOLSOM ROAD 4-LANE WIDENING PROJECT
ALTERNATIVE 1 - WIDENING TO THE WEST

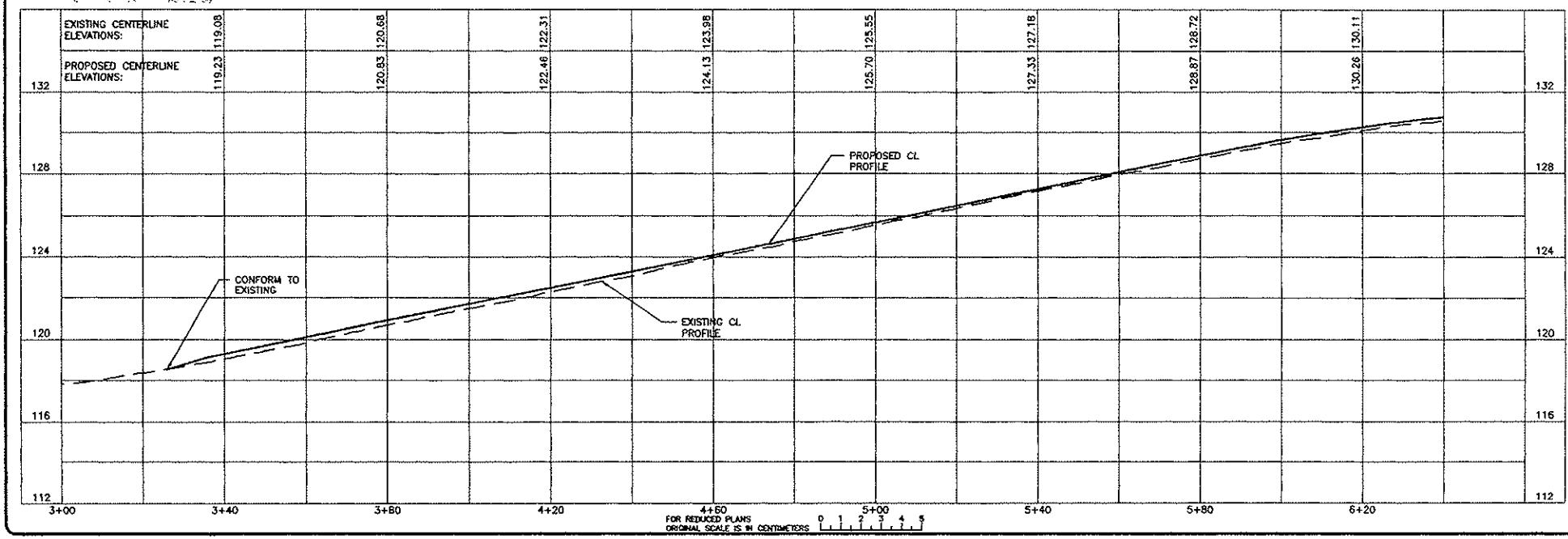
COUNTY OF PLACER
DEPARTMENT OF PUBLIC WORKS
TRANSPORTATION DIVISION

SHEET NO. 13 OF 35

Alternative 2:
Widening to the East

PRELIMINARY DESIGN PLANS
NOT FOR CONSTRUCTION





SCALE
HORIZONTAL: 1:500
VERTICAL: 1:100

DESIGNED: C. FERLING DATE: 7/31/02
DRAWN: C. FERLING 7/31/02
CHECKED: E. McCARTHY 7/31/02

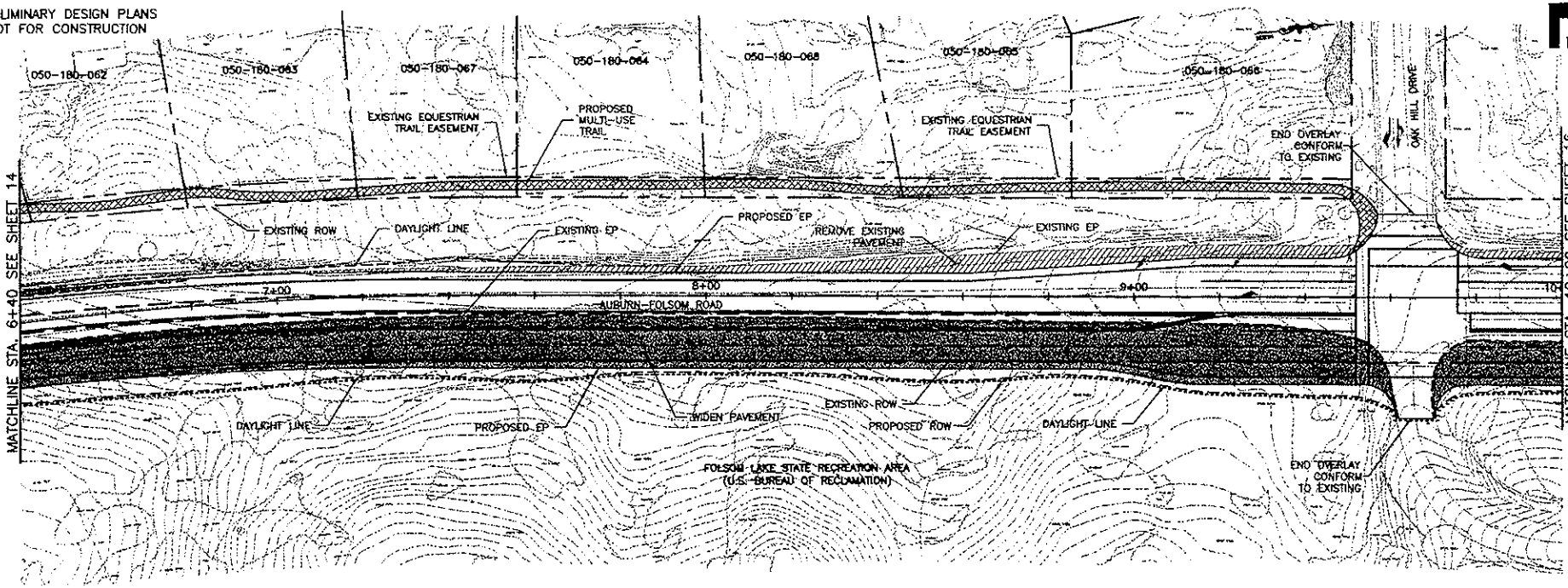
PLACER COUNTY PROJECT NUMBER:
EC 2784

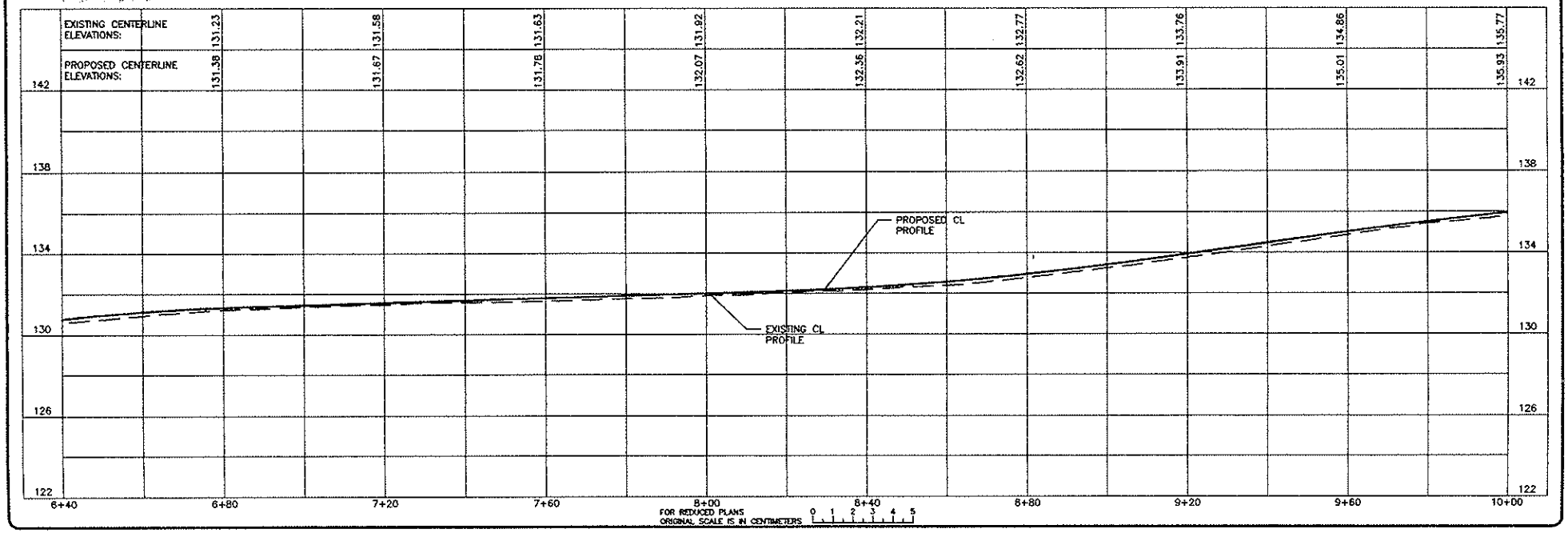
AUBURN-FOLSOM ROAD 4-LANE WIDENING PROJECT
"F" ALTERNATIVE 2 - WIDENING TO THE EAST

COUNTY OF PLACER
DEPARTMENT OF PUBLIC WORKS
TRANSPORTATION DIVISION

SHEET NO. 14 OF 35

PRELIMINARY DESIGN PLANS
NOT FOR CONSTRUCTION





SCALE
HORIZONTAL: 1:500
VERTICAL: 1:100

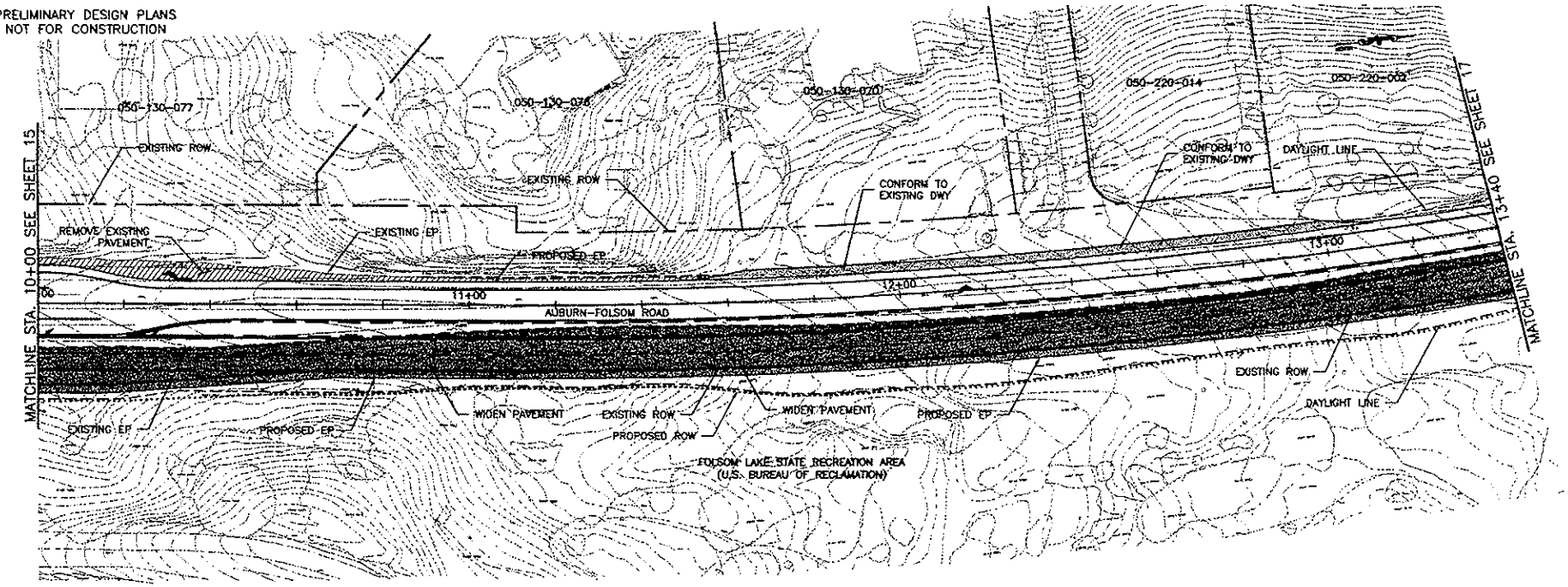
PLACER COUNTY PROJECT NUMBER: PC 2784
DESIGNED: G. EBELING DATE: 7/31/02
DRAWN: G. EBELING 7/31/02
CHECKED: E. McCARTHY 7/31/02

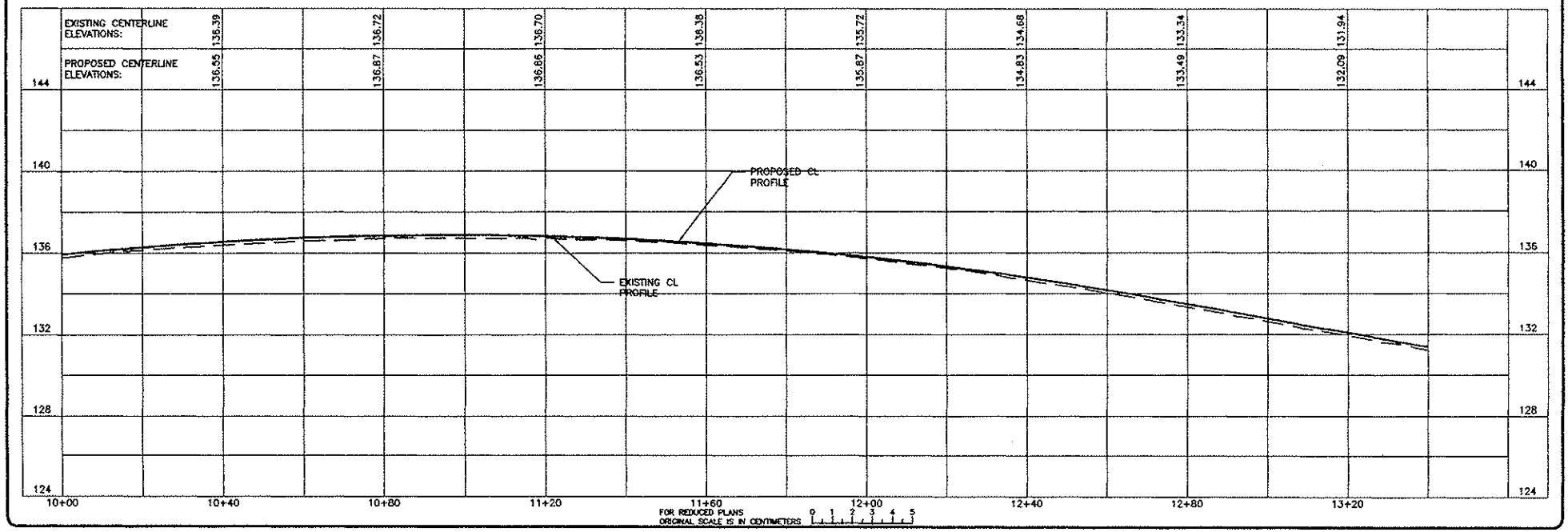
COUNTY OF PLACER
DEPARTMENT OF PUBLIC WORKS
TRANSPORTATION DIVISION

AUBURN-FOLSOM ROAD 4-LANE WIDENING PROJECT
ALTERNATIVE 2 - WIDENING TO THE EAST

SHEET NO. 15 OF 35

PRELIMINARY DESIGN PLANS
NOT FOR CONSTRUCTION





SCALE
HORIZONTAL 1:500
VERTICAL 1:100

DATE:
DESIGNED: C. EBELING 7/31/02
DRAWN: C. EBELING 7/31/02
CHECKED: E. McCARTHY 7/31/02

PLACER COUNTY PROJECT NUMBER:
PC 2264

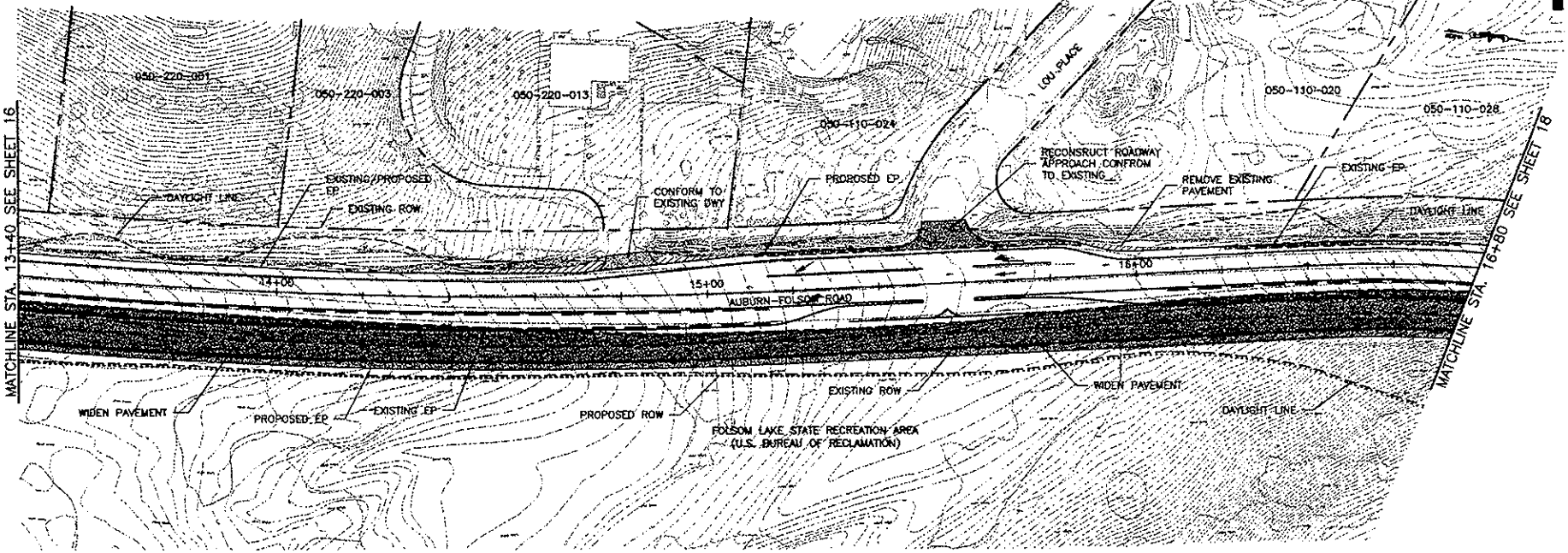
AUBURN-FOLSOM ROAD 4-LANE WIDENING PROJECT

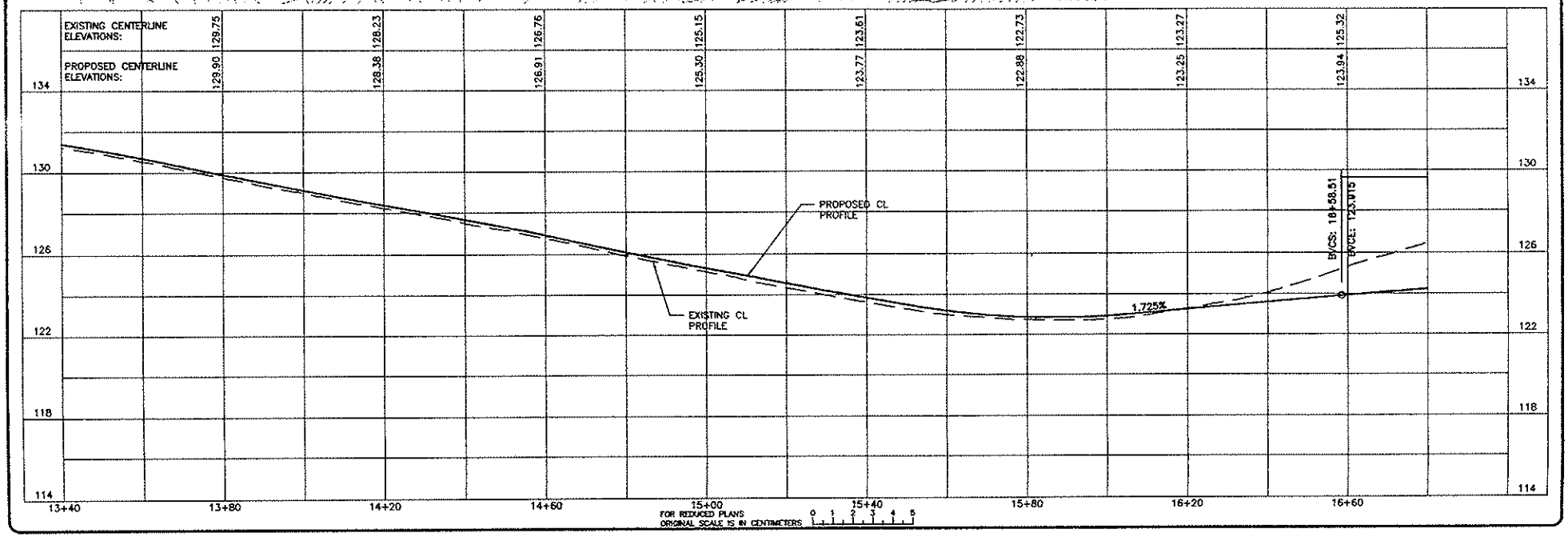
ALTERNATIVE 2 - WIDENING TO THE EAST

COUNTY OF PLACER
DEPARTMENT OF PUBLIC WORKS
TRANSPORTATION DIVISION

SHEET NO.
16
OF
35

PRELIMINARY DESIGN PLANS
NOT FOR CONSTRUCTION





SCALE
HORIZONTAL: 1:500
VERTICAL: 1:100

DATE:
DESIGNED: C. ERKLING 7/31/02
DRAWN: C. ERKLING 7/31/02
CHECKED: E. McCARTHY 7/31/02

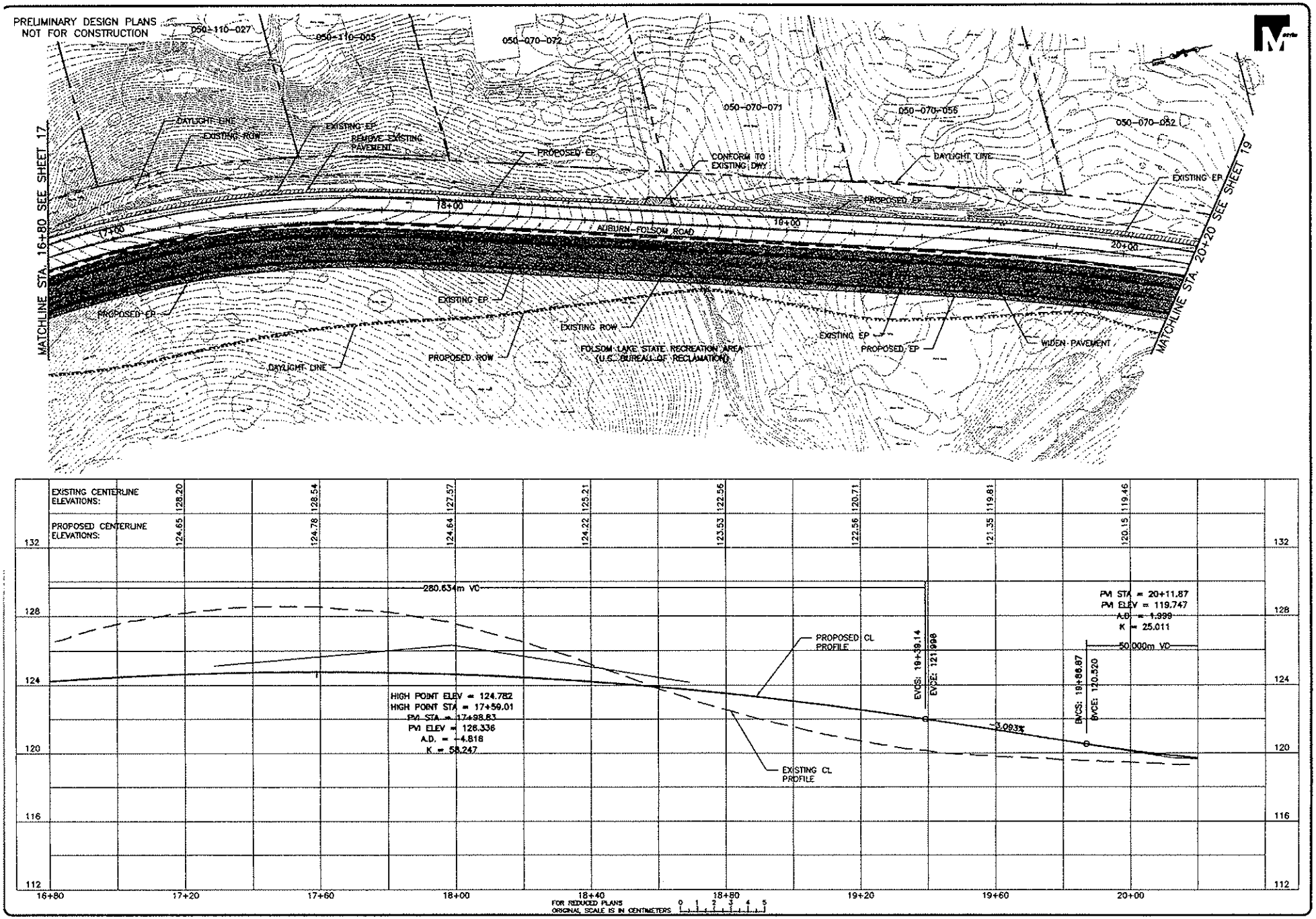
PLACER COUNTY PROJECT NUMBER: PC-2764

AUBURN-FOLSOM ROAD 4-LANE WIDENING PROJECT
ALTERNATIVE 2 - WIDENING TO THE EAST

COUNTY OF PLACER
DEPARTMENT OF PUBLIC WORKS
TRANSPORTATION DIVISION

SHEET NO. 17 OF 35

PRELIMINARY DESIGN PLANS
NOT FOR CONSTRUCTION



SCALE
HORIZONTAL: 1:500
VERTICAL: 1:100

		DATE
DESIGNED:	G. EBELING	7/31/02
DRAWN:	G. EBELING	7/31/02
CHECKED:	E. McCARTHY	7/31/02

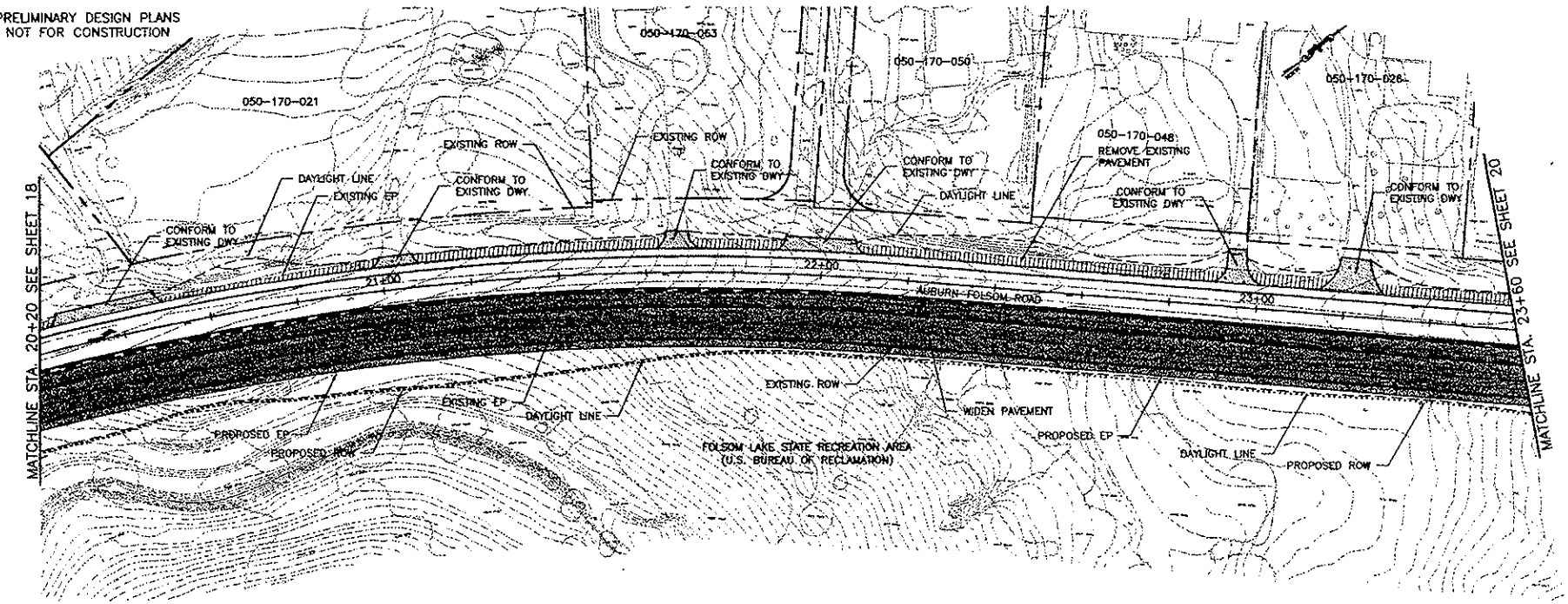
PLACER COUNTY PROJECT NUMBER: PC 2764

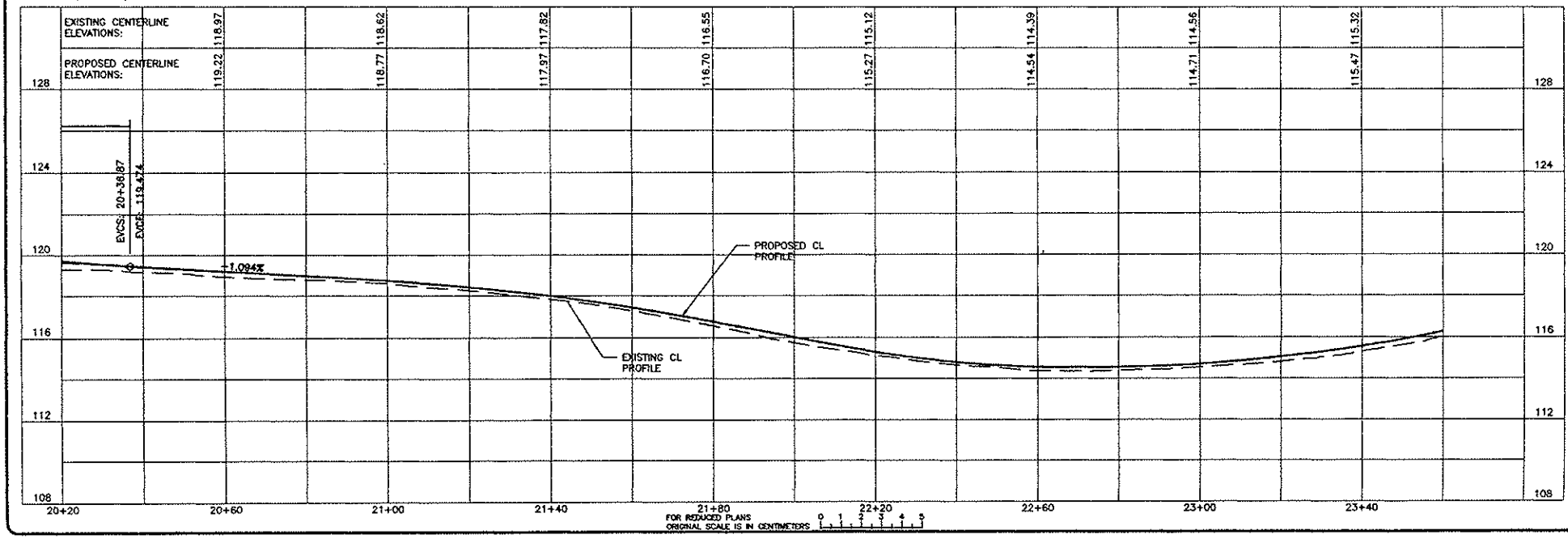
AUBURN-FOLSOM ROAD 4-LANE WIDENING PROJECT
ALTERNATIVE 2 - WIDENING TO THE EAST

COUNTY OF PLACER
DEPARTMENT OF PUBLIC WORKS
TRANSPORTATION DIVISION

SHEET NO. 18 OF 35

PRELIMINARY DESIGN PLANS
NOT FOR CONSTRUCTION





SCALE
HORIZONTAL: 1:500
VERTICAL: 1:100

DATE:
DESIGNED: C. EBELING 7/31/02
DRAWN: C. EBELING 7/31/02
CHECKED: E. McCARTHY 7/31/02

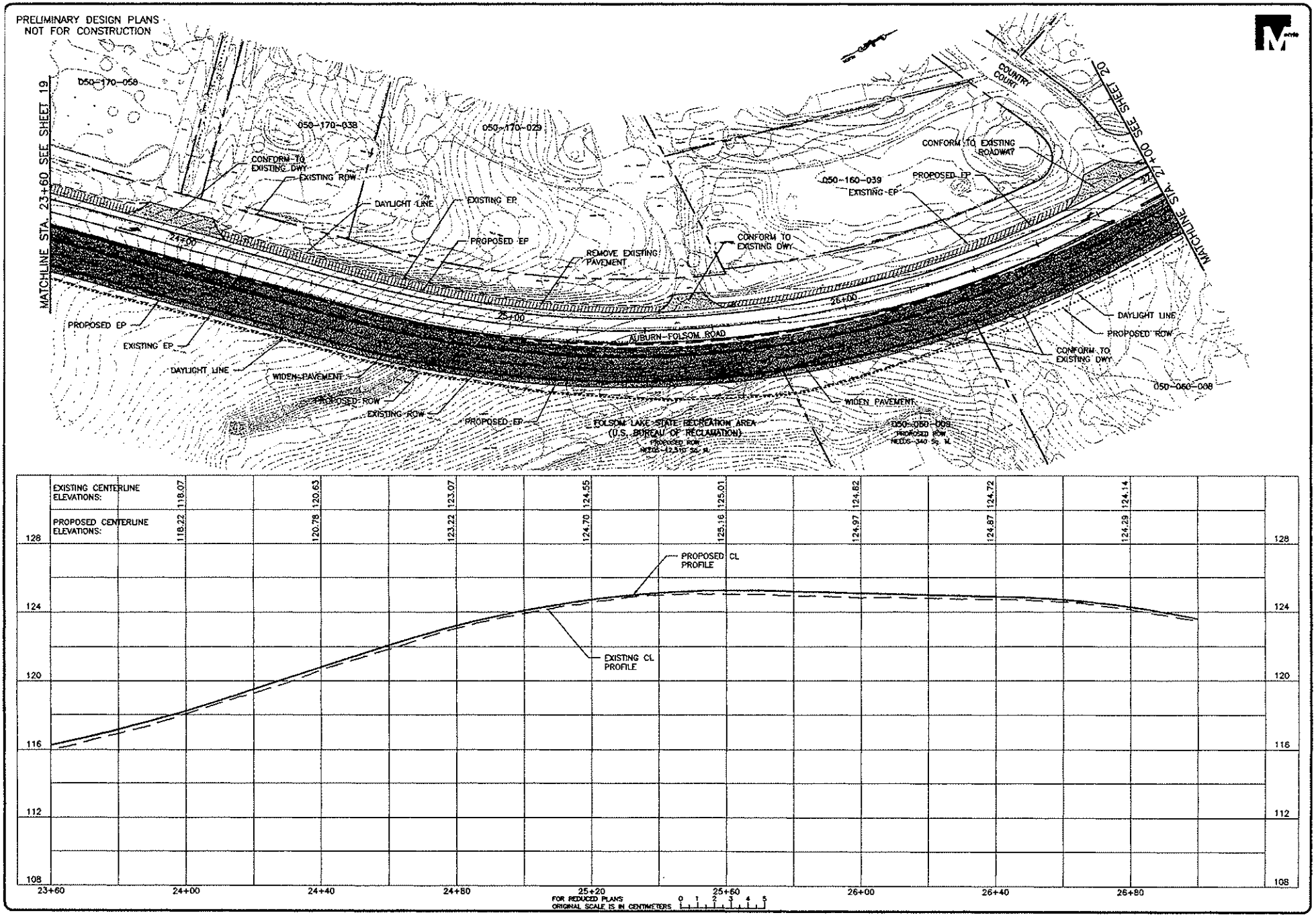
PLACER COUNTY PROJECT NUMBER: PC 2261

COUNTY OF PLACER
DEPARTMENT OF PUBLIC WORKS
TRANSPORTATION DIVISION

AUBURN-FOLSOM ROAD 4-LANE WIDENING PROJECT
ALTERNATIVE 2 - WIDENING TO THE EAST

SHEET NO. 19 OF 35

PRELIMINARY DESIGN PLANS
NOT FOR CONSTRUCTION



SCALE
HORIZONTAL: 1:500
VERTICAL: 1:100

DATE
DESIGNED: S. FEELING 7/31/02
DRAWN: S. FEELING 7/31/02
CHECKED: E. McCARTHY 7/31/02

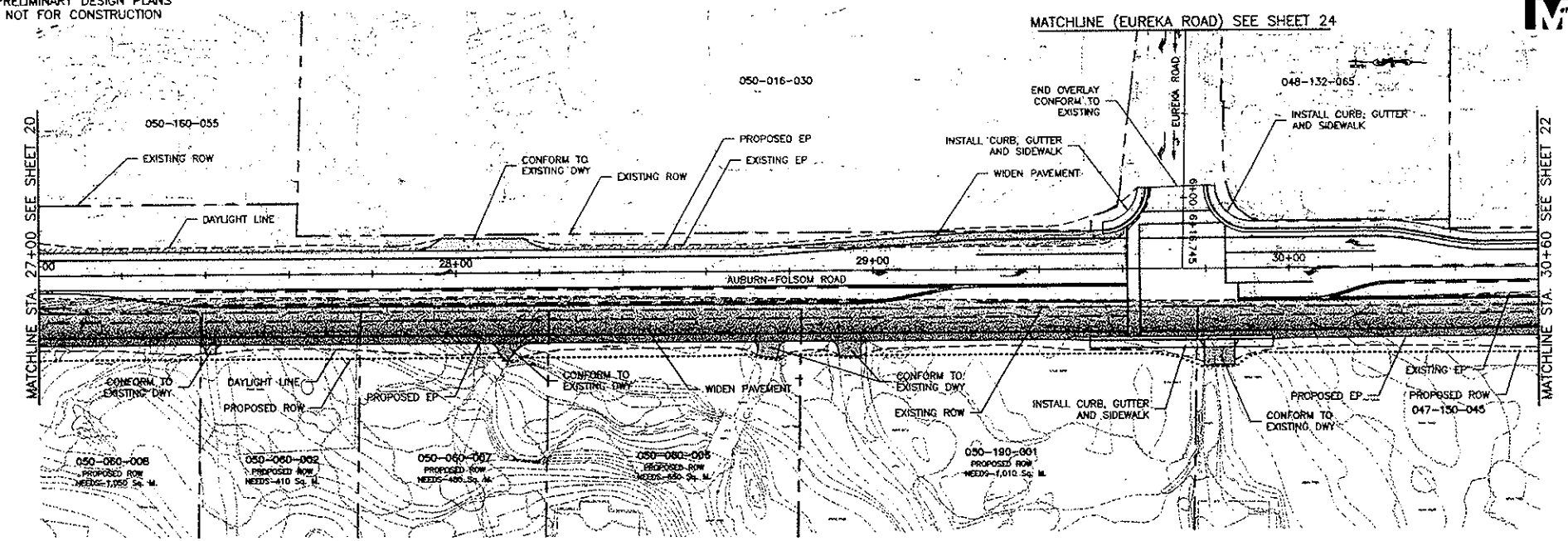
PLACER COUNTY PROJECT NUMBER:
PS-2784

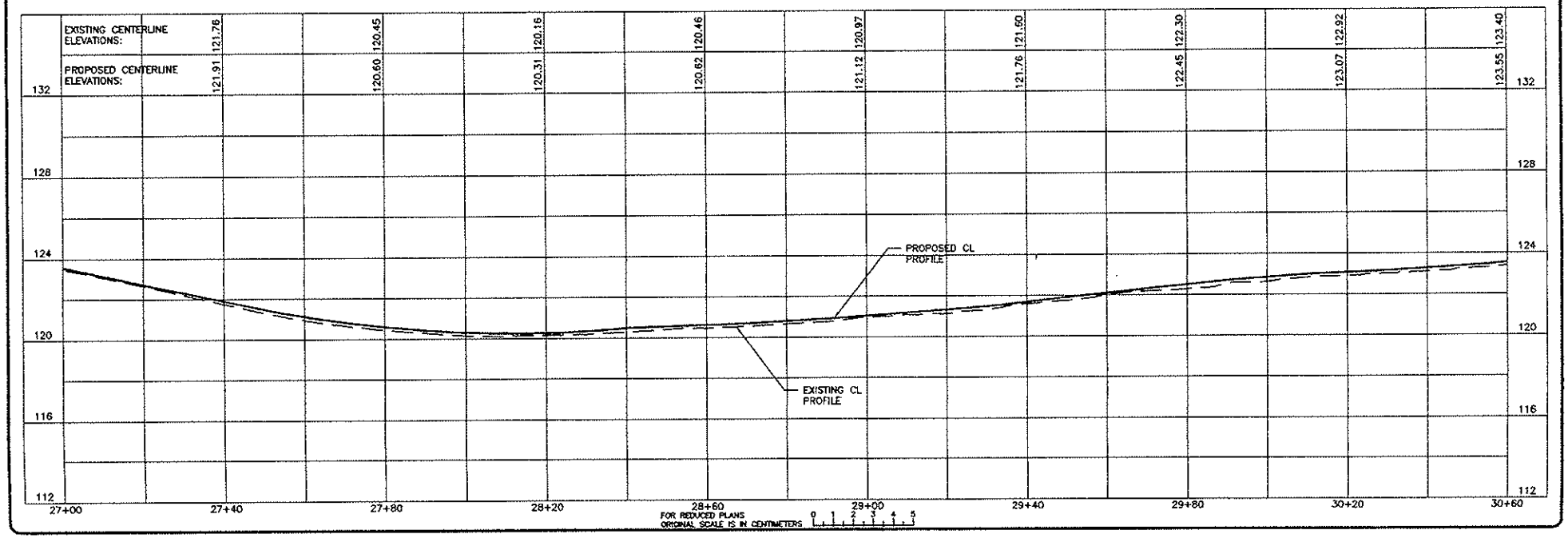
AUBURN-FOLSOM ROAD 4-LANE WIDENING PROJECT
"4" ALTERNATIVE 2 - WIDENING TO THE EAST

COUNTY OF PLACER
DEPARTMENT OF PUBLIC WORKS
TRANSPORTATION DIVISION

SHEET NO.
20
OF
35

PRELIMINARY DESIGN PLANS
NOT FOR CONSTRUCTION





SCALE
HORIZONTAL: 1:500
VERTICAL: 1:100

DATE
DESIGNED: S. EBELING 7/31/02
DRAWN: S. EBELING 7/31/02
CHECKED: E. McCARTHY 7/31/02

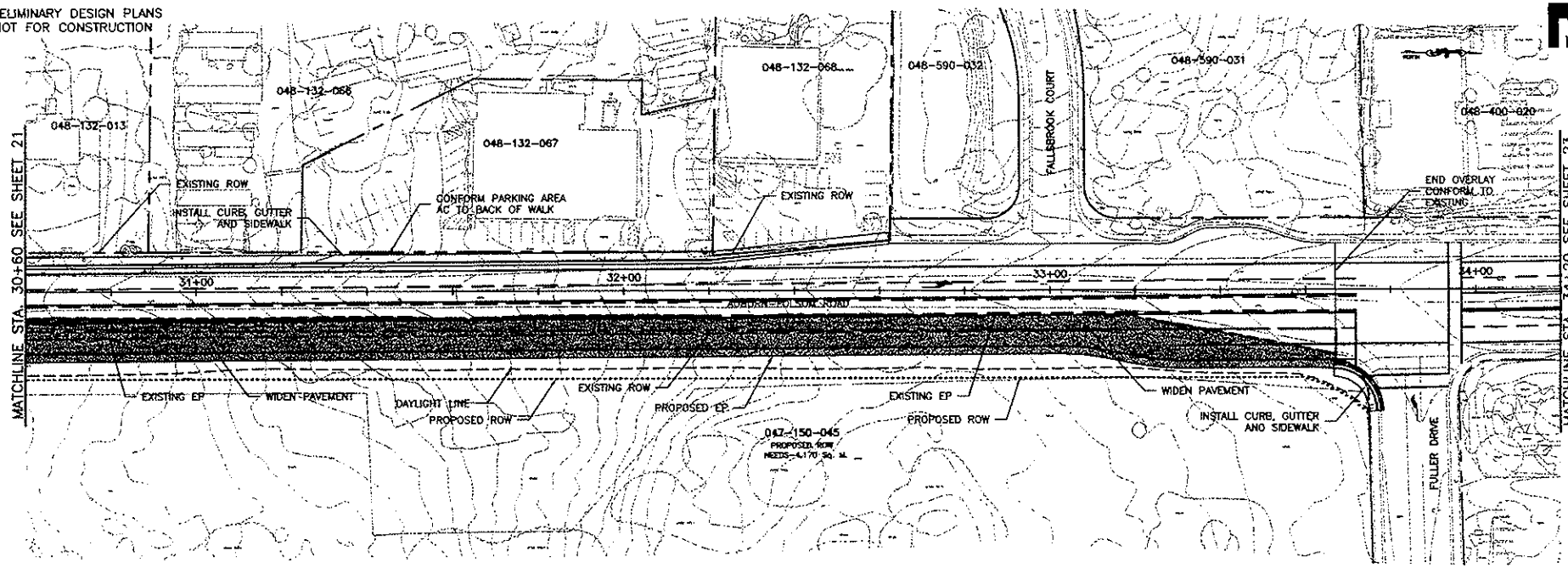
PLACER COUNTY PROJECT NUMBER: PC-2764

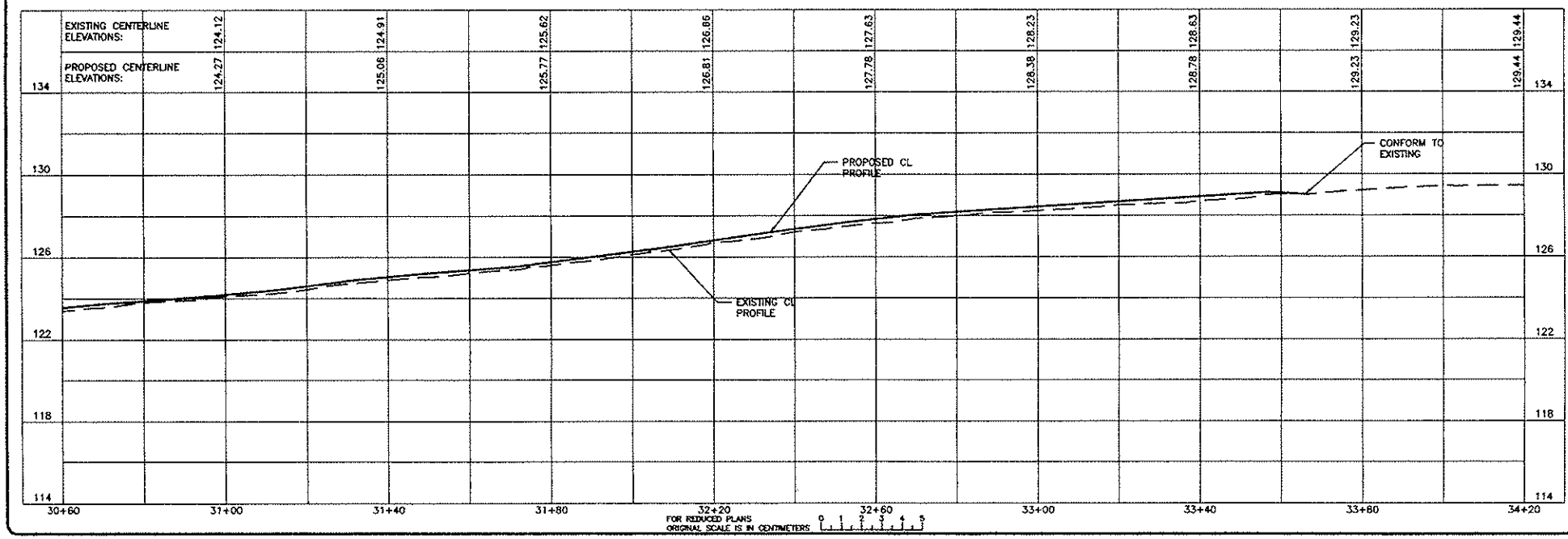
AUBURN-FOLSOM ROAD 4-LANE WIDENING PROJECT
ALTERNATIVE 2 - WIDENING TO THE EAST

COUNTY OF PLACER
DEPARTMENT OF PUBLIC WORKS
TRANSPORTATION DIVISION

SHEET NO. 21 OF 35

PRELIMINARY DESIGN PLANS
NOT FOR CONSTRUCTION





SCALE
HORIZONTAL: 1:500
VERTICAL: 1:100

DATE:
DESIGNED: C. EBELING 7/31/02
DRAWN: C. EBELING 7/31/02
CHECKED: E. McCARTHY 7/31/02

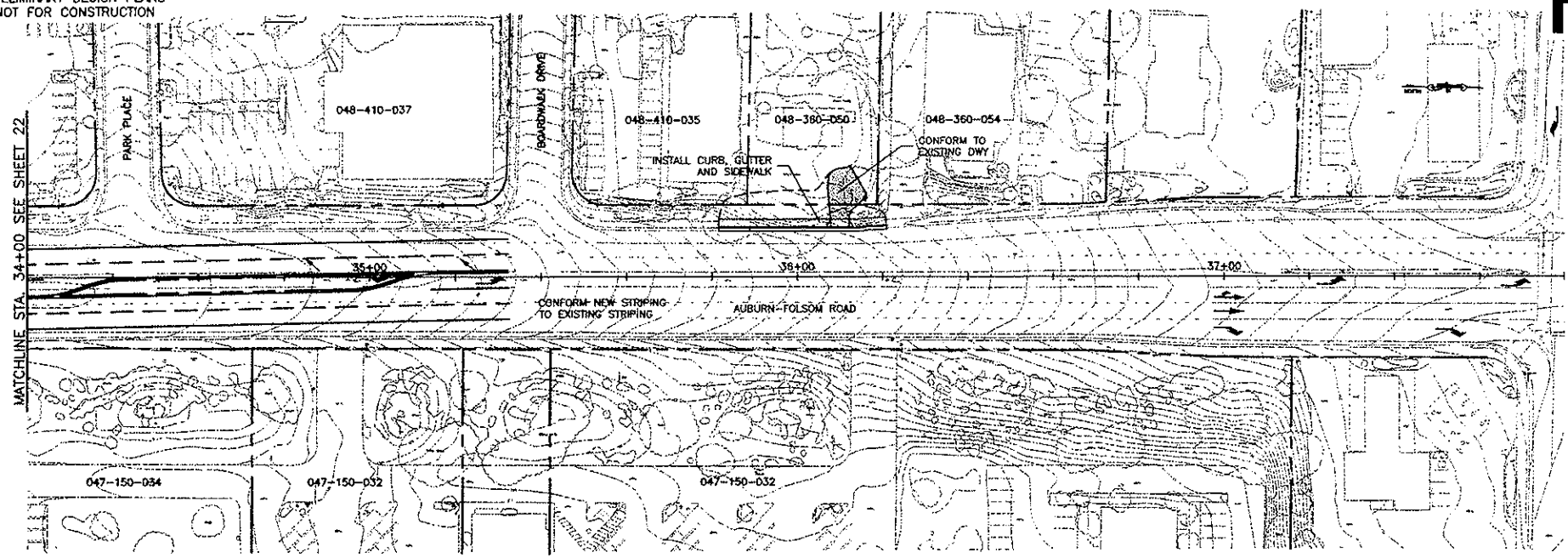
PLACER COUNTY PROJECT NUMBER:
RC 2764

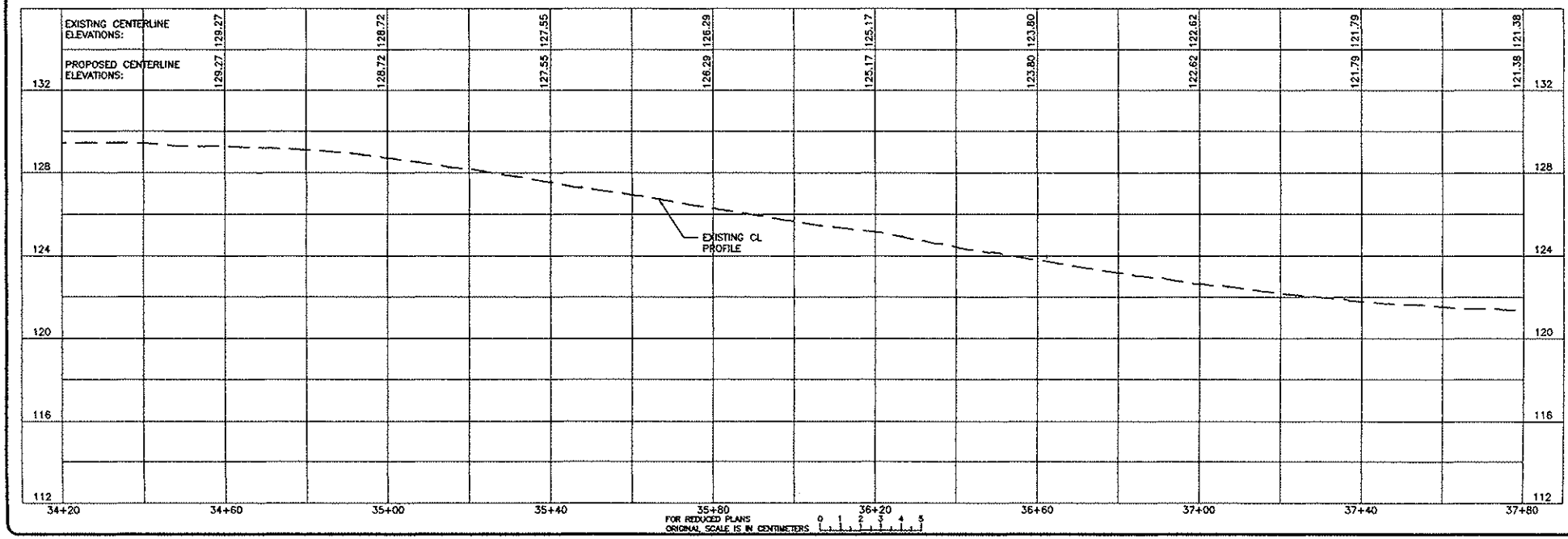
AUBURN-FOLSOM ROAD 4-LANE WIDENING PROJECT
ALTERNATIVE 2 - WIDENING TO THE EAST

COUNTY OF PLACER
DEPARTMENT OF PUBLIC WORKS
TRANSPORTATION DIVISION

SHEET NO. 22 OF 35

PRELIMINARY DESIGN PLANS
NOT FOR CONSTRUCTION





SCALE
HORIZONTAL: 1:500
VERTICAL: 1:100

		DATE
DESIGNED:	C. EBELING	7/31/02
DRAWN:	C. EBELING	7/31/02
CHECKED:	E. McCARTHY	7/31/02

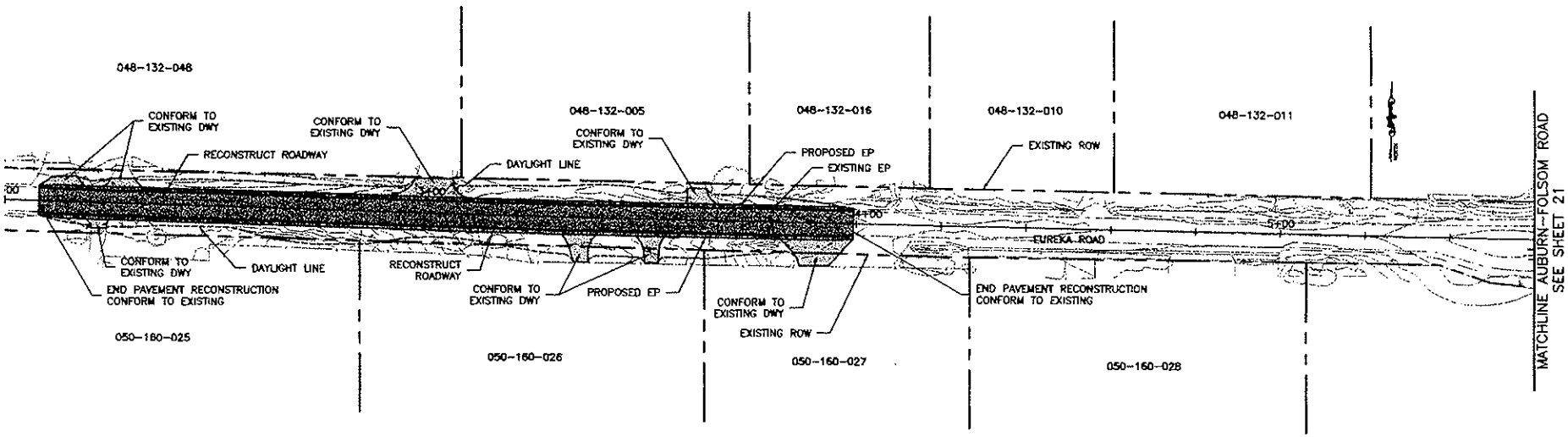
PLACER COUNTY PROJECT NUMBER: PC-2764

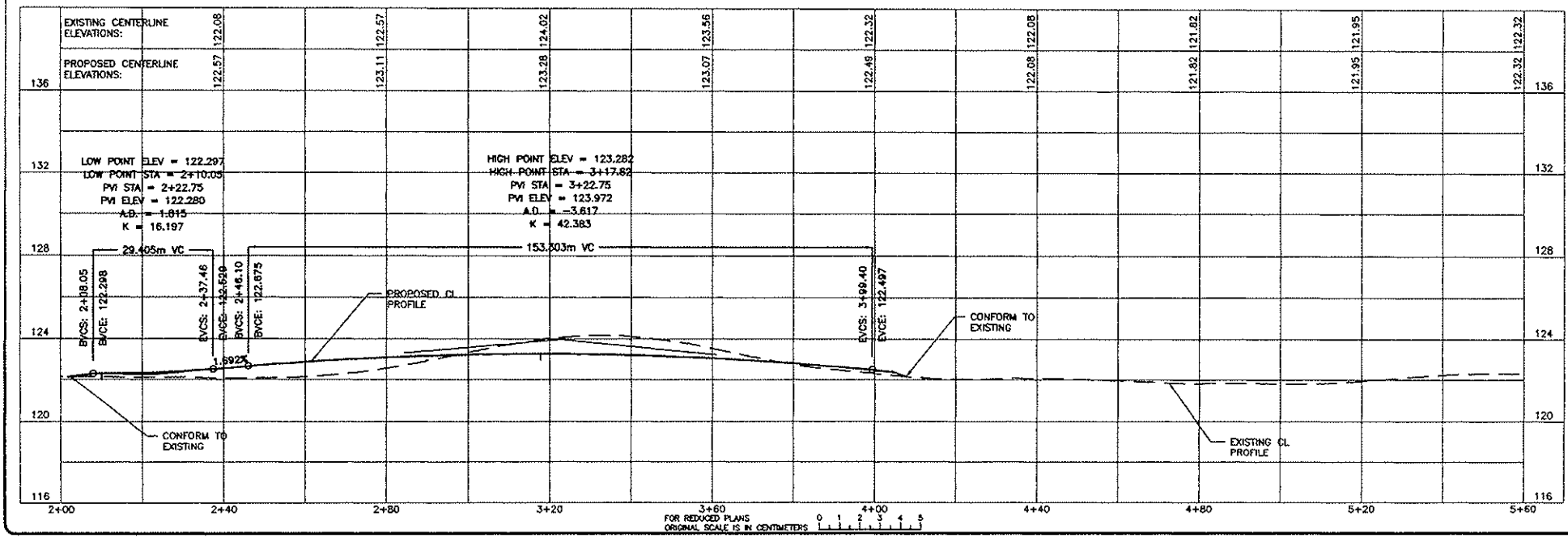
AUBURN-FOLSOM ROAD 4-LANE WIDENING PROJECT
ALTERNATIVE 2 - WIDENING TO THE EAST

COUNTY OF PLACER
DEPARTMENT OF PUBLIC WORKS
TRANSPORTATION DIVISION

SHEET NO. 23 OF 35

PRELIMINARY DESIGN PLANS
NOT FOR CONSTRUCTION





SCALE
HORIZONTAL: 1:500
VERTICAL: 1:100

DATE:
DESIGNED: S. FERLING 7/31/02
DRAWN: S. FERLING 7/31/02
CHECKED: E. McCARTHY 7/31/02

PLACER COUNTY PROJECT NUMBER: PC 2754

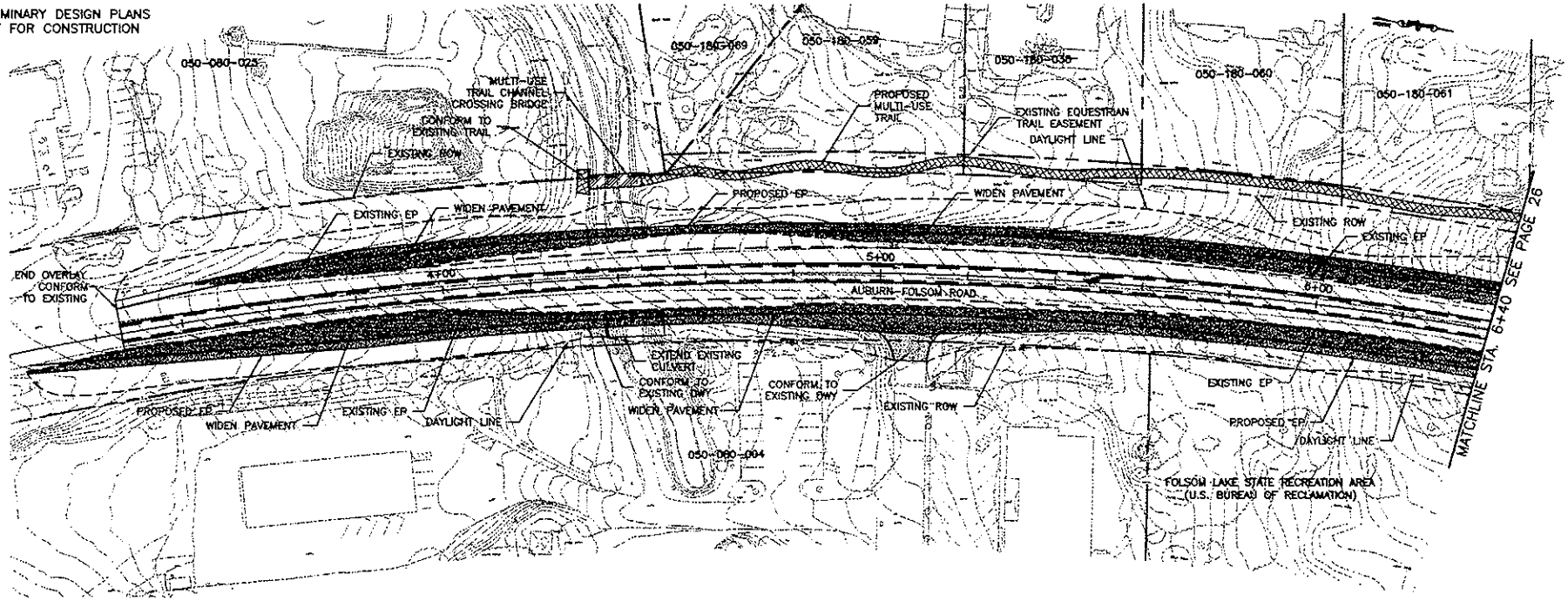
AUBURN-FOLSOM ROAD 4-LANE WIDENING PROJECT
+ ALTERNATIVE 2 - WIDENING TO THE EAST

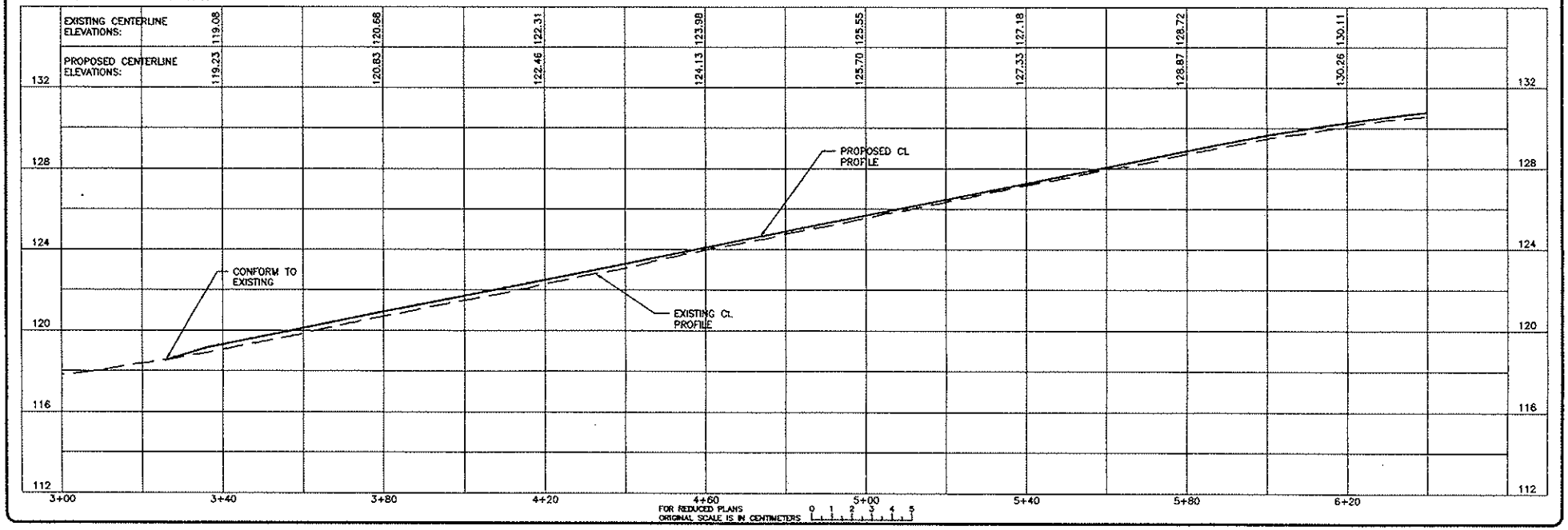
COUNTY OF PLACER
DEPARTMENT OF PUBLIC WORKS
TRANSPORTATION DIVISION

SHEET NO. 24 OF 35

Alternative 3: Widening Equally on Both Sides

PRELIMINARY DESIGN PLANS
NOT FOR CONSTRUCTION





SCALE
HORIZONTAL: 1:500
VERTICAL: 1:100

		DATE
DESIGNED:	C. EBELING	7/31/02
DRAWN:	C. EBELING	7/31/02
CHECKED:	E. McCARTHY	7/31/02

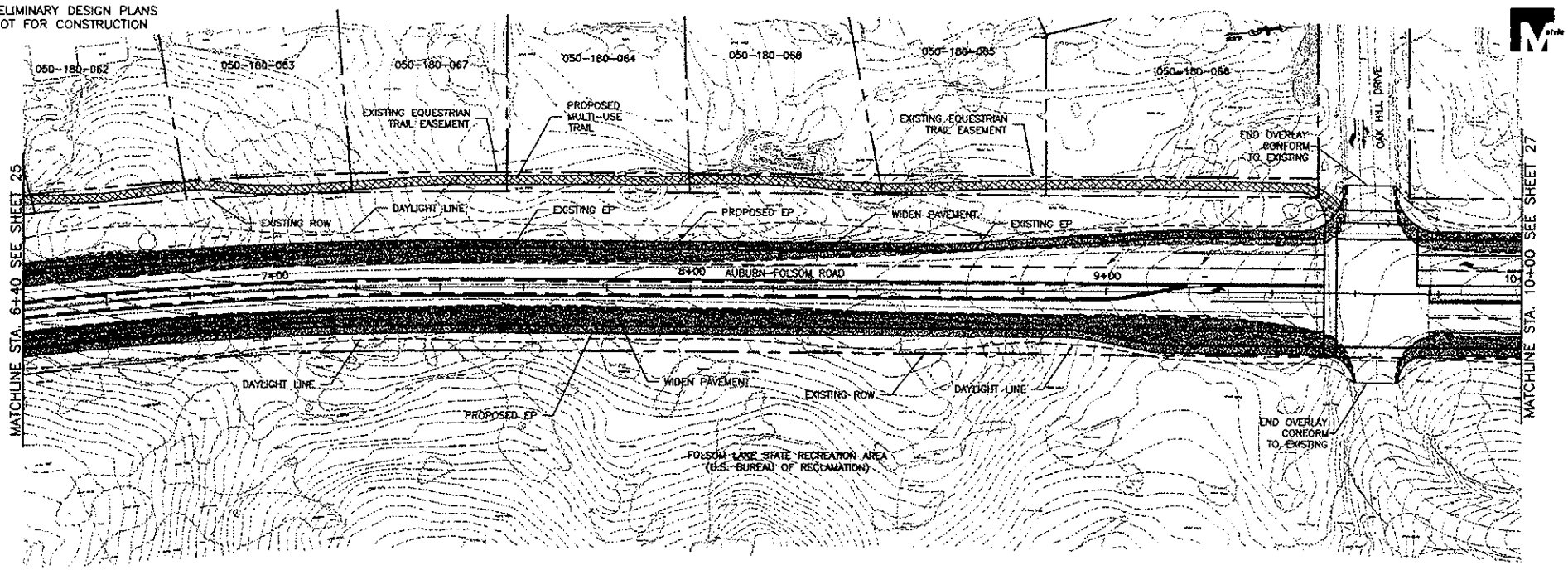
PLACER COUNTY PROJECT NUMBER: PC 2764

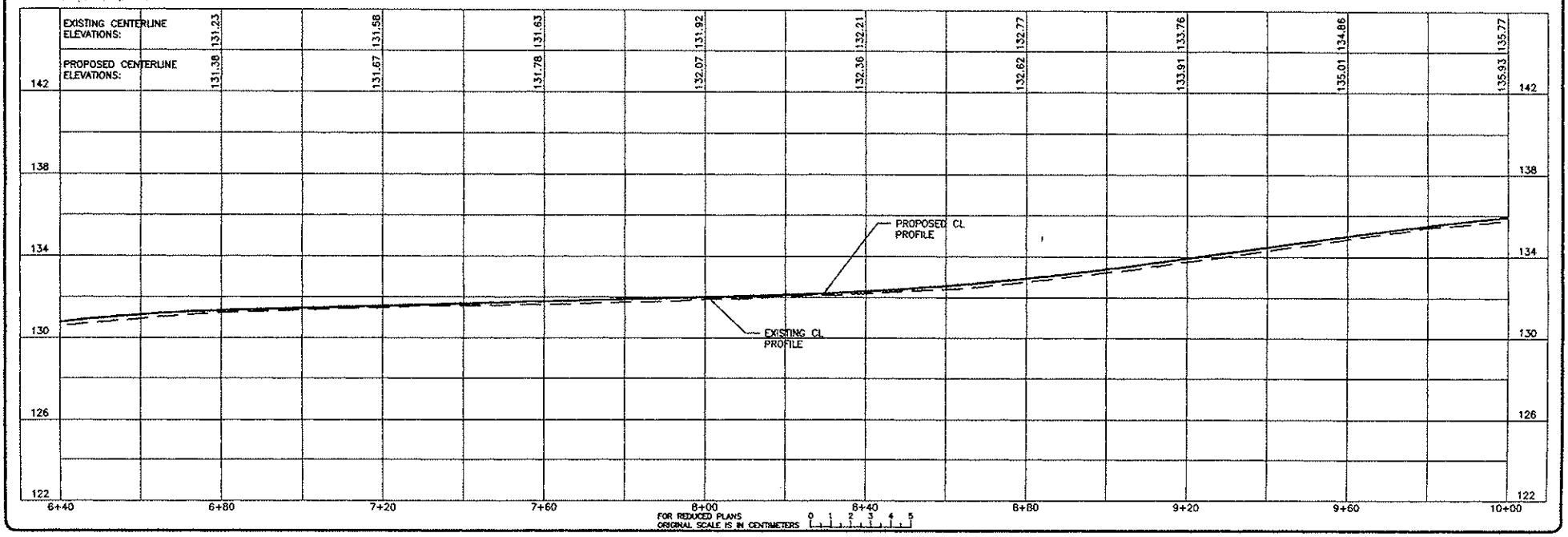
AUBURN-FOLSOM ROAD 4-LANE WIDENING PROJECT
"F" ALTERNATIVE 3 - WIDENING ON BOTH SIDES

COUNTY OF PLACER
DEPARTMENT OF PUBLIC WORKS
TRANSPORTATION DIVISION

SHEET NO. 25 OF 35

PRELIMINARY DESIGN PLANS
NOT FOR CONSTRUCTION





SCALE
HORIZONTAL: 1:500
VERTICAL: 1:100

		DATE
DESIGNED:	S. FEELING	7/31/03
DRAWN:	S. FEELING	7/31/03
CHECKED:	L. McCARTHY	7/31/03

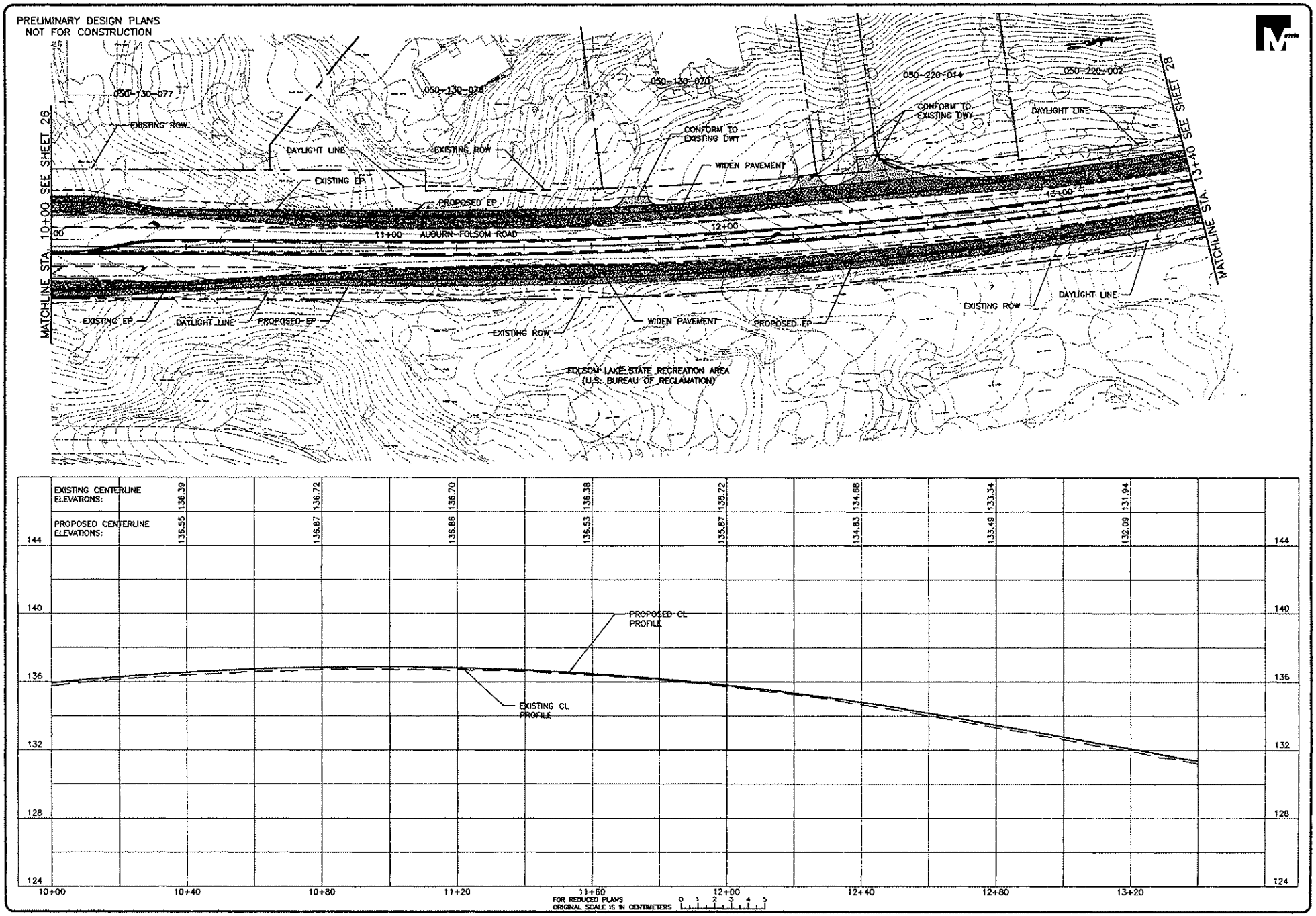
PLACER COUNTY PROJECT NUMBER: PC 2764

COUNTY OF PLACER
DEPARTMENT OF PUBLIC WORKS
TRANSPORTATION DIVISION

AUBURN-FOLSOM ROAD 4-LANE WIDENING PROJECT
ALTERNATIVE 3 - WIDENING ON BOTH SIDES

SHEET NO. 26 OF 35

PRELIMINARY DESIGN PLANS
NOT FOR CONSTRUCTION



SCALE
HORIZONTAL: 1:500
VERTICAL: 1:100

PLACER COUNTY PROJECT NUMBER: PC 2764

DESIGNED: C. EBELING 7/31/02
DRAWN: C. EBELING 7/31/02
CHECKED: E. McCARTHY 7/31/02

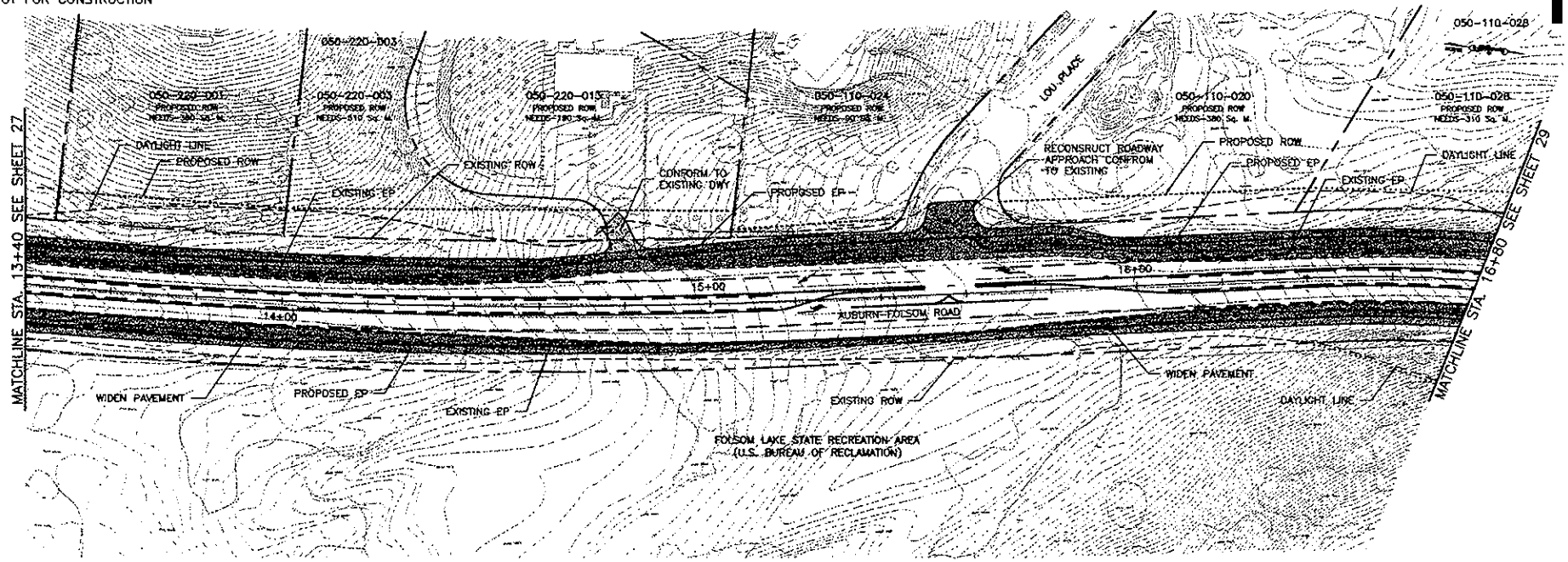
DATE:

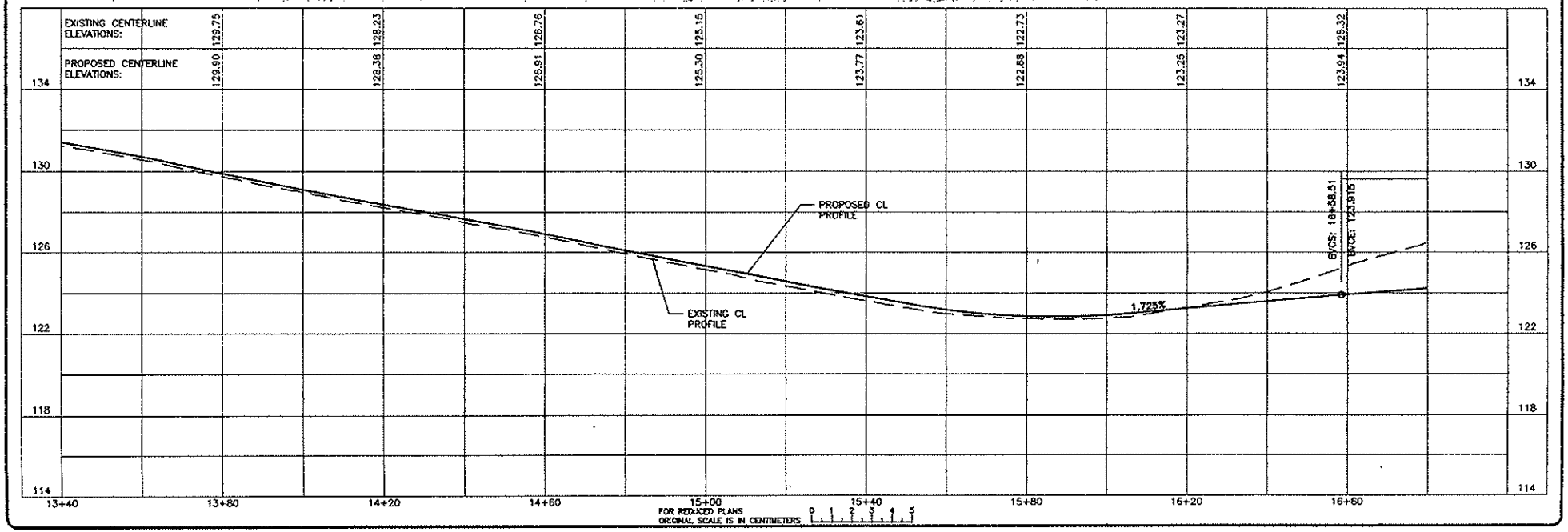
AUBURN-FOLSOM ROAD 4-LANE
WIDENING PROJECT
ALTERNATIVE 3 - WIDENING ON BOTH SIDES

COUNTY OF PLACER
DEPARTMENT OF PUBLIC WORKS
TRANSPORTATION DIVISION

SHEET NO.
27
OF
35

PRELIMINARY DESIGN PLANS
NOT FOR CONSTRUCTION





SCALE
HORIZONTAL: 1:500
VERTICAL: 1:100

DATE:
DESIGNED: S. EKLUND 7/31/02
DRAWN: S. EKLUND 7/31/02
CHECKED: S. MCCARTHY 7/31/02

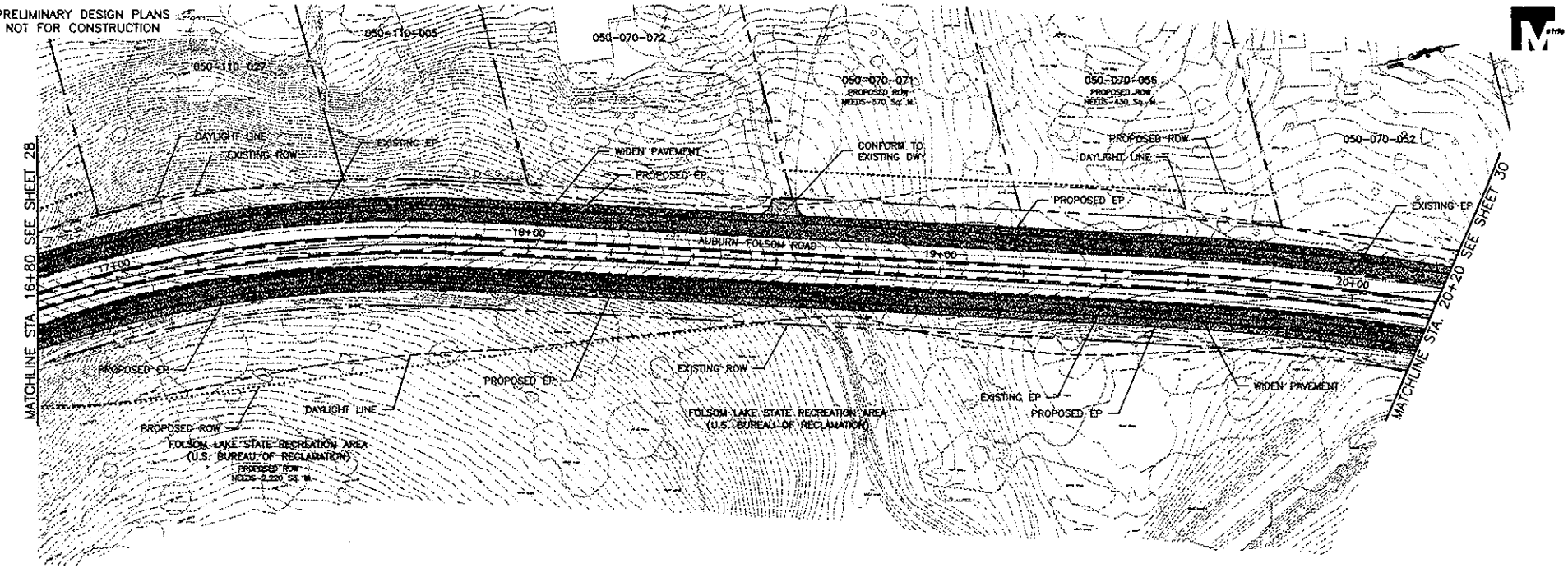
PLACER COUNTY
PROJECT NUMBER:
FC 2764

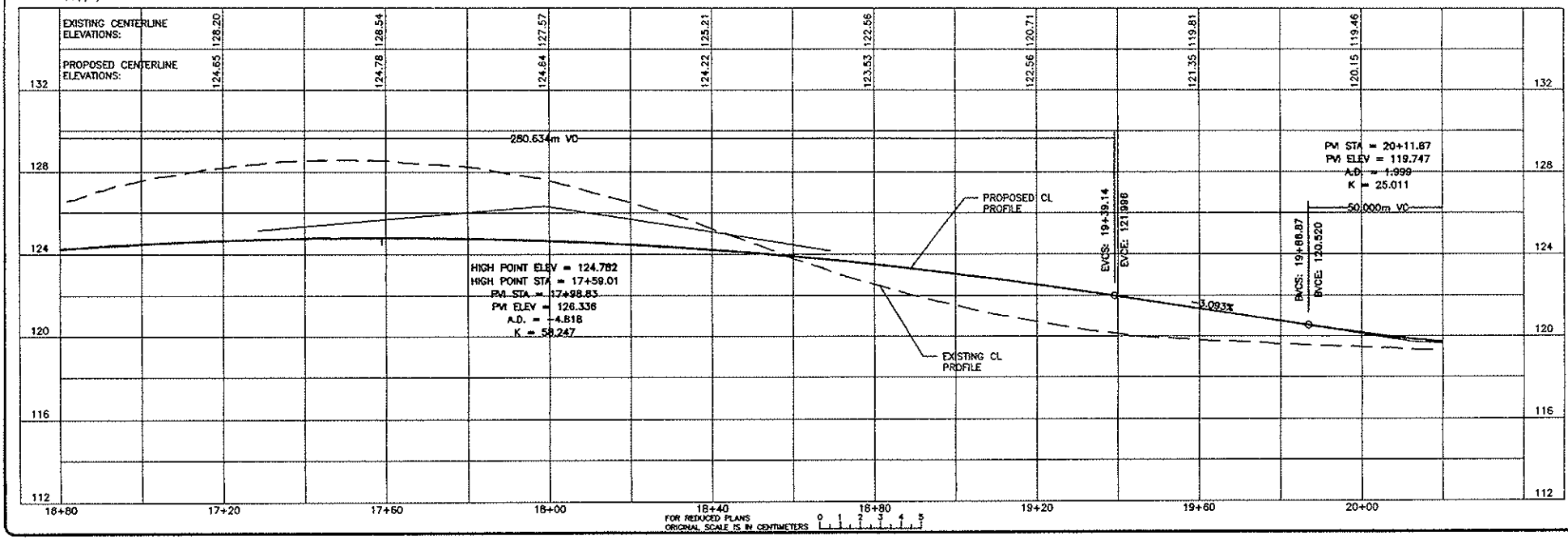
COUNTY OF PLACER
DEPARTMENT OF PUBLIC WORKS
TRANSPORTATION DIVISION

AUBURN-FOLSOM ROAD 4-LANE
WIDENING PROJECT
"F" ALTERNATIVE 3 - WIDENING ON BOTH SIDES

SHEET NO.
28
OF
35

PRELIMINARY DESIGN PLANS
NOT FOR CONSTRUCTION





SCALE
HORIZONTAL: 1:500
VERTICAL: 1:100

DATE
DESIGNED: C. FERLING 7/31/02
DRAWN: C. FERLING 7/31/02
CHECKED: E. McCARTHY 7/31/02

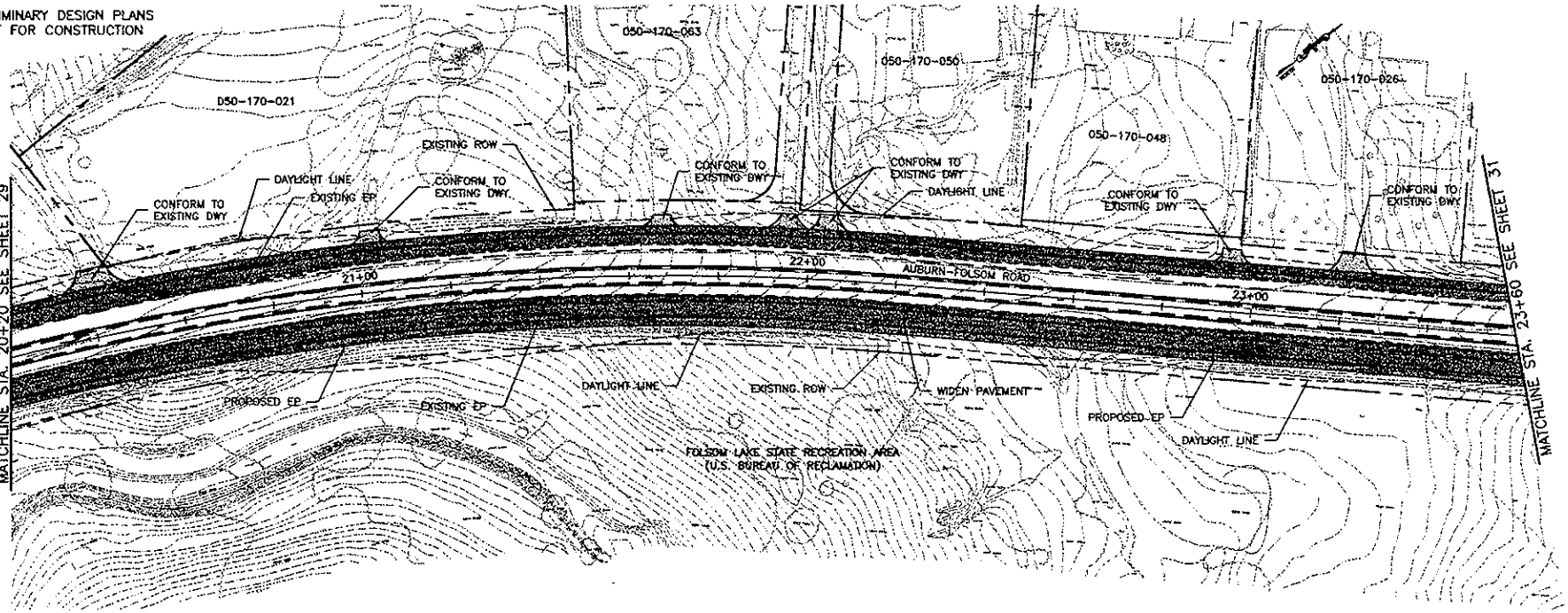
PLACER COUNTY
PROJECT NUMBER:
PC 2281

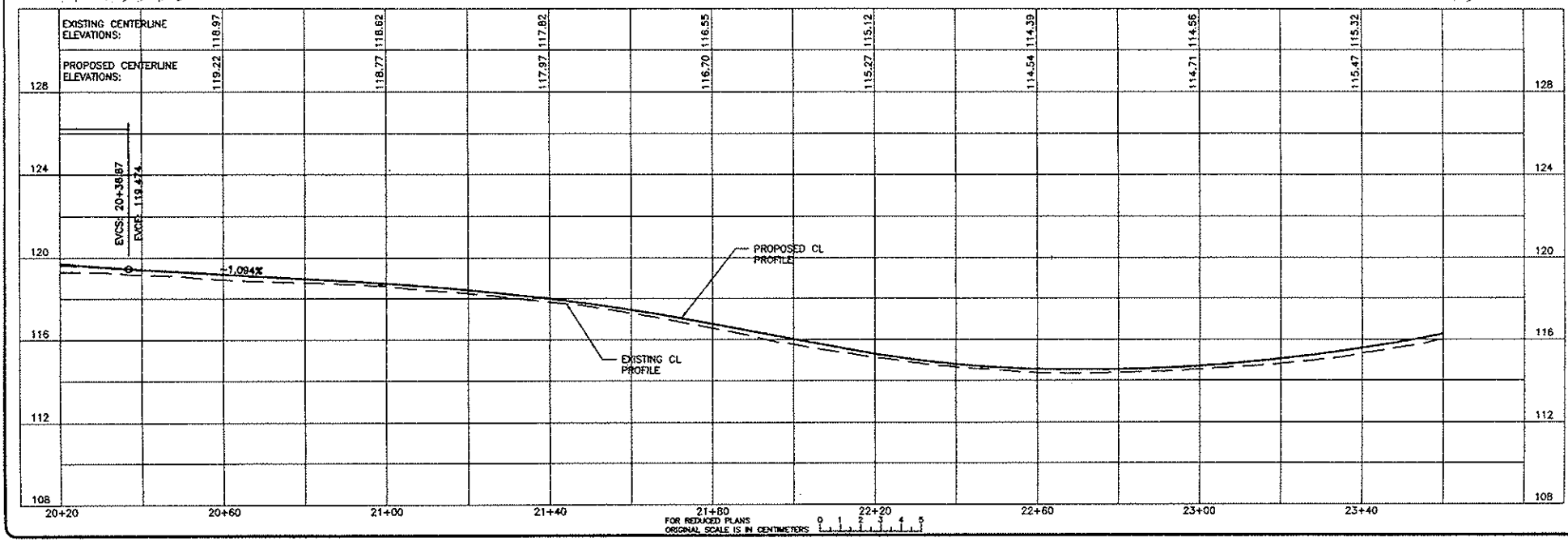
AUBURN-FOLSOM ROAD 4-LANE
WIDENING PROJECT
"F" ALTERNATIVE 3 - WIDENING ON BOTH SIDES

COUNTY OF PLACER
DEPARTMENT OF PUBLIC WORKS
TRANSPORTATION DIVISION

SHEET NO.
29
OF
35

PRELIMINARY DESIGN PLANS
NOT FOR CONSTRUCTION





SCALE
HORIZONTAL: 1:500
VERTICAL: 1:100

DESIGNED: C. EBELING DATE: 7/31/02
DRAWN: C. EBELING 7/31/02
CHECKED: E. McCARTHY 7/31/03

PLACER COUNTY PROJECT NUMBER:
PC 2764

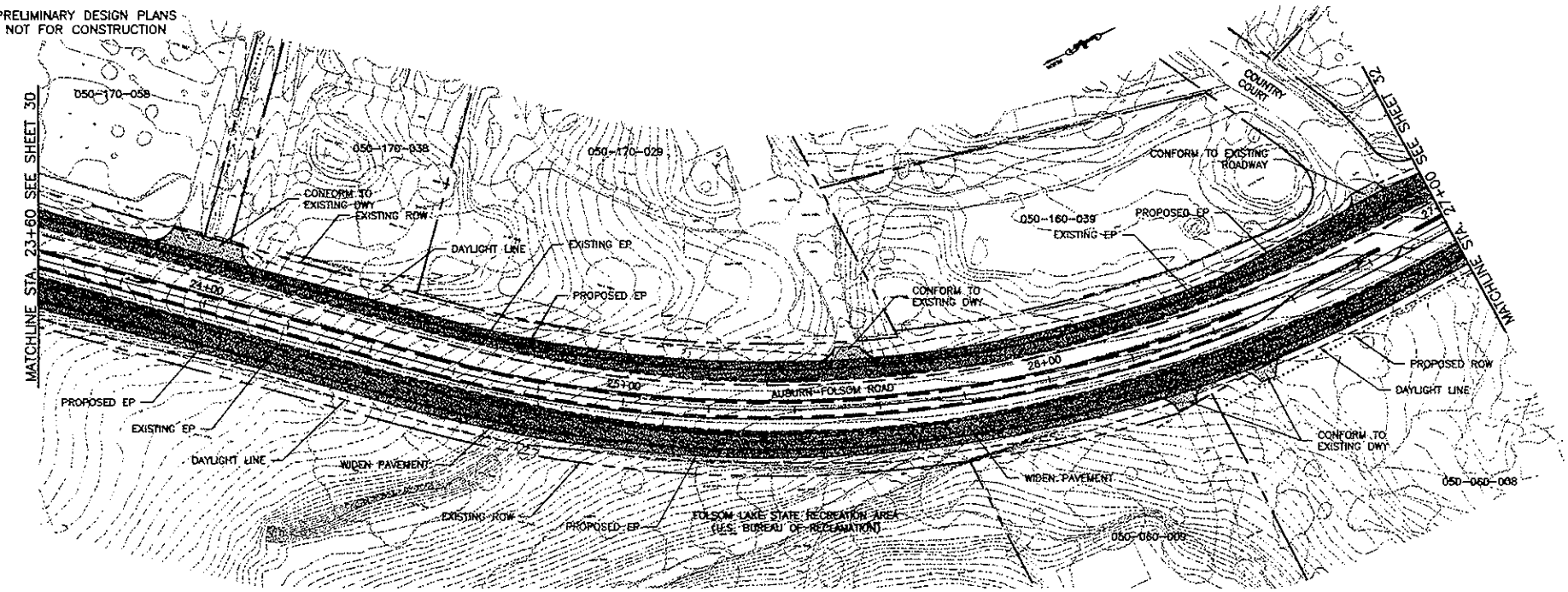
AUBURN-FOLSOM ROAD 4-LANE WIDENING PROJECT

"4" ALTERNATIVE 3 - WIDENING ON BOTH SIDES

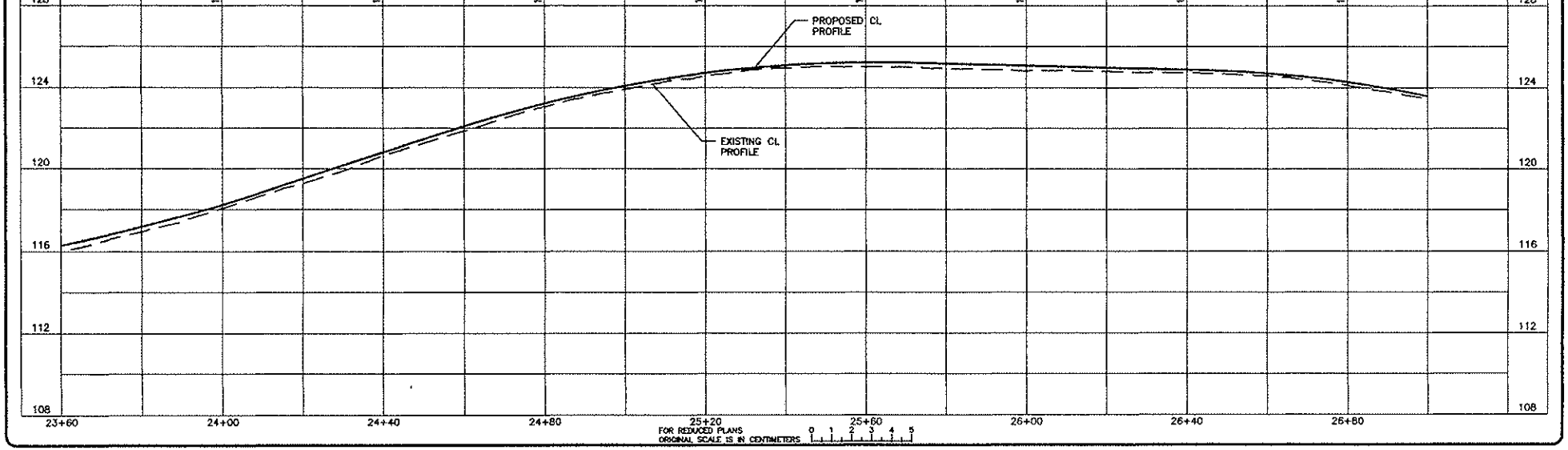
COUNTY OF PLACER
DEPARTMENT OF PUBLIC WORKS
TRANSPORTATION DIVISION

SHEET NO. 30 OF 35

PRELIMINARY DESIGN PLANS
NOT FOR CONSTRUCTION



EXISTING CENTERLINE ELEVATIONS:		118.07		120.63		123.07		124.55		125.01		124.82		124.72		124.14		
PROPOSED CENTERLINE ELEVATIONS:		118.22		120.78		123.22		124.70		125.16		124.97		124.87		124.29		



SCALE
HORIZONTAL: 1:500
VERTICAL: 1:100

DATE
DESIGNED: G. EBELING 7/31/02
DRAWN: G. EBELING 7/31/02
CHECKED: E. McCARTHY 7/31/02

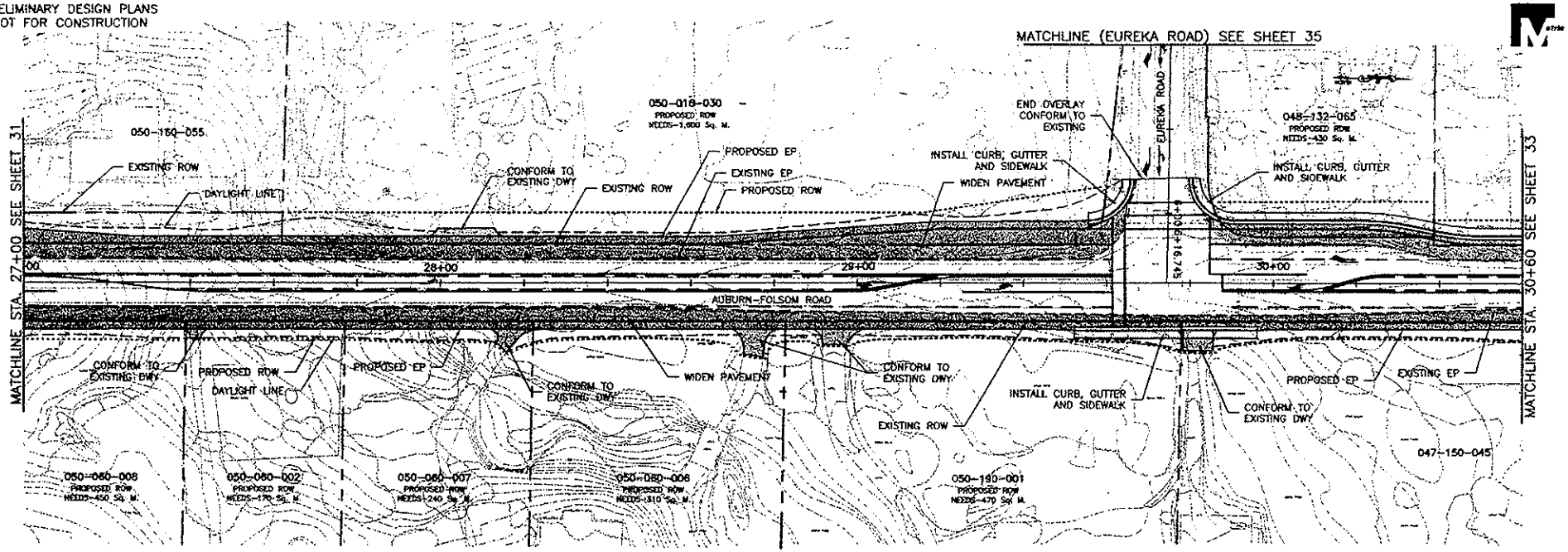
PLACER COUNTY PROJECT NUMBER: PC 2784

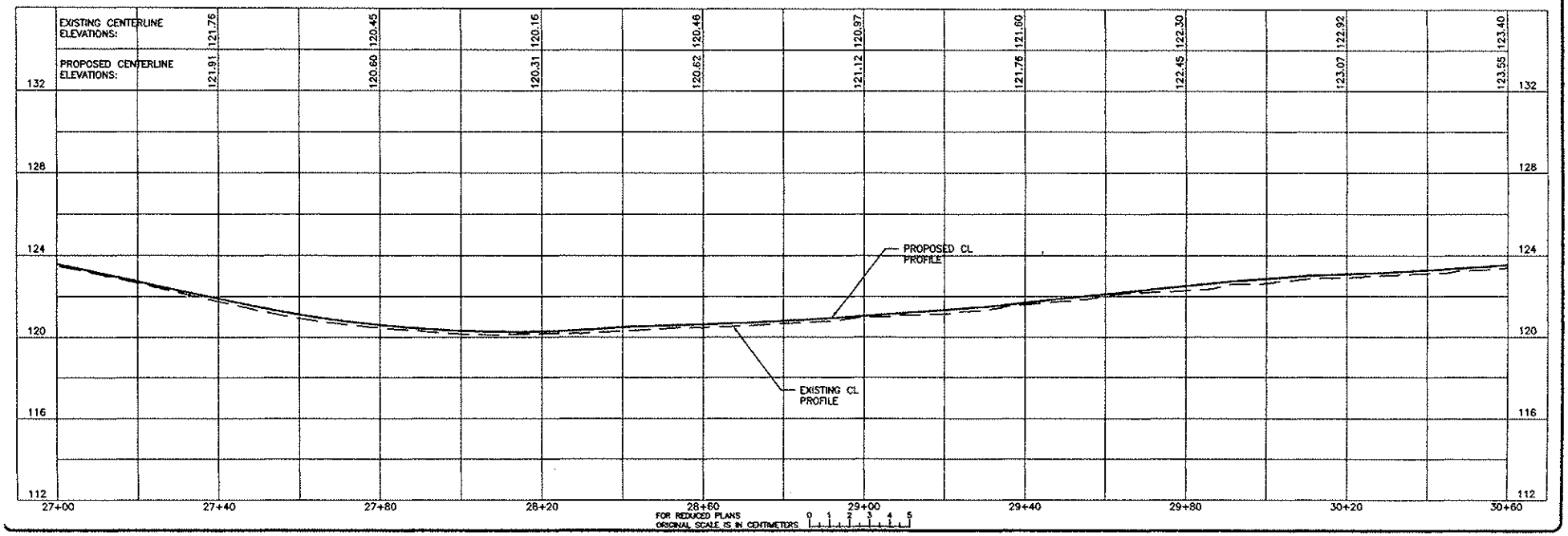
COUNTY OF PLACER
DEPARTMENT OF PUBLIC WORKS
TRANSPORTATION DIVISION

AUBURN-FOLSOM ROAD 4-LANE WIDENING PROJECT
ALTERNATIVE 3 - WIDENING ON BOTH SIDES

SHEET NO. 31 OF 35

PRELIMINARY DESIGN PLANS
NOT FOR CONSTRUCTION





SCALE
HORIZONTAL: 1:500
VERTICAL: 1:100

DESIGNED: C. EBLING 7/31/02
DRAWN: C. EBLING 7/31/02
CHECKED: E. McCARTHY 7/31/02
DATE:

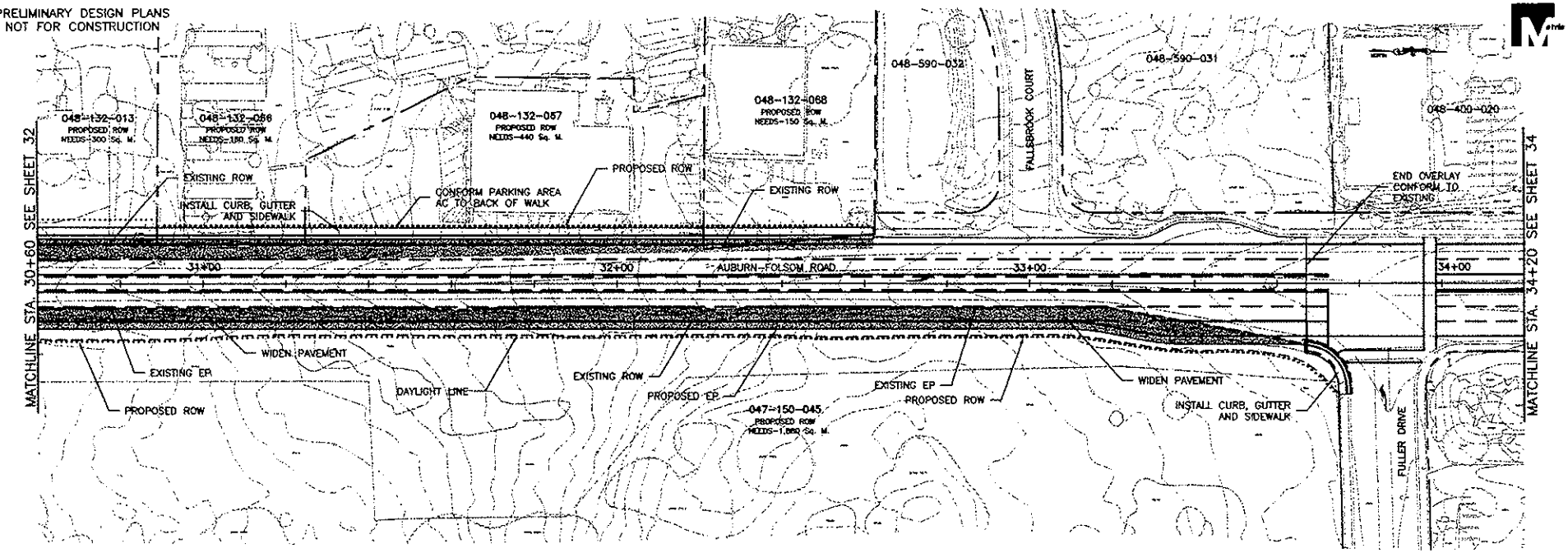
PLACER COUNTY PROJECT NUMBER: PC 2764

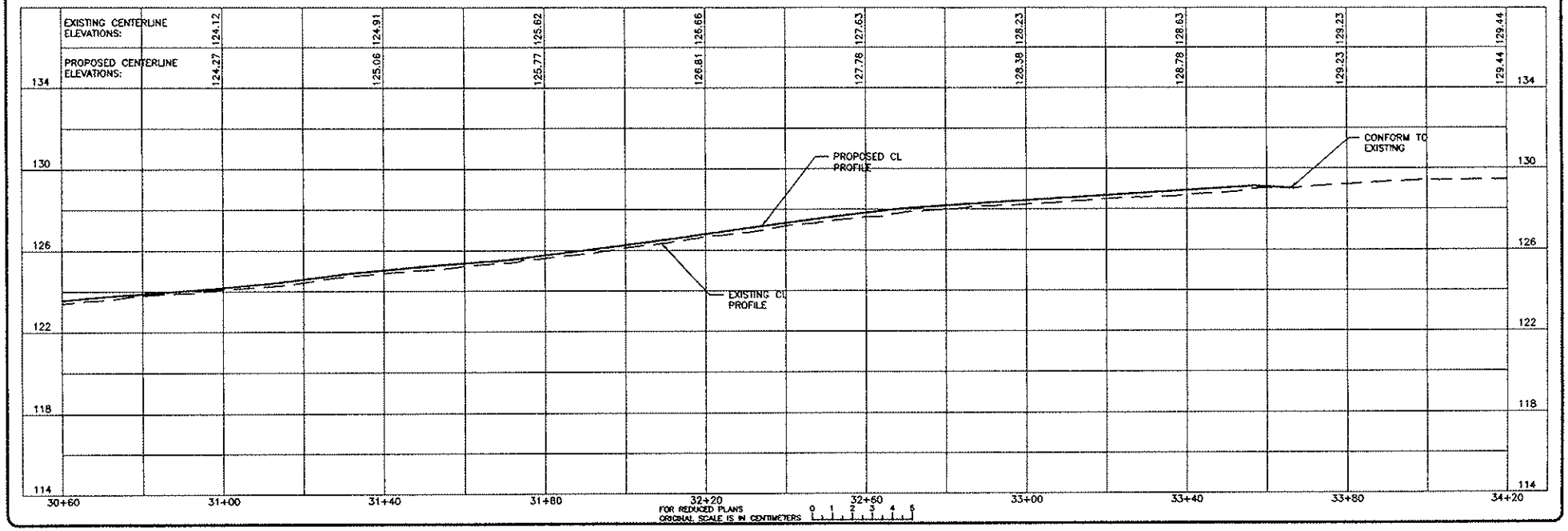
COUNTY OF PLACER
DEPARTMENT OF PUBLIC WORKS
TRANSPORTATION DIVISION

AUBURN-FOLSOM ROAD 4-LANE WIDENING PROJECT
"4" ALTERNATIVE 3 -- WIDENING ON BOTH SIDES

SHEET NO. 32 OF 35

PRELIMINARY DESIGN PLANS
NOT FOR CONSTRUCTION





SCALE
HORIZONTAL: 1:500
VERTICAL: 1:100

		DATE
DESIGNED:	S. EBELING	7/31/02
DRAWN:	S. EBELING	7/31/02
CHECKED:	E. McCARTHY	7/31/02

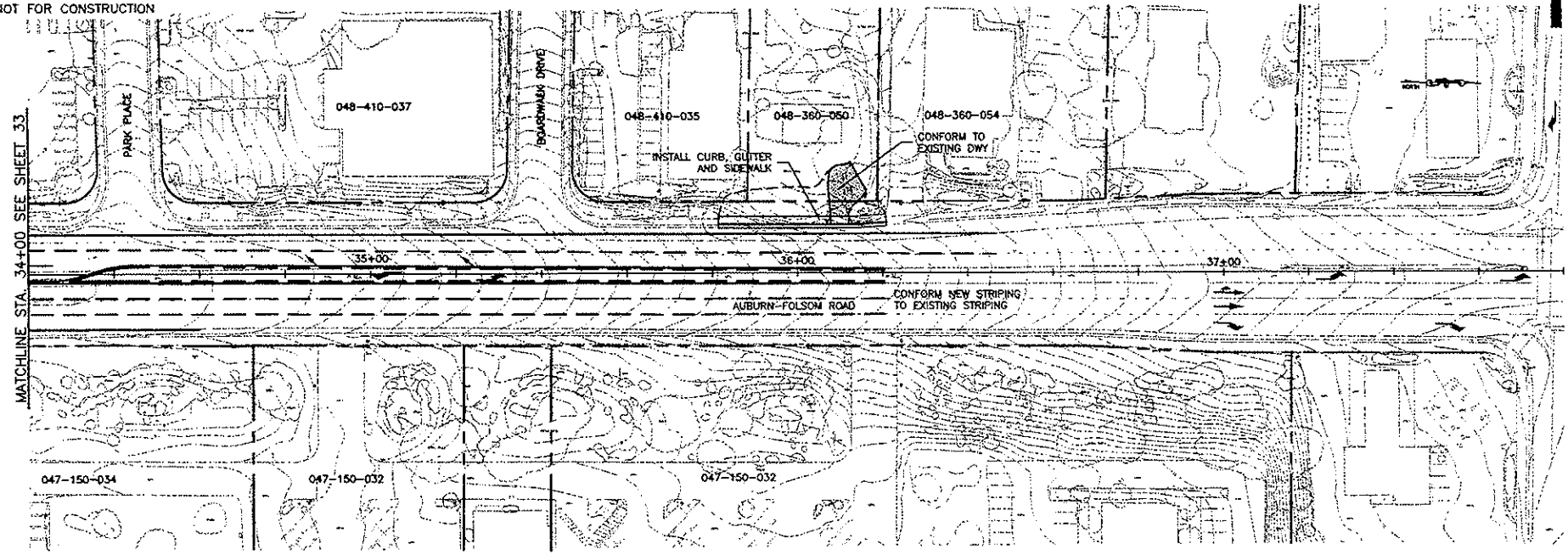
PLACER COUNTY PROJECT NUMBER: PC 2764

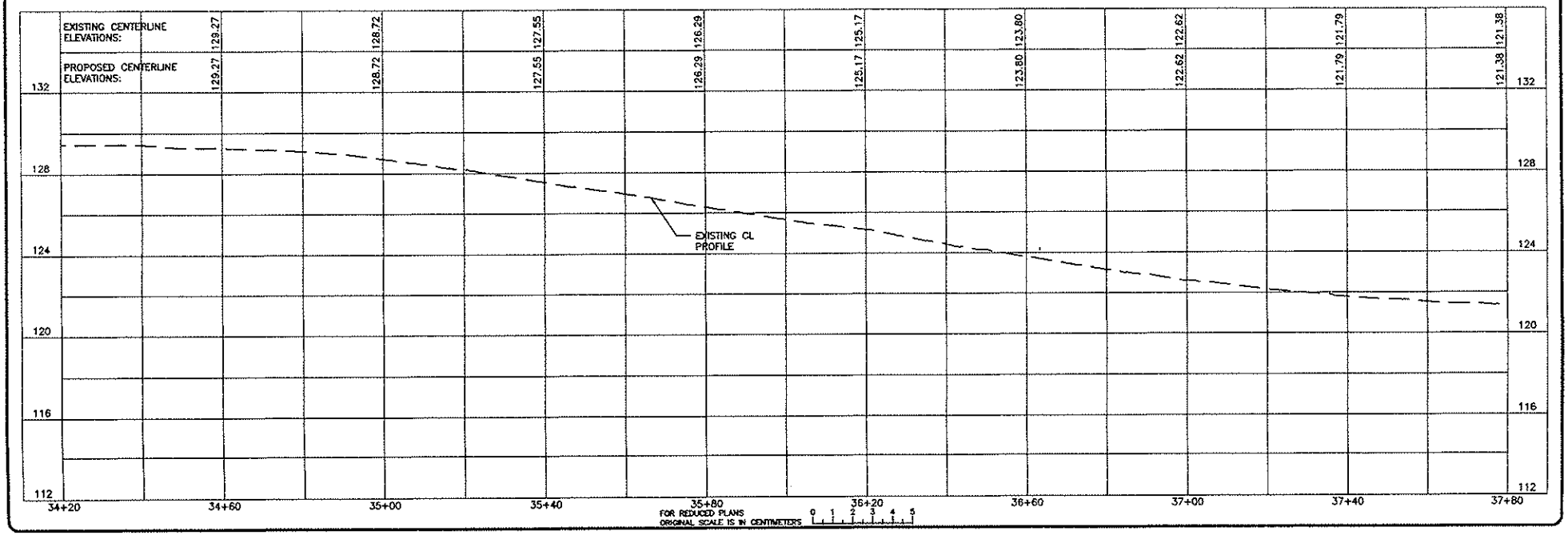
AUBURN-FOLSOM ROAD 4-LANE WIDENING PROJECT
ALTERNATIVE 3 - WIDENING ON BOTH SIDES

COUNTY OF PLACER
DEPARTMENT OF PUBLIC WORKS
TRANSPORTATION DIVISION

SHEET NO. 33 OF 35

PRELIMINARY DESIGN PLANS
NOT FOR CONSTRUCTION





SCALE
HORIZONTAL: 1:500
VERTICAL: 1:100

PLACER COUNTY PROJECT NUMBER: PC 2764

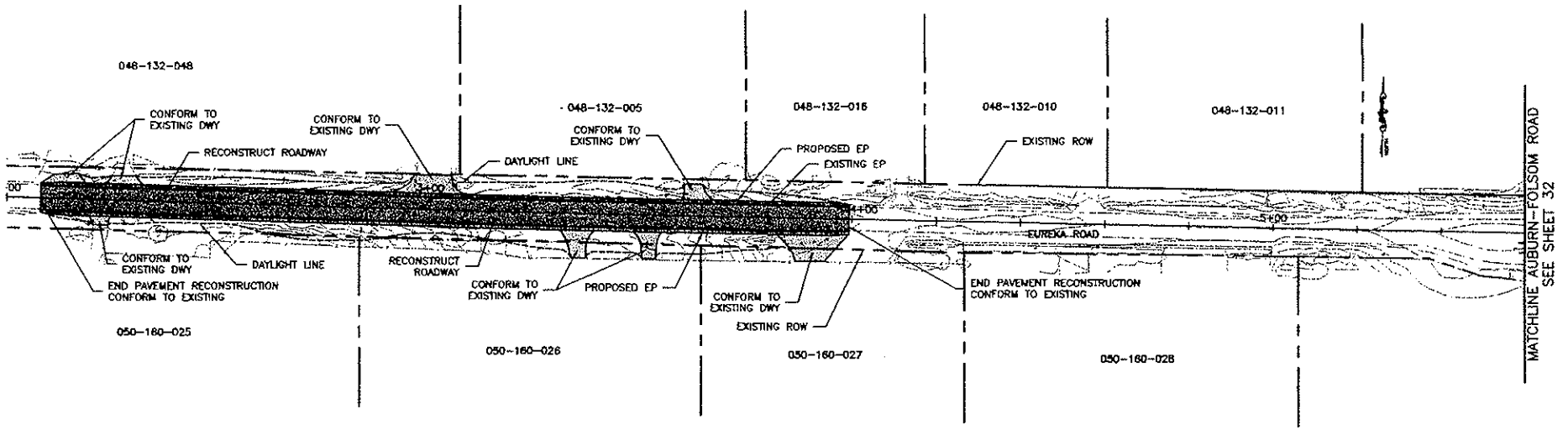
DESIGNED: G. ERBLING 7/31/02
DRAWN: G. ERBLING 7/31/02
CHECKED: E. McCARTHY 7/31/02
DATE:

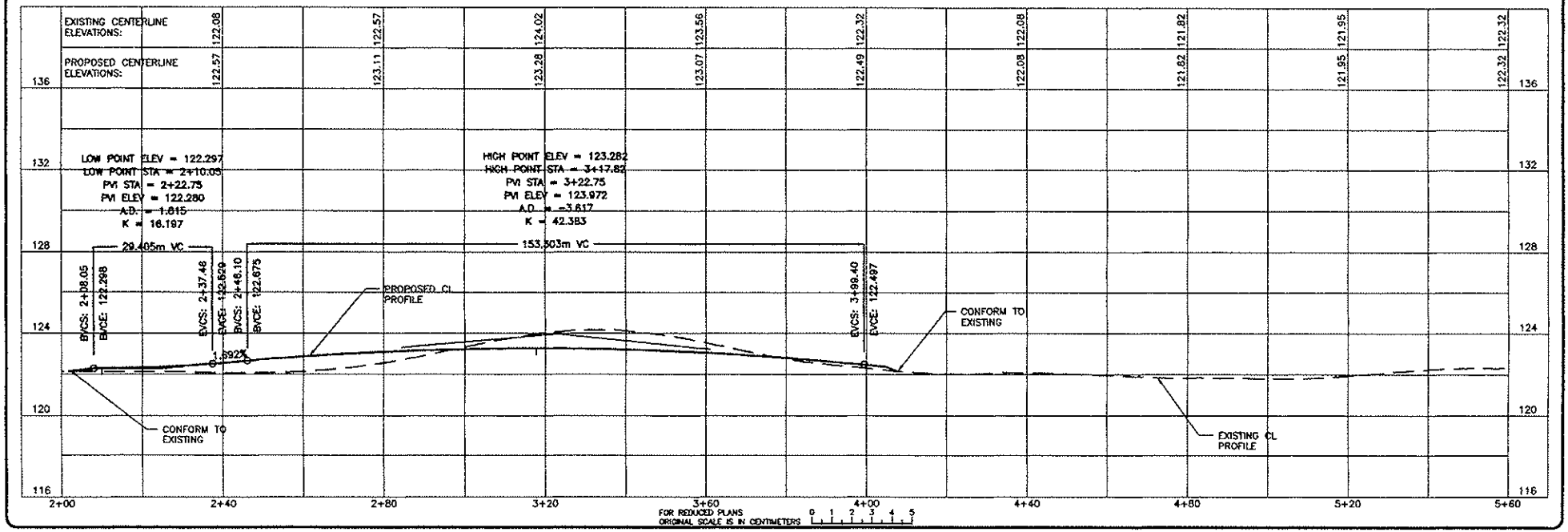
AUBURN-FOLSOM ROAD 4-LANE WIDENING PROJECT
ALTERNATIVE 3 - WIDENING ON BOTH SIDES

COUNTY OF PLACER
DEPARTMENT OF PUBLIC WORKS
TRANSPORTATION DIVISION

SHEET NO. 34 OF 35

PRELIMINARY DESIGN PLANS
NOT FOR CONSTRUCTION





SCALE
HORIZONTAL: 1:500
VERTICAL: 1:100

DATE:
DESIGNED: C. EGELUND 7/31/02
DRAWN: S. EGELUND 7/31/02
CHECKED: E. McCARTHY 7/31/02

PLACER COUNTY PROJECT NUMBER:
PC 2164

AUBURN-FOLSOM ROAD 4-LANE WIDENING PROJECT
ALTERNATIVE 3 - WIDENING ON BOTH SIDES

COUNTY OF PLACER
DEPARTMENT OF PUBLIC WORKS
TRANSPORTATION DIVISION

SHEET NO.
35
OF
35

Alternative 4: County DPW-Preferred Alternative

PRELIMINARY DESIGN PLANS
NOT FOR CONSTRUCTION

COUNTY OF PLACER

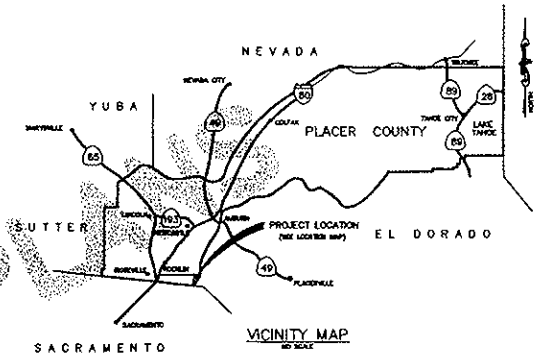
DEPARTMENT OF PUBLIC WORKS

PRELIMINARY DESIGN PLANS FOR:

AUBURN–FOLSOM ROAD 4–LANE WIDENING PROJECT

FROM THE PLACER COUNTY LINE NORTH TO DOUGLAS BOULEVARD GRANITE BAY, CA

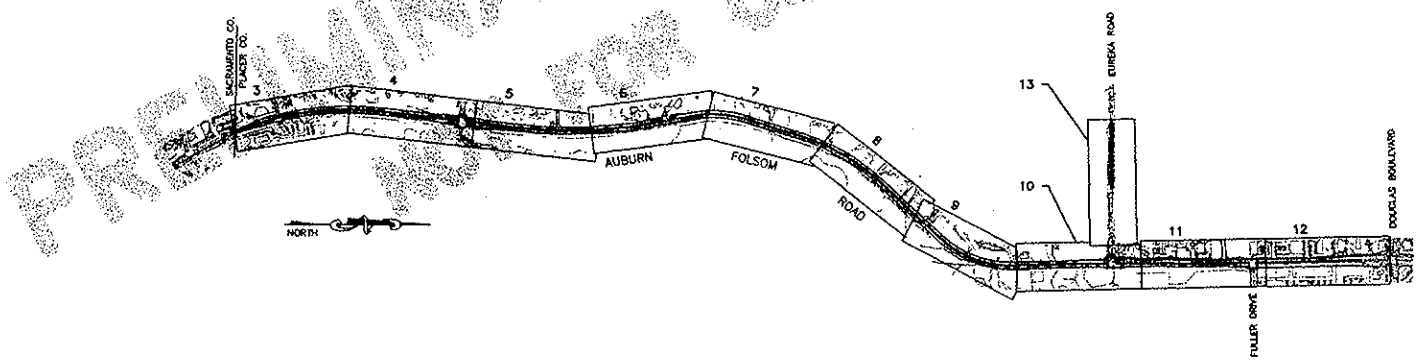
ALTERNATIVE 4



SHEET INDEX:

1. TITLE SHEET
2. TYPICAL SECTIONS
3–13. PLAN & PROFILE ALTERNATIVE 4

PRELIMINARY DESIGN PLANS NOT FOR CONSTRUCTION



NOTE:

1) THE RIGHT–OF–WAY LINES SHOWN ARE FOR REFERENCE PURPOSES ONLY. RIGHT–OF–WAY HAS NOT BEEN SURVEYED.

2) ATERNATIVE 4 IS A COMBINATION OF ALTERNATIVES 1, 2, AND 3 PRESENTED IN THE PRELIMINARY DESIGN PLAN SET DATED 7/31/02. ALTERNATIVE 4 FITS WITHIN THE PROJECT LIMITS DEFINED IN THE AUBURN–FOLSOM ROAD 4–LANE WIDENING PROJECT PRELIMINARY DESIGN REPORT DATED 8/21/02

FOR REDUCED PLANS ORIGINAL SCALE IS IN CENTIMETERS 0 1 2 3 4 5

SCALE
HORIZONTAL: N.A.
VERTICAL: N.A.

DATE
DESIGNED: S. EBELING 9/18/02
DRAWN: S. EBELING 9/18/02
CHECKED: E. McCARTHY 9/18/02

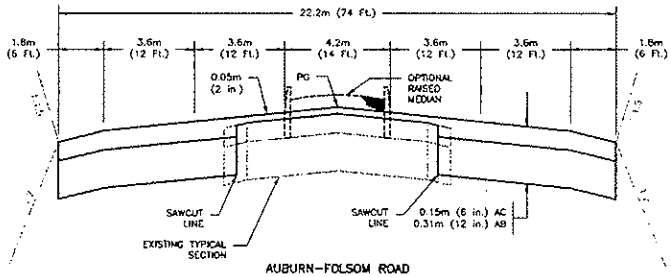
PLACER COUNTY PROJECT NUMBER: 2784

COUNTY OF PLACER
DEPARTMENT OF PUBLIC WORKS
TRANSPORTATION DIVISION

AUBURN–FOLSOM ROAD 4–LANE WIDENING PROJECT
TITLE SHEET

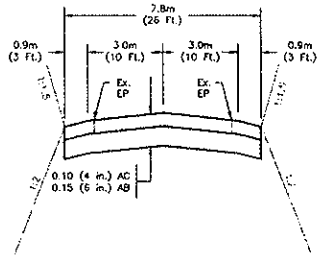
SHEET NO. 1 OF 13

PRELIMINARY DESIGN PLANS
NOT FOR CONSTRUCTION



AUBURN-FOLSOM ROAD
ALTERNATIVE 4

THE LOCATION OF THE EXISTING SECTION VARIES - SEE PLAN AND PROFILE SHEETS



EUREKA ROAD
(RECONSTRUCT SECTION)

FOR REDUCED PLANS
ORIGINAL SCALE IS IN CENTIMETERS 0 1 2 3 4 5

SCALE
HORIZONTAL: 1:100
VERTICAL: 1:20

PLACER COUNTY PROJECT NUMBER: 2764

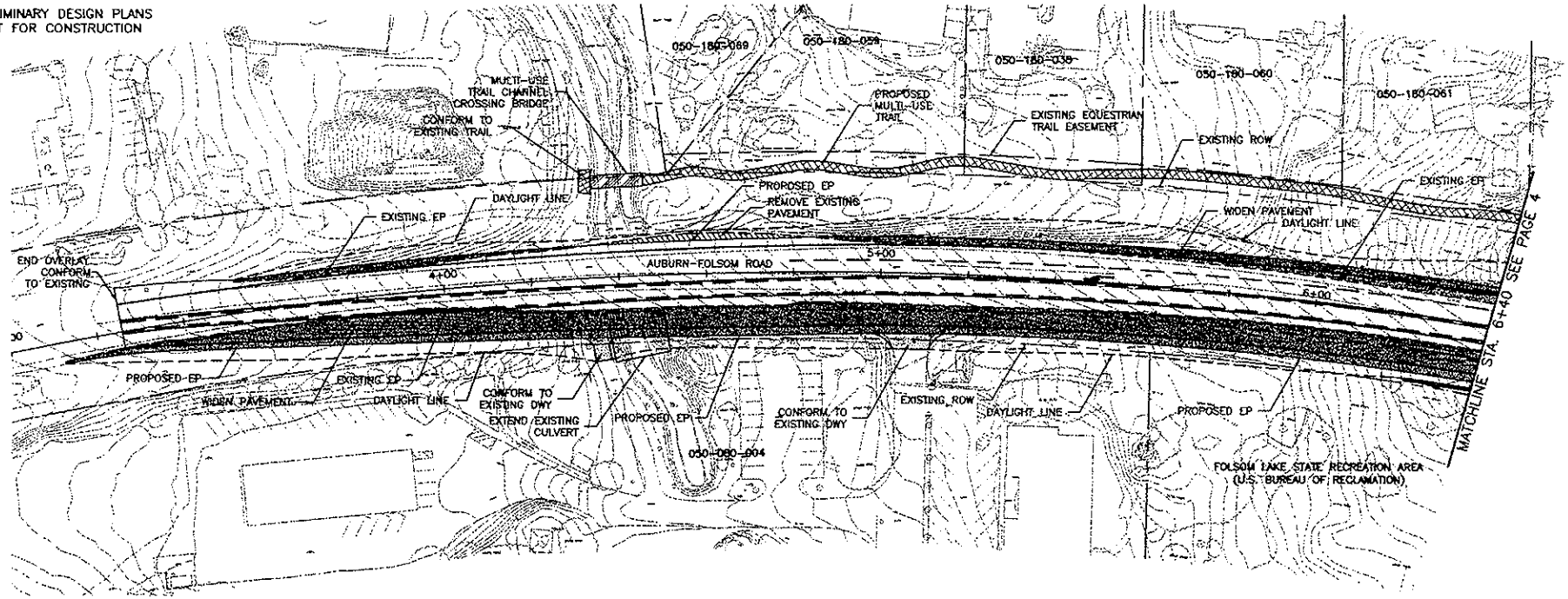
		DATE
DESIGNED:	G. EBERLING	9/16/02
DRAWN:	G. EBERLING	9/16/02
CHECKED:	E. McCARTHY	9/16/02

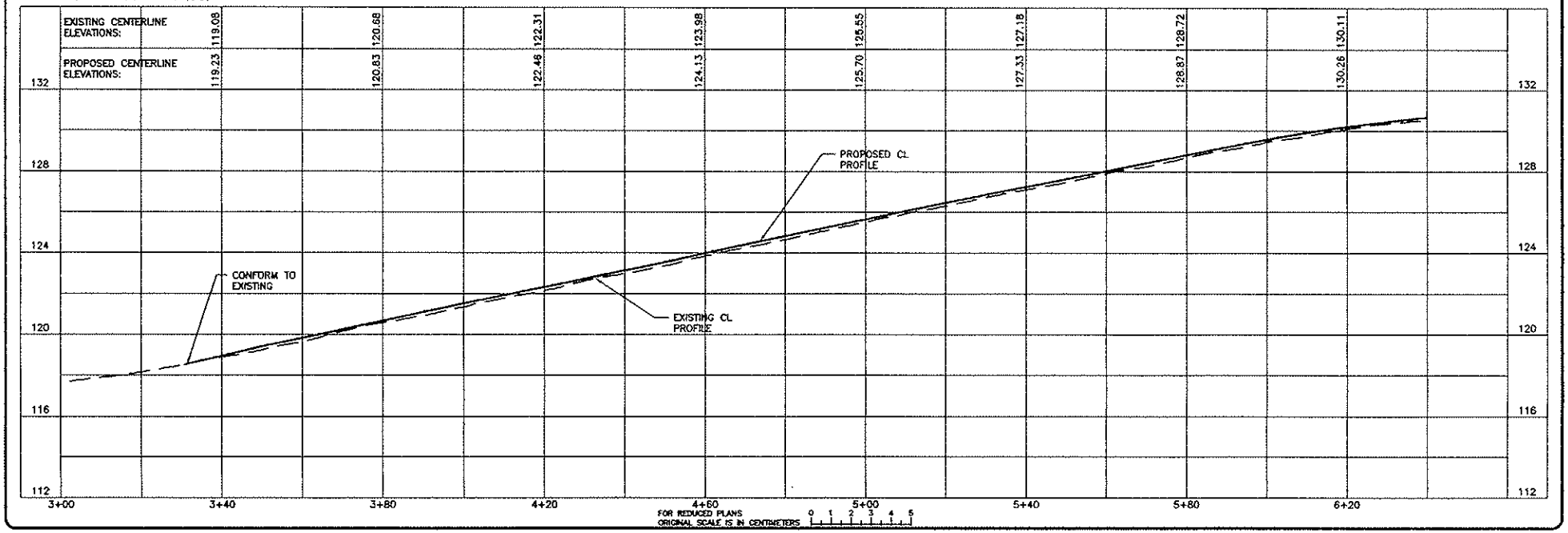
COUNTY OF PLACER
DEPARTMENT OF PUBLIC WORKS
TRANSPORTATION DIVISION

AUBURN-FOLSOM ROAD 4-LANE
WIDENING PROJECT
TYPICAL SECTIONS

SHEET NO.
2
OF
13

PRELIMINARY DESIGN PLANS
NOT FOR CONSTRUCTION





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VERTICAL: 1:100

DESIGNED: C. EBELING 9/18/03
DRAWN: C. EBELING 9/18/03
CHECKED: R. McCARTHY 9/18/03

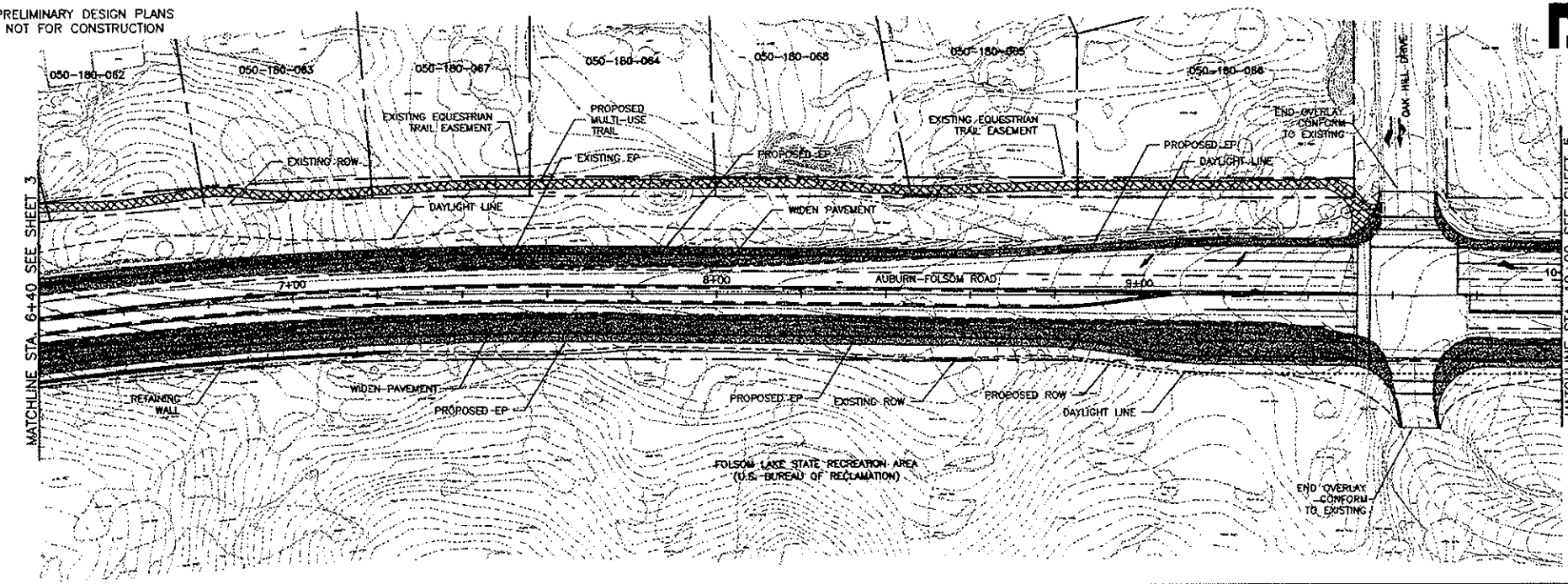
PLACER COUNTY
PROJECT NUMBER:
PC 2784

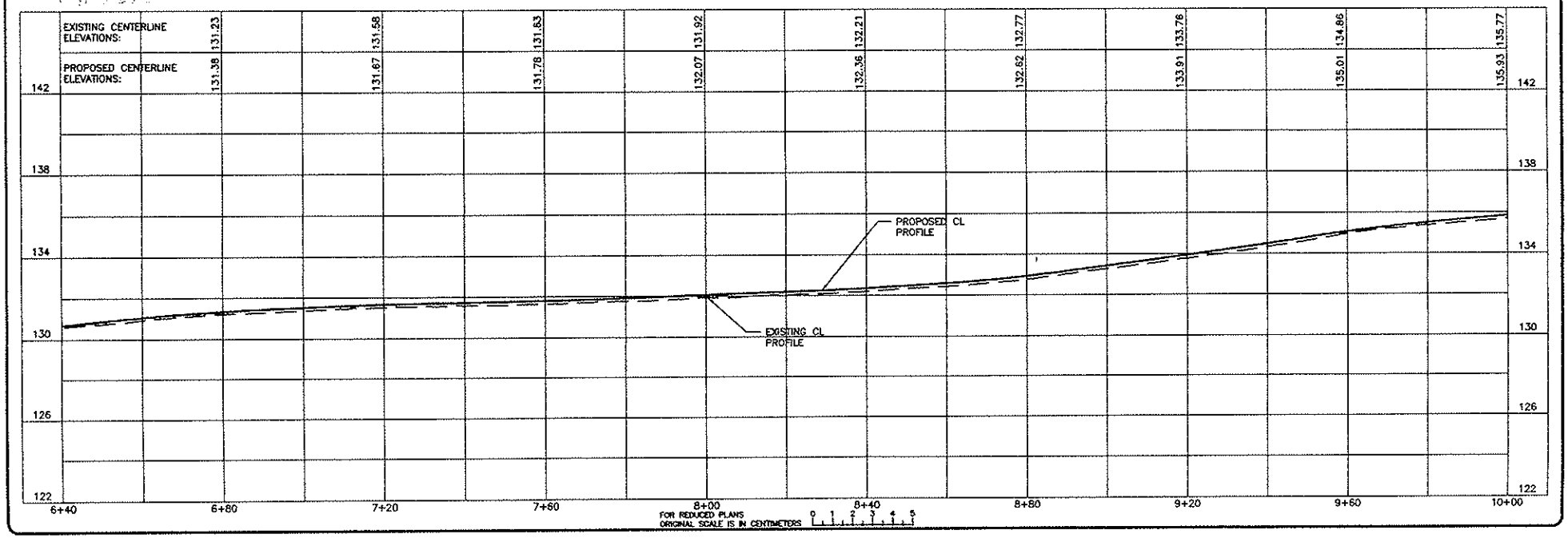
AUBURN-FOLSOM ROAD 4-LANE
WIDENING PROJECT
ALTERNATIVE 4

COUNTY OF PLACER
DEPARTMENT OF PUBLIC WORKS
TRANSPORTATION DIVISION

SHEET NO.
3
OF
13

PRELIMINARY DESIGN PLANS
NOT FOR CONSTRUCTION





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		DATE
DESIGNED:	G. FERLING	9/16/02
DRAWN:	G. FERLING	9/16/02
CHECKED:	E. MACARTHY	9/16/02

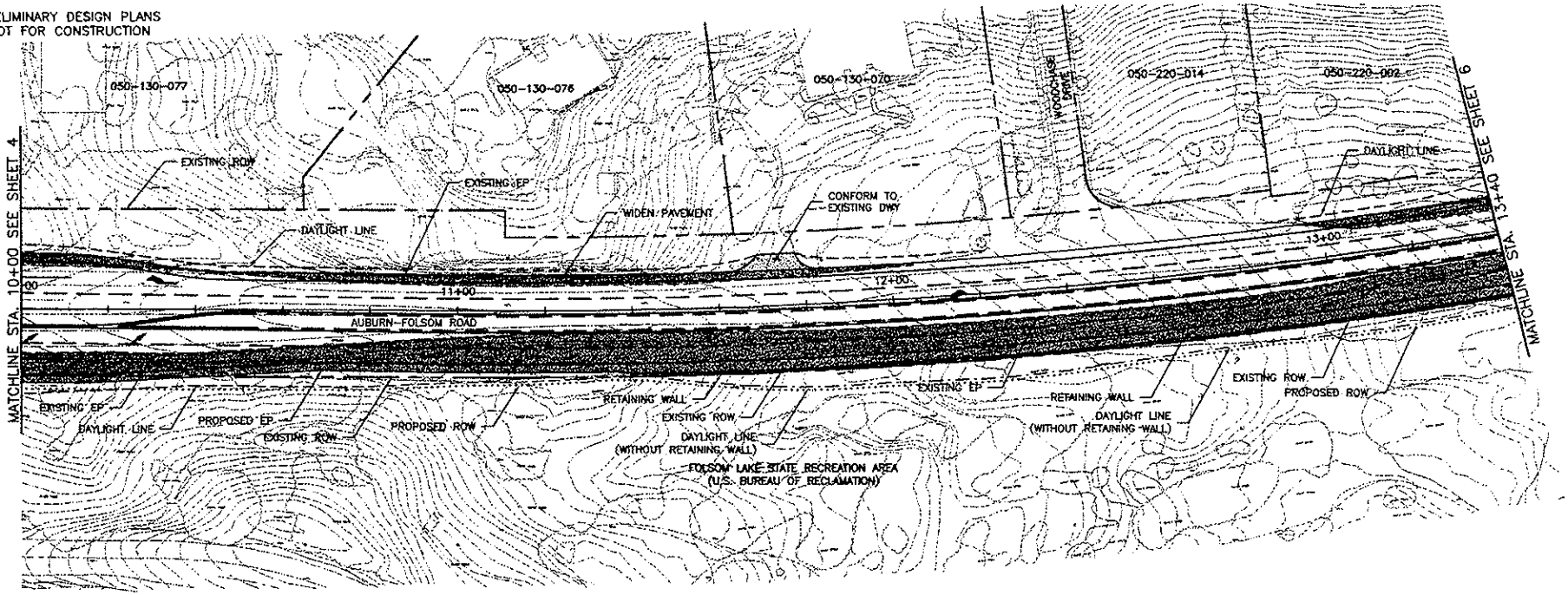
PLACER COUNTY PROJECT NUMBER:
PC 2264

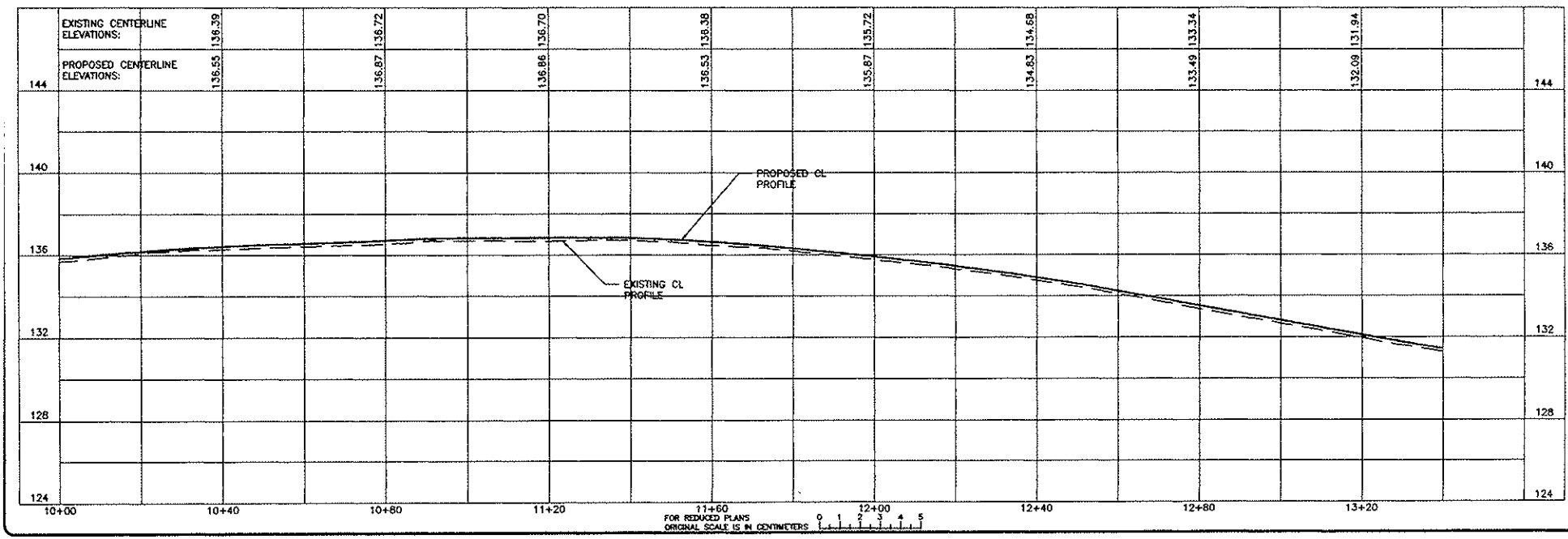
AUBURN-FOLSOM ROAD 4-LANE WIDENING PROJECT
ALTERNATIVE 4

COUNTY OF PLACER
DEPARTMENT OF PUBLIC WORKS
TRANSPORTATION DIVISION

SHEET NO.
4
OF
13

PRELIMINARY DESIGN PLANS
NOT FOR CONSTRUCTION





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VERTICAL: 1:100

DATE:
DESIGNED: C. EBELING 9/19/02
DRAWN: C. EBELING 9/19/02
CHECKED: E. McCarthy 9/19/02

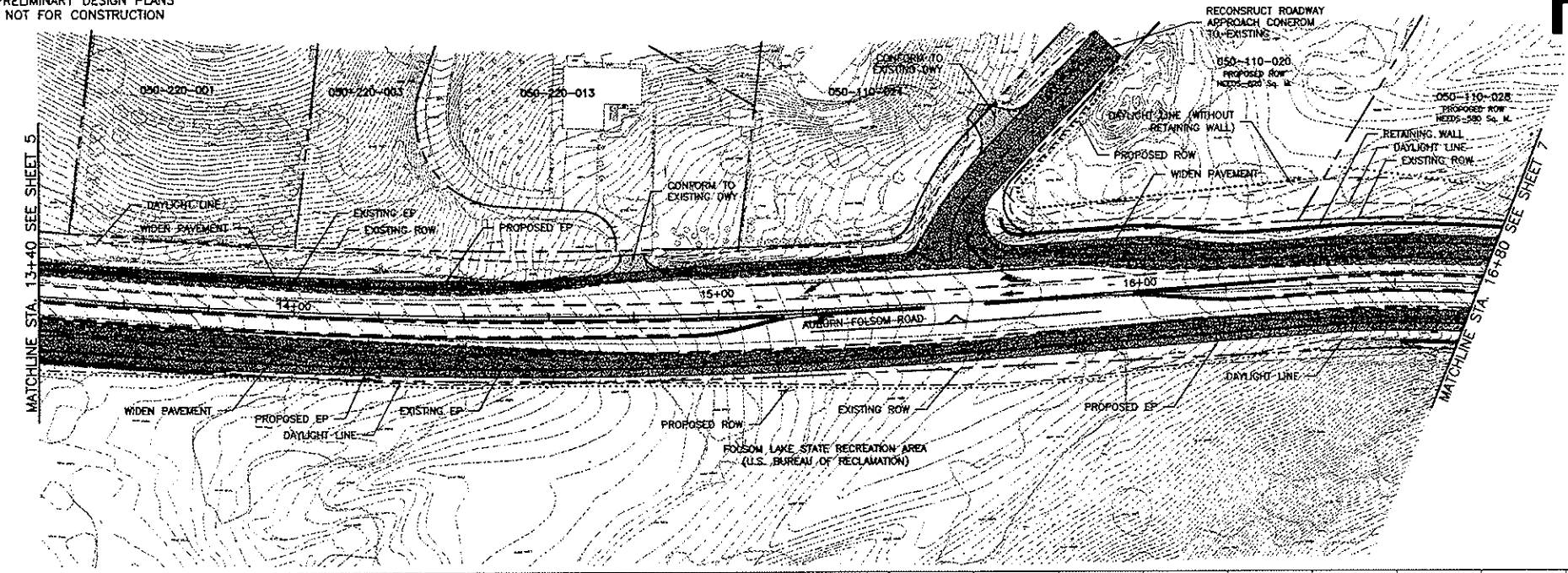
PLACER COUNTY PROJECT NUMBER:
PC 2784

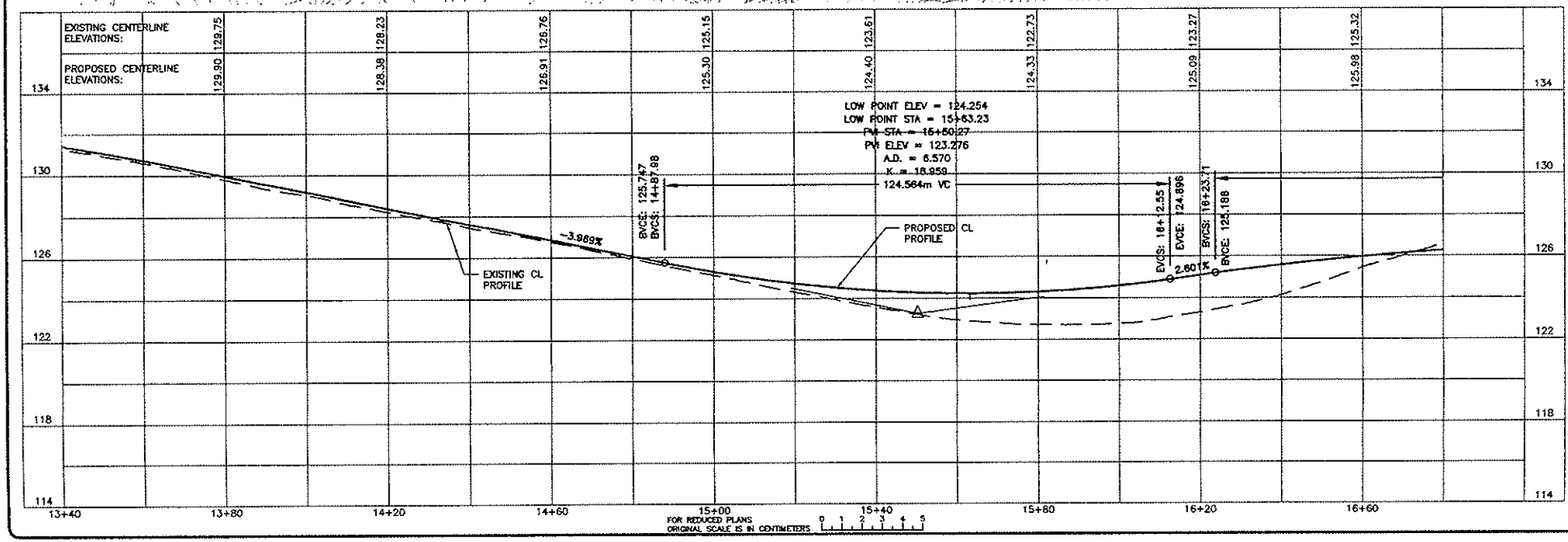
AUBURN-FOLSOM ROAD 4-LANE WIDENING PROJECT
ALTERNATIVE 4

COUNTY OF PLACER
DEPARTMENT OF PUBLIC WORKS
TRANSPORTATION DIVISION

SHEET NO. 5 OF 13

PRELIMINARY DESIGN PLANS
NOT FOR CONSTRUCTION





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DATE:
DESIGNED: G. EBELING 8/16/02
DRAWN: G. EBELING 8/16/02
CHECKED: E. McCARTHY 8/16/02

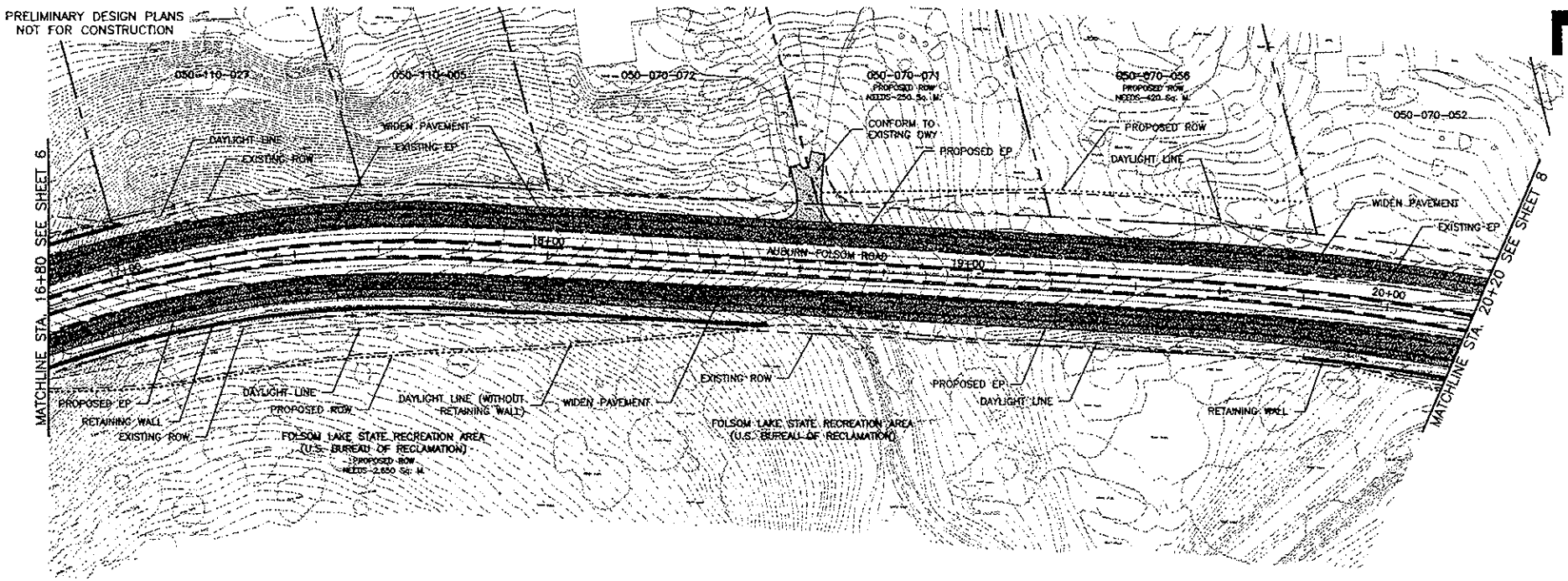
PLACER COUNTY PROJECT NUMBER:
PC 2764

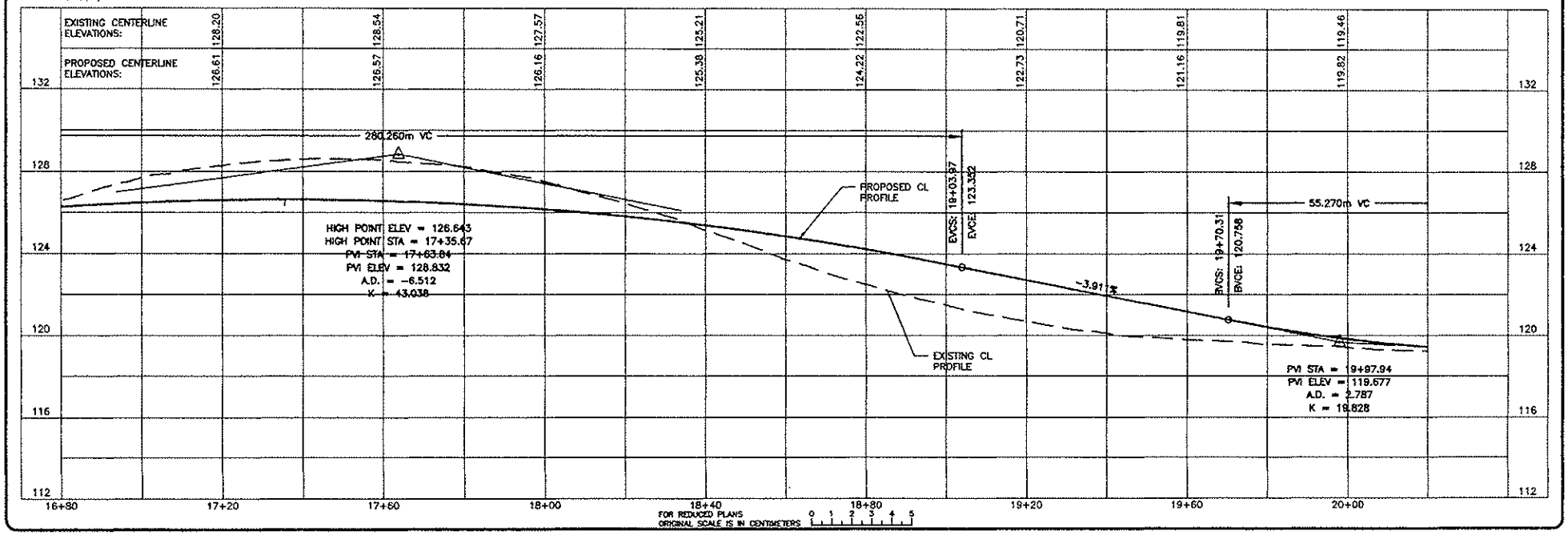
AUBURN-FOLSOM ROAD 4-LANE WIDENING PROJECT
ALTERNATIVE 4

COUNTY OF PLACER
DEPARTMENT OF PUBLIC WORKS
TRANSPORTATION DIVISION

SHEET NO.
6
OF
13

PRELIMINARY DESIGN PLANS
NOT FOR CONSTRUCTION





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VERTICAL: 1:100

DATE
DESIGNED: G. EBELING 9/18/03
DRAWN: G. EBELING 9/18/03
CHECKED: E. McCARTHY 9/18/03

PLACER COUNTY PROJECT NUMBER:
PC 2764

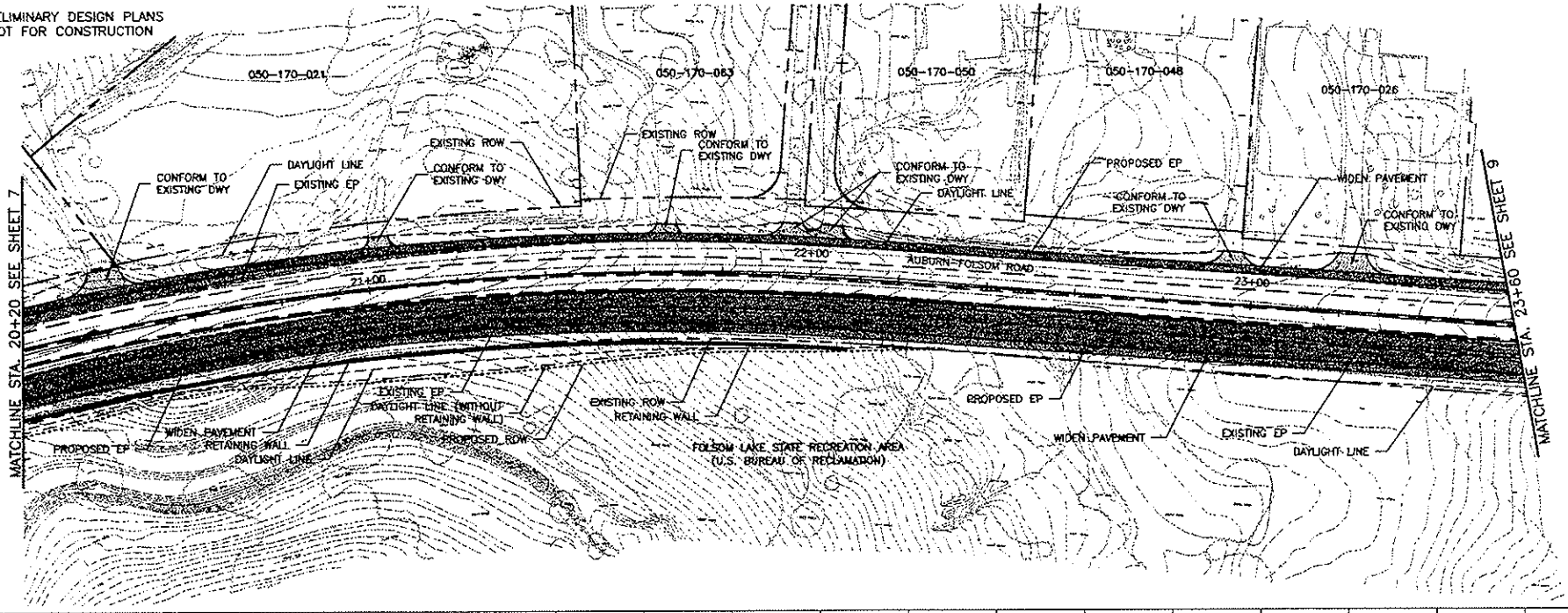
AUBURN-FOLSOM ROAD 4-LANE WIDENING PROJECT

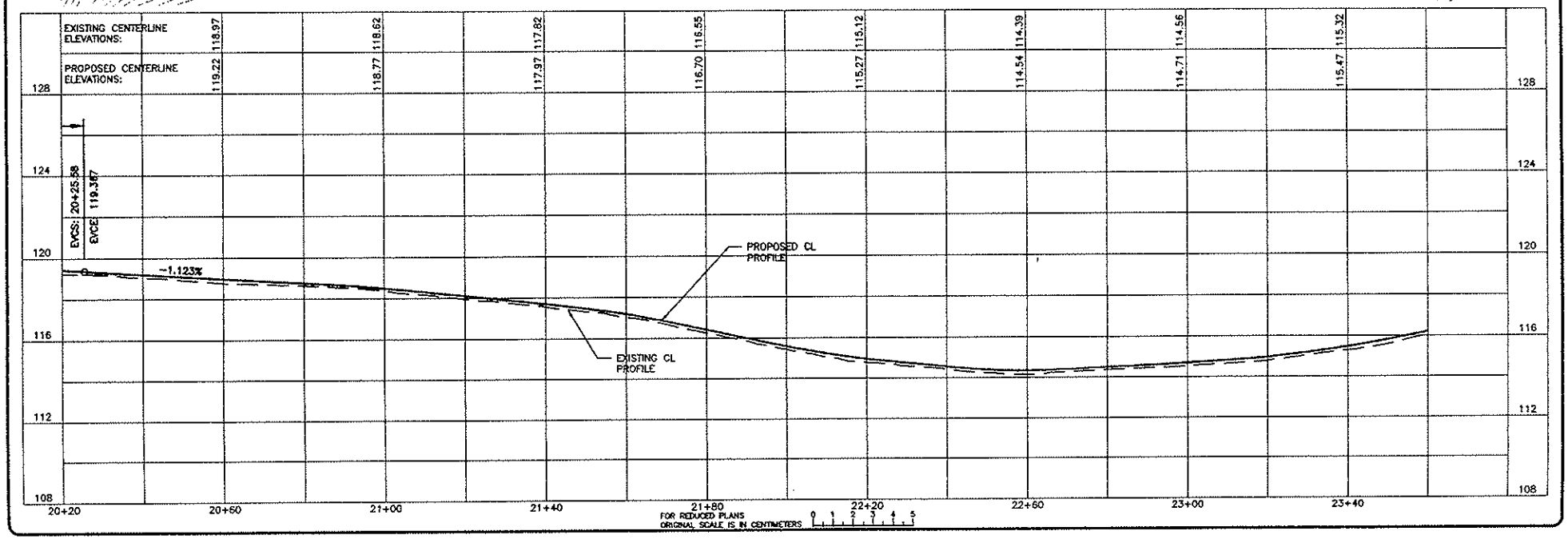
ALTERNATIVE 4

COUNTY OF PLACER
DEPARTMENT OF PUBLIC WORKS
TRANSPORTATION DIVISION

SHEET NO. 7 OF 13

PRELIMINARY DESIGN PLANS
NOT FOR CONSTRUCTION





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PLACER COUNTY PROJECT NUMBER: PC 2764

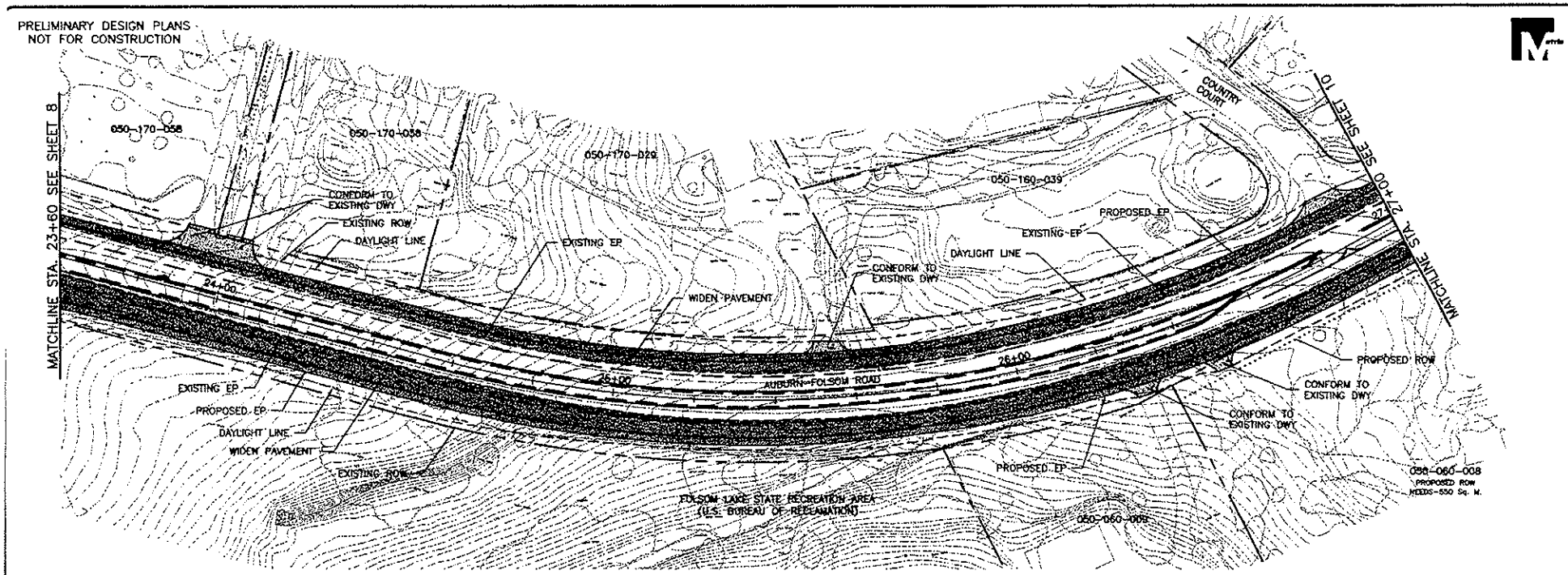
DESIGNED: C. ERFLING 9/16/02
DRAWN: C. ERFLING 9/16/02
CHECKED: E. McCARTHY 9/16/02
DATE:

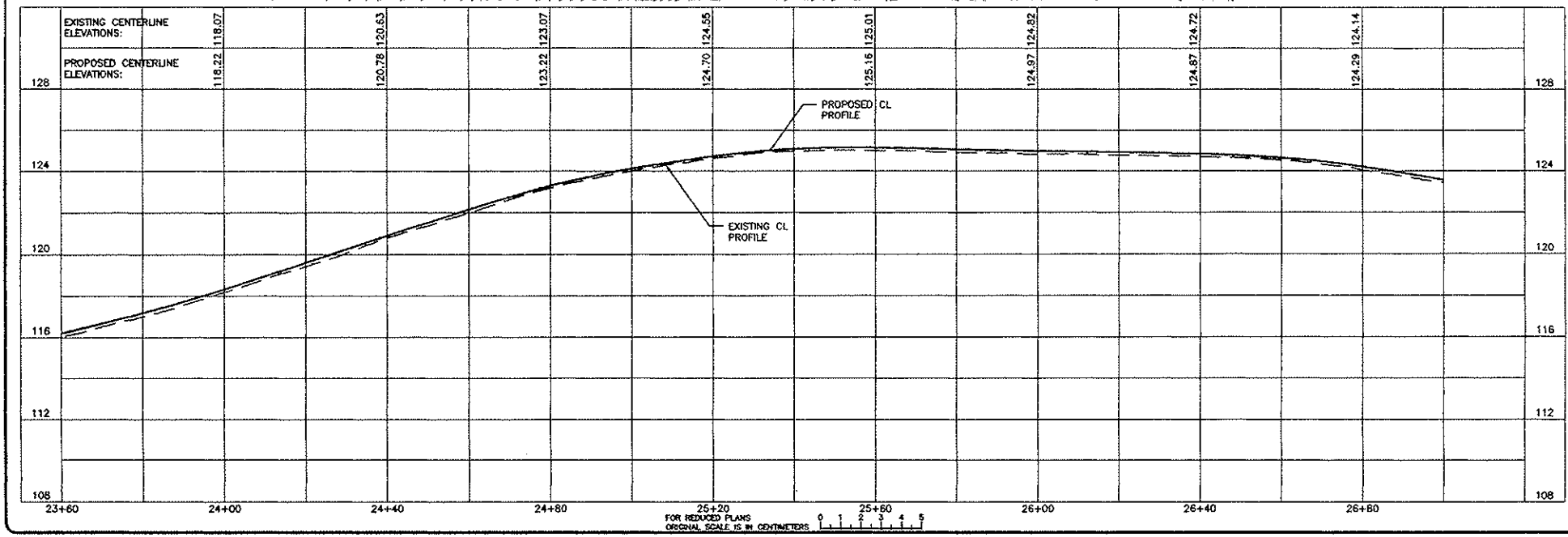
AUBURN-FOLSOM ROAD 4-LANE WIDENING PROJECT
ALTERNATIVE 4

COUNTY OF PLACER
DEPARTMENT OF PUBLIC WORKS
TRANSPORTATION DIVISION

SHEET NO. 8 OF 13

PRELIMINARY DESIGN PLANS
NOT FOR CONSTRUCTION





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DATE
DESIGNED: C. EBELING 9/16/03
DRAWN: C. EBELING 9/16/03
CHECKED: E. McCARTHY 9/16/03

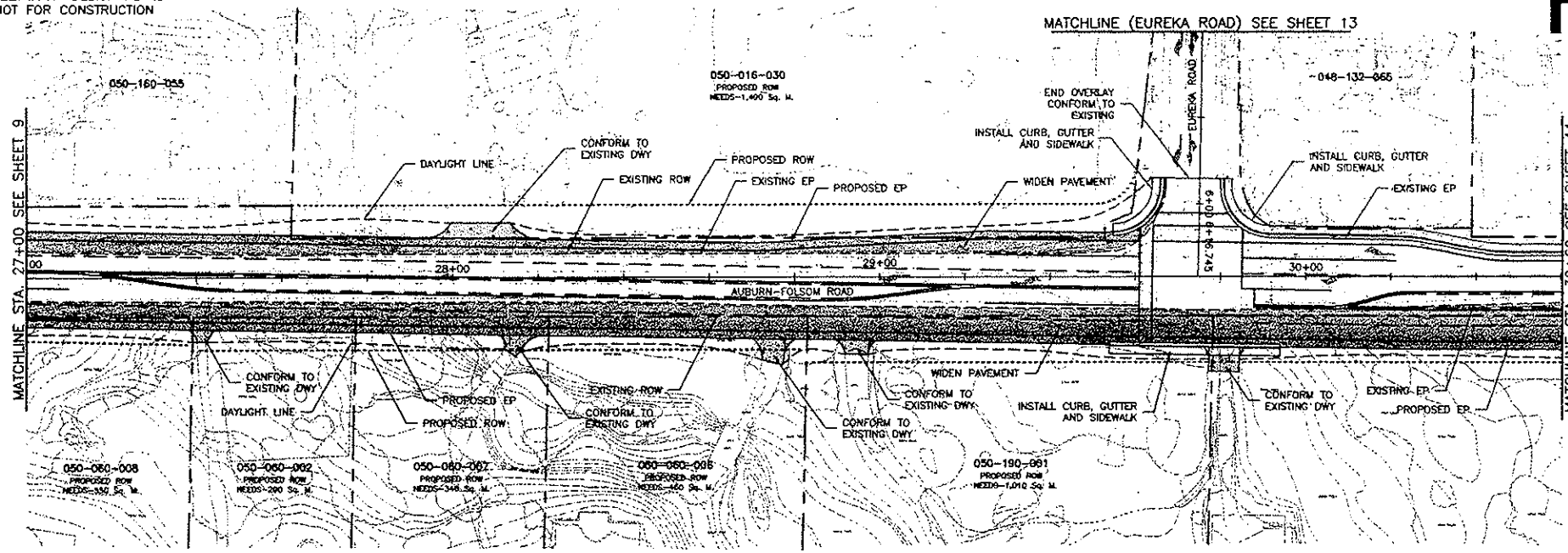
PLACER COUNTY PROJECT NUMBER:
PC 2784

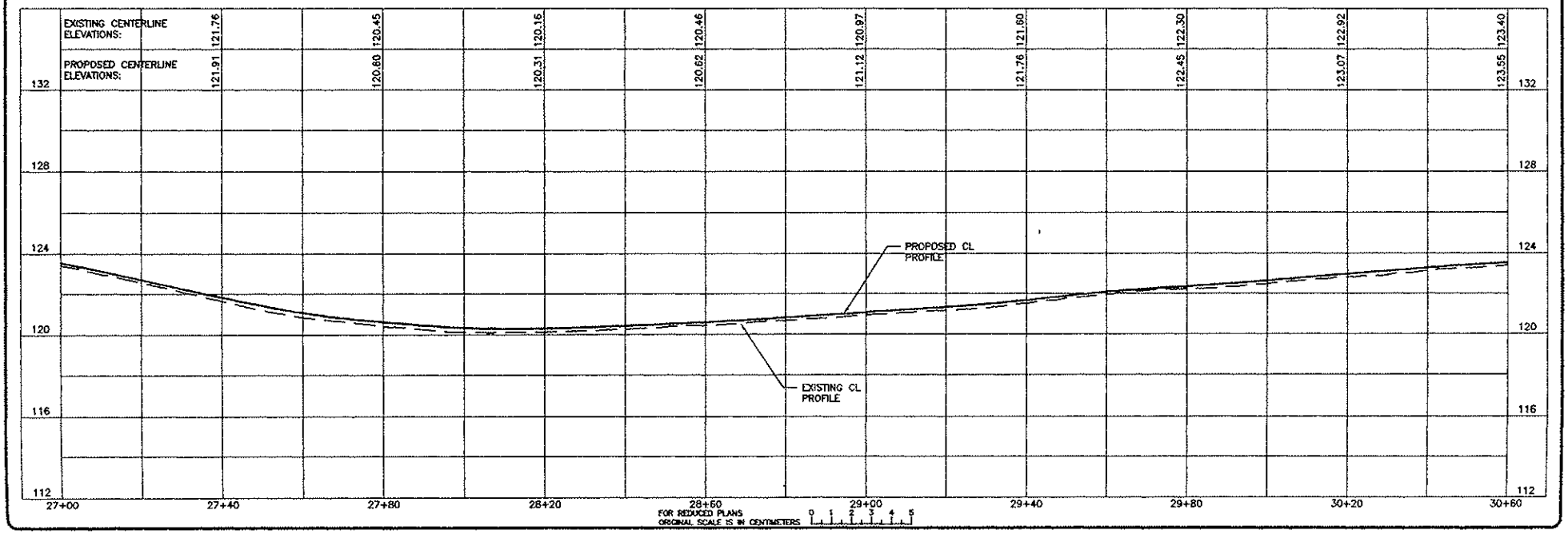
AUBURN-FOLSOM ROAD 4-LANE WIDENING PROJECT
ALTERNATIVE 4

COUNTY OF PLACER
DEPARTMENT OF PUBLIC WORKS
TRANSPORTATION DIVISION

SHEET NO.
9
OF
13

PRELIMINARY DESIGN PLANS
NOT FOR CONSTRUCTION





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DRAWN: C. EBELING 9/16/02
CHECKED: E. McCARTHY 9/16/02

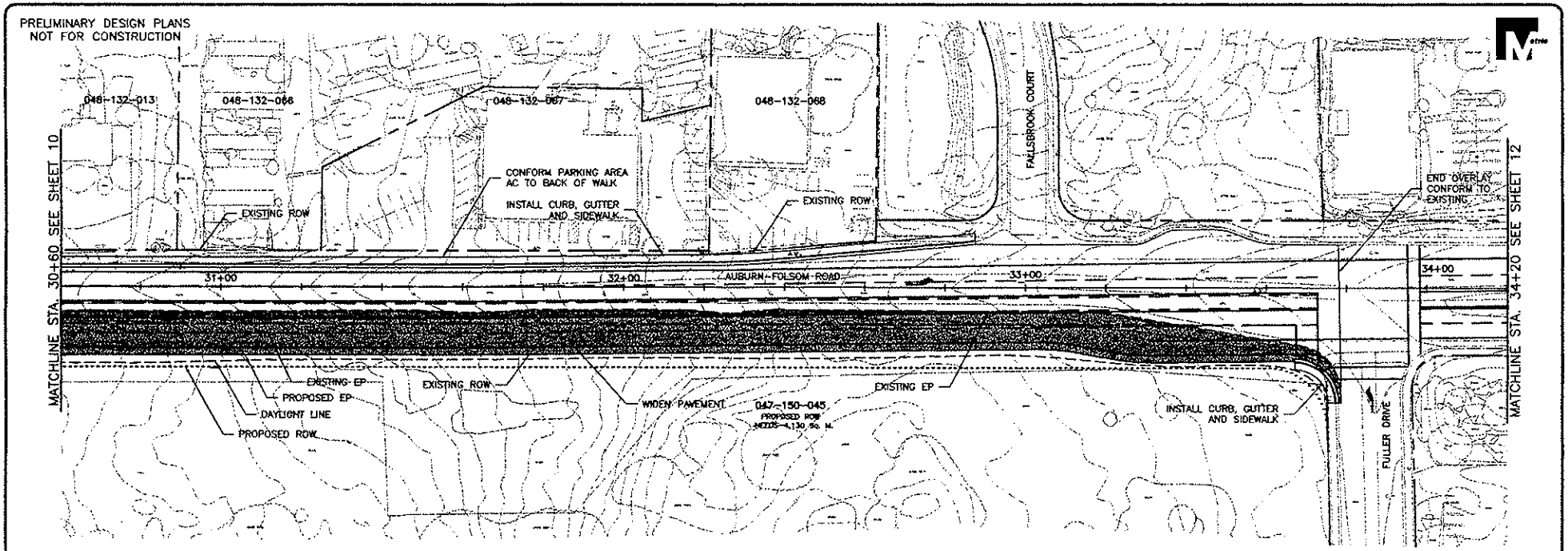
PLACER COUNTY PROJECT NUMBER: EC 2764

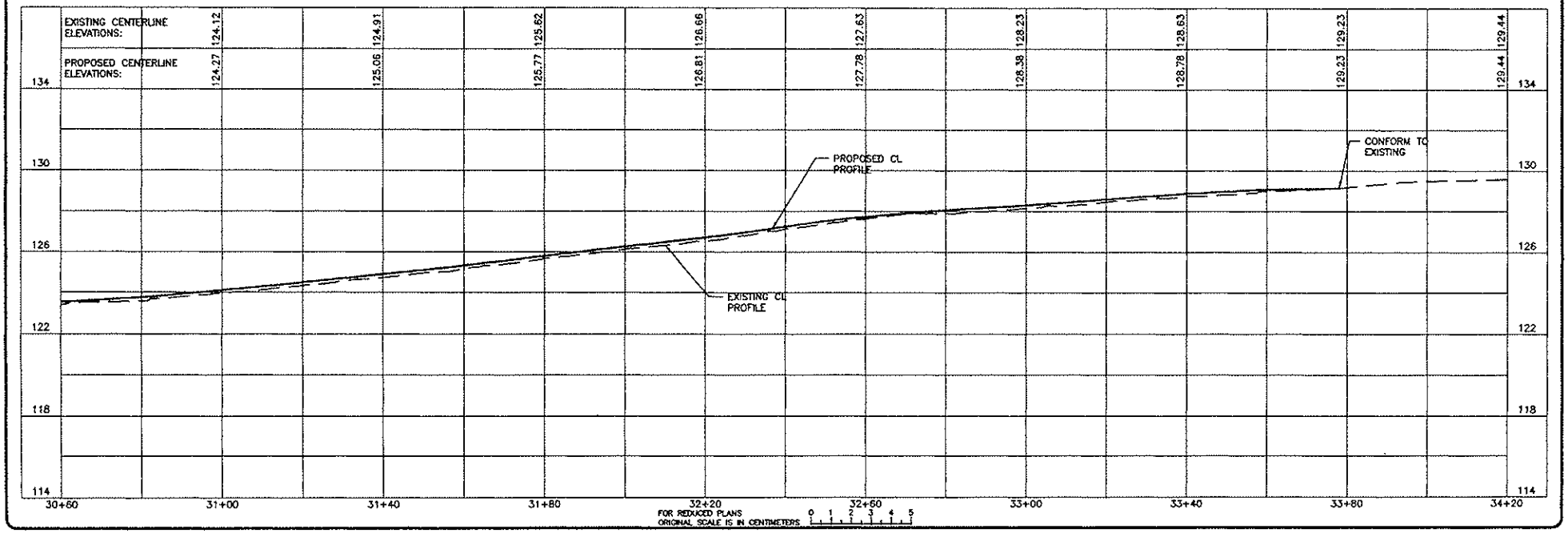
AUBURN-FOLSOM ROAD 4-LANE WIDENING PROJECT
ALTERNATIVE 4

COUNTY OF PLACER
DEPARTMENT OF PUBLIC WORKS
TRANSPORTATION DIVISION

SHEET NO. 10 OF 13

PRELIMINARY DESIGN PLANS
NOT FOR CONSTRUCTION





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DATE:
DESIGNED: C. EBLING 9/16/02
DRAWN: C. EBLING 9/16/02
CHECKED: E. McCARTHY 9/16/02

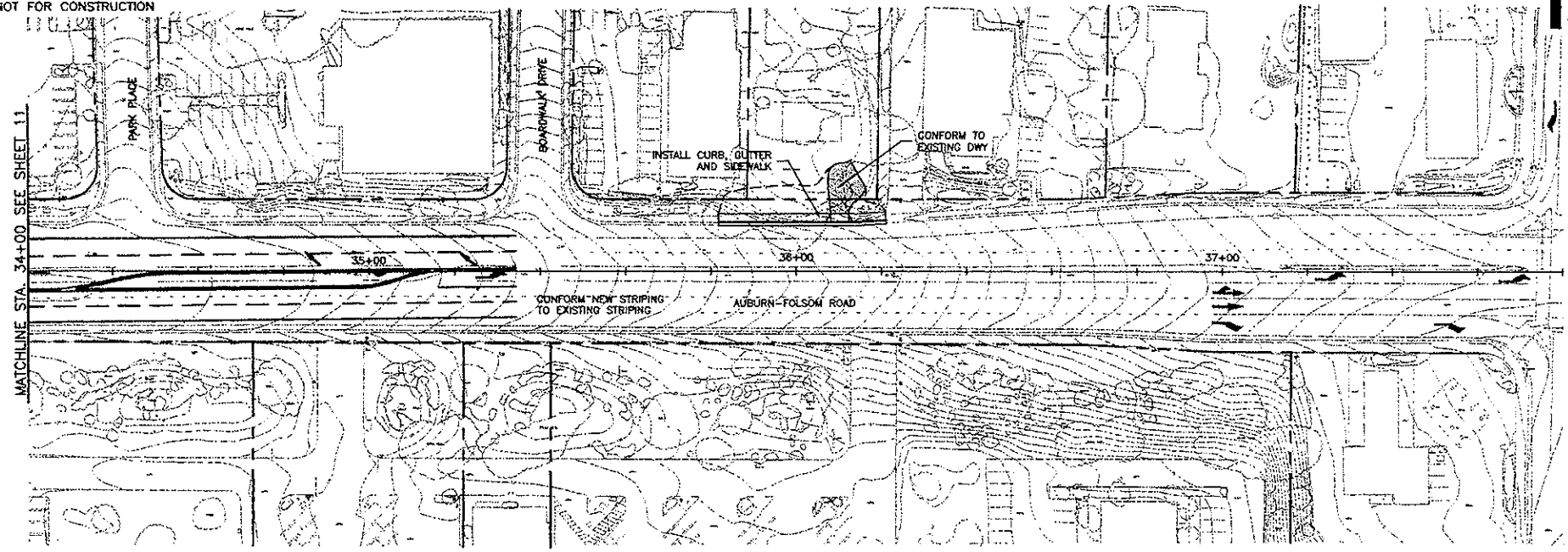
PLACER COUNTY PROJECT NUMBER:
PC 2264

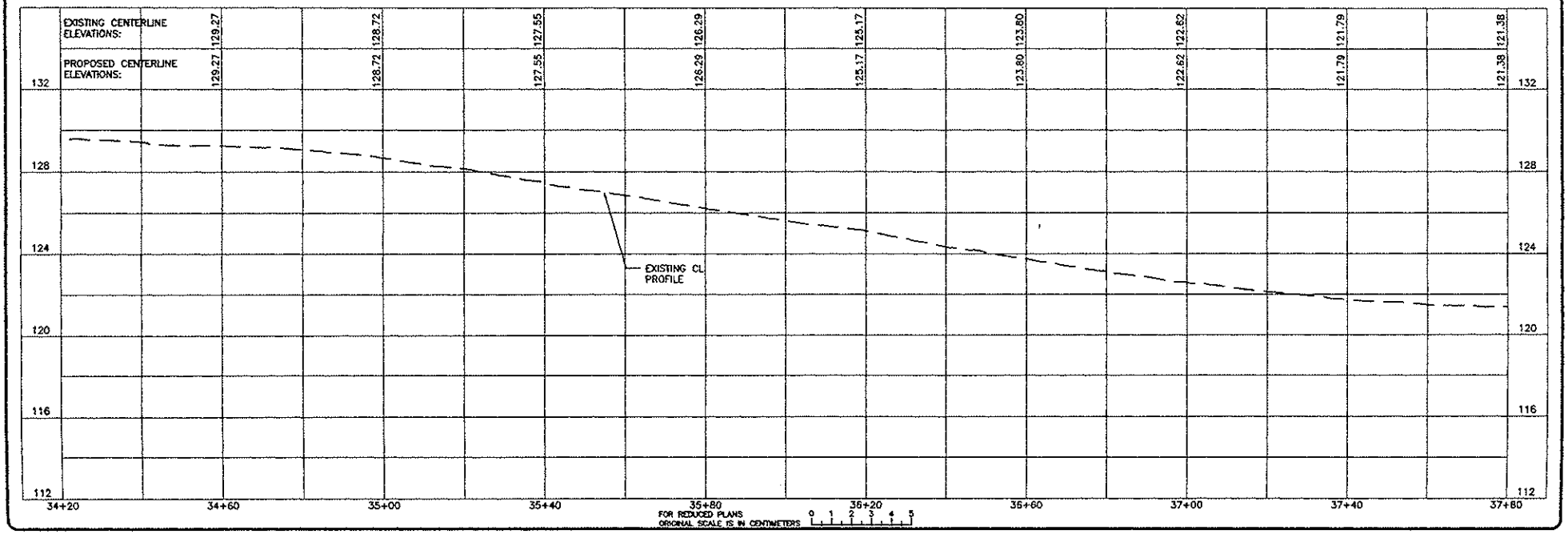
AUBURN-FOLSOM ROAD 4-LANE WIDENING PROJECT
ALTERNATIVE 4

COUNTY OF PLACER
DEPARTMENT OF PUBLIC WORKS
TRANSPORTATION DIVISION

SHEET NO.
11
OF
13

PRELIMINARY DESIGN PLANS
NOT FOR CONSTRUCTION





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PLACER COUNTY PROJECT NUMBER: PC 2764

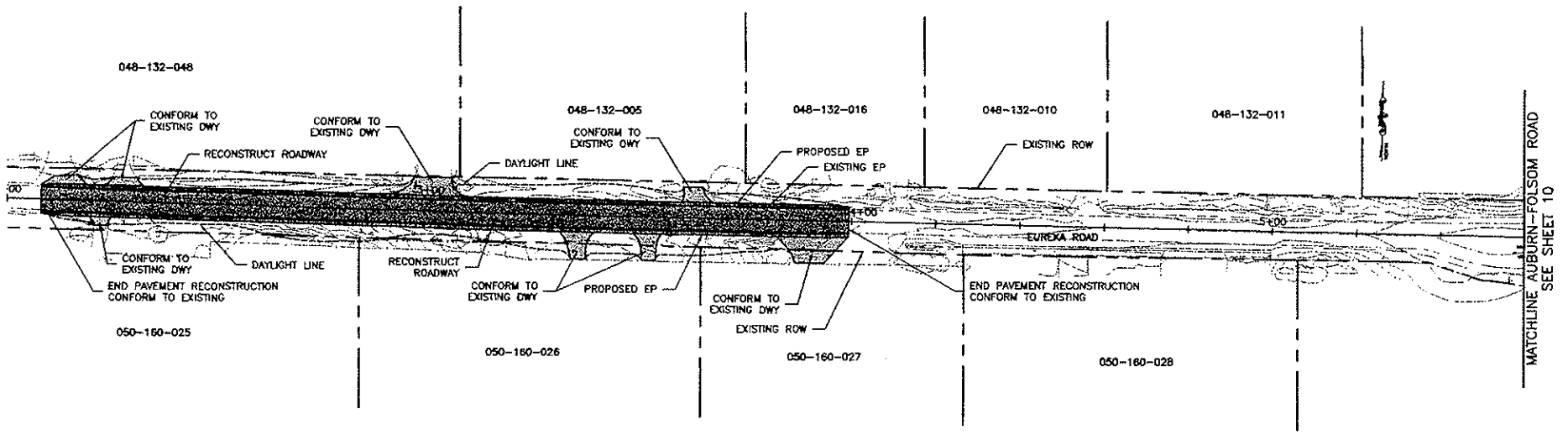
DESIGNED: C. EBELING 9/16/02
DRAWN: C. EBELING 9/16/02
CHECKED: E. McCARTHY 9/16/02
DATE:

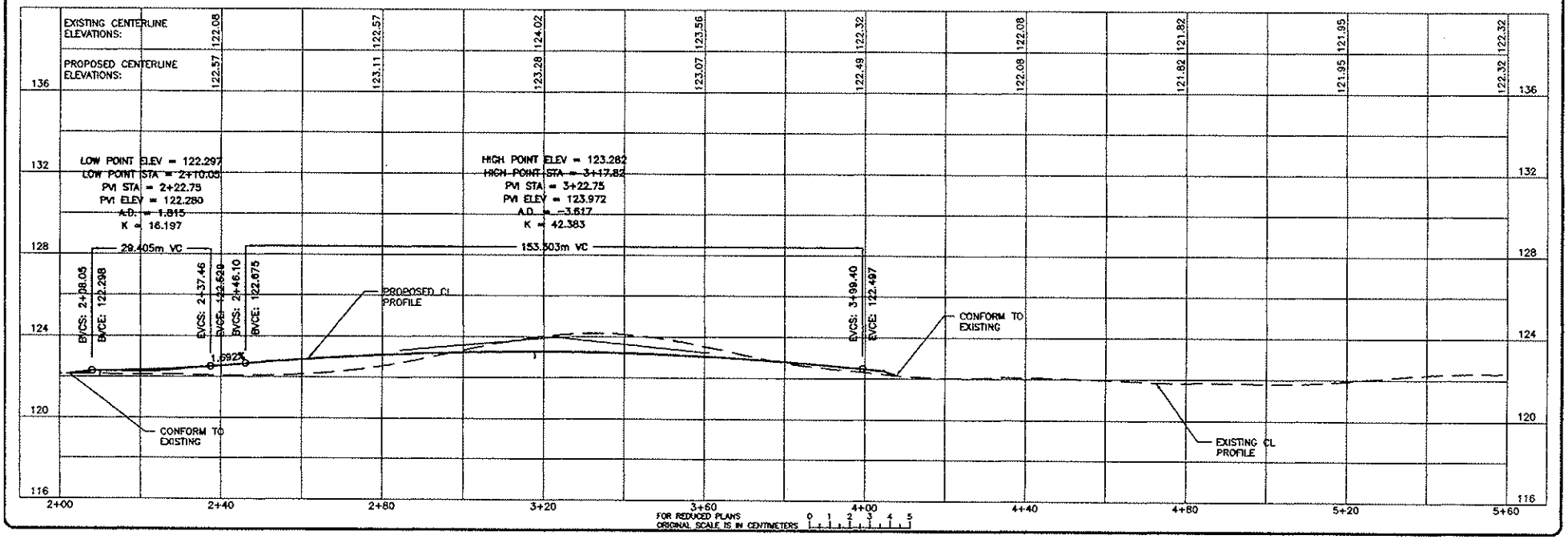
AUBURN-FOLSOM ROAD 4-LANE WIDENING PROJECT
ALTERNATIVE 4

COUNTY OF PLACER
DEPARTMENT OF PUBLIC WORKS
TRANSPORTATION DIVISION

SHEET NO. 12 OF 13

PRELIMINARY DESIGN PLANS
NOT FOR CONSTRUCTION





SCALE
HORIZONTAL: 1:500
VERTICAL: 1:100

DESIGNED: C. EBELING 9/18/02
DRAWN: C. EBELING 9/18/02
CHECKED: E. McCARTHY 9/18/04
DATE:

PLACER COUNTY PROJECT NUMBER:
PC 2764

AUBURN-FOLSOM ROAD 4-LANE WIDENING PROJECT
ALTERNATIVE 4

COUNTY OF PLACER
DEPARTMENT OF PUBLIC WORKS
TRANSPORTATION DIVISION

SHEET NO.
13
OF
13

Appendix B

Written Comments on the Notice of Preparation

PLACER COUNTY PLANNING DEPARTMENT

11414 B Avenue/Auburn, California 95603/Telepbone (530) 889-7470/FAX (530) 889-7499
Web Page: http://www.placer.ca.gov/planning E-Mail: ljlawren@placer.ca.gov

May 15, 2002

Maggie Townsley
Jones & Stokes
2600 V Street
Sacramento, CA 95818-1914

Subject: **Auburn-Folsom Road Widening (SCH #2002042036)**

Dear Ms. Townsley:

The Notice of Preparation (NOP) review period for the subject proposal has ended. Comments regarding the NOP are attached for your review and response in the Environmental Impact Report (EIR). Any additional comments that may be received will be forwarded to you by fax.

The first administrative draft EIR (15 copies) should be received by this office no later than **July 22, 2002.** If you require additional time in order to prepare the EIR, please do not hesitate to contact this office and request a suspension of the processing timeframes.

Sincerely,

Lori Lawrence

LORI LAWRENCE
Environmental Coordinator

Attached comments: San Juan Water District, 5/3/02
California Highway Patrol, 4/29/02
Folsom Lake Estates HOA, 5/6/02
Karen Branson, Ridgeview MHP, 4/30/02
Friends of Auburn Folsom Road, 4/26/02

cc: Charlie Ebeling, Department of Public Works
ERC members

San Juan Water District

P.O. Box 2157 • Granite Bay, California 95746 • 916.791.0115
9935 Auburn Folsom Road • Granite Bay, California 95746
FAX 916.791.7361 • www.sjwd.org

General Manager
James R. English
Directors
Dorothy Kilgore, President
Edward J. Teal Costa, Vice President
Lyle N. Hoag
Glenn A. Miller
Kenneth H. Miller

May 3, 2002

Mr. Charlie Ebeling
Placer County Department of Public Works
11444 B. Avenue
Auburn, CA 95603

Re: AUBURN-FOLSOM ROAD WIDENING - PLACER COUNTY EIR/EA Comments

Mr. Ebeling:

This letter is written in follow-up to our conversation regarding the widening of Auburn-Folsom Road in Placer County and the district's request at this time with this phase of the project.

As we discussed, the district currently has two primary entrances and one secondary entrance accessing Auburn Folsom Road. Our plan is to maintain the north and south entrances, and to abandon the secondary entrance located adjacent to the canal. We also plan to designate the south entrance, across from Pinebrook mobile home park, as out primary entrance to our property.

Since we plan on keeping the existing north entrance to our property, we will need a merge lane for traffic accessing from the north, as well as an acceleration taper for trucks exiting to the to the north from this entrance. There may be other environmental mitigation measures, such as landscaping that will warrant review and discussion at a later date as this project progresses.

If you have any questions on the above, please give me a call at 791-0153, or e-mail me at bmartinez@sjwd.org.

Sincerely,

BEN MARTINEZ
Engineering Manager

Post-it® Fax Note 7671	Date 5/6/02	# of pages ▶ 1
To Lori Lawrence	From Ben Martinez	
Co./Dept. Placer Co. Planning	Co. San Juan H2O	
Phone #	Phone # 791-0153	
Fax # 530/887-7499	Fax # 791-0161	

State of California—Business, Transportation and Housing Agency GRAY DAVIS, Governor

DEPARTMENT OF CALIFORNIA HIGHWAY PATROL
California Highway Patrol
9440 Indian Hill Road
Newcastle, CA 95658
(916) 663-3344
(800) 735-2929 (TT/TDD)
(800) 735-2922 (Voice)

PLACER COUNTY
DATE
RECEIVED
MAY 01 2002
PLANNING DEPARTMENT

April 29, 2002

File No.: 220.10284.8837.SCH #2002042036

Ms. Katie Shulte Joung
State Clearinghouse
1400 Tenth Street, Room 121
Sacramento, CA 95814

Dear Ms. Joung,

The Auburn Area Office of the California Highway Patrol (CHP) received the Notice of Preparation (NOP) for the Auburn-Folsom Road Four-Lane Widening Project draft Environmental Impact Report (EIR), State Clearing House (SCH) #2002042036. After review, we believe this project will have an impact on operations in our area. With the expected growth of this area and the increased traffic volumes anticipated, this improvement will be a beneficial improvement to Auburn-Folsom Road. However, there are several concerns we wish to address.

On April 11, 2002, the Placer County Department of Public Works held an early coordination/scoping meeting on the widening of Auburn-Folsom Road. Present at the meeting were representatives from the CHP and South Placer County Consolidated Fire District as well as other agencies and entities. The CHP and South Placer Fire representatives each expressed concern over the possible addition of a center divider along certain portions of this project. The fire officials were concerned with additional response time in the event they were forced to pass a location on account of the divider and find a safe location to make a U-turn. Due to the size and nature of fire equipment, the detour may be a further distance from the location they are responding to. CHP Officer S. Hall, who patrols the Auburn-Folsom Road beat, was concerned with the increase of vehicles forced to make U-turns to arrive at their intended destinations. These U-turns would be accomplished in areas that would now have a higher and faster traffic flow. Furthermore, people may be inclined to make U-turns at an area that, although convenient for them, may not be safe. The additional lanes will allow for a higher and faster volume of traffic. The downside, however, is the possibility of an increase in the frequency and severity of collisions.

It is anticipated that the majority of traffic using northbound Auburn-Folsom Road will be turning west (left) onto Douglas Boulevard. Currently, there are two left turn lanes to handle this movement. The additional traffic will burden the left turn lanes, causing a back up into the through lanes which may result in additional rear end collisions. It may be possible to mitigate this by extending the left turn lanes beyond the current length.

Flex your POWER
BE ENERGY EFFICIENT

As previously stated, the majority of traffic will turn west onto Douglas Boulevard. However, as more people discover this route, there will be additional traffic northbound north of Douglas. This will place an additional burden on Auburn-Folsom Road where it reverts to one lane in each direction. Additionally, there may be an increase in sideswipe and rear end collisions just north of Douglas Boulevard where the roadway narrows to one northbound lane.

Another concern with this project is the impact that it may have on traffic and the issue of safety to workers and the motoring public during construction. We would recommend the use of CHP officers working reimbursable construction zone enforcement to assist with securing the construction site and to aid in traffic control as needed. The presence of uniformed CHP officers on site has shown to significantly improve the compliance of the motoring public to directional signs and traffic control personnel. Compliance reduces the exposure to danger faced by the on site construction workers and to the motorists traversing the construction site.

If you have any questions or concerns regarding this letter and our comments, please contact me or Officer M. Turner at (916) 663-3344.

RICK WARD, Captain
Commander
Auburn Area

cc: Special Projects Section
Placer County Planning Department

PLACER COUNTY
DATE
RECEIVED

MAY 09 2002

PLANNING DEPARTMENT

May 6, 2002

Ms. Lori Lawrence
Placer County Planning Department
Transportation Division
11414 B Avenue – DeWitt Center
Auburn, CA. 95603-2603

Dear Ms. Lawrence,

Re. Notice of Preparation – Auburn-Folsom Road (AFR) Widening Project

After reviewing the AFR Widening Project NOP, the Folsom Lake Estates (FLE) homeowners wish to submit this document to emphasize our concerns. This document is in addition to our participation with the "Friends of AFR" document, and is intended to outline FLE's specific concerns relative to the Southern most portion of AFR. This document represents the concerns of approximately 546 voting taxpayers representing the 273 homes in Folsom Lake Estates regarding the widening of Auburn Folsom Road.

Concerns – Items within the NOP

Section II. EVALUATION OF ENVIORONMENTAL IMPAC:
ENVIORMENTAL ISSUES
ITEM 10 – NOISE

a. Increase in existing noise levels?
b. Exposure of people to noise levels in excess of County standards?

Road noise from both the tires on the pavement, as well as the engine noise from cars and trucks has likely exceeded the county sound ordinance. Combine this with the projected increase in traffic count, and we have an issue that requires mitigation. We have expectations of a contiguous sound wall, earth berm, or combination of both to be constructed at fence line and stands tall enough to address the line of sight noise.

Section II. EVALUATION OF ENVIORONMENTAL IMPAC:
ENVIORMENTAL ISSUES
ITEM 13 – AESTHETICS

a. Affect a scenic vista or scenic highway?
b. Have a demonstrable negative aesthetic effect

Residents of FLE purchased property in this region in part to the natural beauty and community presentation obvious when traveling around this area. We want to insure that

the widening of AFR incorporates an aesthetically pleasing architecture, as well as visually pleasing native materials.

Concerns – Items not noted in the NOP

1. **Road Safety**
   FLE homeowners have genuine concern for their safety, and the safety of others, using AFR and the neighborhood streets within FLE. The increased traffic, combined with the potential for increased motorist speed makes it particularly dangerous to walk our streets, drive our streets, and merge on and off AFR.
2. **Homeowner Security**
   There are rising safety concerns amongst the FLE homeowners related to the widening project. Some concern comes from the traffic on AFR, some from increased traffic funneled through FLE, and most recently, with the installation of the equestrian trial (multi use trail) cut behind the homes on Willey Court. Homeowners believe they are now targets for criminal activity due to the potentially transient activity from Folsom Lake, now directed down a concealed path behind their homes.
3. **Privacy**
   With the recent installation of the equestrian trail, we have people looking over our fences and invading our privacy. Additionally, trees and brush were removed to install the said trail that allows motorists to also peer into our yards.
4. **Property Values**
   Most all issues noted in this document lend tangible damage to the value of the homes in FLE. Effective and aesthetically pleasing mitigation will help this issue.
5. **Utility Poles and Wires**
   Some FLE home owners have voiced concerns that above ground utilities (telephone wires etc…) be placed in a fashion that does not cause a health issue, or locates such equipment that would not be visibly offensive to the homeowners.

Per discussions with Mr. Ebeling and Mr. Dondro, we are providing this information to be included into the "Draft EIR" phase so that each individual concern can be reviewed and addressed for mitigation during the Environmental Review. We have purposely not offered solutions to the noted concerns at the request of Public Works. We understand that our recommendations for mutually beneficial solutions will come during subsequent phases.

Sincerely,

Jim Phillips
Folsom Lake Estates Subcommittee Chairman (AFR Project)
9985 Willey Court
Granite Bay, CA. 95746
916.773.3042
phillipsfamily@surewest.net

c.c. Ted Gaines (Placer County Supervisor)
c.c. Charlie Ebeling (Project Manager – Placer County Public Works)
c.c. Liz O'Brien (President – Folsom Lake Estates)
c.c. Pat Goody (Founder – Friends of Auburn Folsom Road)

AUBURN FOLSOM ROAD WIDENING PROJECT

April 30, 2002

PLACER COUNTY
DATE
RECEIVED

MAY 02 2002

LL
PLANNING DEPARTMENT

Lori Lawrence
Placer County Planning Department
11414 B Avenue
Auburn, CA 95603

Re: Notice of Preparation – Auburn Folsom Road Four Lane Widening Project

Dear Ms. Lawrence:

As a Granite Bay property owner and business person, I am concerned about the imminent widening of Auburn-Folsom Rd. Along with my concerns are the issues of my residents, seventy (70) senior citizens who live in our community known as Ridgeview Mobile Home Park. With the front entrance to our establishment being on Auburn Folsom Rd., the safety of these seniors and their ability to enter and exit their community safely is of utmost importance.

I have reviewed the Notice of Preparation issued by Placer County and submit the following concerns I would like to be considered in the environmental review process.

ENVIRONMENTAL ISSUES:

1. LAND USE AND PLANNING:

   e. *Disrupt or divide the physical arrangement of an established community (including a low-income or minority community)?*
   f. *Result in a substantial alteration of the present or planned land use of an area?*

Though noted as "No Impact" a potential component of the project is for raised medians dividing the roadway, therein creating restricted access to our community. As a commercial establishment in the business of providing affordable housing to senior citizens it is detrimental to my customers (residents) not be able to turn left onto Auburn Folsom Rd., shop in Granite Bay, or the ease in which to enter the roadway for doctor visits, etc. Obviously turning left across 4 lanes (5 lanes as proposed) of traffic would be quite hazardous.

The impacts associated with the raised median will in fact alter the way in which we must do business. Not only does this change the route or direction in which our seniors gain access to their needed amenities, but delivery of mobile homes (some 14' x 70') is of paramount concern. This can and does disrupt the physical arrangement of our established community, and therein should be revised to ***"Potential Significant Unless Mitigation Incorporated".***

While there is an additional exit/entrance on Eureka Road, this gate was closed many years ago for safety reasons. The "shortcut" provided the general public across private property became excessive; and, inadequate site distance while exiting the mobile home park were contributing factors. The potential for having to reopen this gate as an "exit" only creates grave concerns. In addition, residents living next to this exit will no longer be provided the privacy they desired when purchasing their home. The impact of keeping "customers" happy is monumental.

Upon talks with county personnel, the existing " berm", that disallows adequate site distance when exiting the mobile home park on Eureka Road, was brought to their attention. The discussion included the possibility of adequately fixing the site distance – removing the berm -- on Eureka Road and should be a consideration when reviewing this mitigation. Safe access onto this side street would allow our seniors and the community in general a better traffic flow and less chance of injury.

5. AIR QUALITY:

   a. *Violate any air quality standard or contribute to an existing or projected air quality violation?*
   b. *Expose sensitive receptors to pollutants?*
   c. *Have the potential to increase localized carbon monoxide levels at nearby intersections in exceedance of adopted standards?*

All these items are designated as "Potentially Significant Unless Mitigation Incorporated". Senior citizens are more susceptible to pollutants than most, especially those on oxygen apparatus. As residents along Auburn Folsom Rd and with the anticipated increase of localized carbon monoxide levels at nearby intersections (Eureka Rd.) this issue is significant in nature. The effect of the reduced air quality presents a severe hazard for these seniors as well as the families who live and play in Granite Bay.

6. TRANSPORTATION/CIRCULATION:

   b. *Hazards to safety from design features (e.g. sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment)?*

There are potential hazards in the safe flow of traffic into and out of the mobile home park on Auburn Folsom Road by the senior residents who live there. With the potential component of the raised median, it is my understanding that access to the mobile home park will be right turn in and right turn out. Safe acceleration and deceleration are

necessary for ingress and egress to/from their homesites and should be reviewed in this mitigation.

While this project does not change the "planned use"of my property, it does affect and change the way I "use" my property. I appreciate your serious consideration of the above concerns and expect that the project will not proceed until all the environmental concerns noted in the Notice of Preparation are mitigated to the satisfaction of the community.

Sincerely,

Karen Branson

Karen Branson, Owner
Ridgeview Mobile Home Park
4120 Douglas Blvd. #306-347
Granite Bay, CA 95746

Cc: Ted Gaines, Placer County Supervisor
Charles Eberling, Dept. of Public Works

FRIENDS OF AUBURN FOLSOM ROAD

PLACER COUNTY
DATE
RECEIVED

APR 30 2002
LL
PLANNING DEPARTMENT

April 26th, 2002

Lori Lawrence
Placer County Planning Department
11414 B Avenue
Auburn, Ca. 95603

Re: Notice of Preparation – Auburn Folsom Road Four Lane Widening Project

Dear Ms. Lawrence:

In December 2001 a group of Granite Bay Homeowners, concerned about the imminent widening of Auburn-Folsom Road, formed a committee called "Friends of Auburn-Folsom Road." This committee's goal is to represent the legitimate concerns of the majority of the 500 homeowners whose residential roads or driveways enter directly or indirectly on to Auburn-Folsom Road between the Placer County Line and Douglas Boulevard.

We have reviewed the Notice of Preparation issued by Placer County and submit the following concerns we would like to be considered in the environmental review.

ENVIRONMENTAL ISSUES:

1. LAND USE AND PLANNING:

e: Disrupt or divide the physical arrangement of an established community (including a low-income or minority community?)
f: Result in a substantial alteration of the present or planned land use of an area?

Though noted as "No Impact" in fact there will be a division of the current physical arrangement of the established community. Currently, there are numerous paths used by pedestrians, horses and bicyclists coming from the west side of Auburn-Folsom Road, crossing to the Folsom Lake State Park on the east side. These paths connect to the various recreation trails in the State Park and the five lane road will definitely divide the east from the west. The land use of the area will be changed from primarily rural and recreational to a major traffic thoroughfare unless mitigation is incorporated in the design. Many families reside in this area because of the proximity and easy access to the lake for their children. This change will greatly impact the safety of the access across Auburn-Folsom Road.

2. POPULATION AND HOUSING:

c: Displace existing housing, especially affordable housing?

Though noted as "less than significant impact," any displacement needs to be reviewed. For individual homeowners along Auburn-Folsom Road who may lose part of their property because of this project, this item should be shown as "Potentially Significant Unless Mitigation Incorporated."

3. GEOLOGICAL PROBLEMS:

f. Changes in deposition or erosion or changes in siltation which may modify the channel of a river, stream, or lake?

Though noted as "Potentially Significant unless Mitigation Incorporated," Linda Creek is known to flood. Due to an increase in surface water on the road and potential growth in the area, the environmental review needs to investigate the direction of increased water flow toward the creek rather than residential areas.

4. WATER:

a. Changes in absorption rates, drainage patterns, or the rate and amount of surface runoff?
b. Exposure of people or property to water related hazards such as flooding?
d. Changes in the amount of surface water in any water body?
g. Altered direction or rate of flow of groundwater?

a. Though noted as "Potentially Significant Unless Mitigation Incorporated," we reiterate our strong concern regarding water runoff. Considering the expansive surface area being added to the road, and the modification to the landscape at roadside, the review needs to mitigate the dispersal of water away from homes and driveways. The additional road base, additional water runoff, and the slope of the road, the potential for increased water falling into lower lying property is significant and needs to be mitigated.

b,d,e. Though noted as "Less than significant/no impact," Auburn-Folsom Road is subject to flooding during heavy storms. This is particularly true at the corner of Auburn-Folsom Road and Eureka. The environmental review needs to include exposure of people and property to flooding and incorporate mitigation for this hazard. This item should be changed to "Potentially Significant Impact."

5. AIR QUALITY

Though noted as "Potentially Significant Unless Mitigation Incorporated," air quality will significant decrease as a result of the increase in traffic through the Granite Bay community. This recreation area, particularly in the summer months and weekends, is inundated with joggers, hikers, bicyclists and other outdoor enthusiasts drawn to the State Park. The effect of the reduced air quality presents a severe hazard to those athletes, as well as the families from all over the area that spend a great deal of time at this park. As most of the traffic using the widened road

will be through traffic, there is no positive benefit to the Granite Bay Community and decreased air quality is one of the many hazards. It is absolutely imperative that Auburn-Folsom Road continue to be designated as "no through truck traffic allowed," and that designation be enforced.

6. TRANSPORTATION/CIRCULATION:

a. Increased vehicle trips or traffic congestion?

Though noted as "Potentially Significant Unless Mitigation Incorporated," the proposed mitigation must address the flow of traffic. The introduction of signalized intersections (in addition to the proposed signal at Fuller Road) along with the proposed improvements would do much to control the traffic flow along Auburn-Folsom Road, allowing for many things to happen, including: queuing traffic to allow safe access from side streets (existing residents), to discourage truck traffic on this "no truck route" road, and to allow recreational users access to Folsom Lake State Park. Providing signalized intersections will provide the needed control to mitigate for the induced traffic congestion which will be placed on the longtime residents of this community. A fully signalized intersection at Lou Place will help accomplish these items and, most importantly, provide increased safer access for residents.

b. Hazards to safety from design features (e.g. sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment)?

Though noted as "No Impact" the review needs to mitigate the hazards of the Lou Place curve (commonly referred to as "dead man's curve,) which in the past has seen a number of serious accidents. This needs to be revised to "Potential Significant Unless Mitigation Incorporated," otherwise the hazards could be accentuated and the road design may not be up to acceptable industry improvement standards.

The addition of raised medians will also help reduce the speeds and thus reduce the safety hazards created by this widening. The addition of raised/landscaped medians will provide aesthetic benefits in beautifying the community, offsetting the impact of the widening and assist in safely slowing and dividing the traffic.

There are also potential hazards in the safe flow of traffic into and out of the mobile home park at Eureka and Auburn Folsom Road. If the design incorporates a large berm, or rise in the roadway a blind spot would be created that would create a safety hazard for residents exiting the park. An additional safety hazard exists in that the mobile home park is home to senior citizens. The safe flow of traffic into and out of the mobile home park without mitigation would require hazardous acceleration or deceleration.

e. Hazards or barriers for pedestrians or bicyclists?

Though noted as "Potentially Significant unless mitigation incorporated," the widening of the roadway from 2 lanes to 5 (as proposed) will create hazards for all residents and visitors who have crossed Auburn Folsom Road from the west side for decades to gain State Park access,

including pedestrians, runners, hikers, bicycles, equestrian, etc. These users currently access the State Park at a number of mid-block recreation trail entrances provided by the State Park system.

These impacts, with the mitigation of crosswalks and intersection signal lights, should require that this category be listed as "Potentially Significant Impact." This way of life is consistent and interdependent with the values established in Granite Bay and the southeast Placer County Region.

f. Conflicts with adopted policies supporting alternative transportation (e.g. bus turnouts, bicycle racks?)

Though noted as "No Impact", the roadway, as proposed, should be "Potentially Significant Unless Mitigation Incorporated", due to its inability to be planned and built in conformance with the adopted SACOG "Metropolitan Transportation Plan for 2025." Placer County Supervisor Ted Gaines currently is a SACOG board member. The roadway, which is being proposed as a five lane arterial road, may be out of compliance with the Granite Bay MAC transportation sub-committee goals for the Granite Bay region, which limits truck routes and freeway bypass alternatives.

In addition, the widening also poses a significant safety hazard due to the necessity of providing adequate safe harbor for students at school bus stops, since this road has the precedence of doubling as a residential collector for school bus stops.

10. NOISE:

a. Increase in existing noise levels?
b. Exposure of people to noise levels in excess of County Standards?

Though noted as "Potentially Significant Unless Mitigation Incorporated," we must emphasize that noise is one of our primary concerns with this project, (for residents of Folsom Lake Estates it is the number one issue.) It is important to understand the noise generated by the engines of the passing vehicles is far greater than the noise generated by tire to surface interface, though both are substantial. Primary offenders of the engine and tire noise are trucks. Both engine and tire noise are directly related to the speed of the vehicles. Noise mitigation to the noise issue must include expanding the road to the east where homes are present only on the west, improved surface materials for tire noise, raised medians, speed limits, restricted truck activity and, most importantly, the effective and aesthetic use of sound berms and sound walls.

It is important that the environmental review for noise include peak traffic times (commuter times in the morning and afternoon and recreational traffic on weekends, particularly holiday weekends such as Memorial Day or July 4th.)

11. PUBLIC SERVICES:

c. Schools?

Though noted as "Less than Significant Impact," the widening of the road from 2 lanes to 5 (as proposed) will have a significant impact on the local school system. Currently the environmental

review does not consider school bus turnouts, currently in place on Auburn-Folsom Road. The school bus loading areas will be a major safety hazard to our children waiting to be picked up on Auburn-Folsom Road and this item should be listed as "Potentially Significant Unless Mitigation Incorporated."

d. Maintenance of public facilities, including roads?

Though noted as "Less than Significant Impact," with the possible addition of medians and tasteful soundwalls or berms to mitigate the noise and decrease the speed of this proposed 5 lane road, there will be a significant increase in the maintenance and landscaping requirements of Auburn-Folsom Road. Therefore, the additional maintenance activities must be reflected as "Potentially Significant Unless Mitigation Incorporated."

12. UTILITIES AND SERVICE SYSTEMS:

a. Power or natural gas?
b. Communication systems?

Though noted as "Less than Significant Impact," in fact, the power and communication poles constitute both a safety hazard with the increased traffic and an aesthetic issue. The safety hazard and aesthetic issue of these poles and above ground utilities increases if surrounding trees are removed, leaving them more exposed. This item needs to be changed to "Potentially significant Unless Mitigation Incorporated."

e. Storm water drainage?

Though noted as "Less Than Significant Impact," this should be changed to "Potentially Significant Impact." Please see previous comments under item "4. WATER" page 2, outlining the potential for flooding as a result of storm water.

13. AESTHETICS:

a. Affect a scenic vista or scenic highway?
b. Have a demonstrable negative aesthetic effect?

Though noted as "Potentially Significant Unless Mitigation Incorporated," it is important to add that the widening of Auburn-Folsom Road will potentially damage the rural/suburban look of Granite Bay if not mitigated in the most careful fashion. The constituency we represent request the use of natural, indigenous construction and plant materials. We should continue the architectural style incorporated in Douglas Boulevard and East Roseville Parkway in Granite Bay. This item is very important to the local community and our input to this portion of the Auburn-Folsom Road widening project is paramount.

15. RECREATION:

b. Affect recreational opportunities?

Though noted as "Potentially Significant Unless Mitigation Incorporated," it is important to add that the widening of Auburn-Folsom Road from two lanes to five lanes (as proposed) will create safety hazards for all those who have crossed the road from the west side for decades to gain access to the State Park. These include pedestrians, runners, hikers, bicyclists, equestrian, etc. These users currently cross the road at a number of mid-block recreation trail entrances provided by the State Park system. These safety hazards, without mitigation such as crosswalks and intersection signal lights, require that this category be listed as "Potentially Significant Impact." This way of life is consistent and interdependent with the values established in Granite Bay and southeast Placer County. The Folsom Lake State Park is the most visited State Park within the California State Park system. It is important that the environmental review and County staff consider the nearby residents and thousands of regional residents who use these facilities and not deprive them of precedented decades of recreational access.

With the widening of Auburn-Folsom Road, and the associated level of increased traffic, the current bike lanes, (used by pedestrians as well as bicyclists), have become unsafe and a hazard for those who have used them for many years. It is important that the effect of the widening be mitigated

MANDATORY FINDINGS OF SIGNIFICANCE:

a. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of rare of endangered plants or animals, or eliminate important examples of the major periods of California history or prehistory?

Though noted as "Potentially Significant Unless Mitigation Incorporated" due to its impact on the historic corridor between Folsom and Auburn, and those significant plants, wildlife and archeological features which go along with it, there are other important concerns which warrant noting. These include the access of a wide range of wildlife across the road at low water crossings, including bobcat, coyote, fox, wild turkey, opossum, pheasant, turtle, raccoon, skunk etc. The widening of Auburn-Folsom Road may cut off this naturally occurring migration, which has become a way of life for the wildlife and many of the rural residents along Auburn-Folsom Road. A fish and game low water crossing may need to be considered where culverts currently cross the road to mitigate for these wildlife patterns.

We appreciate your serious consideration of the above concerns and expect that the project will not proceed until all the environmental concerns including safety, aesthetic, and health hazards are mitigated to the satisfaction of this community.

The undersigned are available should

Sincerely,

Patricia A. Goody

Pat Goody
Co-President, Crown Point Vista Ho

Jim Phillips (773-3042)
Chair, Folsom Lake Estates Homeow

Patricia Meyers, Secreta
for Don Penkala, Presi

Don Penkala
President, Woodchase Homeowners

Pete Lopez

Pete Lopez (791-3156)
Representing Muir Way residents

Mike Pavik (791-1353)
Representing Lou Place/Troy Way re

Karen Branson

Karen Branson (773-3105)
Owner, Ridgeview Mobile Home Par

Penney Beamer

Penney Beamer (797-1252)
Representing 9276 and 9290 Auburn

Sandra Russell

Sandra Russell (791-4611)
Representing 9170 Auburn Folsom R

cc: Ted Gaines, Placer County Super
Charlie Ebeling, Dept. of Public V

Appendix C

Placer County Best Available Air Quality Mitigation Measures

PLACER COUNTY
BEST AVAILABLE AIR QUALITY MITIGATION MEASURES

CONSTRUCTION ACTIVITY

Projects that are estimated to result in daily construction emissions greater than 82 pounds per day for any pollutant will result in significant air quality impacts and should be required to submit a Construction Emission/Dust Control Plan (Plan) to the District for review and approval. At a minimum, the Plan should include measures 1-6 listed below and all feasible measures listed under "Construction Activity." Projects with construction emissions below 82 pounds per day should implement all feasible measures to reduce their contributions to significant cumulative air quality impacts and for the project to be consistent with the District=s Air Quality Attainment Plan.

1. Construction equipment exhaust emissions shall not exceed District Rule 202 Visible Emission limitations.
2. The applicant shall submit to the District and receive approval of a Construction Emission / Dust Control Plan prior to groundbreaking.
3. The prime contractor shall submit to the District a comprehensive inventory (i.e. make, model, year, emission rating) of all the heavy-duty off-road equipment (50 horsepower of greater) that will be used an aggregate of 40 or more hours for the construction project. District personnel, with assistance from the California Air Resources Board, will conduct initial Visible Emission Evaluations of all heavy-duty equipment on the inventory list.
4. An enforcement plan shall be established to weekly evaluate project-related on-and-off- road heavy-duty vehicle engine emission opacities, using standards as defined in California Code of Regulations, Title 13, Sections 2180 - 2194. An Environmental Coordinator, CARB-certified to perform Visible Emissions Evaluations (VEE), shall routinely evaluate project related off-road and heavy duty on-road equipment emissions for compliance with this requirement. Operators of vehicles and equipment found to exceed opacity limits will be notified and the equipment must be repaired within 72 hours.
5. Construction contracts should stipulate that at least 20% of the heavy-duty off-road equipment included in the inventory be powered by CARB certified off-road engines, as follows:

175 hp B 750 hp	1996 and newer engines
100 hp B 174 hp	1997 and newer engines
50 hp B 99 hp	1998 and newer engines

In lieu of or in addition to this requirement, an applicant can use other measures to reduce particulate matter and nitrogen oxide emissions from their project through the use of emulsified diesel fuel and or particulate matter traps. The District should be contacted to discuss this measure.

6. No open burning of removed vegetation during infrastructure improvements. Vegetative material should be chipped or delivered to waste to energy facilities.
7. Develop trip reduction plan to achieve 1.5 AVR for construction employees.
8. Clean earth moving construction equipment with water once per day.
9. Spread soil binders on unpaved roads and employee/equipment parking areas.
10. Apply approved chemical soil stabilizers according to manufacturers' specifications, to all-inactive construction areas (previously graded areas which remain inactive for 96 hours).
11. Reestablish ground cover on the construction site as soon as possible through seeding and watering.
12. Implement or contribute to a native tree-planting program to offset the loss of existing trees at the construction site.
13. Employ construction activity management techniques, such as: extending the construction period outside the ozone season of May through October; reducing the number of pieces used simultaneously; increasing the distance between emission sources; reducing or changing the hours of construction; and scheduling activity during off-peak hours.
14. Wet broom or wash streets if silt is carried over to adjacent public thoroughfares.
15. Reduce traffic speeds on all unpaved surfaces to 15 miles per hour or less.
16. Suspend all grading operations when wind speeds (as instantaneous gusts) exceed 25 miles per hour and dust is impacting adjacent properties.
17. Install wheel washers or wash all trucks and equipment leaving the site.
18. Minimize idling time to 10 minutes.
19. An operational water truck shall be onsite at all times. Apply water to control dust as needed to prevent dust impacts offsite.
20. Use low sulfur fuel for stationary construction equipment.
21. Utilize existing power sources (e.g., power poles) or clean fuel generators rather than temporary power generators.
22. Use low emission on-site stationary equipment.
23. Provide a flag person to guide traffic properly and ensure safety at construction sites.
24. Schedule operations affecting traffic for off-peak hours.
25. Develop a traffic plan to minimize traffic flow interference from construction activities. The plan may include advance public notice of routing, use of public transportation, and satellite parking areas with a shuttle service.
26. Minimize obstruction of through-traffic lanes.

OPERATIONAL

The following is a list of mitigation measures that have been identified by the District to reduce a project=s long-term operational impact on local and regional air quality. All projects should implement those measures that are logical and feasible for their project to implement due to the existing severe nonattainment designation in Placer County for federal and State ozone standards. Projects that cannot implement sufficient onsite measures to reduce project impacts, can participate in the District=s offsite mitigation program. Please see measure number 101 for details on the District=s offsite mitigation program. Implementation of these measures will ensure that projects are consistent with the District=s Air Quality Attainment Plan and local land use plans.

27. Tree planting of California native species in excess of that already required.
28. Landscape with native drought-resistant species (plants, trees and bushes) to reduce the demand for gas powered landscape maintenance equipment.
29. Use of low VOC coatings per District Rule 218 Architectural Coatings.
30. Site design to minimize the need for external trips by including services/facilities for day care, banking/ATM, restaurants, vehicle refueling, and shopping.
31. Require development practices, which maximize energy conservation.
32. Improve the thermal integrity of buildings, and reduce the thermal load with automated time clocks or occupant sensors.
33. Introduce window glazing, wall insulation, and efficient ventilation methods.
34. Introduce efficient heating and other appliances, such as water heaters, cooking equipment, refrigerators, furnaces and boiler units.
35. Incorporate appropriate passive solar design and solar heaters.
36. Use devices that minimize the combustion of fossil fuels.
37. Capture waste heat and re-employ it in nonresidential buildings.
38. Electrical outlets shall be installed on the exterior walls of both the front and back of a residence or all commercial buildings to promote the use of electric landscape maintenance equipment.
39. Install a gas outlet in the backyard for gas burning barbecues.
40. Install a gas outlet for use with outdoor cooking appliances, such as a gas barbecue.
41. Install a gas outlet with ceramic logs in any proposed fireplaces, including outdoor recreational fireplaces or pits.
42. Install low nitrogen oxide (NOx) hot water heaters.(Beyond District Rule 246 Requirements)
43. Install electric vehicle recharging circuits in residential garages / parking lots.
44. Install electric vehicle charging raceways in residential garages.
45. Prohibit gas powered landscape maintenance equipment within developments.
46. Purchase battery powered or electric landscape maintenance equipment for new residences.
47. Require landscape maintenance companies use battery powered or electric equipment.

48. Create / increase buffer zones between a sensitive receptor and pollution source.
49. Configure parking to minimize traffic interference.
50. Schedule goods movement for off-peak traffic hours.
51. Synchronize traffic signals.
52. Provide adequate ingress and egress at entrances to public facilities to minimize vehicle idling at curbside.
53. Provide dedicated turn lanes as appropriate.
54. Join a local Transportation Management Association (TMA) and prepare employer-based trip reduction plans.
55. Establish telecommuting programs, alternate work schedules, and satellite work centers.
56. Design parking areas with less emphasis on "convenience."
57. Include a limited number of parking spaces in project design.
58. Include wide parking spaces or vanpool only spaces to accommodate vanpool vehicles.
59. Develop vehicle and bicycle all day parking lots near rail stations, transit stops, and freeway access points.
60. Construction/enhancement of a Park and Ride lot.
61. Parking pricing strategies, such as charging parking lot fees to low occupancy vehicles.
62. Provide preferential parking for those who rideshare.
63. Provide funds for on line computer rideshare matching.
64. Provide ridesharing information in a homeowner=s association package.
65. Site design to maximize telecommunication including an appropriate network infrastructure.
66. Provide satellite work offices when appropriate. Applicable to office/industrial and educational institutions.
67. Design/establish telecommuting programs for office/industrial complexes.
68. Offer low cost financing to employees for the purchase of telecommuting equipment, or lend company-owned equipment.
69. Design "Shop by Telephone" or "Shop-by-Computer" services. Applicable to shopping centers and retail facilities.
70. Provide individual private telephones for patients at medical facilities, which allows for "visits without trips."
71. Purchase abandoned railroad rights-of-way for future transit line, bikeway or hiking use(s).
72. Contribute to an area transit fund to help build, maintain, and enhance transit services/facilities/amenities.
73. Site design to maximize access to existing transit lines.
74. Street design to accommodate bus travel.
75. Street design to maximize pedestrian access to transit stops, including access from residential cul-de-sacs to collector and arterial streets.

76. Site design to include bus shelters at transit access points.

77. Provide additional lighted transit shelters and multimodal transfer stations for transit users.

78. Construction of transit facility/amenity(bus shelters, bicycle lockers/racks, etc.) for existing public and private transit.

79. Provision for transit-use incentives such as subsidized transit passes, accommodation of "unusual" work schedules to allow for transit schedules. Applies to office/industrial, educational institutions, and resorts/hotels.

80. AValidation" of a transit ticket to provide free return trip. Applies to shopping centers, hospitals/medical facilities, and retail facilities.

81. Sell transit passes. Applies to retail facilities, educational institutions, resorts/hotels, and office/industrial complexes.

82. An employer subsidized free or reduced transit fares for midday central business district trips.

83. Free transfers between all shuttles and transit.

84. Subsidized school bus service.

85. A subsidy of added transit services.

86. An employer subsidized shuttle service to connect to existing transit sites.

87. Operation of a shuttle bus to shopping, health care, public services sites and other nearby trip attractors to reduce automobile use.

88. Establish delivery services. Applicable to retail facilities (frequent use), shopping centers, and restaurants.

89. Site design to maximize bicycle access to and within the project and/or provide bicycle parking/lockers.

90 An employer/developer provided locker room/showers to employees whom bicycle.

91. Include Class 2 bicycle lanes in new developments.

92. Develop or improve bicycle/pedestrian paths between destinations using public and/or utility rights-of-way.

93. Develop or improve access by bicycle, wheelchair or pedestrian traffic to existing major destinations in city or region. For example, schools, employment centers, shopping, recreation, and parks.

94. Provide secure bicycle storage at public parking facilities.

95. Contribute funding toward the purchase and operation of air quality monitoring equipment.

96. Provide a location for air monitoring equipment.

97. Require mixed-use development in order to achieve a balance of commercial, employment, and housing options within the project site or its immediate environment.

98. Provide higher density land uses around activity centers, transportation nodes and transit corridors.

99. Only U.S. EPA Phase II certified woodburning devices shall be allowed in single-family residences. The emission potential from each residence shall not exceed 7.5 grams per hour.

100. Woodburning or Pellet appliances shall not be permitted in multi-family developments. Only natural gas or propane fired Afireplace@ appliances are permitted.

101. If a project cannot implement sufficient on-site measures to reduce its long-term operational emissions, the project could implement an offsite mitigation program to achieve the required emission reduction. Offsite mitigation strategies are modeled after existing heavy duty nitrogen oxide reduction programs and include retrofitting existing on-road or off-road heavy vehicles/equipment with cleaner burning engines, retrofitting or purchasing new low emission agriculture pumps, transit vehicles, CNG fueling infrastructure or replacing non-EPA certified woodstoves with new EPA certified units. The design of the offsite mitigation program would depend on the type and amount of emission reductions needed.

In lieu of each individual project implementing their own offsite mitigation program, an applicant can choose to pay an equivalent amount of money into the District=s Air Quality Mitigation Fund. The District provides monetary incentives to sources of air pollutant emissions within the projects general vicinities that are not required by law to reduce their emissions. Therefore, the emission reductions are real, quantifiable and implement provisions of the 1994 State Implementation Plan. The offsite mitigation program has been implemented by a number of projects in Placer County.

Appendix D

Air Quality Modeling Data

Road Widening **Version 4.1**

Auburn-Folsom Widening

Project Phases (English Units)	ROG (lbs/day)	CO (lbs/day)	NOx (lbs/day)	PM10 (lbs/day)	Exhaust PM10 (lbs/day)	Fugitive Dust PM10 (lbs/day)	
Grubbing/Land Clearing	15	106	133	15	6	9	
Grading/Excavation	15	110	129	15	6	9	
Drainage/Utilities/Sub-Grade	19	130	165	8	8	0	
Paving	13	95	115	5	5	0	
Maximum (pounds /day)	19	130	165	15	8	9	
Total (tons/construction project)	2	11	14	1	1	1	<-tons

Notes:

Project Start Year ->	2003
Project Length (months) ->	9
Total Project Area (acres) ->	7
Maximum Area Disturbed/Day (acres) ->	2
Total Soil Imported/Exported (yd^3/day)->	0

PM10 estimates assume 50% control of fugitive dust from watering and associated dust control measures.

Total PM10 emissions shown in column F are the sum of exhaust and fugitive dust emissions shown in columns H and I.

Appendix E

Background Information on Acoustics

Background Information on Acoustics

Sound Terminology

Sound travels through the air as waves of minute air pressure fluctuations caused by some type of vibration. In general, sound waves travel away from the sound source as an expanding spherical surface. The energy contained in a sound wave is consequently spread over an increasing area as it travels away from the source. This results in a decrease in loudness at greater distances from the sound source. The following terms are commonly used in acoustics.

Decibel

Sound-level meters measure the pressure fluctuations caused by sound waves. Because of the ability of the human ear to respond to a wide dynamic range of sound pressure fluctuations, loudness is measured in terms of decibels (dB) on a logarithmic scale. This results in a scale that measures pressure fluctuations in a convenient notation and corresponds to our auditory perception of increasing loudness.

A-Weighted Decibels

Most sounds consist of a broad range of sound frequencies. Because the human ear is not equally sensitive to all frequencies, several frequency-weighting schemes have been used to develop composite decibel scales that approximate the way the human ear responds to sound levels. The "A-weighted" decibel scale (dBA) is the most widely used for this purpose. Typical A-weighted sound levels for various types of sound sources are summarized in Figure 1.

Equivalent Sound Level

Time-varying sound levels are often described in terms of an equivalent constant decibel level. Equivalent sound levels (L_{eq}) are used to develop single-value descriptions of average sound exposure over various periods of time. Such average sound exposure values often include additional weighting factors for annoyance potential attributable to time of day or other considerations. The L_{eq} data used for these average sound exposure descriptors are generally based on A-weighted sound-level measurements.

Day-Night Average Sound Level

Average sound exposure over a 24-hour period is often presented as a day-night average sound level (L_{dn}). L_{dn} values are calculated from hourly L_{eq} values, with

the L_{eq} values for the nighttime period (10:00 p.m.-7:00 a.m.) increased by 10 dB to reflect the greater disturbance potential from nighttime noises.

Community Noise Equivalent Level

The community noise equivalent level (CNEL) is also used to characterize average sound levels over a 24-hour period, with weighting factors included for evening and nighttime sound levels. L_{eq} values for the evening period (7:00 p.m.-10:00 p.m.) are increased by 5 dB, while L_{eq} values for the nighttime period (10:00 p.m.-7:00 a.m.) are increased by 10 dB. For given set of sound measurements, the CNEL value will usually be about 1 dB higher than the L_{dn} value. In practice, CNEL and L_{dn} are often used interchangeably.

Percentile-Exceeded, Maximum, and Minimum Sound Level

The sound level exceeded during a given percentage of a measurement period is the percentile-exceeded sound level (L_x). Examples include L_{10}, L_{50}, and L_{90}. L_{10} is the A-weighted sound level that is exceeded 10% of the measurement period, L_{50} is the level exceeded 50% of the period, and so on. L_{50} is the median sound level measured during the measurement period. L_{90}, the sound level exceeded 90% of the time, excludes high localized sound levels produced by nearby sources such as single car passages or bird chirps. L_{90} is often used to represent the background sound level. L_{50} is also used to provide a less conservative assessment of the background sound level.

The maximum sound level (L_{max}) and the minimum sound level (L_{min}) are the maximum and minimum sound levels respectively, measured during the measurement period. When a sound meter is set to the "slow" response setting as is typical for most community noise measurements, the Lmax and Lmin values are the maximum and minimum levels measured over a one second period.

Ambient Sound

Ambient sound is the all-encompassing sound associated with a given community site, usually being a composite of sounds from many sources, near and far, with no particular sound being dominant.

Equivalencies between Various Sound Descriptors

The L_{dn} value at a site calculated from a set of measurements taken over a given 24-hour period will be slightly lower than the CNEL value calculated over the same period. Except in situations where unusually high evening sound levels occur, the CNEL value will be within 1.5 dB of the L_{dn} value for the same set of sound measurements.

Sound Source	Sound Level (dBA)*	Response
Carrier deck jet operation		
	140	
Civil defense siren (at 100 feet)		
	130	Painfully loud
Jet takeoff (at 200 feet)		
	120	Threshold of feeling and pain
Riveting machine (at 1 foot) Rock music concert		
Pile driver (at 50 feet) Ambulance siren (at 100 feet)	110	
Heavy truck (at 50 feet)	100	Very loud
Pneumatic drill (at 50 feet) Freight train cars (at 50 feet) Garbage disposal in home	90	
Freight train cars (at 100 feet) Freeway traffic (at 50 feet) Vacuum cleaner (at 10 feet) Air conditioning unit (at 20 feet)	80	
Speech in normal voice (at 15 feet)	70	Moderately loud
Residence-typical movement of people, no TV or radio	60	
Soft whisper (at 5 feet)		
	50	
Recording studio		
	40	Quiet
	30	
	20	
	10	
	0	Threshold of hearing

* Typical A-weighted sound levels in decibels. "A" weighting approximates the frequency response of the human ear.

Figure 1
Weighted Sound Levels and Human Response

The relationship between peak hourly L_{eq} values and associated L_{dn} values depends on the distribution of traffic over the entire day. There is no precise way to convert a peak hourly L_{eq} value to an L_{dn} value. However, in urban areas near heavy traffic, the peak hourly L_{eq} value is typically 2-4 dB lower than the daily L_{dn} value. In less heavily developed areas, the peak hourly L_{eq} is often equal to the daily L_{dn} value. For rural areas with little nighttime traffic, the peak hourly L_{eq} value will often be 3-4 dB greater than the daily L_{dn} value.

Working with Decibel Values

The nature of the decibel scale is such that the individual sound levels for different sound sources cannot be added directly to give the combined sound level of these sources. Two sound sources producing equal sound levels at a given location will produce a composite sound level that is 3 dB greater than either sound alone. When two sound sources differ by 10 dB, the composite sound level will be only 0.4 dB greater than the louder source alone.

Most people have difficulty distinguishing the louder of two sound sources if they differ by less than 1.5-2.0 dB. Research into the human perception of changes in sound level indicates the following:

- a 3-dB change is just perceptible,
- a 5-dB change is clearly perceptible, and
- a 10-dB change is perceived as being twice or half as loud.

A doubling or halving of acoustic energy will change the resulting sound level by 3 dB, which corresponds to a change that is just perceptible. In practice, this means that a doubling of traffic volume on a roadway, doubling the number of people in a stadium, or doubling the number of wind turbines in a wind farm will, as a general rule, only result in a 3-dB, or just perceptible, increase in noise.

Outdoor Sound Propagation

There are a number of factors that affect how sound propagates outdoors. These factors, described by Hoover and Keith (1996), are summarized below.

Distance Attenuation

As a general rule, sound from localized or point sound sources spreads out as it travels away from the source and the sound level drops at a rate of 6 dB per doubling of distance. If the sound source is long in one dimension, such as traffic on a highway or a long train, the sound source is considered to be a line source. As a general rule, the sound level from a line source will drop off at a rate of 3 dB per doubling of distance. If the intervening ground between the line source and the receptor is acoustically "soft" (e.g., ground vegetation, scattered trees, clumps

of bushes), an attenuation rate of 4.5 dB per doubling of distance is generally used.

Attenuation from Barriers

Any solid structure such as a berm, wall, or building that blocks the line of sight between a source and receiver serves as a sound barrier and will result in additional sound attenuation. The amount of additional attenuation is a function of the difference between the length of the sound path over the barrier and the length of the direct line of sight path. Thus, the sound attenuation of a barrier between a source and a receiver that are very far apart will be much less than the attenuation that would result if either the source or the receiver is very close to the barrier.

Molecular Absorption

Air absorbs sound energy as a function of the temperature, humidity of the air, and frequency of the sound. Additional sound attenuation on the order of 1 to 2 dB per 1,000 feet can occur.

Anomalous Excess Attenuation

Large-scale effects of wind speed, wind direction, and thermal gradients in the air can cause large differences in sound transmission over large distances. These effects when combined result in anomalous excess attenuation, which can be applied to long-term sound-level estimates. Additional sound attenuation on the order of about 1 dB per 1,000 feet can occur.

Other Atmospheric Effects

Short-term atmospheric effects relating to wind and temperature gradients can cause bending of sound waves and can influence changes in sound levels at large distances. These effects can either increase or decrease sound levels depending on the orientation of the source and receptor and the nature of the wind and temperature gradient. Because these effects are normally short-term, it is generally not practical to include them in sound propagation calculations. Understanding these effects, however, can help explain variations that occur between calculated and measured sound levels.

Guidelines for Interpreting Sound Levels

Various federal, state, and local agencies have developed guidelines for evaluating land use compatibility under different sound-level ranges. The following is a summary of federal and state guidelines.

Federal Agency Guidelines

The federal Noise Control Act of 1972 (Public Law 92-574) established a requirement that all federal agencies administer their programs to promote an environment free of noise that jeopardizes public health or welfare. The U.S. Environmental Protection Agency (EPA) was given the responsibility for:

- providing information to the public regarding identifiable effects of noise on public health or welfare,
- publishing information on the levels of environmental noise that will protect the public health and welfare with an adequate margin of safety,
- coordinating federal research and activities related to noise control, and
- establishing federal noise emission standards for selected products distributed in interstate commerce.

The federal Noise Control Act also directed that all federal agencies comply with applicable federal, state, interstate, and local noise control regulations.

Although EPA was given major public information and federal agency coordination roles, each federal agency retains authority to adopt noise regulations pertaining to agency programs. EPA can require other federal agencies to justify their noise regulations in terms of the federal Noise Control Act policy requirements. The Occupational Safety and Health Administration retains primary authority for setting workplace noise exposure standards. The Federal Aviation Administration retains primary jurisdiction over aircraft noise standards, and the Federal Highway Administration (FHWA) retains primary jurisdiction over highway noise standards.

In 1974, in response to the requirements of the federal Noise Control Act, EPA identified indoor and outdoor noise limits to protect public health and welfare (communication disruption, sleep disturbance, and hearing damage). Outdoor L_{dn} limits of 55 dB and indoor L_{dn} limits of 45 dB are identified as desirable to protect against speech interference and sleep disturbance for residential, educational, and healthcare areas. Sound-level criteria to protect against hearing damage in commercial and industrial areas are identified as 24-hour L_{eq} values of 70 dB (both outdoors and indoors).

The FHWA has adopted criteria for evaluating noise impacts associated with federally funded highway projects and for determining whether these impacts are sufficient to justify funding noise mitigation actions (23 CFR 772). The FHWA noise abatement criteria are based on peak hourly L_{eq} sound levels, not L_{dn} or 24-hour L_{eq} values. The peak 1-hour L_{eq} criteria for residential, educational, and healthcare facilities are 67 dB outdoors and 52 dB indoors. The peak 1-hour L_{eq} criterion for commercial and industrial areas is 72 dB (outdoors).

The U.S. Department of Housing and Urban Development has established guidelines for evaluating noise impacts on residential projects seeking financial support under various grant programs (44 FR 135:40860-40866, January 23,

1979). Sites are generally considered acceptable for residential use if they are exposed to outdoor L_{dn} values of 65 dB or less. Sites are considered "normally unacceptable" if they are exposed to outdoor L_{dn} values of 65-75 dB. Sites are considered unacceptable if they are exposed to outdoor L_{dn} values above 75 dB.

State Agency Guidelines

In 1987, the California Department of Health Services published guidelines for the noise elements of local general plans. These guidelines include a sound level/land use compatibility chart that categorizes various outdoor L_{dn} ranges into up to four compatibility categories (normally acceptable, conditionally acceptable, normally unacceptable, and clearly unacceptable) by land use. For many land uses, the chart shows overlapping L_{dn} ranges for two or more compatibility categories.

The noise element guidelines chart identifies the normally acceptable range for low-density residential uses as less than 60 dB and the conditionally acceptable range as 55-70 dB. The normally acceptable range for high-density residential uses is identified as L_{dn} values below 65 dB, and the conditionally acceptable range is identified as 60-70 dB. For educational and medical facilities, L_{dn} values below 70 dB are considered normally acceptable and L_{dn} values of 60-70 dB are considered conditionally acceptable. For office and commercial land uses, L_{dn} values below 70 dB are considered normally acceptable and L_{dn} values of 67.5-77.5 are categorized as conditionally acceptable.

These overlapping L_{dn} ranges are intended to indicate that local conditions (existing sound levels and community attitudes toward dominant sound sources) should be considered in evaluating land use compatibility at specific locations.

The California Department of Housing and Community Development has adopted noise insulation performance standards for new hotels, motels, and dwellings other than detached single-family structures (24 CCR T25-28). These standards require that "interior CNELs with windows closed, attributable to exterior sources, shall not exceed an annual CNEL of 45 dB in any habitable room".

The California Department of Transportation uses the FHWA criteria as the basis for evaluating noise impacts from highway projects.

Reference

Hoover, R. M., and R. H. Keith. 1996. Noise control for buildings and manufacturing plants. Hoover and Keith, Inc. Houston, TX.

Appendix F

Noise Modeling Data (Bound Separately)

The technical noise modeling data is bound separately and available on a limited basis at the Placer County offices in Auburn and at the U.S. Department of the Interior, Bureau of Reclamation. The appendix contains the output data from the Sound32 noise model. These data were used to analyze the noise impacts of the proposed project by alternative. This appendix contains output files for existing conditions, future no-project conditions, and Alternative 1, 2, 3, and 4 conditions.

Appendix G

U.S. Fish and Wildlife Service Sensitive Species List

United States Department of the Interior

FISH AND WILDLIFE SERVICE

Sacramento Fish and Wildlife Office
2800 Cottage Way, Room W2605
Sacramento, California 95825

IN REPLY REFER TO:
1-1-02-SP-2881

August 15, 2002

Ms. Angela Alcala
Wildlife Biologist
Jones and Stokes
2600 V Street
Sacramento, California 95818-1914

Subject: Species List for Auburn-Folsom Road Widening. Douglas Boulevard South to Placer County Boundary. Two Lanes to Four, Placer County, California

Dear Ms. Alcala:

We are sending the enclosed list in response to your August 6, 2002, request for information about endangered and threatened species (Enclosure A). The list covers the following U.S. Geological Survey 7½ minute quad of Folsom.

Please read *Important Information About Your Species List* (enclosed). It explains how we made the list and describes your responsibilities under the Endangered Species Act. Please contact Justin Ly at (916) 414-6645, if you have any questions about the attached list or your responsibilities under the Endangered Species Act. For the fastest response to species list requests, address them to the attention of Species Lists at this address. You may fax requests to 414-6712 or 414-6713. You may also email them to harry_mossman@fws.gov.

Sincerely,

for Jan C. Knight
Chief, Endangered Species Division

Enclosures

GUIDELINES FOR CONDUCTING AND REPORTING BOTANICAL INVENTORIES FOR FEDERALLY LISTED, PROPOSED AND CANDIDATE PLANTS

(September 23, 1996)

These guidelines describe protocols for conducting botanical inventories for federally listed, proposed and candidate plants, and describe minimum standards for reporting results. The Service will use, in part, the information outlined below in determining whether the project under consideration may affect any listed, proposed or candidate plants, and in determining the direct, indirect, and cumulative effects.

Field inventories should be conducted in a manner that will locate listed, proposed, or candidate species (target species) that may be present. The entire project area requires a botanical inventory, except developed agricultural lands. The field investigator(s) should:

1. Conduct inventories at the appropriate times of year when target species are present and identifiable. Inventories will include all potential habitats. Multiple site visits during a field season may be necessary to make observations during the appropriate phenological stage of all target species.

2. If available, use a regional or local reference population to obtain a visual image of the target species and associated habitat(s). If access to reference populations is not available, investigators should study specimens from local herbaria.

3. List every species observed and compile a comprehensive list of vascular plants for the entire project site. Vascular plants need to be identified to a taxonomic level which allows rarity to be determined.

4. Report results of botanical field inventories that include:

   a. a description of the biological setting, including plant community, topography, soils, potential habitat of target species, and an evaluation of environmental conditions, such as timing or quantity of rainfall, which may influence the performance and expression of target species

   b. a map of project location showing scale, orientation, project boundaries, parcel size, and map quadrangle name

   c. survey dates and survey methodology(ies)

   d. if a reference population is available, provide a written narrative describing the target species reference population(s) used, and date(s) when observations were made

   e. a comprehensive list of all vascular plants occurring on the project site for each habitat type

   f. current and historic land uses of the habitat(s) and degree of site alteration

   g. presence of target species off-site on adjacent parcels, if known

h. an assessment of the biological significance or ecological quality of the project site in a local and regional context

5. If target species is(are) found, report results that additionally include:

   a. a map showing federally listed, proposed and candidate species distribution as they relate to the proposed project

   b. if target species is (are) associated with wetlands, a description of the direction and integrity of flow of surface hydrology. If target species is (are) affected by adjacent off-site hydrological influences, describe these factors.

   c. the target species phenology and microhabitat, an estimate of the number of individuals of each target species per unit area; identify areas of high, medium and low density of target species over the project site, and provide acres of occupied habitat of target species. Investigators could provide color slides, photos or color copies of photos of target species or representative habitats to support information or descriptions contained in reports.

   d. the degree of impact(s), if any, of the proposed project as it relates to the potential unoccupied habitat of target habitat.

6. Document findings of target species by completing California Native Species Field Survey Form(s) and submit form(s) to the Natural Diversity Data Base. Documentation of determinations and/or voucher specimens may be useful in cases of taxonomic ambiguities, habitat or range extensions.

7. Report as an addendum to the original survey, any change in abundance and distribution of target plants in subsequent years. Project sites with inventories older than three years from the current date of project proposal submission will likely need additional survey. Investigators need to assess whether an additional survey(s) is (are) needed.

8. Adverse conditions may prevent investigator(s) from determining presence or identifying some target species in potential habitat(s) of target species. Disease, drought, predation, or herbivory may preclude the presence or identification of target species in any year. An additional botanical inventory(ies) in a subsequent year(s) may be required if adverse conditions occur in a potential habitat(s). Investigator(s) may need to discuss such conditions.

9. Guidance from California Department of Fish and Game (CDFG) regarding plant and plant community surveys can be found in Guidelines for Assessing the Effects of Proposed Developments on Rare and Endangered Plants and Plant Communities, 1984. Please contact the CDFG Regional Office for questions regarding the CDFG guidelines and for assistance in determining any applicable State regulatory requirements.

ENCLOSURE A

Endangered and Threatened Species that May Occur in
or be Affected by Projects in the Selected Quads Listed Below
Reference File No. 1-1-02-SP-2881

Auburn-Folsom Road Widening

August 13, 2002

QUAD: 511B FOLSOM

Listed Species

Birds

bald eagle, *Haliaeetus leucocephalus* (T)

Reptiles

giant garter snake, *Thamnophis gigas* (T)

Amphibians

California tiger salamander, *Ambystoma californiense* (C/E)

California red-legged frog, *Rana aurora draytonii* (T)

Fish

delta smelt, *Hypomesus transpacificus* (T)

Central Valley steelhead, *Oncorhynchus mykiss* (T) NMFS

winter-run chinook salmon, *Oncorhynchus tshawytscha* (E) NMFS

Central Valley spring-run chinook salmon, *Oncorhynchus tshawytscha* (T) NMFS

Critical Habitat, Central Valley spring-run chinook, *Oncorhynchus tshawytscha* (T) NMFS

Sacramento splittail, *Pogonichthys macrolepidotus* (T)

Invertebrates

vernal pool fairy shrimp, *Branchinecta lynchi* (T)

valley elderberry longhorn beetle, *Desmocerus californicus dimorphus* (T)

vernal pool tadpole shrimp, *Lepidurus packardi* (E)

Plants

Sacramento Orcutt grass, *Orcuttia viscida* (E)

Proposed Species

Birds

mountain plover, *Charadrius montanus* (PT)

Candidate Species

Fish

Central Valley fall/late fall-run chinook salmon, *Oncorhynchus tshawytscha* (C) NMFS

Critical habitat, Central Valley fall/late fall-run chinook, *Oncorhynchus tshawytscha* (C) NMFS

Species of Concern

Mammals

Pacific western big-eared bat, *Corynorhinus (=Plecotus) townsendii townsendii* (SC)

spotted bat, *Euderma maculatum* (SC)

greater western mastiff-bat, *Eumops perotis californicus* (SC)

small-footed myotis bat, *Myotis ciliolabrum* (SC)

long-eared myotis bat, *Myotis evotis* (SC)

fringed myotis bat, *Myotis thysanodes* (SC)

long-legged myotis bat, *Myotis volans* (SC)

Yuma myotis bat, *Myotis yumanensis* (SC)

San Joaquin pocket mouse, *Perognathus inornatus* (SC)

Birds

tricolored blackbird, *Agelaius tricolor* (SC)

grasshopper sparrow, *Ammodramus savannarum* (SC)

short-eared owl, *Asio flammeus* (SC)

western burrowing owl, *Athene cunicularia hypugaea* (SC)

oak titmouse, *Baeolophus inornatus* (SLC)

Aleutian Canada goose, *Branta canadensis leucopareia* (D)

Swainson's hawk, *Buteo Swainsoni* (CA)

ferruginous hawk, *Buteo regalis* (SC)

Lawrence's goldfinch, *Carduelis lawrencei* (SC)

Vaux's swift, *Chaetura vauxi* (SC)

black tern, *Chlidonias niger* (SC)

black swift, *Cypseloides niger* (SC)

white-tailed (=black shouldered) kite, *Elanus leucurus* (SC)

little willow flycatcher, *Empidonax traillii brewsteri* (CA)

American peregrine falcon, *Falco peregrinus anatum* (D)

loggerhead shrike, *Lanius ludovicianus* (SC)

Lewis' woodpecker, *Melanerpes lewis* (SC)

long-billed curlew, *Numenius americanus* (SC)

Nuttall's woodpecker, *Picoides nuttallii* (SLC)

white-faced ibis, *Plegadis chihi* (SC)

bank swallow, *Riparia riparia* (CA)

rufous hummingbird, *Selasphorus rufus* (SC)

Brewer's sparrow, *Spizella breweri* (SC)

California thrasher, *Toxostoma redivivum* (SC)

Reptiles

northwestern pond turtle, *Clemmys marmorata marmorata* (SC)

California horned lizard, *Phrynosoma coronatum frontale* (SC)

Amphibians

western spadefoot toad, *Spea hammondii* (SC)

Fish

green sturgeon, *Acipenser medirostris* (SC)

longfin smelt, *Spirinchus thaleichthys* (SC)

Invertebrates

Midvalley fairy shrimp, *Branchinecta mesovallensis* (SC)

California linderiella fairy shrimp, *Linderiella occidentalis* (SC)

Plants

pincushion navarretia, *Naverretia myersii spp. myersii* (SC)

KEY:

(E)	*Endangered*	Listed (in the Federal Register) as being in danger of extinction.
(T)	*Threatened*	Listed as likely to become endangered within the foreseeable future.
(P)	*Proposed*	Officially proposed (in the Federal Register) for listing as endangered or threatened.
(PX)	*Proposed Critical Habitat*	Proposed as an area essential to the conservation of the species.
(C)	*Candidate*	Candidate to become a *proposed* species.
(SC)	*Species of Concern*	May be endangered or threatened. Not enough biological information has been gathered to support listing at this time.
(SLC)	*Species of Local Concern*	Species of local or regional concern or conservation significance.
(MB)	*Migratory Bird*	Migratory bird
NMFS	NMFS species	Under the jurisdiction of the National Marine Fisheries Service. Contact them directly.
(D)	*Delisted*	Delisted. Status to be monitored for 5 years.
(CA)	*State-Listed*	Listed as threatened or endangered by the State of California.
(*)	*Extirpated*	Possibly extirpated from this quad.
(**)	*Extinct*	Possibly extinct.
	Critical Habitat	Area essential to the conservation of a species.

ENCLOSURE A

Endangered and Threatened Species that May Occur in or be Affected by
Projects in the Area of the Following California Counties
Reference File No. 1-1-02-SP-28812881

Auburn-Folsom Road Widening

August 13, 2002

PLACER COUNTY

Listed Species

Birds

bald eagle, *Haliaeetus leucocephalus* (T)

Reptiles

giant garter snake, *Thamnophis gigas* (T)

Amphibians

California red-legged frog, *Rana aurora draytonii* (T)

California tiger salamander, *Ambystoma californiense* (C/E)

Fish

Central Valley spring-run chinook salmon, *Oncorhynchus tshawytscha* (T) NMFS

Central Valley steelhead, *Oncorhynchus mykiss* (T) NMFS

Critical Habitat, Central Valley spring-run chinook, *Oncorhynchus tshawytscha* (T) NMFS

Critical habitat, Central Valley steelhead, *Oncorhynchus mykiss* (T) NMFS

Lahontan cutthroat trout, *Oncorhynchus (=Salmo) clarki henshawi* (T)

Sacramento splittail, *Pogonichthys macrolepidotus* (T)

delta smelt, *Hypomesus transpacificus* (T) *

winter-run chinook salmon, *Oncorhynchus tshawytscha* (E) NMFS

Invertebrates

valley elderberry longhorn beetle, *Desmocerus californicus dimorphus* (T)

vernal pool fairy shrimp, *Branchinecta lynchi* (T)

vernal pool tadpole shrimp, *Lepidurus packardi* (E)

Plants

Truckee barberry, *Berberis sonnei* (E)

Proposed Species

Birds

mountain plover, *Charadrius montanus* (PT)

Candidate Species

Birds

Western yellow-billed cuckoo, *Coccyzus americanus occidentalis* (C) *

Plants

Tahoe yellow-cress, *Rorippa subumbellata* (C)

slender Moonwort (= narrowleaf grapefern), *Botrychium lineare* (C) *

Species of Concern

Mammals

American (=pine) marten, *Martes americana* (SC)

California wolverine, *Gulo gulo luteus* (CA)

Pacific fisher, *Martes pennanti pacifica* (SC)

Pacific western big-eared bat, *Corynorhinus (=Plecotus) townsendii townsendii* (SC)

San Joaquin pocket mouse, *Perognathus inornatus* (SC)

Sierra Nevada red fox, *Vulpes vulpes necator* (CA)

Sierra Nevada snowshoe hare, *Lepus americanus tahoensis* (SC)

Yuma myotis bat, *Myotis yumanensis* (SC)

fringed myotis bat, *Myotis thysanodes* (SC)

greater western mastiff-bat, *Eumops perotis californicus* (SC)

long-eared myotis bat, *Myotis evotis* (SC)

long-legged myotis bat, *Myotis volans* (SC)

pale Townsend's big-eared bat, *Corynorhinus (=Plecotus) townsendii pallescens* (SC)

small-footed myotis bat, *Myotis ciliolabrum* (SC)

spotted bat, *Euderma maculatum* (SC)

Birds

Aleutian Canada goose, *Branta canadensis leucopareia* (D)

American bittern, *Botaurus lentiginosus* (SC)

American dipper, *Cinclus mexicanus* (SLC)

American peregrine falcon, *Falco peregrinus anatum* (D)

Brewer's sparrow, *Spizella breweri* (SC)

California spotted owl, *Strix occidentalis occidentalis* (SC)

California thrasher, *Toxostoma redivivum* (SC)

Harlequin duck, *Histrionicus histrionicus* (SC)

Lawrence's goldfinch, *Carduelis lawrencei* (SC)

Lewis' woodpecker, *Melanerpes lewis* (SC)

Nuttall's woodpecker, *Picoides nuttallii* (SLC)

Swainson's hawk, *Buteo Swainsoni* (CA)

Vaux's swift, *Chaetura vauxi* (SC)

bank swallow, *Riparia riparia* (CA)

black swift, *Cypseloides niger* (SC)

common loon, *Gavia immer* (SC)

ferruginous hawk, *Buteo regalis* (SC)
grasshopper sparrow, *Ammodramus savannarum* (SC)
hermit warbler, *Dendroica occidentalis* (SC)
little willow flycatcher, *Empidonax traillii brewsteri* (CA)
long-billed curlew, *Numenius americanus* (SC)
northern goshawk, *Accipiter gentilis* (SC)
oak titmouse, *Baeolophus inornatus* (SLC)
olive-sided flycatcher, *Contopus cooperi* (SC)
rufous hummingbird, *Selasphorus rufus* (SC)
short-eared owl, *Asio flammeus* (SC)
tricolored blackbird, *Agelaius tricolor* (SC)
western burrowing owl, *Athene cunicularia hypugaea* (SC)
white-faced ibis, *Plegadis chihi* (SC)
white-headed woodpecker, *Picoides albolarvatus* (SLC)

Reptiles

California horned lizard, *Phrynosoma coronatum frontale* (SC)
northwestern pond turtle, *Clemmys marmorata marmorata* (SC)
southwestern pond turtle, *Clemmys marmorata pallida* (SC)

Amphibians

Mount Lyell salamander, *Hydromantes platycephalus* (SC)
foothill yellow-legged frog, *Rana boylii* (SC)
mountain yellow-legged frog, *Rana muscosa* (SC)
western spadefoot toad, *Spea hammondii* (SC)

Fish

Pacific lamprey, *Lampetra tridentata* (SC)
green sturgeon, *Acipenser medirostris* (SC)
river lamprey, *Lampetra ayresi* (SC)

Invertebrates

California linderiella fairy shrimp, *Linderiella occidentalis* (SC)
Lake Tahoe benthic stonefly, *Capnia lacustra* (SC)
Sagehen Creek goracean caddisfly, *Goeracea oregona* (SC)
Shirttail Creek stonefly, *Megaleuctra sierra* (SC)
South Forks ground beetle, *Nebria darlingtoni* (SC)
spiny rhyacophilan caddisfly, *Rhyacophila spinata* (SC)

Plants

Ahart's (dwarf) rush, *Juncus leiospermus var. ahartii* (SC)
Boggs Lake hedge-hyssop, *Gratiola heterosepala* (CA)

Brandegee's clarkia, *Clarkia biloba ssp brandegeae* (SLC)
Butte fritillary, *Fritillaria eastwoodiae* (SC)
Carson Range rock cress, *Arabis rigidissima var. demota* (SC)
Donner Pass buckwheat, *Eriogonum umbellatum var. torreyanum* (SC)
Plumas ivesia, *Ivesia sericoleuca* (SC)
Red Hills soaproot, *Chlorogalum grandiflorum* (SC)
Stebbins' phacelia, *Phacelia stebbinsii* (SC)
big-scale (=California) balsamroot, *Balsamorhiza macrolepis var macrolepis* (SLC)
common moonwort, *Botrychium lunaria* (SC)
felt-leaved (=woolly) violet, *Viola tomentosa* (SLC)
hispid bird's-beak, *Cordylanthus mollis ssp. hispidus* (SC)
legenere, *Legenere limosa* (SC)
long-petaled lewisia, *Lewisia longipetala* (SC)
saw-toothed lewisia, *Lewisia serrata* (SC)
stinkbells, *Fritillaria agrestis* (SLC)

KEY:

(E)	*Endangered*	Listed (in the Federal Register) as being in danger of extinction.
(T)	*Threatened*	Listed as likely to become endangered within the foreseeable future.
(P)	*Proposed*	Officially proposed (in the Federal Register) for listing as endangered or threatened.
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(C)	*Candidate*	Candidate to become a *proposed* species.
(SC)	*Species of Concern*	Other species of concern to the Service.
(SLC)	*Species of Local Concern*	Species of local or regional concern or conservation significance.
(D)	*Delisted*	Delisted. Status to be monitored for 5 years.
(CA)	*State-Listed*	Listed as threatened or endangered by the State of California.
NMFS	NMFS species	Under jurisdiction of the National Marine Fisheries Service. Contact them directly.
*	*Extirpated*	Possibly extirpated from the area.
**	*Extinct*	Possibly extinct
	Critical Habitat	Area essential to the conservation of a species.

Appendix H

Scientific and Common Names of Species Mentioned in the Text

Table H-1. Common and Scientific Names of Plant and Wildlife Species Mentioned in the Text

Common Name	*Scientific Name*
Plant Species	
Balsamroot	*Balsamorhiza macrolepis* var. *macrolepis*
Baltic rush	*Juncus balticus*
Barbed goatgrass	*Aegilops triuncialis*
Bermuda grass	*Cynodon dactylon*
Blue elderberry	*Sambucus mexicana*
Blue oak	*Quercus douglasii*
Box elder	*Acer negudo* var. *californicum*
Broad-leaved cattail	*Typha latifolia*
Bromes	*Bromus* sp.
Buckeye	*Aesculus californica*
California blackberry	*Rubus parviflours*
California poppy	*Eschscholzia californica*
California wild grape	*Vitis californica*
California wild rose	*Rosa californica*
Cocklebur	*Xanthium strumarium*
Common scouring rush	*Equisetum hyemale* ssp. *affine*
Coyote bush	*Baccharis pilularis*
Creeping wildrye	*Leymus triticoides*
Curly dock	*Rumex crispus*
Fescue	*Festuca* sp.
Filarees	*Erodium* sp.
Foothill pine (grey pine)	*Pinus sabiniana*
Fremont's cottonwood	*Populus fremontii* ssp. *fremontii*
Harding grass	*Phalaris aquatica*
Hardstem bulrush	*Scirpus acutus* var. *occidentalis*
Himalayan blackberry	*Rubus discolor*
Interior live oak	*Quercus wislizenii*
Italian ryegrass	*Lolium multiflorum*
Johnson grass	*Sorghum halepense*
Lupin species	*Lupinus* spp.
Mediterranean barley	*Hordeum marinum* ssp. *gussoneanum*
Mugwort	*Artemisia douglasiana*
Mustards	*Brassica* sp.
Oregon ash	*Fraxinus latifolia*
Perennial peppergrass	*Lepidium latifolium*
Poison oak	*Tocicodendron diversilobum*

Table H-1. Continued

Common Name	*Scientific Name*
Rabbit's foot grass	*Polypogon monspeliensis*
Sedges	*Carex* sp.
Smilo grass	*Piptatherum miliaceum*
Spike rush	*Eleocharis macrostachya*
Valley oak	*Quercus lobata*
Water smart weed	*Polygonum amphibium*
Wild oats	*Avena barbata*
Willows	*Salix* spp.
Willow smart weed	*Polygonum lapathifolium*
Yellow star-thistle	*Centaurea solstitialis*
Wildlife Species	
Amphibians	
Pacific chorus frog	*Hyla regilla*
Reptiles	
Common garter snake	*Thamnophis elegans*
Western toad	*Bufo boreus*
Birds	
Acorn woodpecker	*Melanerpes erythrocephalus*
American avocet	*Recurvirostra americana*
American goldfinch	*Carduelis tristis*
American kestrel	*Falco tinnunculus*
American robin	*Turdus migratorius*
Ash-throated flycatcher	*Myiarchus cinerascens*
Barn swallow	*Hirundo rustica*
Bewick's wren	*Thryomanes bewickii*
Black phoebe	*Sayornis saya*
Brewer's blackbird	*Euphagus cyanocephalus*
Cliff swallow	*Petrochelidon pyrrhonota*
Common yellowthroat	*Geothlypis trichas*
Great blue heron	*Ardea herodias*
Great egret	*Ardea alba*
Great-horned owl	*Bubo virginianus*
Greater yellowlegs	*Tringa melanoleuca*
House wren	*Troglodytes aedon*
Killdeer	*Charadrius vociferous*
Mallard	*Anas platyrhynchos*
Marsh wren	*Cistothuorus palustris*

Table H-1. Continued

Common Name	*Scientific Name*
Mourning dove	*Zenaida macroura*
Northern harrier	*Circus cyaneus*
Nuttall's woodpecker	*Picoides nuttallii*
Red-breasted nuthatch	*Sitta canadensis*
Red-shouldered hawk	*Buteo lineatus*
Red-tailed hawk	*Buteo jamaicensis*
Red-winged blackbird	*Agelaius phoeniceus*
Song sparrow	*Melospiza melodia*
Tree swallow	*Tachycineta bicolor*
Western bluebird	*Sialia mexicana*
Western meadowlark	*Sturnella neglecta*
Western scrub jay	*Aphelocoma californica*
White crowned sparrow	*Zonotrichia leucophrys*
White-throated swift	*Aaeronautes saxatalis*
Wood duck	*Aix sponsa*
Yellow-billed magpie	*Pica nuttalli*
Mammals	
Black-tailed deer	*Odocoileus hemionus*
Black-tailed hare	*Lepus californicus*
Botta's pocket gopher	*Thomomys bottae*
California ground squirrel	*Spermophilus beecheyi*
California vole	*Microtus californicus*
Coyote	*Canis latrans*
Deer mouse	*Peromyscus maniculatus*
Muskrat	Ondatra zibethica
Raccoon	*Procyon lotor*
Striped skunk	*Mephitis mephitis*
Virginia opossum	*Didelphis marsupialis*
Western gray squirrel	*Sciurus griseus*
Western harvest mouse	*Reithrodontomys megalotis*

Appendix I

Wetland Delineation

Preliminary Delineation of Waters of the United States, Including Wetlands Auburn-Folsom Road Widening Project, Placer County

Federal Lead Agency:

U.S. Department of the Interior
Bureau of Reclamation
7794 Folsom Dam Road
Folsom, CA 95630
Contact: Sandi Richerson
916/989-7174

State Lead Agency:

Placer County
Department of Public Works
11444 B Avenue
De Witt Center
Auburn, CA 95603
Contact: Charles W. Ebeling, P.E.
530/886-3521

Environmental Consultant:

Jones & Stokes
2600 V Street
Sacramento, CA 95818-1914
Contact: Lynn Finley/Susan Bushnell Bergfalk
916/737-3000

March 2003

Jones & Stokes. 2003. Preliminary delineation of waters of the United States, including wetlands, Auburn-Folsom Road widening project, Placer County. March. (J&S 02-102.) Sacramento, CA.

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Description of General Site Conditions 3

Section II. Delineation Terminology and Methods 5
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Upland Areas 15

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Attachment A. Representative Data Forms

Attachment B. Delineation Maps

Attachment C. List of Waters in the Study Area

Tables and Figures

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Acronyms and Abbreviations

CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
Corps	U.S. Army Corps of Engineers
County	Placer County
CWA	Clean Water Act
EPA	Environmental Protection Agency
FAC	facultative
FACU	facultative upland
FACW	facultative wetland
FR	Federal Register
GIS	geographic information system
GPS	global positioning system
NEPA	National Environmental Policy Act
NI	no indicator
OBL	obligate
OHWM	ordinary high-water mark
Reclamation	U.S. Department of the Interior, Bureau of Reclamation
SRA	State Recreation Area
UPL	obligate upland
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey

Executive Summary

This report presents the results of a delineation of waters of the United States, including wetlands, conducted for the Auburn-Folsom Road Widening Project in Placer County, California (Figure 1). Placer County (County), with the cooperation of the U.S. Bureau of Reclamation (Reclamation), proposes to improve approximately 3.2 kilometers (2 miles) of Auburn-Folsom Road, from the Placer County/Sacramento County line north to Douglas Boulevard. Widening and construction would extend north only to Fuller Drive.

Jones & Stokes was retained by the County to delineate potential waters of the United States (including wetlands) within the study area (the study area is shown in Attachment B). The purpose of this delineation is to identify areas that would be regulated by the U.S. Army Corps of Engineers (Corps) under Section 404 of the Clean Water Act. This report presents the methods used to delineate waters of the United States and the results of this field delineation. The results of this delineation should be considered preliminary until verified by the Sacramento District of the Corps.

In summary, a total of 0.112 hectare (0.277 acre) of waters of the United States (including 0.031 hectare [0.077 acre] of jurisdictional wetlands and 0.08 hectare [0.20 acre] of waters of the United States) was delineated in the project study area. Table 1 lists the habitat types and acreages that were delineated by Jones & Stokes as potential waters of the United States.

Table 1. Potential Waters of the United States Delineated in the Auburn-Folsom Road Widening Project Study Area, Placer County

Habitat Type	Jurisdictional Status	Total Hectares (Acres)
–Perennial stream –Linda Creek –Unnamed tributary to Linda Creek –Baldwin Reservoir canal	Waters of the United States, including wetlands	0.112 (0.277)
–Ephemeral stream –Unnamed tributary to Linda Creek	Other waters of the United States	0.08 (0.20)
–Freshwater marsh –Two adjacent wetlands	Jurisdictional wetland	0.02 (0.05)
–Seasonal wetland –One adjacent wetland	Jurisdictional wetland	0.011 (0.027)

Guidance on waters that are "non-navigable, isolated [and] intrastate" was published jointly on January 19, 2001, by Counsel for the Environmental Protection Agency (EPA) and the Corps. This guidance was in response to the *Solid Waste Agency of Northern Cook County* vs. *United States Army Corps of Engineers* decision (121 S.CT. 675,2001). No isolated wetlands were located in

the study area. This determination should be considered preliminary until verified by the Sacramento District of the Corps.

Section I. Introduction

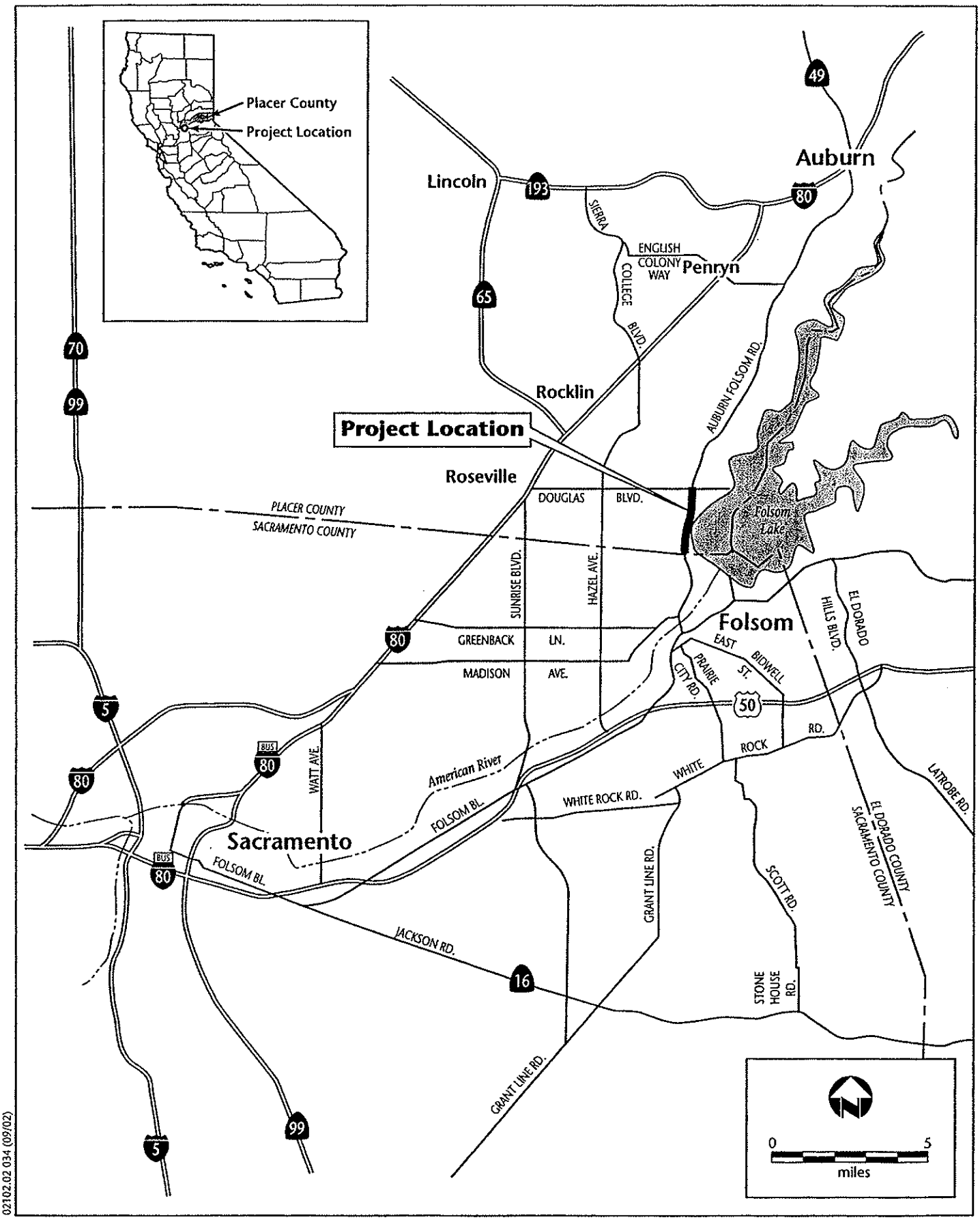
Jones & Stokes was retained by the County to prepare an environmental document in compliance with the California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA) for the 3.2-kilometer-long (2.0-mile-long) Auburn-Folsom Road Widening Project in Placer County (Figure 1). As part of this environmental document, Jones & Stokes delineated potential waters of the United States, including wetlands. A summary of this delineation will be used to support the CEQA/NEPA document and state and federal permits for the project.

This delineation report consists of the following five sections:

- Section I, "Introduction," briefly describes the proposed road improvement project and the site conditions observed in the study area.
- Section II, "Delineation Terminology and Methods," discusses terms used in this report and describes field delineation methods.
- Section III, "Results," presents the results of the wetland delineation.
- Section IV, "List of Preparers," lists the individuals involved in preparing the wetland delineation.
- Section V, "References Cited," lists printed references and personal communications cited in the text.
- Attachment A contains representative data forms completed for each wetland encountered in the field.
- Attachment B contains the wetland delineation maps.
- Attachment C contains a list of waters of the United States (including wetlands) documented in the study area.

Project Location

The Auburn-Folsom Road project area is located in the community of Granite Bay and runs along the western side of Folsom Lake State Recreation Area (SRA) (Figure 2). The project area is located in the Folsom 7.5-minute U.S. Geological Survey (USGS) quadrangle, in 10 North Township, 7 East Range, and 11 and 14 Sections.



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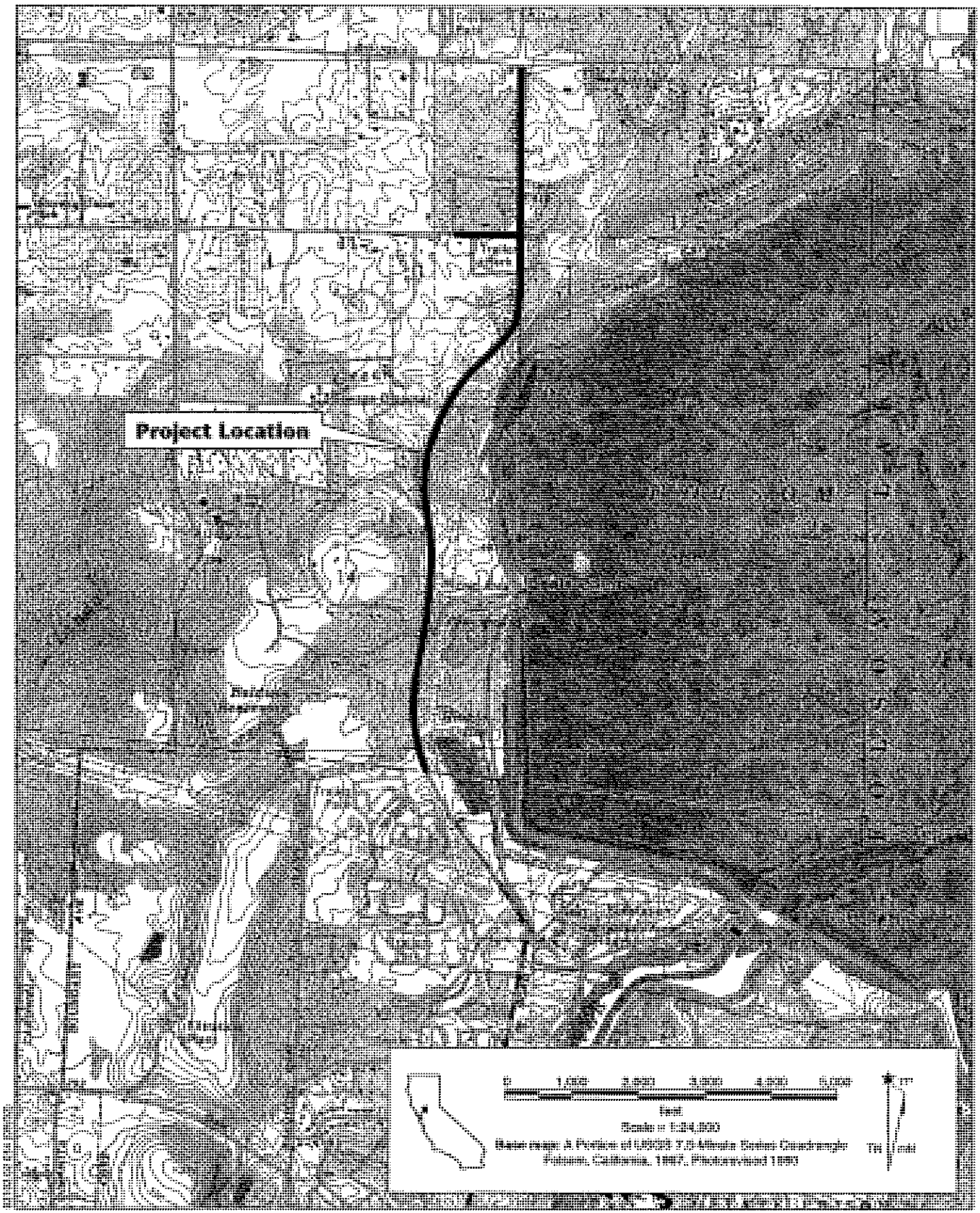
Jones & Stokes

Figure 1
Regional Location:
Auburn-Folsom Widening Project



Jones & Stokes

Figure 2
Project Location

Project Overview

The Auburn-Folsom Road project would involve:

- widening the roadway from two to four lanes,
- providing continuous Class II bicycle lanes/shoulders on each side of the road,
- providing a median that may include two-way left-turn lanes and/or raised or painted medians,
- installing a traffic signal at the Auburn-Folsom Road/Fuller Drive intersection,
- constructing/improving a multi-use trail/equestrian trail on the west side of Auburn-Folsom Road that will extend from the Baldwin Reservoir access road near the County line north to the Auburn-Folsom Road/Oak Hill Drive intersection, and
- implementing improvements to Eureka Road west of the Auburn-Folsom/Eureka Road intersection.

The County is considering four project alternative designs. All four of these alternatives were included in the designated study area for this project.

Description of General Site Conditions

This section presents an overview of the general site conditions documented in the study area. The elevation in the study area ranges from approximately 61 to 122 meters (200 to 400 feet) above mean sea level. Topography in the general vicinity of the project corridor is nearly level to moderately steep, with slopes ranging from 2% to 30% (Rogers 1980). The following general site conditions are described in this section.

- Land use
- Climate
- General hydrogeographic setting and hydrologic units
- Vegetation
- Soils

Land Use

The project corridor is located in the Granite Bay community, east of the City of Roseville and west of Folsom Lake SRA. This area has been undergoing considerable suburbanization, moving from a rural character to mixed uses of housing developments and retail centers.

Although there are some commercial, residential, and industrial uses at the north and south ends of the project corridor, the east side of the road is bordered by the Folsom SRA; here, an earth dike helps contain Folsom Lake (also known as a "wing dam" because it connects to the main concrete dam of Folsom Lake).

On the western side of Auburn-Folsom Road is a variety of private residential and commercial uses, with a mosaic of native and ornamental vegetation.

Climate

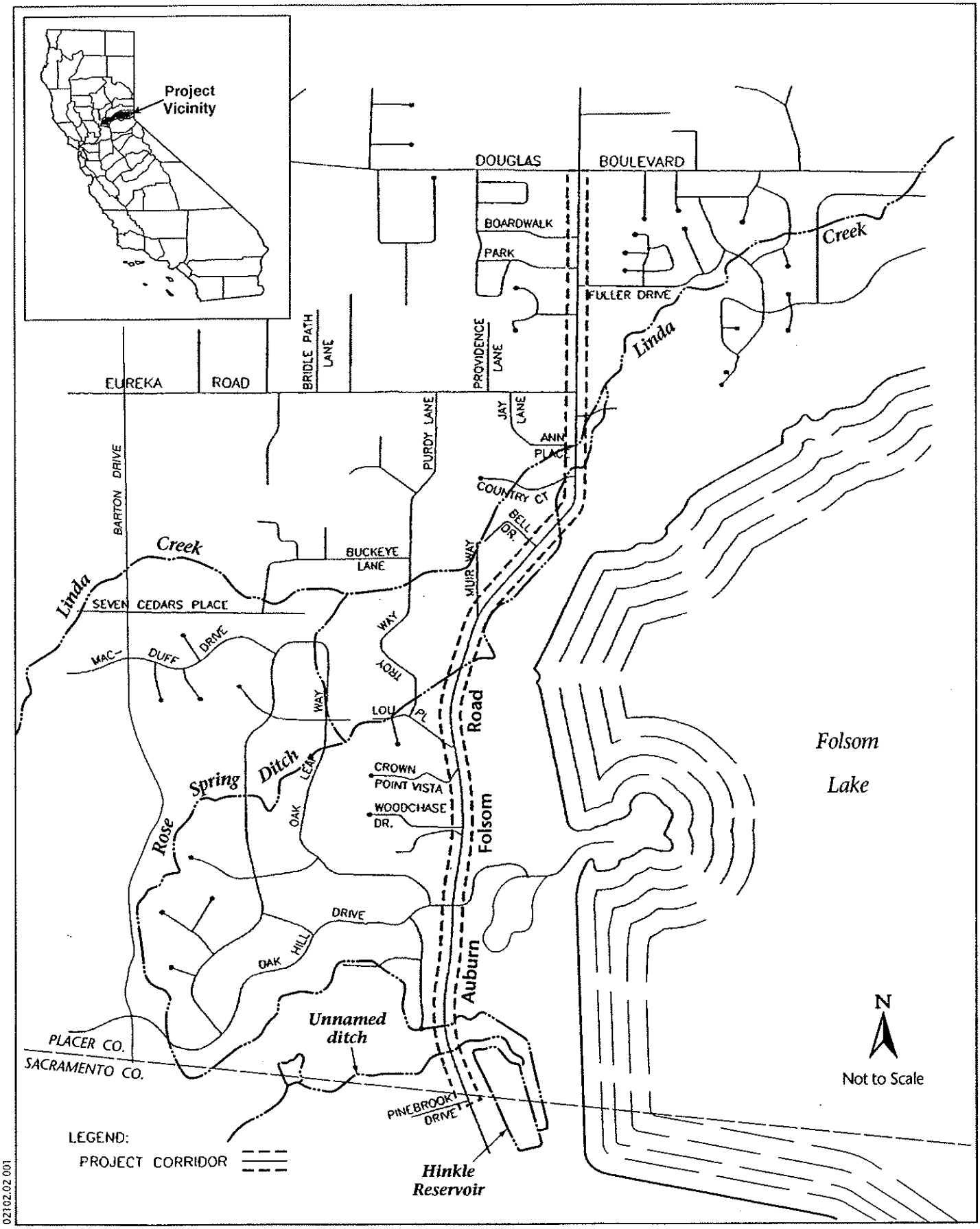
The north Pacific high-pressure system dominates the region's climate and produces northerly winds along the west coast of the United States during most of the year. The average annual precipitation in the project area is 58 centimeters (23 inches) (California Data Exchange Center 2002), but precipitation in summer is infrequent; most precipitation is associated with rainstorms that occur between October and April. Rainstorms originate over the Pacific Ocean and carry considerable moisture. In the project area, such storms usually last 1 to 4 days. Cloudbursts occurring within rainstorms often cause flooding in watersheds of a few hundred square miles or less and below 1,220 meters (4,000 feet) above mean sea level (Placer County Flood Control and Water Conservation District 1994). A cloudburst is a severe thunderstorm with very intense, short-lived rainfall, often accompanied by hail, strong winds, or tornadoes. Cloudbursts are most likely to occur inland at lower elevations, in winter or early spring, and in association with subtropical moisture sources. In western Placer County, cloudbursts usually cover an area smaller than 777 square kilometers (300 square miles) and last less than 2 hours (Placer County Flood Control and Water Conservation District 1994).

The soil temperature regime is thermic, and the soil moisture regime is xeric or aquic. Based on a frost-free season of 336 days (Rogers 1980), 5% of the growing season in the study area equates to 17 days. *Growing season* is defined in this report under Section II, "Delineation Terminology and Methods."

General Hydrogeographic Setting and Hydrologic Units

The study area is located in the northern Sierra Nevada Foothills hydrogeographic region and encompasses nine hydrologic units (U.S. Environmental Protection Agency 2002). The project area is located in the approximately 202-square-kilometer (78-square-mile) Dry Creek watershed.

Linda Creek is a major tributary of Dry Creek and intersects the project corridor approximately 61 meters (200 feet) south of the Auburn-Folsom Road/Eureka Road intersection. The road and surrounding study area also cross the Baldwin Reservoir canal, historic Rose Spring Ditch, and unnamed drainages that are associated with Linda Creek, Hinkle Reservoir, and Baldwin Reservoir (Figures 3 and 4).



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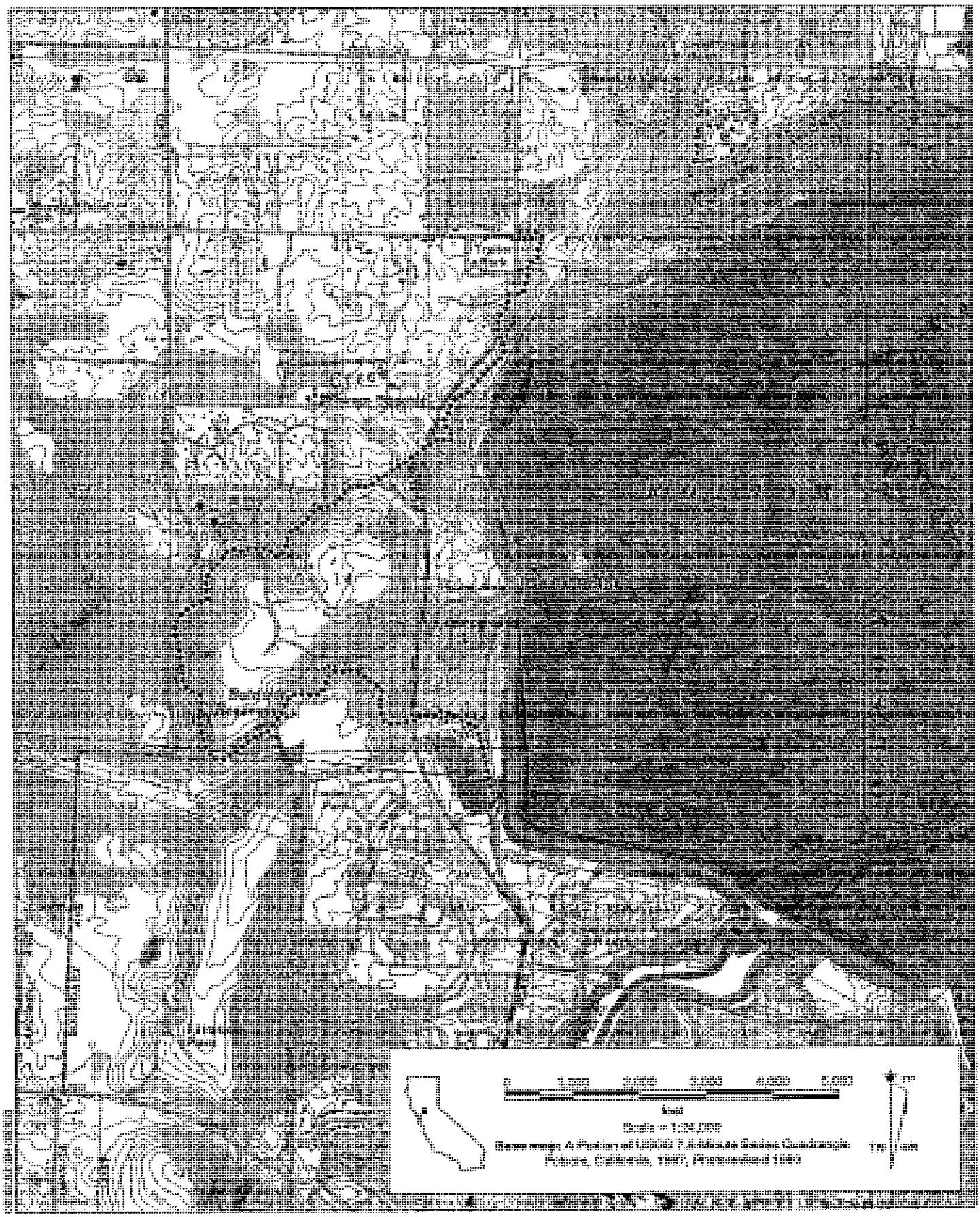
Jones & Stokes

Figure 3
Water Resources in the Project Area



Jones & Stokes

Figure 4
Historic Alignment of the Rose Spring Ditch

Vegetation

The vegetation in the study area primarily consists of grassland, blue oak–grey pine woodland, and landscaping. A few riparian areas and wetlands can be found in scattered locations in the study area. Valley foothill riparian forest is located along Linda Creek and a tributary drainage. Freshwater marsh and seasonal wetlands occur in and adjacent to drainage systems in the study area.

Soils

The soil survey of western Placer County (Rogers 1980) indicates that there are eight soil map units located in and adjacent to the study area (Figure 5). Three of these soil units contain hydric inclusions or components and are listed as hydric soils by the U.S. Soil Conservation Service (1992). These soil units are Andregg coarse sandy loam (106), with an unnamed hydric soil inclusion; Andregg-Shanandoah Complex (113), with a Shanandoah component and an unnamed hydric soil inclusion; and Xerothents placer area (197), with an unnamed hydric inclusion. These soil units generally are located in drainages in the study area.

Most of the study area is underlain by soil map units 106, 107, 110, 111, and 113 (Figure 5). All these map units comprise primarily the Andregg coarse sandy loam soil, which is a well-drained, moderately deep, and relatively coarse-textured soil that formed from weathered granitic bedrock. Largely because of its coarse texture, the Andregg coarse sandy loam soil has moderately rapid permeability and a low shrink-swell potential. In map unit 113, the Andregg soil is interspersed with soils of the Shenandoah series, which are somewhat poorly drained soils that have a clayey, very slowly permeable subsurface horizon.

A small portion of the southern half of the study area is underlain by soil map unit 152, which primarily comprises the Inks cobbly loam soil. The Inks cobbly loam soil is a well-drained, moderately deep to deep soil that formed from the andesitic conglomerate of the Mehrten Formation. It typically consists of a cobbly loam surface layer underlain by very cobbly clay loam and hard conglomerate bedrock at a depth of approximately 130 centimeters (51 inches). It is moderately permeable and has a low shrink-swell potential.

Most of the northern quarter of the project corridor is underlain by soil map unit 196, which primarily comprises well-drained cut and fill materials that often contain rocks and fragments of concrete, asphalt, and other debris.

The portions of the project alignment next to Linda Creek are underlain by soil map unit 197, which primarily comprises placer mine tailings. The tailings consist of poorly sorted or stratified stones, cobbles, and gravels that contain variable amounts of sand and silt. The physical properties of the tailings are highly variable and are not well characterized by Rogers (1980).

Section II. Delineation Terminology and Methods

This section provides definitions of the terms used in this report and detailed descriptions of methods used to delineate wetlands and other waters of the United States in the study area.

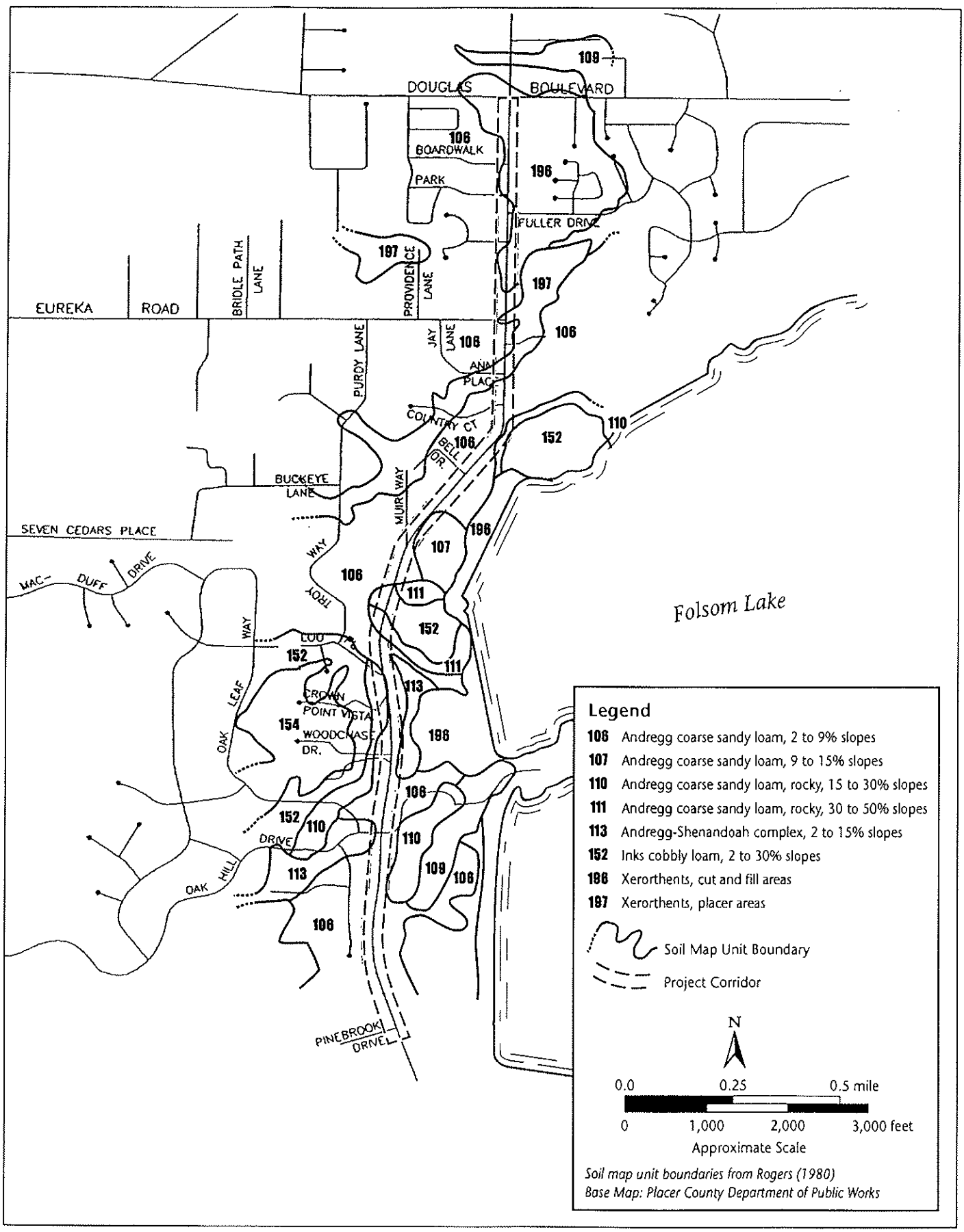
Terminology

Certain terms used throughout this report have meanings that relate to Corps's jurisdiction and the wetland delineation process, as specified by the *Wetlands Delineation Manual* (Environmental Laboratory 1987). These terms are described below.

- *Waters of the United States* is the term used by the Corps for areas that qualify for federal regulation under Section 404 of the Clean Water Act CWA. Waters of the United States are defined as:
  - all waters that are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters that are subject to the ebb and flow of the tide;
  - all interstate waters, including interstate wetlands;
  - all other waters, such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation, or destruction of which could affect interstate or foreign commerce including any such waters;
  - all impoundments of waters otherwise defined as waters of the United States under the definition;
  - tributaries of waters identified in the previous four bullet items;
  - the territorial seas; and
  - wetlands adjacent to waters (other than waters that are themselves wetlands) identified in the first six bullet items of this section (Title 33, Code of Federal Regulations [CFR], Section 328.3).

  Waters of the United States are areas under federal jurisdiction pursuant to Section 404 of the Clean Water Act. For the purpose of this delineation report, waters of the United States are categorized as either *wetlands* or *other waters of the United States*.

- For regulatory purposes, *wetlands* are areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions (33 CFR 328.3[b], 40 CFR 230.3). To qualify as a wetland, an area must show positive indicators



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Jones & Stokes

Figure 5
Soil Map of the Project Corridor and Vicinity

of three parameters: hydrophytic vegetation, hydric soils, and wetland hydrology.

- *Other waters of the United States* refers to unvegetated waterways and water bodies, such as lakes, creeks, and rivers, with an apparent ordinary high-water mark (OHWM) or bed and bank. Other waters of the United States typically lack one or more of the mandatory technical criteria for qualification as a jurisdictional wetland.
- The term *ordinary high-water mark (OHWM)* is defined (in 33 CFR 328.3[e]) as

  > that line on the shore established by the fluctuations of water and indicated by physical characteristics such as clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding area.

- The term *adjacent* means bordering, contiguous with, or neighboring. *Adjacent wetlands* are jurisdictional under the Clean Water Act. Wetlands separated from other waters of the United States by artificial dikes or barriers, natural river berms, beach dunes, and the like are adjacent wetlands (33 CFR 328.3[3]).
- *Isolated wetlands* are those that are not bordering, contiguous with, or neighboring waters of the United States, and usually are not considered jurisdictional. Wetlands normally are considered isolated if they are hydrologically isolated (currently and historically) from both fluvial and tidal surface hydrology, are not part of a larger wetland complex, and are located in a closed basin that is not a headwater connected to a larger watershed.

Terminology Defined in the 1987 *Wetland Delineation Manual*

- *Dominant and subdominant plant species*—"dominant" is a descriptor of vegetation and is related to the standing crop of a species in an area. Dominance usually is measured by height, areal cover, or basal area (for trees). A dominant plant species exerts a controlling influence on, or defines, the character of a community. Measurements of percent areal cover often are used to determine species dominance (Environmental Laboratory 1987).
- *Frequently flooded* is a flooding classification meaning that flooding is often likely to occur under normal weather conditions (i.e., there is more than a 50% chance of flooding in any year, or a likelihood of flooding more than 50 times in 100 years) (Environmental Laboratory 1987).
- The *growing season* is the portion of the year when soil temperatures at 50 centimeters (19.7 inches) below the soil surface are above biological zero (5°C or 41°F). Inundation or saturation for at least 5% of the growing season typically creates anaerobic conditions in the soil, and these conditions affect the types of plants that can grow and the types of soils that develop (Wetland

Training Institute 1995). This period is determined by estimating the number of frost-free days in a year (Environmental Laboratory 1987).

- A *hydric soil* is a soil that has formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part (Federal Register [FR], July 13, 1994; Environmental Laboratory 1987; U.S. Soil Conservation Service 1991).
- *Long duration* describes a period of inundation for a single inundation event, and may range from 7 days to 1 month (Environmental Laboratory 1987). Inundation or soil saturation for a week or more during the growing season typically creates anaerobic conditions in the soil, and these conditions affect the types of plants that can grow and the types of soils that develop (Wetland Training Institute 1995).
- An area has *wetland hydrology* if it is inundated or saturated to the surface continuously for at least 5% of the growing season in most years (50% probability of recurrence) (Environmental Laboratory 1987).
- *Redoximorphic features* are soil properties formed by oxidation, translocation, or reduction of iron or manganese oxides. Redoximorphic features indicate past or present prolonged soil saturation and were formerly known as mottles, concretions, soft masses, and low-chroma colors (Vepraskas 1992), and are characteristic of hydric soils.
- The *indicator status* for plants is used to determine whether a particular plant species is known to grow in wetlands. Indicator status categories were originally developed and defined by the U.S. Fish and Wildlife Service's (USFWS's) *National Wetlands Inventory* and subsequently modified by the *National Plant List Panel* (Reed 1988, Environmental Laboratory 1987).

  Plant indicator status categories are defined as follows and are used on the data forms in Attachment A:

  - obligate (OBL)—almost always occurs in wetlands (99% probability);
  - facultative wetland (FACW)—usually occurs in wetlands (67–99% probability);
  - facultative (FAC)—equally likely to occur in wetlands or nonwetlands (34–66% probability of occurrence in wetlands);
  - facultative upland (FACU)—usually occurs in nonwetlands, but occasionally occurs in wetlands (1–33% probability);
  - obligate upland (UPL)—almost never occurs in wetlands (1% probability); and
  - no indicator (NI)—no indicator status assigned because information is lacking.

Methods

Review of Existing Information

Jones & Stokes ecologists reviewed the following information before conducting the field delineation:

- Folsom USGS 7.5-minute topographic map;
- aerial photographs of the study area (approximate scale: 2.5 centimeters = 63 meters [1 inch = 208 feet]);
- topographic map of study area (approximate scale: 2.5 centimeters = 25 meters [1 inch = 82 feet]);
- soil types and soil temperature information from the Placer County Soil Survey, Western Part (Rogers 1980); and
- climate data from the California Data Exchange Center (2002).

Field Delineation Methods

Jones & Stokes wetland ecologists conducted field visits on March 15; April 3; May 2, 3, and 31; and August 9, 2002, to delineate jurisdictional wetlands and other waters of the United States in the study area. During the March and April field surveys, the ecologists walked the study area and mapped potential waters of the United States (wetlands and drainages with well-defined beds and banks). During the subsequent field visits in May and August, wetlands were delineated using the routine onsite determination method outlined in the Corps's *Wetlands Delineation Manual* (Environmental Laboratory 1987). The jurisdictional boundaries for other waters of the United States were determined using the criteria in the Federal Register (33 CFR 328.3[e]). The 1987 manual and the *Sacramento District Corps' Minimum Standards for Acceptance of Preliminary Wetlands Delineations* (U.S. Army Corps of Engineers 2001) were used to map and document waters of the United States in the field. All data obtained during the field delineation were recorded on standard data forms (Attachment A).

Specific methods used to delineate waters of the United States are described below.

Field Delineation Methods for Wetlands

Determination of Hydrophytic Vegetation

The presence of hydrophytic vegetation was determined using the methods outlined in the *Wetlands Delineation Manual* (Environmental Laboratory 1987). To determine whether a sample point was dominated by hydrophytic vegetation, all dominant plant species present at each sample site were recorded, and the wetland indicator status (Reed 1988) was designated for the dominant species.

Areas are considered to have positive indicators of hydrophytic vegetation if more than 50% of the dominant plant species (defined as plants that compose 20% or more of the cover value observed at a site) have an indicator status of OBL, FACW, or FAC (Reed 1988).

Determination of Wetland Hydrology

According to the *Wetlands Delineation Manual*, "an area has wetland hydrology if it is inundated or saturated to the surface continuously for at least 5% of the growing season in most years (50% probability of recurrence)" (Environmental Laboratory 1987). For this wetland delineation, wetland hydrology was determined to be present if standing water or saturation was observed or could be inferred based on corroborative data.

Wetland hydrology was determined to be present if a sample point supported one or more of the following characteristics:

- downslope position of the site in relation to an upslope water source, as well as location in a distinct wetland drainage pattern, and concave topography;
- inundation or saturation for a long duration observed during repeated field surveys; and/or
- residual primary or secondary wetland hydrology indicators (e.g., water marks, drift lines, sediment deposits, drainage patterns in wetlands, oxidized root channels, water-stained leaves, scour marks, and algal matting).

Determination of Hydric Soils

Soil pits at the sample sites were excavated to a depth of at least 30.5 centimeters (12 inches). Each apparent soil horizon was evaluated with respect to its thickness, redoximorphic features, and other diagnostic features indicative of hydric soils (Vepraskas 1992). The primary objective of the soil evaluation was to determine whether positive hydric soil indicators exist at the sample site.

Hydric soil indicators were evaluated based on the *Wetlands Delineation Manual*, updated with *Changes in the Hydric Soils of the United States* (FR, July 13, 1994, and February 24, 1995). The Placer County soil survey also was used to evaluate hydric soils (Rogers 1980). Unpublished data from the U.S. Soil Conservation Service (1991) and Vepraskas (1992) were also used to identify aquic conditions in hydric soil. These documents provide more detailed and comprehensive descriptions of hydric soil features than the *Wetlands Delineation Manual*, and they reflect current research on the identification of aquic conditions and hydric soils. Soils are considered hydric if they pond or flood frequently for a long duration during the growing season (FR, February 24, 1995). Field indicators, described under "Terminology," were used in determining whether soils met these criteria.

Field Delineation Methods for Waters of the United States

For the purpose of this delineation, the designation *waters of the United States* applies to streams that contain jurisdictional wetlands within their OWHM

(Features D/W-1, D/R/W-5, and D/R/W in Attachment B). Linda Creek, the Baldwin Reservoir canal, and an unnamed tributary drainage to Linda Creek appear to be perennial waterways that contain open water and wetland vegetation within the OHWM. These three waterways support a combination of jurisdictional wetlands and other waters of the United States and were delineated and mapped as one ecological unit based on the OHWM.

The one remaining drainage is ephemeral and lacks hydrophytic vegetation and hydric soils but contains well-defined bed and banks (Feature D-6 in Attachment B). This feature was delineated as an *other water of the United States* because it lacks two of the wetland characteristics. The OHWM was used to identify the jurisdictional boundary of this ephemeral drainage.

Jurisdictional Boundary Determinations, Mapping, and Acreage Calculations

The boundary for wetlands was determined based on the presence or inference of positive indicators of all three mandatory characteristics (hydrophytic vegetation, hydric soils, and wetland hydrology). In most cases, the wetland-upland boundary initially was determined based on observed hydrophytic vegetation and wetland hydrologic conditions. Soils then were evaluated in the wetland and an adjacent upland site to determine whether the wetland site supported hydric soil indicators and to establish the boundary between the wetland and the upland.

Boundaries of waters of the United States were mapped using indicators of an OHWM. OHWMs for drainages in the study area typically correspond to the scour line. This line defines the bed and bank portion of the channel that floods under normal conditions.

During the field delineation, each potentially jurisdictional feature was identified with a unique alpha-numeric identifier (e.g., W-1 or Wetland 1), mapped on a topographic map of the study area (scale: 2.5 centimeters = 25 meters [1 inch = 82 feet]), and cross-referenced to the corresponding data form for each sample point. Global positioning system (GPS) points were obtained for each sample point and for the boundary of each water of the United States using Trimble Pro-XR GPS receivers in the field. Acreages were calculated using a combination of geographic information system (GIS) data and planimetering of the boundaries, as mapped on the topographic base maps (scale: 2.5 centimeters = 25 meters [1 inch = 82 feet]).

Section III. Results

This section presents the results of the wetland delineation of the study area. Wetland delineation data forms for representative wetland and upland types evaluated in the field are provided in Attachment A. The location of potential waters of the United States documented in the study area are shown on the

Project Study Limit maps in Attachment B. Information on each waters of the United States crossed by the project alignment is provided in Attachment C.

In summary, a total of 0.112 hectare (0.277 acre) of waters of the United States (including 0.031 hectare (0.077 acre) of potential jurisdictional wetlands and 0.08 hectare (0.20 acre) of waters of the United States) was delineated in the study area (see Table 1 in the Executive Summary). No "non-navigable, isolated [and] intrastate" wetlands were delineated within the study area boundaries. All wetlands and other waters of the United States were determined to be adjacent and therefore subject to regulation by the Corps under Section 404 of the Clean Water Act.

Adjacent Wetlands

Freshwater Marsh

Two freshwater marshes, totaling approximately 0.02 hectare (0.05 acre) (Features W-4 and W-9) were delineated in the study area. In the study area, both of these wetlands are outside, but adjacent to, streams that qualify as waters of the United States.

Freshwater marsh wetland generally is dominated by perennial emergent wetland species (species that grow in wetland conditions more than 99% of the time) that often form a closed canopy and grow in areas that are permanently or seasonally flooded by slow-moving or stagnant fresh water. These wetlands are associated with drainages and broad, flat basins with shallow or seasonally perched groundwater tables.

Freshwater marsh in the study area qualifies as a jurisdictional wetland because it is characterized by a prevalence of hydrophytic vegetation, hydric soils, and wetland hydrology. The freshwater marshes also are considered "adjacent wetlands" because they are hydrologically connected by surface flows and groundwater to adjacent streams (Linda Creek and a tributary stream). Representative data forms W-4-1 and W-9-1 contain information on freshwater marsh wetlands in Attachment A.

Vegetation

Freshwater marsh vegetation is dominated by obligate and facultative wetland species. Dominant vegetation observed in freshwater marshes in the study area includes hardstem bulrush (*Scirpus* sp.) (OBL), broad-leaved cattail (*Typha latifolia*)(OBL), water plantain (*Alisma plantago-aquatica)* (OBL), and rush (*Juncus xiphioides)* (OBL). Freshwater marshes often support scattered riparian plants such as willows (*Salix* spp.) (FACW), Himalayan blackberry (*Rubus discolor*) (FACW+), and other less common species.

Hydrology

In the study area, freshwater marshes are associated with perennial or near-perennial surface water sources, such as overland flow from streams and other surface water sources, ponded seasonal precipitation, and shallow groundwater tables. During several field visits, Jones & Stokes observed ponding and saturated soils during the growing season, indicating that the wetlands would be inundated or saturated for a long duration (at least 17 days).

Soils

The soil in the freshwater marsh wetlands is mapped as Andregg-Shenandoah Complex (113) and Xerothents (197) (Rogers 1980). Hydric soils were determined to be present based on a combination of an aquic moisture regime, high organic matter in the A horizon, saturation in the upper 30.5 centimeters (12 inches) of the soil profile, a low chroma matrix and mottles below 17.8 centimeters (7 inches) in depth, gleyed soils at 33 centimeters (13 inches), and a sulfidic odor.

Jurisdictional Status and Boundary Determination

Freshwater marshes in the study area were delineated as jurisdictional wetlands because they support a prevalence of hydrophytic vegetation, show positive hydric soil indicators, display evidence of wetland hydrology, and are adjacent to or within waters of the United States.

The boundary for freshwater marshes was delineated at the point where the hydrophytic vegetation transitioned to upland annual grassland vegetation and where wetland hydrology (ponding or saturated soils) was not longer evident.

Seasonal Wetland

One seasonal wetland (W-8), totaling approximately 0.011 hectare (0.027 acre), was delineated in the study area. Two additional seasonal wetlands (W-2 and W-3) are located adjacent to the study area, but not within the limits of the study area. W-3 was determined to be adjacent based on its proximity to the Linda Creek tributary stream. W-2 is isolated because it does not have any apparent inlet or outlet connections to waters of the United States. Both of these wetlands are shown on the maps in Attachment B.

The seasonal wetland appears to have developed in a depression with a water table that is perched near the surface by bedrock or an impermeable soil horizon. The seasonal wetland in the study area is inundated during the winter rainy season (generally between December and March) and is dry during the intervening months. The seasonal wetland has seasonal wetland hydrology similar to that of vernal pools, but lacks the typical vernal pool flora.

The seasonal wetland W-8 qualifies as a jurisdictional wetland, based on the presence of positive indicators of all three wetland characteristics: hydrophytic vegetation, hydric soils, and wetland hydrology. The wetland also is considered "adjacent" because it is hydrologically connected by surface flows and groundwater to Linda Creek, located east and south of the wetland. Representative data forms W-8-1 and W-8-3 contain information on the seasonal wetland delineated in the study area (Attachment A). Upland data is provided in data form U-8-2 in Attachment A.

Vegetation

The seasonal wetland in the study area is dominated by relatively little diversity of hydrophytic species. Dominant species are *Rumex crispus* (FACW-), *Eleocharis macrostachya* (OBL), *Epilobium* sp. (NL), *Paspalum dilatatum* (FAC), and *Juncus xiphioides* (OBL). *Rubus discolor* and *Salix goodingii* are also present along the western end of this seasonal wetland.

Hydrology

In the study area, seasonal wetlands receive water from seasonal precipitation, overland flow, and shallow groundwater tables. During several field visits, Jones & Stokes ecologists observed drainage patterns, drift lines, and ponding and saturated soils during the growing season. These primary and secondary indicators were used to conclude that the seasonal wetland would be inundated or would support saturated soils for a long duration (at least 17 days) during the growing season.

Soils

Seasonal wetland W-8 occurs in an area mapped as Andregg coarse sandy loam (106) (Rogers 1980). Hydric soils were determined to be present based on the presence of low matrix soil colors (10YR 3/2, 7.5YR 3/2, 5Y 4/1) with high chroma mottles (5YR 4/6) and an aquic moisture regime.

Jurisdictional Status and Boundary Determination

Seasonal wetlands in the study area were delineated as jurisdictional wetlands because they support a prevalence of hydrophytic vegetation, show positive hydric soil indicators, display evidence of wetland hydrology, and are adjacent to or within waters of the United States.

The boundary for seasonal wetlands was delineated at the point where the hydrophytic vegetation transitioned to upland annual grassland vegetation and where wetland hydrology (saturated soils) was not longer evident.

Waters of the United States

The study area contains four streams, totaling 0.08 hectare (0.20 acre). These streams are characterized by well-defined beds and banks and apparent OHWMs (see figures in Attachment B). Three of the streams are natural and the other stream (a canal) appears to be artificial. The natural streams are Linda Creek (D/R/W-7) and two tributary streams (D/R/W-5 and D-6). Two of these streams are perennial and contain valley foothill riparian forest along their banks, with some inclusions of freshwater marsh and seasonal wetlands within their OHWMs. The third natural stream is ephemeral and contains annual grassland species within its OHWM. The dimensions of OHWMs for these streams are listed in Attachment C.

The artificial stream is a perennial drainage canal on the south end of the study area that feeds into Baldwin Reservoir. The Baldwin Reservoir canal contains freshwater marsh and seasonal wetland communities (described above) within its OHWM. The observed OHWM for this canal encompasses a 5.2-meter-wide (17-foot-wide) area.

The following features were observed in the study area: bank shelving and scour, destruction of terrestrial vegetation, debris deposits, and sediment deposits on the bridge abutments. These features were used to identify the OHWM of the drainages where there were no adjacent wetlands.

Upland Areas

The study area contains the following four upland habitats: annual grassland, blue oak–grey pine woodland, valley foothill riparian forest, and landscaped/ruderal areas (includes irrigated pastures and orchards). Valley foothill riparian forest is less common than the other four upland habitats and is located primarily along the upper banks and floodplain (outside the OHWM) of Linda Creek and a nearby tributary drainage. Data forms U-2-2, U-3-2, U-8-2, and U-11 in Attachment A contain data on upland habitats in the study area.

Section IV. List of Preparers

The following people were involved in analyzing the field data and preparing this report:

- **Kate Garcia.** Botanist/wetlands ecologist
- **Sam Garcia.** Wetlands ecologist/regulatory specialist
- **Susan Bushnell.** Senior plant ecologist
- **Nate Jennings.** GIS/AutoCad specialist

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Attachment A

Representative Data Forms

Jones & Stokes

DATA FORM
ROUTINE WETLAND DETERMINATION

Project/Site:	Auburn-Folsom Road Lane Widening Project	State:	California
Applicant/Owner:	Placer County	County:	Placer (Granite Bay)
Investigator(s):	Kate Carpenter, Sam Garcia	S/T/R	Folsom Quad (S11 & 14/T10N/R7E)
Date:	06/04/02		

Do normal circumstances exist on the site?	☑ YES	☐ NO	Community ID:	Blue Oak-Grey Pine Woodland
Is the site significantly disturbed (atypical situation)?	☐ YES	☑ NO	Transect ID:	W2
Is the area a potential problem area? (If needed, explain below)	☐ YES	☑ NO	Plot ID:	U-2-2 Upland

VEGETATION

Dominant Plant Species	Strata	% Rel. Cover	Indicator	Associate Plant Species	Strata	% Rel. Cover	Indicator
Pinus sabiniana	Tree	10	NI	*Epilobium sp.*	Herb	<5%	
Quercus agrifolia	Tree	30	NI	*Bromus sp.*	Herb	<5%	
Rubus discolor	vine	70	FACW*	*Briza minor*	Herb	<5%	FACW-
Epilobium brachycarpum	herb	65	UPL				

Percent of dominants that are OBL, FACW, or FAC (excluding FAC-): 25% Total vegetation cover: 180 %

- ☐ Morphological Adaptations
- ☐ Physiological/Reproductive Adaptations
- ☐ Visual Observation of Plant Species Growing in Areas of Prolonged Inundation/Saturation
- ☐ Personal Knowledge of Regional Plant Communities
- ☐ Technical Literature
- ☐ Other (explain below)

Hydrophytic Vegetation Present? ☐ YES ☑ NO

Remarks:

HYDROLOGY

Is it the growing season? ☑ YES ☐ NO

Based On: ☐ Soil Temp (record) ☐ Other (explain)

Typical length: Days 5% =

Recorded Data (describe below):
- ☐ Stream, Lake, or Tide Gauge
- ☐ Aerial Photographs
- ☐ Other
- ☐ None Available

Field Observations:
- Depth of Surface Water: none inches
- Depth to Standing Water in Pit: none to 16 inches
- Depth to Saturated Soil: none to 16 inches

Wetland Hydrology Indicators:

Primary Indicators:
- ☐ Inundated
- ☐ Saturated Upper 12 Inches
- ☐ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposits
- ☐ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ☐ Oxidized Rhizospheres in Upper 12 Inches
- ☐ Water-Stained Leaves
- ☐ Local Soil Survey Data
- ☐ FAC-Neutral Test
- ☐ Other (explain below)

Wetland Hydrology Present? ☐ YES ☑ NO

Remarks:
No standing water, or saturated soils.

SOILS

Plot ID:

Map Unit Name (series and phase): 113 Andregg-Shenandoah Comlex Drainage Class: Well drained

Taxonomy (subgroup): Typic Haploxeroll Field observations confirm mapped type? ☑ YES ☐ NO

Is data point located within a hydric inclusion? ☐ YES ☐ NO

Profile Description

Horizon	Depth (inches)	Texture	Structure	Matrix Color (moist)	Redoximorphic Features: Abundance, Size, Contrast	Redoximorphic Features: Type, location	Redoximorphic Features: Color (moist)	Other
A1	1-10	sl		7.5YR 3/2	c,1,p	Fe-x, mat	7.5YR 5/8	
A2	10-16	sl		7.5YR 4/3	f,1,f	Fe-x, mat	7.5YR 5/6	

Hydric Soil Indicators (check all that apply):

- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions (α, α' - dipyridyl test)
- ☐ Gleyed or Low-Chroma (≤1) matrix
- ☑ Matrix Chroma ≤2 with Redoximorphic Concentrations and/or Depletions
- ☐ Mn or Fe Concretions or Nodules
- ☐ High Organic Content in Surface Layer of Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☐ Listed on National/Local Hydric Soils List
- ☐ Other (explain below)

Hydric Soils Present? ☐ YES ☑ NO

Remarks:

Soils are marginal at best. This is a sandy soil and typical hydric indicatiors for sandy soils are not present. Although a low croma in the matrix with redox features exists, the soil criteria is not strong enough to decide this point.

WETLAND DETERMINATION :

Hydrophytic vegetation present? ☐ YES ☑ NO

Wetland hydrology present? ☐ YES ☑ NO

Hydric soils present? ☐ YES ☑ NO Is the sampling point within a wetland? ☐ YES ☑ NO

Remarks:

Texture and Rock Fragment Content

Texture

cos - coarse sand
s - sand
fs - fine sand
vfs - very fine sand
lcos - loamy coarse sand
ls - loamy sand
lfs - loamy fine sand
lvfs - loamy very fine sand
cosl - coarse sandy loam
sl - sandy loam
fsl - fine sandy loam
vfsl - very fine sandy loam
l - loam
sil - silt loam
si - silt
scl - sandy clay loam
cl - clay loam
sicl - silty clay loam
sc - sandy clay
sic - silty clay
c - clay

Rock Fragments

gr - gravelly
vgr - very gravelly
xgr - extremely gravelly
cb - cobbly
vcb - very cobbly
xcb - extremely cobbly
st - stony
vst - very stony
xst - extremely stony

Redoximorphic Feature Morphology

Abundance

f - few
c - common
m - many

Size

1 - fine (<2mm)
2 - medium 2–5mm)
3 - coarse (5–20mm)
4 - very coarse (20–76mm)
5 - extremely coarse (>76mm)

Contrast

f - faint
d - distinct
p - prominent

Type

Fe-x - iron concentration (soft mass)
Fe-nc - iron nodule or concretion
Mn-x - manganese concentration (soft mass)
Mn-nc - manganese nodule or concretion
d - depletion

Location

mat - soil matrix
ped - ped surface
por - soil pores
otr - other

Jones & Stokes

DATA FORM
ROUTINE WETLAND DETERMINATION

Project/Site:	Auburn-Folsom Road Lane Widening Project	State:	California
Applicant/Owner:	Placer County	County:	Placer (Granite Bay)
Investigator(s):	Kate Carpenter, Sam Garcia	S/T/R	Folsom Quad (S11 & 14/T10N/R7E)
Date:	06/04/02		

Do normal circumstances exist on the site?	☑ YES	☐ NO	Community ID:	Annual Grassland
Is the site significantly disturbed (atypical situation)?	☐ YES	☑ NO	Transect ID:	W-3
Is the area a potential problem area? (If needed, explain below)	☐ YES	☑ NO	Plot ID:	U-3-2 Upland

VEGETATION

Dominant Plant Species	Strata	% Rel. Cover	Indicator	Associate Plant Species	Strata	% Rel. Cover	Indicator
Trifolium hirtum	H	40	UPL	*Dichelostemma capitatum*	H	<5%	
Bromus hordeaceus	H	20	UPL	*Centaurea solstitialis*	H	<5%	
Bromus diandrus	H	40	UPL	*Brassica nigra*	H	<5%	

Percent of dominants that are OBL, FACW, or FAC (excluding FAC-): 0% Total vegetation cover 180 %

- ☐ Morphological Adaptations
- ☐ Physiological/Reproductive Adaptations
- ☐ Visual Observation of Plant Species Growing in Areas of Prolonged Inundation/Saturation
- ☐ Personal Knowledge of Regional Plant Communities
- ☐ Technical Literature
- ☐ Other (explain below)

Hydrophytic Vegetation Present? ☐ YES ☑ NO

Remarks:
Site is dominated by upland vegetation.

HYDROLOGY

Is it the growing season? ☑ YES ☐ NO

Based On: ☐ Soil Temp (record) ☐ Other (explain)

Typical length: _____ Days 5% = _____

Recorded Data (describe below):
- ☐ Stream, Lake, or Tide Gauge
- ☐ Aerial Photographs
- ☐ Other
- ☐ None Available

Field Observations:
- Depth of Surface Water: none inches
- Depth to Standing Water in Pit: none to 12 inches
- Depth to Saturated Soil: none to 12 inches

Wetland Hydrology Indicators:

Primary Indicators:
- ☐ Inundated
- ☐ Saturated Upper 12 Inches
- ☐ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposits
- ☐ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ☐ Oxidized Rhizospheres in Upper 12 Inches
- ☐ Water-Stained Leaves
- ☐ Local Soil Survey Data
- ☐ FAC-Neutral Test
- ☐ Other (explain below)

Wetland Hydrology Present? ☐ YES ☑ NO

Remarks:
On topographic high. No primary or secondary indicators. On well drained sandy soils.

SOILS

Plot ID:

Map Unit Name (series and phase): 113 Andregg-Shenandoah Comlex Drainage Class: Well drained

Taxonomy (subgroup): Typic Haploxeroll Field observations confirm mapped type? ☑ YES ☐ NO

Is data point located within a hydric inclusion? ☐ YES ☑ NO

Profile Description

Horizon	Depth (inches)	Texture	Structure	Matrix Color (moist)	Redoximorphic Features: Abundance, Size, Contrast	Redoximorphic Features: Type, location	Redoximorphic Features: Color (moist)	Other
A	0-2	sl		7.5YR 4/3				
Bw	2-12	sl		7.5YR 3/4				

Hydric Soil Indicators (check all that apply):

- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions (α, α' - dipyridyl test)
- ☐ Gleyed or Low-Chroma (≤1) matrix
- ☐ Matrix Chroma ≤2 with Redoximorphic Concentrations and/or Depletions
- ☐ Mn or Fe Concretions or Nodules
- ☐ High Organic Content in Surface Layer of Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☐ Listed on National/Local Hydric Soils List
- ☐ Other (explain below)

Hydric Soils Present? ☐ YES ☑ NO

Remarks:

No hydric soil indicators. No low chromas, mottles or sulfidic odor.

WETLAND DETERMINATION :

Hydrophytic vegetation present? ☐ YES ☑ NO

Wetland hydrology present? ☐ YES ☑ NO

Hydric soils present? ☐ YES ☑ NO Is the sampling point within a wetland? ☐ YES ☑ NO

Remarks:

This point is located in a topographically high spot above the wetland.

Texture and Rock Fragment Content

Texture		Rock Fragments
cos - coarse sand	vfsl - very fine sandy loam	gr - gravelly
s - sand	l - loam	vgr - very gravelly
fs - fine sand	sil - silt loam	xgr - extremely gravelly
vfs - very fine sand	si - silt	cb - cobbly
lcos - loamy coarse sand	scl - sandy clay loam	vcb - very cobbly
ls - loamy sand	cl - clay loam	xcb - extremely cobbly
lfs - loamy fine sand	sicl - silty clay loam	st - stony
lvfs - loamy very fine sand	sc - sandy clay	vst - very stony
cosl - coarse sandy loam	sic - silty clay	xst - extremely stony
sl - sandy loam	c - clay	
fsl - fine sandy loam		

Redoximorphic Feature Morphology

Abundance
- f - few
- c - common
- m - many

Size
- 1 - fine (<2mm)
- 2 - medium 2–5mm)
- 3 - coarse (5–20mm)
- 4 - very coarse (20–76mm)
- 5 - extremely coarse (>76mm)

Contrast
- f - faint
- d - distinct
- p - prominent

Type
- Fe-x - iron concentration (soft mass)
- Fe-nc - iron nodule or concretion
- Mn-x - manganese concentration (soft mass)
- Mn-nc - manganese nodule or concretion
- d - depletion

Location
- mat - soil matrix
- ped - ped surface
- por - soil pores
- otr - other

Jones & Stokes

DATA FORM
ROUTINE WETLAND DETERMINATION

Project/Site:	Aubrun-Folsom Road Lane Widening Project	State:	California
Applicant/Owner:	Placer County	County:	Placer (Granite Bay)
Investigator(s):	Kate Carpenter	S/T/R	Folsom Quad (S11 & 14/T10N/R7E)
Date:	08/09/02		

Do normal circumstances exist on the site?	☑ YES	☐ NO	Community ID:	Irrigated Orchard
Is the site significantly disturbed (atypical situation)?	☑ YES	☐ NO	Transect ID:	
Is the area a potential problem area? (If needed, explain below)	☐ YES	☑ NO	Plot ID:	U-11

VEGETATION

Dominant Plant Species	Strata	% Rel. Cover	Indicator	Associate Plant Species	Strata	% Rel. Cover	Indicator
Cynodon dactylon	Herb	50	FAC				
Paspalum dilatatum	Herb	20	FAC				
Holcus lanatus	Herb	15	FAC				
Setaria glauca	Herb	15	FAC				

Percent of dominants that are OBL, FACW, or FAC (excluding FAC-): 100% Total vegetation cover 100 %

- ☐ Morphological Adaptations
- ☐ Physiological/Reproductive Adaptations
- ☐ Visual Observation of Plant Species Growing in Areas of Prolonged Inundation/Saturation
- ☐ Personal Knowledge of Regional Plant Communities
- ☐ Technical Literature
- ☐ Other (explain below)

Hydrophytic Vegetation Present? ☑ YES ☐ NO

Remarks:
Data point is in a irrigated orchard, weedy grass species are growing under fruit trees.

HYDROLOGY

Is it the growing season? ☑ YES ☐ NO

Based On: ☐ Soil Temp (record) ☐ Other (explain)

Typical length: _____ Days 5% = _____

Recorded Data (describe below):
- ☐ Stream, Lake, or Tide Gauge
- ☐ Aerial Photographs
- ☐ Other
- ☐ None Available

Field Observations:
- Depth of Surface Water: none inches
- Depth to Standing Water in Pit: none to 12 inches
- Depth to Saturated Soil: none to 12 inches

Wetland Hydrology Indicators:

Primary Indicators:
- ☐ Inundated
- ☐ Saturated Upper 12 Inches
- ☐ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposits
- ☐ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ☐ Oxidized Rhizospheres in Upper 12 Inches
- ☐ Water-Stained Leaves
- ☐ Local Soil Survey Data
- ☐ FAC-Neutral Test
- ☐ Other (explain below)

Wetland Hydrology Present? ☐ YES ☑ NO

Remarks:
Data point is on a slight slope. Soils were well drained and moist but not saturated. Area is irrigated and it appears that without irrigation, FAC species would not be supported.

SOILS

Plot ID:

Map Unit Name (series and phase): 106 Andregg coarse sandy loam Drainage Class: moderately rapid

Taxonomy (subgroup): Haploxeroll Field observations confirm mapped type? ☑ YES ☐ NO

Is data point located within a hydric inclusion? ☐ YES ☑ NO

Profile Description

Horizon	Depth (inches)	Texture	Structure	Matrix Color (moist)	Redoximorphic Features: Abundance, Size, Contrast	Redoximorphic Features: Type, location	Redoximorphic Features: Color (moist)	Other
A	0-12	cosl	gr	7.5YR 3/2				

Hydric Soil Indicators (check all that apply):

- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions (α,α' - dipyridyl test)
- ☐ Gleyed or Low-Chroma (≤1) matrix
- ☐ Matrix Chroma ≤2 with Redoximorphic Concentrations and/or Depletions
- ☐ Mn or Fe Concretions or Nodules
- ☐ High Organic Content in Surface Layer of Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☐ Listed on National/Local Hydric Soils List
- ☐ Other (explain below)

Hydric Soils Present? ☐ YES ☑ NO

Remarks:

Soils are well drained and appear to be managed for the orchard.

WETLAND DETERMINATION :

Hydrophytic vegetation present? ☑ YES ☐ NO

Wetland hydrology present? ☐ YES ☑ NO

Hydric soils present? ☐ YES ☑ NO Is the sampling point within a wetland? ☐ YES ☑ NO

Remarks:

Texture and Rock Fragment Content

Texture

cos - coarse sand
s - sand
fs - fine sand
vfs - very fine sand
lcos - loamy coarse sand
ls - loamy sand
lfs - loamy fine sand
lvfs - loamy very fine sand
cosl - coarse sandy loam
sl - sandy loam
fsl - fine sandy loam
vfsl - very fine sandy loam
l - loam
sil - silt loam
si - silt
scl - sandy clay loam
cl - clay loam
sicl - silty clay loam
sc - sandy clay
sic - silty clay
c - clay

Rock Fragments

gr - gravelly
vgr - very gravelly
xgr - extremely gravelly
cb - cobbly
vcb - very cobbly
xcb - extremely cobbly
st - stony
vst - very stony
xst - extremely stony

Redoximorphic Feature Morphology

Abundance

f - few
c - common
m - many

Size

1 - fine (<2mm)
2 - medium 2–5mm)
3 - coarse (5–20mm)
4 - very coarse (20–76mm)
5 - extremely coarse (>76mm)

Contrast

f - faint
d - distinct
p - prominent

Type

Fe-x - iron concentration (soft mass)
Fe-nc - iron nodule or concretion
Mn-x - manganese concentration (soft mass)
Mn-nc - manganese nodule or concretion
d - depletion

Location

mat - soil matrix
ped - ped surface
por - soil pores
otr - other

Jones & Stokes

DATA FORM
ROUTINE WETLAND DETERMINATION

Project/Site:	Aubrun-Folsom Road Lane Widening Project	State:	California
Applicant/Owner:	Placer County	County:	Placer (Granite Bay)
Investigator(s):	Kate Carpenter, Sam Garcia	S/T/R	Folsom Quad (S11 & 14/T10N/R7E)
Date:	06/04/02		

Do normal circumstances exist on the site?	☑ YES	☐ NO	Community ID:	Freshwater Marsh
Is the site significantly disturbed (atypical situation)?	☐ YES	☑ NO	Transect ID:	W-4
Is the area a potential problem area?	☐ YES	☑ NO	Plot ID:	W-4-1 Wetland
(If needed, explain below)				

VEGETATION

Dominant Plant Species	Strata	% Rel. Cover	Indicator	Associate Plant Species	Strata	% Rel. Cover	Indicator
Juncus xiphioides	Herb	10	OBL	*Rubus discolor*	Vine	<5%	FACW*
Typha latifolia	Herb	65	OBL	*Prunus sp.*	Tree	<5%	
Polygonum sp.	Herb	25	OBL				

Percent of dominants that are OBL, FACW, or FAC (excluding FAC-): 100% Total vegetation cover 100 %

- ☐ Morphological Adaptations
- ☐ Physiological/Reproductive Adaptations
- ☑ Visual Observation of Plant Species Growing in Areas of Prolonged Inundation/Saturation
- ☐ Personal Knowledge of Regional Plant Communities
- ☐ Technical Literature
- ☐ Other (explain below)

Hydrophytic Vegetation Present? ☑ YES ☐ NO

Remarks:
Dominated by obligates.

HYDROLOGY

Is it the growing season? ☑ YES ☐ NO

Based On: ☐ Soil Temp (record) ☑ Other (explain)

Typical length: 336 Days 5% = 17 days

Recorded Data (describe below):
- ☐ Stream, Lake, or Tide Gauge
- ☐ Aerial Photographs
- ☐ Other
- ☐ None Available

Field Observations:
- Depth of Surface Water: none inches
- Depth to Standing Water in Pit: 15 inches
- Depth to Saturated Soil: 15 inches

Wetland Hydrology Indicators:

Primary Indicators:
- ☐ Inundated
- ☑ Saturated Upper 12 Inches
- ☐ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposits
- ☑ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ☐ Oxidized Rhizospheres in Upper 12 Inches
- ☐ Water-Stained Leaves
- ☐ Local Soil Survey Data
- ☑ FAC-Neutral Test
- ☐ Other (explain below)

Wetland Hydrology Present? ☑ YES ☐ NO

Remarks:
This area is a back water from adjacent stream (D/R/W-5). In addition, it is a topographic low and drains the surrounding uplands. Groundwater may also be source of hydrology. Depth to standing water in pit was 15 inches and rising while observing pit.

SOILS

Plot ID:

Map Unit Name (series and phase): 113 Andregg-Shenandoah Complex Drainage Class: Poorly drained

Taxonomy (subgroup): Aquic Palexeralf Field observations confirm mapped type? ☑ YES ☐ NO

Is data point located within a hydric inclusion? ☐ YES ☑ NO

Profile Description

Horizon	Depth (inches)	Texture	Structure	Matrix Color (moist)	Redoximorphic Features: Abundance, Size, Contrast	Redoximorphic Features: Type, location	Redoximorphic Features: Color (moist)	Other
A	0-7	sl		10YR 2/1				High Organic and Sand
Bw1	7-13	sl		7.5YR 3/1	f,1,d	Fe-x, mat	7.5YR 4/6	
Bw2	13-18	sl		G1 4/N	c,3,d	Fe-x, mat	7.5YR 3/3	

Hydric Soil Indicators (check all that apply):

- ☐ Histosol
- ☐ Histic Epipedon
- ☑ Sulfidic Odor
- ☑ Aquic Moisture Regime
- ☐ Reducing Conditions (α,α' - dipyridyl test)
- ☑ Gleyed or Low-Chroma (≤1) matrix
- ☑ Matrix Chroma ≤2 with Redoximorphic Concentrations and/or Depletions
- ☐ Mn or Fe Concretions or Nodules
- ☑ High Organic Content in Surface Layer of Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☐ Listed on National/Local Hydric Soils List
- ☐ Other (explain below)

Hydric Soils Present? ☑ YES ☐ NO

Remarks:

Strong sulfidic odor with low chromas, mottles, and gleyed soils. The upland data point, W-3-2, for this wetland is shared with W-3-1.

WETLAND DETERMINATION :

Hydrophytic vegetation present? ☑ YES ☐ NO

Wetland hydrology present? ☑ YES ☐ NO

Hydric soils present? ☑ YES ☐ NO Is the sampling point within a wetland? ☑ YES ☐ NO

Remarks:

Texture and Rock Fragment Content

Texture

cos - coarse sand
s - sand
fs - fine sand
vfs - very fine sand
lcos - loamy coarse sand
ls - loamy sand
lfs - loamy fine sand
lvfs - loamy very fine sand
cosl - coarse sandy loam
sl - sandy loam
fsl - fine sandy loam
vfsl - very fine sandy loam
l - loam
sil - silt loam
si - silt
scl - sandy clay loam
cl - clay loam
sicl - silty clay loam
sc - sandy clay
sic - silty clay
c - clay

Rock Fragments

gr - gravelly
vgr - very gravelly
xgr - extremely gravelly
cb - cobbly
vcb - very cobbly
xcb - extremely cobbly
st - stony
vst - very stony
xst - extremely stony

Redoximorphic Feature Morphology

Abundance

f - few
c - common
m - many

Size

1 - fine (<2mm)
2 - medium 2–5mm)
3 - coarse (5–20mm)
4 - very coarse (20–76mm)
5 - extremely coarse (>76mm)

Contrast

f - faint
d - distinct
p - prominent

Type

Fe-x - iron concentration (soft mass)
Fe-nc - iron nodule or concretion
Mn-x - manganese concentration (soft mass)
Mn-nc - manganese nodule or concretion
d - depletion

Location

mat - soil matrix
ped - ped surface
por - soil pores
otr - other

Jones & Stokes

DATA FORM
ROUTINE WETLAND DETERMINATION

Project/Site:	Aubrun-Folsom Road Lane Widening Project	State:	California
Applicant/Owner:	Placer County	County:	Placer (Granite Bay)
Investigator(s):	Kate Carpenter, Sam Garcia	S/T/R	Folsom Quad (S11 & 14/T10N/R7E)
Date:	06/04/02		

Do normal circumstances exist on the site? ☑ YES ☐ NO
Is the site significantly disturbed (atypical situation)? ☐ YES ☑ NO
Is the area a potential problem area? ☐ YES ☑ NO
(If needed, explain below)

Community ID: Seasonal Wetland
Transect ID: W-8
Plot ID: W-8-1 Wetland

VEGETATION

Dominant Plant Species	Strata	% Rel. Cover	Indicator	Associate Plant Species	Strata	% Rel. Cover	Indicator
Eleocharis macrostachya	Herb	80	OBL	*Epilobium sp.*	Herb	<5%	
Typha latifolia	Herb	5	OBL	*Paspalum dilatatum*	Grass	<5%	FAC
Rumex crispus	Herb	5	FACW-				

Percent of dominants that are OBL, FACW, or FAC (excluding FAC-): 100% Total vegetation cover 95 %

☐ Morphological Adaptations
☐ Physiological/Reproductive Adaptations
☐ Visual Observation of Plant Species Growing in Areas of Prolonged Inundation/Saturation
☐ Personal Knowledge of Regional Plant Communities
☐ Technical Literature
☐ Other (explain below)

Hydrophytic Vegetation Present? ☑ YES ☐ NO

Remarks:
Area has been disked/ mowed. Dominated by obligates that are still present.

HYDROLOGY

Is it the growing season? ☑ YES ☐ NO
Based On: ☐ Soil Temp (record)
☑ Other (explain) Soil Survey
Typical length: 336 Days 5% = 17 days

Recorded Data (describe below):
☐ Stream, Lake, or Tide Gauge
☐ Aerial Photographs
☐ Other
☐ None Available

Field Observations:
Depth of Surface Water: none inches
Depth to Standing Water in Pit: 19 inches
Depth to Saturated Soil: 17 inches

Wetland Hydrology Indicators:
Primary Indicators:
☐ Inundated
☑ Saturated Upper 12 Inches
☐ Water Marks
☑ Drift Lines
☐ Sediment Deposits
☑ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
☐ Oxidized Rhizospheres in Upper 12 Inches
☐ Water-Stained Leaves
☐ Local Soil Survey Data
☑ FAC-Neutral Test
☐ Other (explain below)

Wetland Hydrology Present? ☑ YES ☐ NO

Remarks:
Drainage pattern coming across site. Wetland is in topographic low and is saturated to surface.

SOILS

Plot ID:

Map Unit Name (series and phase): 106 Andregg coarse sandy loam Drainage Class: Somewhat poorly drained

Taxonomy (subgroup): Typic Haploxeroll Field observations confirm mapped type? ☐ YES ☑ NO

Is data point located within a hydric inclusion? ☐ YES ☑ NO

Profile Description

Horizon	Depth (inches)	Texture	Structure	Matrix Color (moist)	Redoximorphic Features: Abundance, Size, Contrast	Redoximorphic Features: Type, location	Redoximorphic Features: Color (moist)	Other
A	0-5	sl		10YR 3/2				High Organic and Sand
Bw1	5-15	sl		5Y 4/1	c,2,p	Fe-x, mat	5YR 4/6	
Bw2	15-19	cl		5Y 4/1	m,3,p	Fe-x, mat	5YR 4/6	

Hydric Soil Indicators (check all that apply):

- ☐ Histosol
- ☐ Histic Epipedon
- ☑ Sulfidic Odor
- ☑ Aquic Moisture Regime
- ☐ Reducing Conditions (α,α' - dipyridyl test)
- ☑ Gleyed or Low-Chroma (≤1) matrix
- ☑ Matrix Chroma ≤2 with Redoximorphic Concentrations and/or Depletions
- ☐ Mn or Fe Concretions or Nodules
- ☑ High Organic Content in Surface Layer of Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☐ Listed on National/Local Hydric Soils List
- ☐ Other (explain below)

Hydric Soils Present? ☑ YES ☐ NO

Remarks:

Clay pan at 19 inches and is gleyed.

WETLAND DETERMINATION :

Hydrophytic vegetation present? ☑ YES ☐ NO

Wetland hydrology present? ☑ YES ☐ NO

Hydric soils present? ☑ YES ☐ NO Is the sampling point within a wetland? ☑ YES ☐ NO

Remarks:

Area has been disked. Despite this, wetland features are still prominent in this topographic low. The western edge of the wetland is shrub scrub dominated by *Rubus discolor* and *Salix goodinggii*.

Texture and Rock Fragment Content

Texture

cos - coarse sand
s - sand
fs - fine sand
vfs - very fine sand
lcos - loamy coarse sand
ls - loamy sand
lfs - loamy fine sand
lvfs - loamy very fine sand
cosl - coarse sandy loam
sl - sandy loam
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Rock Fragments

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Redoximorphic Feature Morphology

Abundance

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Size

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Contrast

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Type

Fe-x - iron concentration (soft mass)
Fe-nc - iron nodule or concretion
Mn-x - manganese concentration (soft mass)
Mn-nc - manganese nodule or concretion
d - depletion

Location

mat - soil matrix
ped - ped surface
por - soil pores
otr - other

Jones & Stokes

DATA FORM
ROUTINE WETLAND DETERMINATION

Project/Site:	Aubrun-Folsom Road Lane Widening Project	State:	California
Applicant/Owner:	Placer County	County:	Placer (Granite Bay)
Investigator(s):	Kate Carpenter, Sam Garcia	S/T/R	Folsom Quad (S11 & 14/T10N/R7E)
Date:	06/04/02		

Do normal circumstances exist on the site?	☑ YES	☐ NO	Community ID:	Annual Grassland
Is the site significantly disturbed (atypical situation)?	☐ YES	☑ NO	Transect ID:	W-8
Is the area a potential problem area? (If needed, explain below)	☐ YES	☑ NO	Plot ID:	U-8-2 Upland

VEGETATION

Dominant Plant Species	Strata	% Rel. Cover	Indicator	Associate Plant Species	Strata	% Rel. Cover	Indicator
Lolium multiflorum	Grass	40	FAC*				
Vulpia bromoides	Grass	45	FACW				
Eschscholzia californica	Herb	5	UPL				

Percent of dominants that are OBL, FACW, or FAC (excluding FAC-): 33% Total vegetation cover 90 %

- ☐ Morphological Adaptations
- ☐ Physiological/Reproductive Adaptations
- ☐ Visual Observation of Plant Species Growing in Areas of Prolonged Inundation/Saturation
- ☐ Personal Knowledge of Regional Plant Communities
- ☐ Technical Literature
- ☐ Other (explain below)

Hydrophytic Vegetation Present? ☐ YES ☑ NO

Remarks:
Annual grassland.

HYDROLOGY

Is it the growing season? ☑ YES ☐ NO

Based On: ☐ Soil Temp (record) ☐ Other (explain)

Typical length: _____ Days 5% = _____

Recorded Data (describe below):
- ☐ Stream, Lake, or Tide Gauge
- ☐ Aerial Photographs
- ☐ Other
- ☐ None Available

Field Observations:
- Depth of Surface Water: none inches
- Depth to Standing Water in Pit: none to 14 inches
- Depth to Saturated Soil: none to 14 inches

Wetland Hydrology Indicators:

Primary Indicators:
- ☐ Inundated
- ☐ Saturated Upper 12 Inches
- ☐ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposits
- ☐ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ☐ Oxidized Rhizospheres in Upper 12 Inches
- ☐ Water-Stained Leaves
- ☐ Local Soil Survey Data
- ☐ FAC-Neutral Test
- ☐ Other (explain below)

Wetland Hydrology Present? ☐ YES ☑ NO

Remarks:
Very dry area above wetland. No drainage patterns. Substrate appears to be well drained sandy soils.

SOILS

Plot ID:

Map Unit Name (series and phase): 106 Andregg coarse sandy loam Drainage Class: Moderately well drained

Taxonomy (subgroup): Typic Haploxeroll Field observations confirm mapped type? ☑ YES ☐ NO

Is data point located within a hydric inclusion? ☐ YES ☑ NO

Profile Description

Horizon	Depth (inches)	Texture	Structure	Matrix Color (moist)	Redoximorphic Features: Abundance, Size, Contrast	Redoximorphic Features: Type, location	Redoximorphic Features: Color (moist)	Other
A	0-2	sl		7.5YR 3/3				
Bw	2-14	sl		7.5YR 4/4	f,1,f	Fe-x, mat	7.5YR 5/6	

Hydric Soil Indicators (check all that apply):

- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions (α,α' - dipyridyl test)
- ☐ Gleyed or Low-Chroma (≤1) matrix
- ☐ Matrix Chroma ≤2 with Redoximorphic Concentrations and/or Depletions
- ☐ Mn or Fe Concretions or Nodules
- ☐ High Organic Content in Surface Layer of Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☐ Listed on National/Local Hydric Soils List
- ☐ Other (explain below)

Hydric Soils Present? ☐ YES ☑ NO

Remarks:

No hydric soils or indicators present.

WETLAND DETERMINATION :

Hydrophytic vegetation present? ☐ YES ☑ NO

Wetland hydrology present? ☐ YES ☑ NO

Hydric soils present? ☐ YES ☑ NO Is the sampling point within a wetland? ☐ YES ☑ NO

Remarks:

This site is located in a topographic high above an adjacent wetland. It is an annual grassland.

Texture and Rock Fragment Content

Texture

cos - coarse sand
s - sand
fs - fine sand
vfs - very fine sand
lcos - loamy coarse sand
ls - loamy sand
lfs - loamy fine sand
lvfs - loamy very fine sand
cosl - coarse sandy loam
sl - sandy loam
fsl - fine sandy loam
vfsl - very fine sandy loam
l - loam
sil - silt loam
si - silt
scl - sandy clay loam
cl - clay loam
sicl - silty clay loam
sc - sandy clay
sic - silty clay
c - clay

Rock Fragments

gr - gravelly
vgr - very gravelly
xgr - extremely gravelly
cb - cobbly
vcb - very cobbly
xcb - extremely cobbly
st - stony
vst - very stony
xst - extremely stony

Redoximorphic Feature Morphology

Abundance

f - few
c - common
m - many

Size

1 - fine (<2mm)
2 - medium 2--5mm)
3 - coarse (5–20mm)
4 - very coarse (20–76mm)
5 - extremely coarse (>76mm)

Contrast

f - faint
d - distinct
p - prominent

Type

Fe-x - iron concentration (soft mass)
Fe-nc - iron nodule or concretion
Mn-x - manganese concentration (soft mass)
Mn-nc - manganese nodule or concretion
d - depletion

Location

mat - soil matrix
ped - ped surface
por - soil pores
otr - other

Jones & Stokes

DATA FORM
ROUTINE WETLAND DETERMINATION

Project/Site:	Auburn-Folsom Road Lane Widening Project	State:	California
Applicant/Owner:	Placer County	County:	Placer (Granite Bay)
Investigator(s):	Kate Carpenter	S/T/R	Folsom Quad (S11 & 14/T10N/R7E)
Date:	08/09/02		

Do normal circumstances exist on the site?	☑ YES	☐ NO	Community ID:	Seasonal Wetland
Is the site significantly disturbed (atypical situation)?	☑ YES	☐ NO	Transect ID:	W-8-3
Is the area a potential problem area? (If needed, explain below)	☐ YES	☑ NO	Plot ID:	W-8-3 wetland

VEGETATION

Dominant Plant Species	Strata	% Rel. Cover	Indicator	Associate Plant Species	Strata	% Rel. Cover	Indicator
Rubus discolor	Vine	70	FACW*				

Percent of dominants that are OBL, FACW, or FAC (excluding FAC-): 100% Total vegetation cover 70 %

- ☐ Morphological Adaptations
- ☐ Physiological/Reproductive Adaptations
- ☐ Visual Observation of Plant Species Growing in Areas of Prolonged Inundation/Saturation
- ☐ Personal Knowledge of Regional Plant Communities
- ☐ Technical Literature
- ☐ Other (explain below)

Hydrophytic Vegetation Present? ☑ YES ☐ NO

Remarks:
Data point was disturbed, appeared to be disked and the Rubus appeared to be young growth.

HYDROLOGY

Is it the growing season? ☑ YES ☐ NO

Based On:
- ☐ Soil Temp (record)
- ☐ Other (explain) See Data Form W-8-1

Typical length: _____ Days 5% = _____

Recorded Data (describe below):
- ☐ Stream, Lake, or Tide Gauge
- ☐ Aerial Photographs
- ☐ Other
- ☐ None Available

Field Observations:
- Depth of Surface Water: none inches
- Depth to Standing Water in Pit: none to 12 inches
- Depth to Saturated Soil: none to 12 inches

Wetland Hydrology Indicators:

Primary Indicators:
- ☐ Inundated
- ☐ Saturated Upper 12 Inches
- ☐ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposits
- ☑ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ☐ Oxidized Rhizospheres in Upper 12 Inches
- ☐ Water-Stained Leaves
- ☐ Local Soil Survey Data
- ☑ FAC-Neutral Test
- ☐ Other (explain below)

Wetland Hydrology Present? ☑ YES ☐ NO

Remarks:
Data point is located in a drainage pattern at the upper portion close to Aburn-Folsom Rd., which is the most distirbed area. Data point is approximately 20 feet away from data point W8-1 which is the lowest point in the drainage pattern.

SOILS

Plot ID:

Map Unit Name (series and phase): 106 Andregg coarse sandy loam — Drainage Class: somewhat poorly or moderately well draine

Taxonomy (subgroup): Typic Haploxeroll — Field observations confirm mapped type? ☑ YES ☐ NO

Is data point located within a hydric inclusion? ☐ YES ☑ NO

Profile Description

Horizon	Depth (inches)	Texture	Structure	Matrix Color (moist)	Redoximorphic Features: Abundance, Size, Contrast	Redoximorphic Features: Type, location	Redoximorphic Features: Color (moist)	Other
A	0-12	sl	gr-bk	7.5YR 3/2	c,2,d	Fe-x	5YR 4/6	Soil is disked

Hydric Soil Indicators (check all that apply):

- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions (α,α' - dipyridyl test)
- ☐ Gleyed or Low-Chroma (≤1) matrix
- ☐ Matrix Chroma ≤2 with Redoximorphic Concentrations and/or Depletions
- ☑ Mn or Fe Concretions or Nodules
- ☐ High Organic Content in Surface Layer of Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☐ Listed on National/Local Hydric Soils List
- ☐ Other (explain below)

Hydric Soils Present? ☑ YES ☐ NO

Remarks:

Soil has been disked and properties are disrupted.

WETLAND DETERMINATION :

Hydrophytic vegetation present? ☑ YES ☐ NO

Wetland hydrology present? ☑ YES ☐ NO

Hydric soils present? ☑ YES ☐ NO — Is the sampling point within a wetland? ☑ YES ☐ NO

Remarks:

Area is a seasonal wetland adjacent to perennial wetland W8-1. Vegetation and drainage patterns are evident although the soils are highly distirbed, iron mottles were still apparent.

Texture and Rock Fragment Content

Texture

cos - coarse sand
s - sand
fs - fine sand
vfs - very fine sand
lcos - loamy coarse sand
ls - loamy sand
lfs - loamy fine sand
lvfs - loamy very fine sand
cosl - coarse sandy loam
sl - sandy loam
fsl - fine sandy loam
vfsl - very fine sandy loam
l - loam
sil - silt loam
si - silt
scl - sandy clay loam
cl - clay loam
sicl - silty clay loam
sc - sandy clay
sic - silty clay
c - clay

Rock Fragments

gr - gravelly
vgr - very gravelly
xgr - extremely gravelly
cb - cobbly
vcb - very cobbly
xcb - extremely cobbly
st - stony
vst - very stony
xst - extremely stony

Redoximorphic Feature Morphology

Abundance

f - few
c - common
m - many

Size

1 - fine (<2mm)
2 - medium 2–5mm)
3 - coarse (5–20mm)
4 - very coarse (20–76mm)
5 - extremely coarse (>76mm)

Contrast

f - faint
d - distinct
p - prominent

Type

Fe-x - iron concentration (soft mass)
Fe-nc - iron nodule or concretion
Mn-x - manganese concentration (soft mass)
Mn-nc - manganese nodule or concretion
d - depletion

Location

mat - soil matrix
ped - ped surface
por - soil pores
otr - other

Jones & Stokes

DATA FORM
ROUTINE WETLAND DETERMINATION

Project/Site:	Aubrun-Folsom Road Lane Widening Project	State:	California
Applicant/Owner:	Placer County	County:	Placer (Granite Bay)
Investigator(s):	Kate Carpenter, Sam Garcia	S/T/R	Folsom Quad (S11 & 14/T10N/R7E)
Date:	08/09/02		

Do normal circumstances exist on the site? ☑ YES ☐ NO
Is the site significantly disturbed (atypical situation)? ☐ YES ☑ NO
Is the area a potential problem area? ☐ YES ☑ NO
(If needed, explain below)

Community ID: Freshwater Marsh
Transect ID: W-9
Plot ID: W-9-1 Wetland

VEGETATION

Dominant Plant Species	Strata	% Rel. Cover	Indicator	Associate Plant Species	Strata	% Rel. Cover	Indicator
Typha latifolia	Herb	85	OBL				
Alisma plantago-aquatica	Herb	15	OBL				

Percent of dominants that are OBL, FACW, or FAC (excluding FAC-): 100% Total vegetation cover 100 %

☐ Morphological Adaptations
☐ Physiological/Reproductive Adaptations
☐ Visual Observation of Plant Species Growing in Areas of Prolonged Inundation/Saturation
☐ Personal Knowledge of Regional Plant Communities
☐ Technical Literature
☐ Other (explain below)

Hydrophytic Vegetation Present? ☑ YES ☐ NO

Remarks:
100% Dominance of obligates.

HYDROLOGY

Is it the growing season? ☑ YES ☐ NO
Based On: ☐ Soil Temp (record)
☐ Other (explain) Same as W-8-1
Typical length: Days 5% =

Recorded Data (describe below):
☐ Stream, Lake, or Tide Gauge
☐ Aerial Photographs
☐ Other
☐ None Available

Field Observations:
Depth of Surface Water: none inches
Depth to Standing Water in Pit: >12 inches
Depth to Saturated Soil: 0 inches

Wetland Hydrology Indicators:
Primary Indicators:
☐ Inundated
☑ Saturated Upper 12 Inches
☑ Water Marks
☐ Drift Lines
☑ Sediment Deposits
☑ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
☐ Oxidized Rhizospheres in Upper 12 Inches
☐ Water-Stained Leaves
☐ Local Soil Survey Data
☐ FAC-Neutral Test
☐ Other (explain below)

Wetland Hydrology Present? ☑ YES ☐ NO

Remarks:
Site appears to receive water from Linda Creek (D/R/W-7) and road runoff. Algal mats on surface of substrate. A small pit was dug and saturated soils were observed in upper 12 inches.

SOILS

Plot ID:

Map Unit Name (series and phase): 197 Xerorthents Drainage Class: variable

Taxonomy (subgroup): Xerorthent Field observations confirm mapped type? ☐ YES ☑ NO

Is data point located within a hydric inclusion? ☐ YES ☐ NO

Profile Description

Horizon	Depth (inches)	Texture	Structure	Matrix Color (moist)	Redoximorphic Features: Abundance, Size, Contrast	Redoximorphic Features: Type, location	Redoximorphic Features: Color (moist)	Other
-	-	-	-	-	-	-	-	No data taken

Hydric Soil Indicators (check all that apply):

- ☐ Histosol
- ☐ Histic Epipedon
- ☑ Sulfidic Odor
- ☑ Aquic Moisture Regime
- ☐ Reducing Conditions (α,α' - dipyridyl test)
- ☑ Gleyed or Low-Chroma (≤1) matrix
- ☐ Matrix Chroma ≤2 with Redoximorphic Concentrations and/or Depletions
- ☐ Mn or Fe Concretions or Nodules
- ☑ High Organic Content in Surface Layer of Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☐ Listed on National/Local Hydric Soils List
- ☐ Other (explain below)

Hydric Soils Present? ☑ YES ☐ NO

Remarks:

A small pit was dug and saturated and gleyed soils were observed in the upper 12 inches with a sulfidic odor. Data was not taken due to the strong wetland hydrology and vegetation.

WETLAND DETERMINATION :

Hydrophytic vegetation present? ☑ YES ☐ NO

Wetland hydrology present? ☑ YES ☐ NO

Hydric soils present? ☑ YES ☐ NO Is the sampling point within a wetland? ☑ YES ☐ NO

Remarks:

This site is directly adjacent to edge of Folsom-Auburn Rd. pavement. Private property and no trespassing prevented surveys from main part of wetland. The full extent of this wetland was estimated by aerial photos.

Texture and Rock Fragment Content

Texture		Rock Fragments
cos - coarse sand	vfsl - very fine sandy loam	gr - gravelly
s - sand	l - loam	vgr - very gravelly
fs - fine sand	sil - silt loam	xgr - extremely gravelly
vfs - very fine sand	si - silt	cb - cobbly
lcos - loamy coarse sand	scl - sandy clay loam	vcb - very cobbly
ls - loamy sand	cl - clay loam	xcb - extremely cobbly
lfs - loamy fine sand	sicl - silty clay loam	st - stony
lvfs - loamy very fine sand	sc - sandy clay	vst - very stony
cosl - coarse sandy loam	sic - silty clay	xst - extremely stony
sl - sandy loam	c - clay	
fsl - fine sandy loam		

Redoximorphic Feature Morphology

Abundance

- f - few
- c - common
- m - many

Size

- 1 - fine (<2mm)
- 2 - medium 2–5mm)
- 3 - coarse (5–20mm)
- 4 - very coarse (20–76mm)
- 5 - extremely coarse (>76mm)

Contrast

- f - faint
- d - distinct
- p - prominent

Type

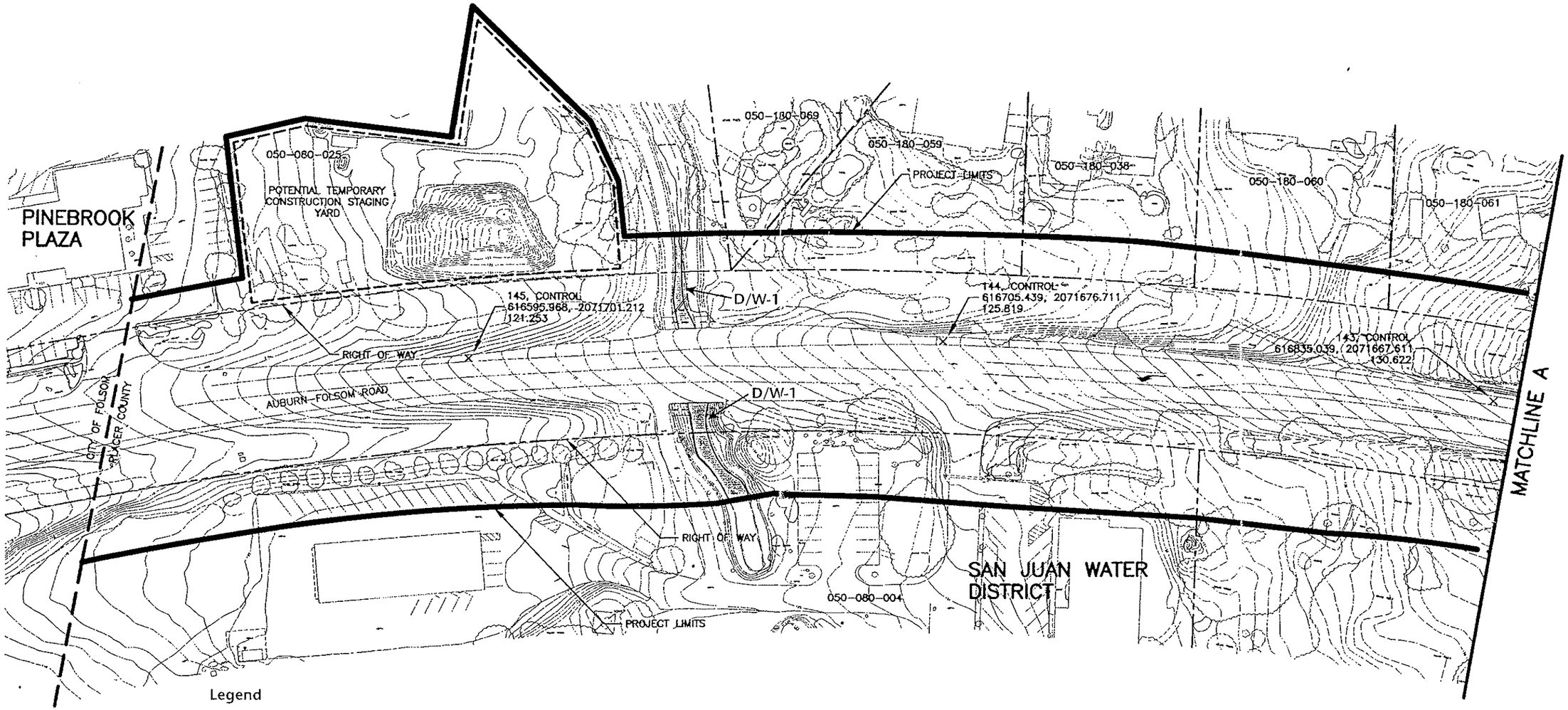
- Fe-x - iron concentration (soft mass)
- Fe-nc - iron nodule or concretion
- Mn-x - manganese concentration (soft mass)
- Mn-nc - manganese nodule or concretion
- d - depletion

Location

- mat - soil matrix
- ped - ped surface
- por - soil pores
- otr - other

Attachment B

Delineation Maps



Legend

- Potential Waters of the U.S. (including Wetland)
- Potential Non-Jurisdictional Wetland
- D Drainage
- U Upland
- W Wetland
- # Feature Number
- Data Point
- Study Area Boundary

N

0 41 82 123 164

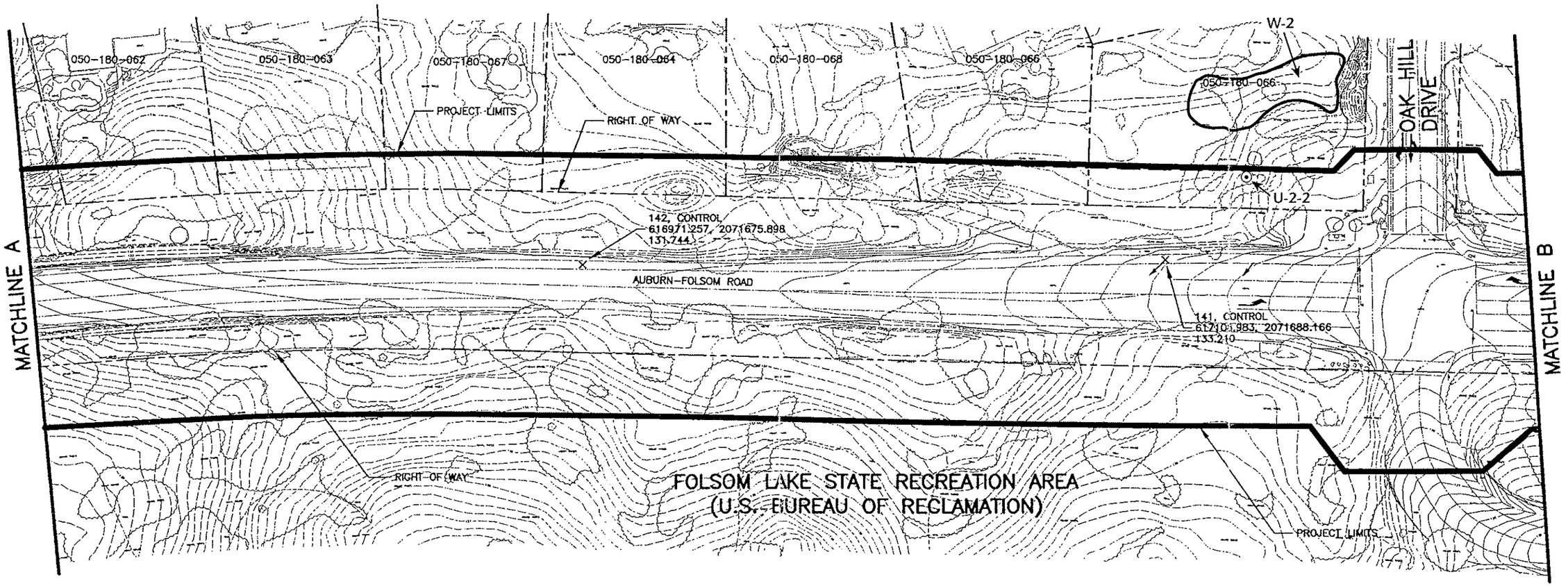
Feet

Source: Placer County 2002.

02102.02 034 (10/02)

Jones & Stokes

Figure B-1
Wetland Delineation



Legend

- Potential Waters of the U.S. (including Wetland)
- Potential Non-Jurisdictional Wetland
- D Drainage
- U Upland
- W Wetland
- # Feature Number
- Data Point
- Study Area Boundary

N

0 41 82 123 164

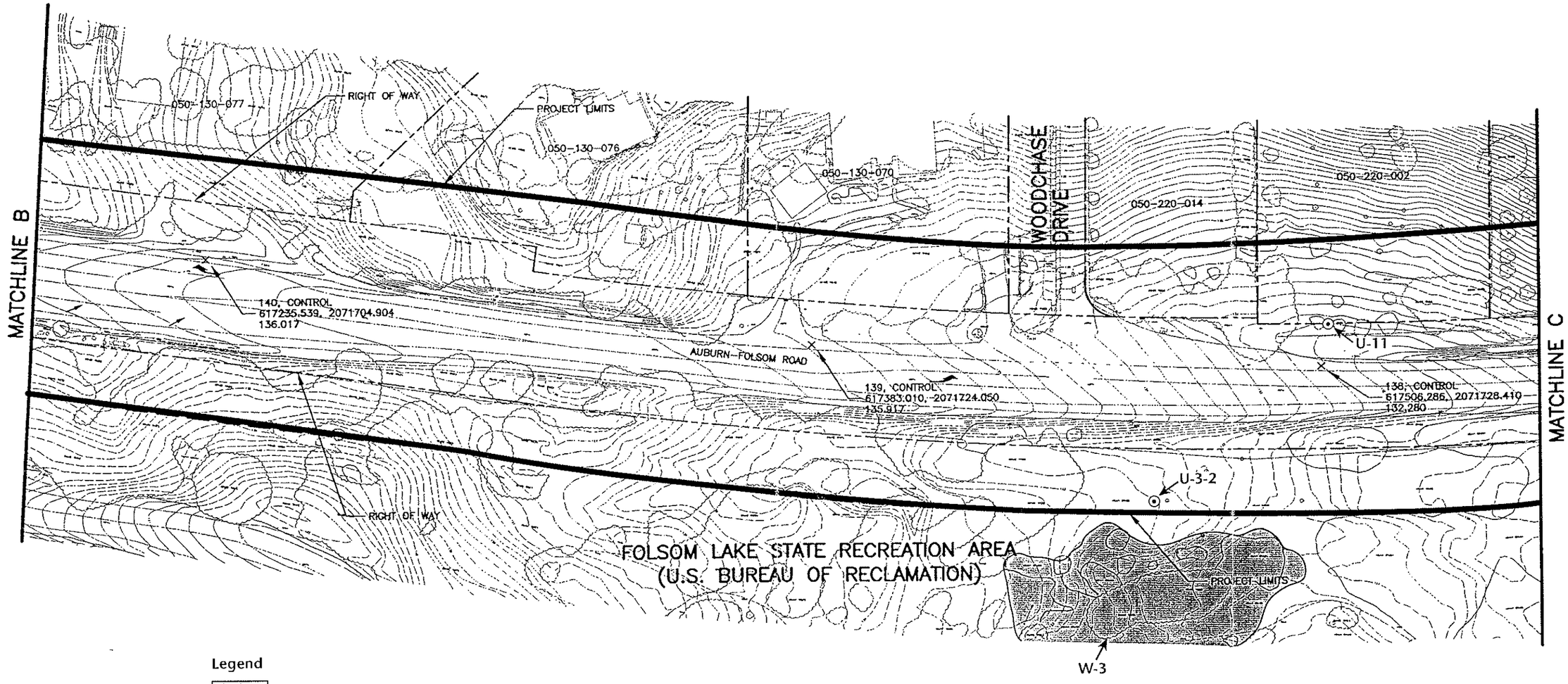
Feet

Source: Placer County 2002.

02102.02 034 (10/02)

Jones & Stokes

Figure B-2
Wetland Delineation



Legend

- Potential Waters of the U.S. (including Wetland)
- Potential Non-Jurisdictional Wetland
- D Drainage
- U Upland
- W Wetland
- # Feature Number
- Data Point
- Study Area Boundary

N

0 41 82 123 164

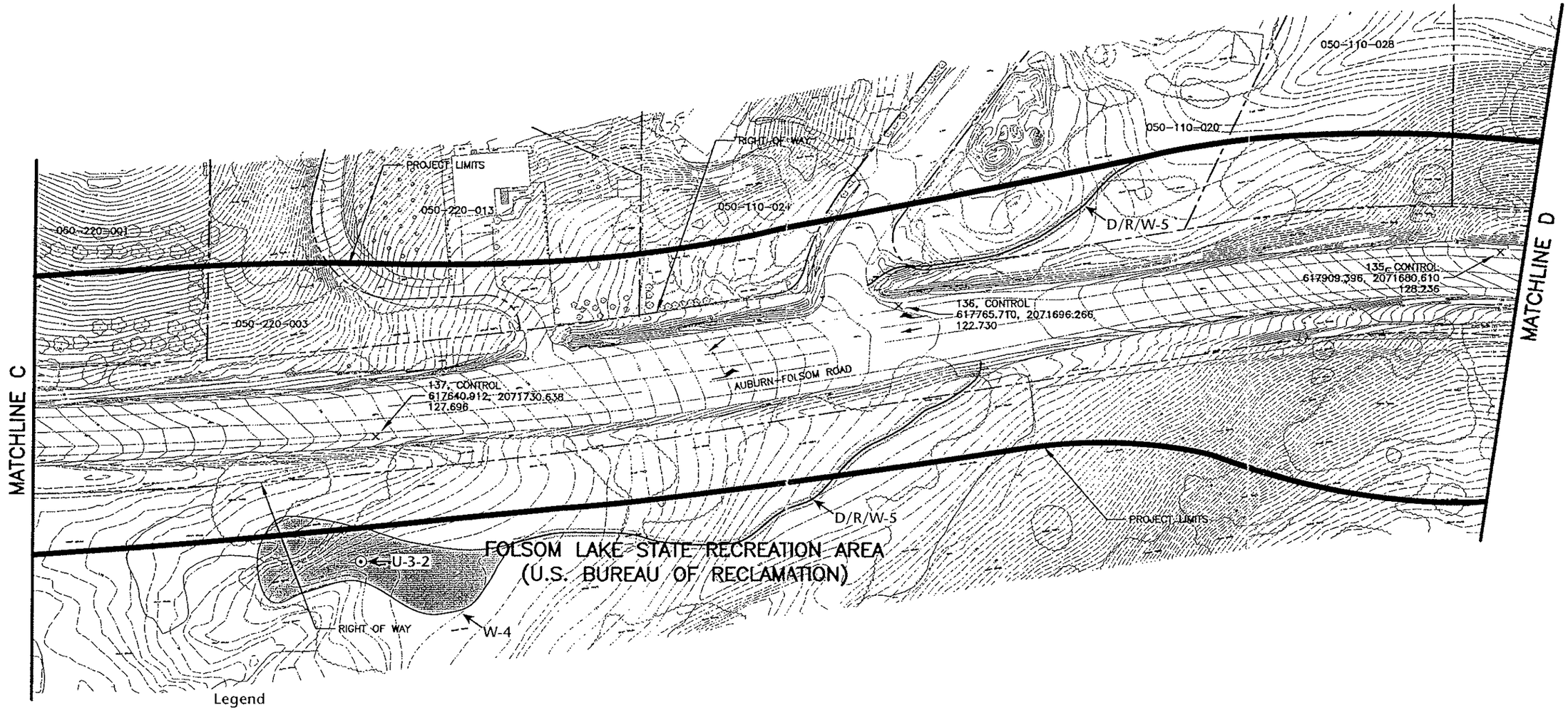
Feet

Source: Placer County 2002.

02102.02 034 (10/02)

Jones & Stokes

Figure B-3
Wetland Delineation



Legend

- Potential Waters of the U.S. (including Wetland)
- Potential Non-Jurisdictional Wetland
- D Drainage
- U Upland
- W Wetland
- # Feature Number
- Data Point
- Study Area Boundary

N

0 41 82 123 164

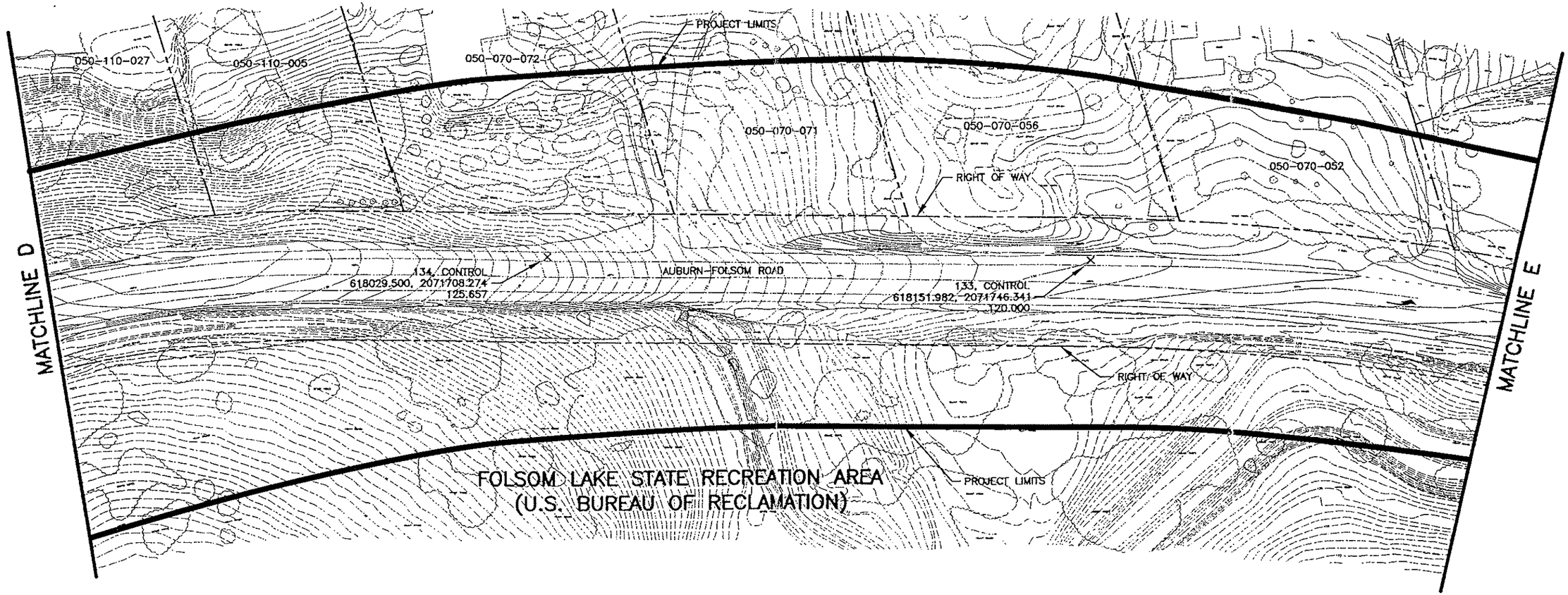
Feet

Source: Placer County 2002.

02102.02 034 (10/02)

Jones & Stokes

Figure B-4
Wetland Delineation



Legend

- Potential Waters of the U.S. (including Wetland)
- Potential Non-Jurisdictional Wetland
- D Drainage
- U Upland
- W Wetland
- # Feature Number
- Data Point
- Study Area Boundary

N

0 41 82 123 164

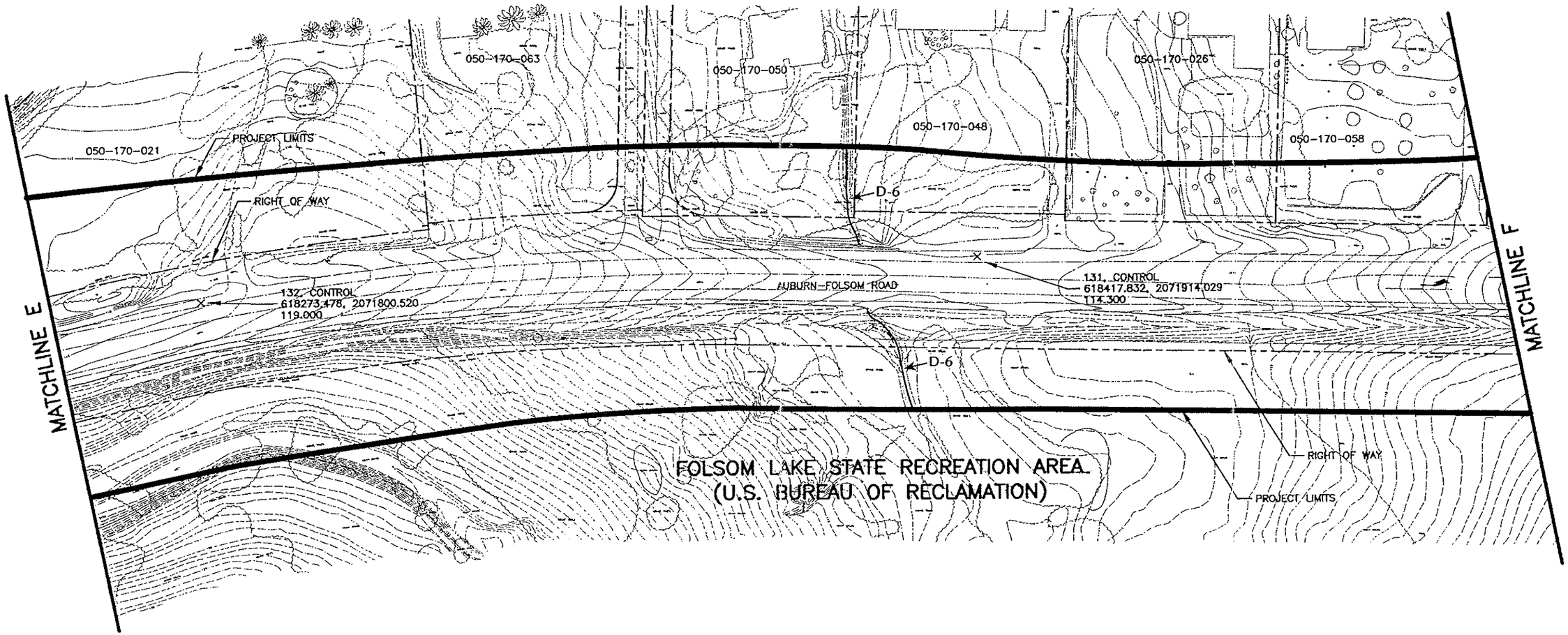
Feet

Source: Placer County 2002.

02102.02 034 (10/02)

Jones & Stokes

Figure B-5
Wetland Delineation



Legend

- Potential Waters of the U.S. (including Wetland)
- Potential Non-Jurisdictional Wetland
- D Drainage
- U Upland
- W Wetland
- # Feature Number
- Data Point
- Study Area Boundary

N

0 41 82 123 164

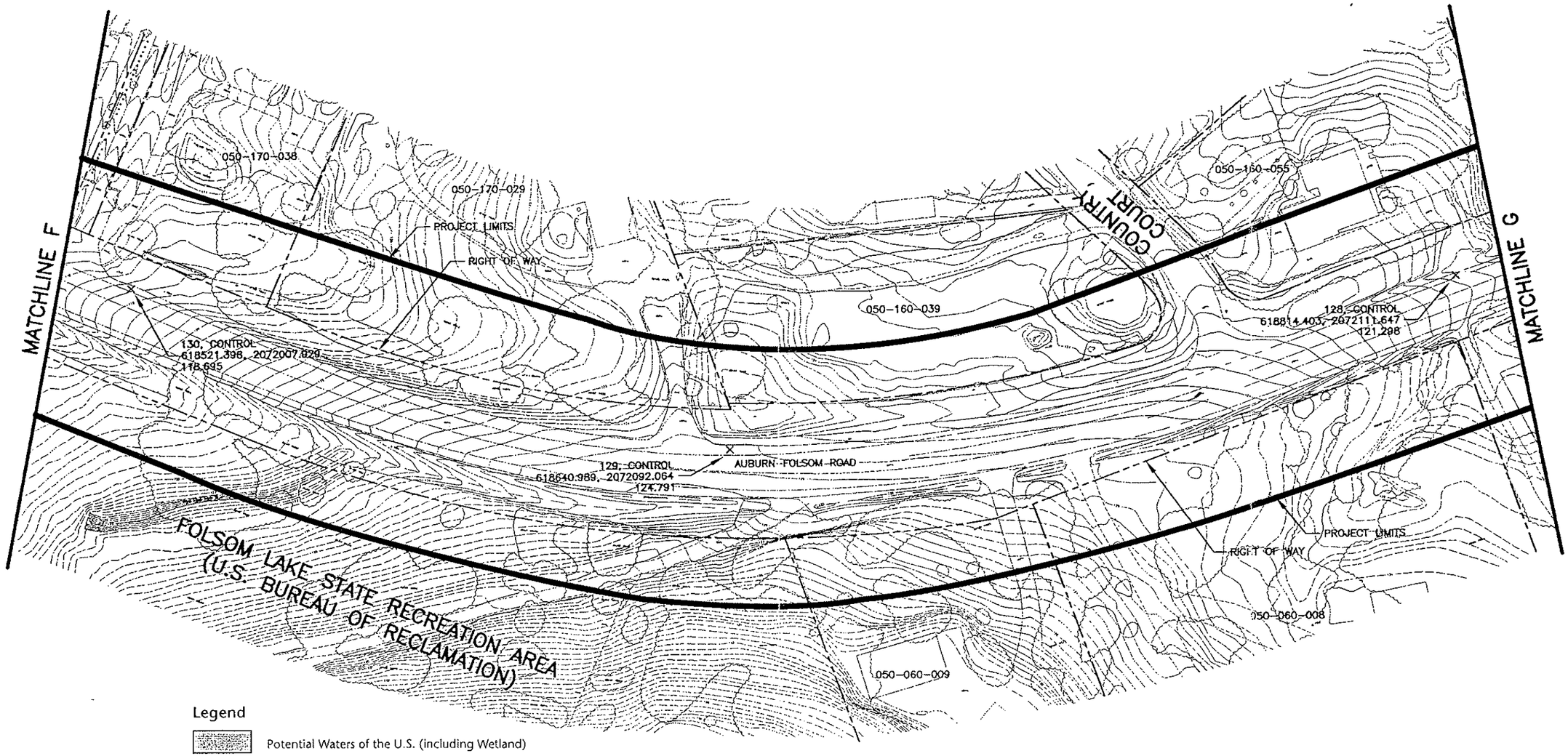
Feet

Source: Placer County 2002.

02102.02 034 (10/02)

Jones & Stokes

Figure B-6
Wetland Delineation



Legend

- Potential Waters of the U.S. (including Wetland)
- Potential Non-Jurisdictional Wetland
- D Drainage
- U Upland
- W Wetland
- # Feature Number
- Data Point
- Study Area Boundary

N

0 41 82 123 164

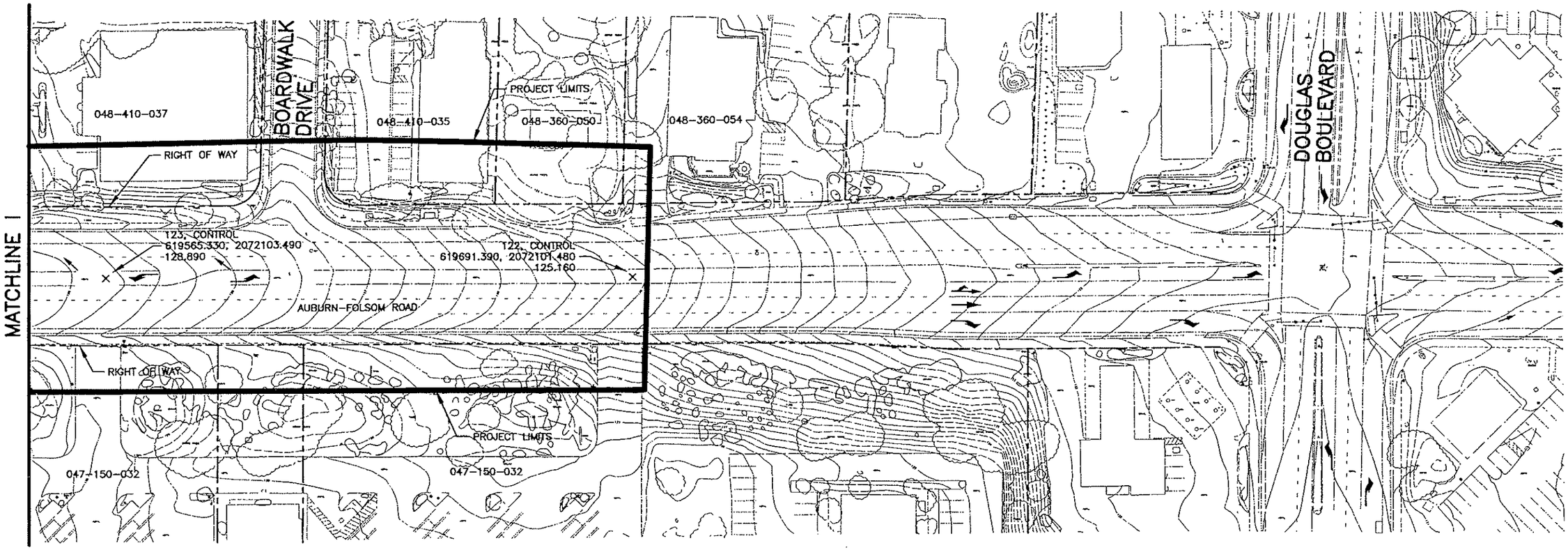
Feet

Source: Placer County 2002.

02102.02 034 (10/02)

Jones & Stokes

Figure B-7
Wetland Delineation



Legend

- Potential Waters of the U.S. (including Wetland)
- Potential Non-Jurisdictional Wetland
- D Drainage
- U Upland
- W Wetland
- # Feature Number
- Data Point
- Study Area Boundary

N

0 41 82 123 164

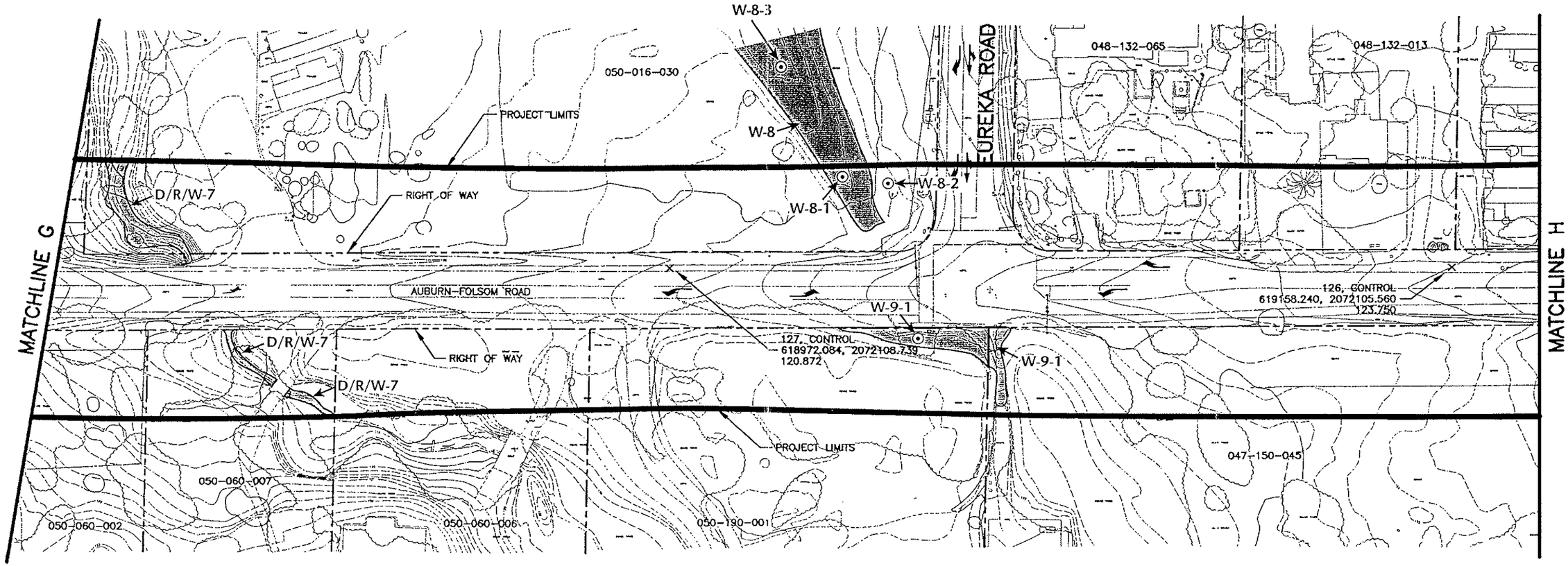
Feet

Source: Placer County 2002.

02102.02 034 (10/02)

Jones & Stokes

Figure B-10
Wetland Delineation



Legend

- Potential Waters of the U.S. (including Wetland)
- Potential Non-Jurisdictional Wetland
- D Drainage
- U Upland
- W Wetland
- # Feature Number
- Data Point
- Study Area Boundary

N

0 41 82 123 164

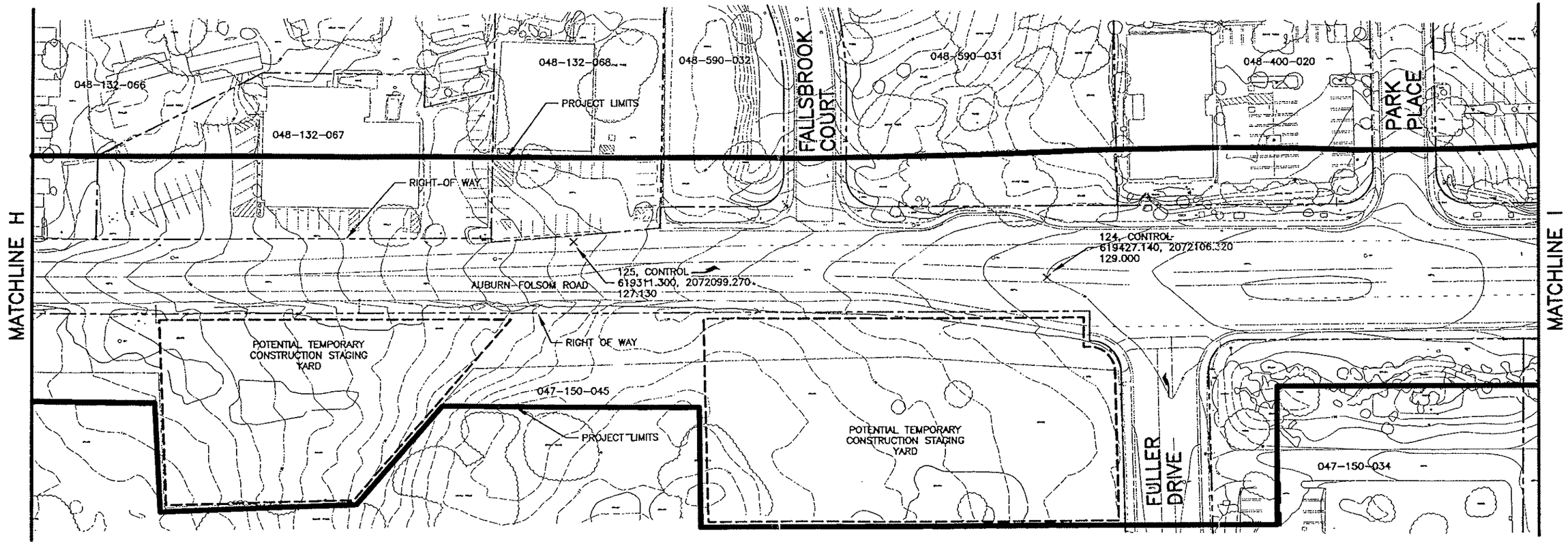
Feet

Source: Placer County 2002.

02102.02 034 (10/02)

Jones & Stokes

Figure B-8
Wetland Delineation



Legend

- Potential Waters of the U.S. (including Wetland)
- Potential Non-Jurisdictional Wetland
- D Drainage
- U Upland
- W Wetland
- # Feature Number
- Data Point
- Study Area Boundary

N

0 41 82 123 164

Feet

Source: Placer County 2002.

02102.02 034 (10/02)

Jones & Stokes

Figure B-9
Wetland Delineation

Attachment C

List of Waters in the Study Area

Attachment C. List of Individual Waters of the United States Delineated In and Adjacent to the Study Area

Feature Number[1]	Hectares (Acres) in the Study Area[2]	Feature Description	Adjacent or Isolated
D/W-1	0.024 (.06) OHWM = 17 feet	Baldwin Reservoir canal, a perennial drainage with seasonal wetlands and freshwater marsh wetlands within the OHWM	Adjacent— Appears to be hydrologically connected to Linda Creek
W-2	None; is adjacent, but outside the study area boundary	Seasonal wetland	Isolated— Wetland is not adjacent to any waters of the United States through culverts or surface flows
W-3	None; is adjacent, but outside the study area boundary	Seasonal wetland	Adjacent— Hydrologically connected to Linda Creek as a tributary drainage
W-4	0.004 (.01)	Freshwater marsh	Adjacent— Hydrologically connnected to Linda Creek as a tributary drainage
D/R/W-5	0.024 (.06) OHWM = 7 feet	Unnamed perennial drainage, a tributary to Linda Creek. Scattered seasonal wetlands within the OHWM. Riparian forest occurs outside the OHWM.	Adjacent— Hydrologically connected to Linda Creek as a tributary drainage
D-6	0.008 (.02) OHWM = 8 feet	Unnamed ephemeral drainage—tributary to Linda Creek	Adjacent— Hydrologically connected to Linda Creek as a tributary drainage
D/R/W-7	0.024 (.06) OHWM = 12 feet	Linda Creek—perennial drainage with seasonal wetlands and freshwater marsh within the OHWM. Riparian forest occurs outside the OHWM.	Adjacent— Hydrologically connected to Dry Creek which flows into the Sacramento River
W-8	0.011 (.027)	Seasonal wetland	Adjacent— Hydrologically connected to Linda Creek before construction of Auburn-Folsom Road
W-9	0.016 (.04)	Freshwater marsh	Adjacent— Hydrologically connected to Linda Creek

[1] Feature Numbering System:
- D = stream (drainage) with a defined bed and bank and apparent OHWM.
- W = wetlands that meet the Corps's criteria.
- R = woody riparian associated with the stream and is outside the stream's OHWM.
- 1 = each waters of the United States was numbered sequentially along the road, from south to north.

[2] W-2 and W-3 were delineated and mapped as part of this delineation because they are located outside, but immediately along, the study area boundary.

Appendix J

Biological Assessment

Biological Assessment for the Auburn-Folsom Road Widening Project from the Placer/Sacramento County Line North to Douglas Boulevard

Project Location:
Placer County, California
Township 10N, Range 7E, Sections 11,14, 23
U.S. Geological Survey Folsom Quadrangle

Federal Lead Agency:

U.S. Department of the Interior
Bureau of Reclamation
7794 Folsom Dam Road
Folsom, CA 95630
Contact: Sandi Richerson
916/989-7174

Environmental Consultant:

Jones & Stokes
2600 V Street
Sacramento, CA 95818-1914
Contact: Angela Alcala
916/503-6681

March 2003

Jones & Stokes. 2003. Biological assessment for the Auburn-Folsom Road widening project from the Placer/Sacramento County line north to Douglas Boulevard. March. (J&S 02-102.) Sacramento, CA. Prepared for Placer County, CA.

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Acronyms and Abbreviations

BA	biological assessment
CEQA	California Environmental Quality Act
CNDDB	California Natural Diversity Database
CNPS	California Native Plant Society
County	Placer County
DFG	California Department of Fish and Game
EA/Draft EIR	Environmental Assessment/Draft Environmental Impact Report
EA/EIR	Environmental Assessment/Environmental Impact Report
ESA	Endangered Species Act
FHWA	Federal Highway Administration
FONSI	Finding of No Significant Impact
FR	Federal Register
GPS	global positioning system
mph	miles per hour
NEPA	National Environmental Policy Act
Reclamation	U.S. Department of the Interior, Bureau of Reclamation
Recovery Plan	USFWS's Valley Elderberry Longhorn Beetle Recovery Plan
SRA	State Recreational Area
USC	United States Code
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
VELB	valley elderberry longhorn beetle

I. Introduction

The purpose of this biological assessment (BA) is to review the proposed Auburn-Folsom Road Widening Project in sufficient detail to determine to what extent the proposed project may affect any of the species, identified below, that are listed as threatened or endangered or proposed to be listed. The U.S. Department of the Interior, Bureau of Reclamation (Reclamation) is the federal lead agency for the proposed project under the National Environmental Policy Act (NEPA). Placer County (County) is the state lead agency under the California Environmental Quality Act (CEQA). The County and Reclamation have prepared a joint environmental document (An Environmental Assessment/Draft Environmental Impact Report [EA/Draft EIR]) that analyzes the impacts associated with four build alternatives for the project:

- Alternative 1: Widen Roadway to the West
- Alternative 2: Widen Roadway to the East
- Alternative 3: Widen Roadway Equally on Both Sides
- Alternative 4: County DPW–Preferred Alternative

Reclamation and the County have prepared this BA for Alternative 4, "County DPW–Preferred Alternative." The other alternatives are described later in this BA, under "Alternative Actions."

This BA has been prepared in accordance with legal requirements set forth under Section 7 of the Endangered Species Act (ESA) (Title 16, United States Code [USC], Section 1536[c]).

In preparing this BA, the following sources of information on federally listed threatened and endangered species were used.

- Species lists obtained from the U.S. Fish and Wildlife Service (USFWS) for the project (Attachment A).
- Results of a record search of the California Department of Fish and Game's (DFG's) California Natural Diversity Database (CNDDB) (2002) for the Folsom, Clarksville, Citrus Heights, Pilot Hill, Rocklin, Roseville, Carmichael, Buffalo Creek, and Folsom Southeast 7.5-minute U.S. Geological Survey (USGS) quadrangles (Attachment B).
- The California Native Plant Society's (CNPS's) *Inventory of Rare and Endangered Vascular Plants of California* (2001) .
- Field surveys conducted by Jones & Stokes biologists.

A. Threatened or Endangered Species or Species Proposed for Such Listing

- Valley elderberry longhorn beetle (VELB) (*Desmocerus californicus dimorphus*)—Threatened

Based on habitat assessments, field surveys, and distribution data, VELB (*Desmocerus californicus dimorphus*), a federally listed threatened species, was identified as having the potential to occur in the study area and is therefore addressed in this BA.

B. Candidate Species, Sensitive Species, and Species of Concern

This BA does not address any candidate species, sensitive species, or species of concern because none has the potential to occur in the study area.

II. Critical Habitat

According to USFWS's *Valley Elderberry Longhorn Beetle Recovery Plan* (Recovery Plan) (U.S. Fish and Wildlife Service 1984), the study area does not encompass areas designated as critical or essential habitat for VELB.

III. Consultation to Date

On August 15, 2002, USFWS provided a list of species that are listed as threatened or endangered, or that are proposed for listing as threatened or endangered under ESA, and that may occur in the project area (Attachment A). Based on the species list, a literature review and field visit were conducted to assess whether the habitat conditions present in the project area could support any of the species identified on the USFWS list. The potential effects of the proposed project on these species were assessed based on the field assessment of habitat conditions and the species' habitat requirements, as identified during the literature review.

Jones & Stokes initiated informal consultation with USFWS biologist Jason Douglas on September 18, 2002, to discuss the proposed project and the potential to affect federally listed species (Douglas pers. comm.). Mr. Douglas indicated that indirect impacts on VELB habitat, such as dust accumulation and changes in hydrology, should be considered, as well as interdependent effects from an adjacent road-widening project.

Identified below are all the federally listed, proposed, and candidate species that the USFWS species list indicated could occur in the project area.

- Vernal pool fairy shrimp (*Branchinecta lynchi*)—Endangered
- Vernal pool tadpole shrimp (*Lepidurus packardi*)—Endangered
- VELB (*Desmocerus californicus dimorphus*)—Threatened
- Delta smelt (*Hypomesus transpacificus*)—Threatened
- Sacramento splittail (*Pogonichthys macrolepidotus*)—Threatened
- California red-legged frog (*Rana aurora draytonii*)—Threatened
- California tiger salamander (*Ambystoma californiense*)—Candidate
- Giant garter snake (*Thamnophis gigas*)—Threatened
- Bald eagle (*Haliaeetus leucocephalus*)—Threatened
- Mountain plover (*Charadrius montanus*)—Proposed Threatened
- Sacramento Orcutt grass (*Orcuttia viscida*)—Endangered

Species distribution and habitat suitability requirements indicate that all of the species listed above, except for VELB, would not occur in the project area and therefore are excluded from consideration in this BA. A brief explanation for the absence of the remaining species is provided below.

- **Vernal pool fairy shrimp and vernal pool tadpole shrimp.** No vernal pools or suitable seasonal ponds are present in the project area; therefore, no vernal pool fairy shrimp or vernal pool tadpole shrimp would occur in the project area.
- **Delta smelt and Sacramento splittail.** Linda Creek, located in the project area, is a tributary to Dry Creek. This drainage is located too far upstream in the Sacramento River watershed to provide suitable habitat for Delta smelt and Sacramento splittail. Linda Creek is dammed downstream of the project area, which precludes upstream migration of fish. Therefore, Delta smelt and Sacramento splittail would not be present in the project area.
- **California red-legged frog.** California red-legged frogs historically occurred from Shasta County south to the Mexican border; however, California red-legged frogs are believed to have been extirpated from the Central Valley floor before 1960 (Title 50 Code of Federal Regulations [CFR] Part 17, Final Rule California red-legged frog). No observations of California red-legged frog within 16 kilometers (10 miles) of the project area have been recorded in the CNDDB (2002), and no frogs were observed during May 2002 field surveys. The closest occupied habitat for this species is located approximately 24 kilometers (15 miles) west of the project area, in El Dorado County (in the Weber Creek Core Recover Area, as identified in the *Draft Recovery Plan for the California Red-legged Frog* [U.S. Fish and Wildlife Service 2000]).

  Three waterways intersect the project area: a manmade canal at the south end of the project area flows between the San Juan Water District water treatment facility and Baldwin Reservoir; Linda Creek, at the north end of the project area, is a perennial stream that originates about 1.6 kilometers (1 mile) northeast of the project area and flows west into Dry Creek; and an

unnamed seasonal stream collects residential and road runoff. California red-legged frogs would not be expected to occur in the project area based on the lack of previous recorded observations in the project vicinity and the surrounding development, and because there is no hydrologic connection to the closest known location of California red-legged frogs, which is in the Weber Creek watershed.

- **California tiger salamander.** No sightings of California tiger salamander within 16 kilometers (10 miles) of the project area have been recorded in the CNDDB (2002), and no vernal pools or suitable seasonal ponds for breeding are present in the project area. Therefore, California tiger salamander would not occur in the project area.
- **Giant garter snake.** The project area is located in the Mid Valley Recovery Unit for giant garter snake, as identified in USFWS's 1999 *Draft Recovery Plan for the Giant Garter Snake.* However, no giant garter snake populations have been documented within 16 kilometers (10 miles) of the project area, and no suitable marsh habitat is present in the project area.
- **Bald eagle.** The project area does not provide suitable nesting habitat for bald eagles; however, bald eagles are known to winter in the project vicinity and would be expected to forage over Folsom Lake, west of the project area. No suitable open-water habitat for foraging bald eagles is present in the project area.
- **Mountain plover.** Mountain plovers are a winter resident of the Central Valley of California and are found in short annual grasslands that contain little or no shrub or tree cover. No suitable foraging habitat for wintering mountain plovers is located in the project area. No documented winter populations are known to occur in the project vicinity (i.e., within a 16-kilometer [10-mile] radius of the project area).
- **Sacramento Orcutt grass.** A floristic survey was conducted in the project area during the appropriate flowering period for Sacramento Orcutt grass, and no plants were documented in the survey area. This species grows in vernal pools below 91 meters (330 feet) above sea level. No vernal pools are located in the project area, so Sacramento Orcutt grass is not expected to be present.

IV. Current Management Direction

The USFWS's *Conservation Guidelines for the Valley Elderberry Longhorn Beetle* (U.S. Fish and Wildlife Service 1999) and the *Valley Elderberry Longhorn Beetle Recovery Plan* (U.S. Fish and Wildlife Service 1984) were used to identify the current management direction for VELB. The prime objectives of the Recovery Plan are to protect known populations of VELB, conduct population and habitat distribution surveys, and protect remaining suitable habitat within the species' range.

V. Description of the Proposed Project

A. Project Location

The project area is located in southeast Placer County, with Folsom Lake immediately to the east and the City of Folsom to the south. The project limits extend from the Placer County/Sacramento County line north to Douglas Boulevard, a distance of approximately 3.2 kilometers (2 miles) (Figures 1 and 2). However, widening and construction activities would extend north only to Fuller Drive. Immediately adjacent land uses are the Folsom Lake State Recreational Area (SRA) to the east (recreational uses) and rural residential and commercial uses. The dominant plant communities in the project vicinity are nonnative annual grassland and blue oak woodland with inclusions of riparian communities and seasonal wetlands.

B. Project Purpose

The purpose of the proposed widening of Auburn-Folsom Road between the Placer County line and Fuller Drive is to relieve recurring traffic congestion by providing additional capacity to meet existing and projected traffic demands through 2020. The additional capacity would:

- reduce corridor delay,
- relieve traffic congestion and add capacity during peak- and off-peak periods, and
- accommodate local and regional traffic volumes through 2020.

The proposed project also would improve roadway operation and safety by widening the roadway; signalizing the Fuller Drive intersection and improving the intersection's geometry; improving Eureka Road; adding medians and left-turn lanes; and improving Auburn-Folsom Road's geometry and design speed.

C. Need for the Project

Auburn-Folsom Road has relatively high volumes of traffic throughout the daytime hours, with well-defined morning and evening peak-hour traffic volumes. As traffic volumes increase, the peaks will broaden, and roadway travelers will experience congestion for increasingly longer periods of time during the day.

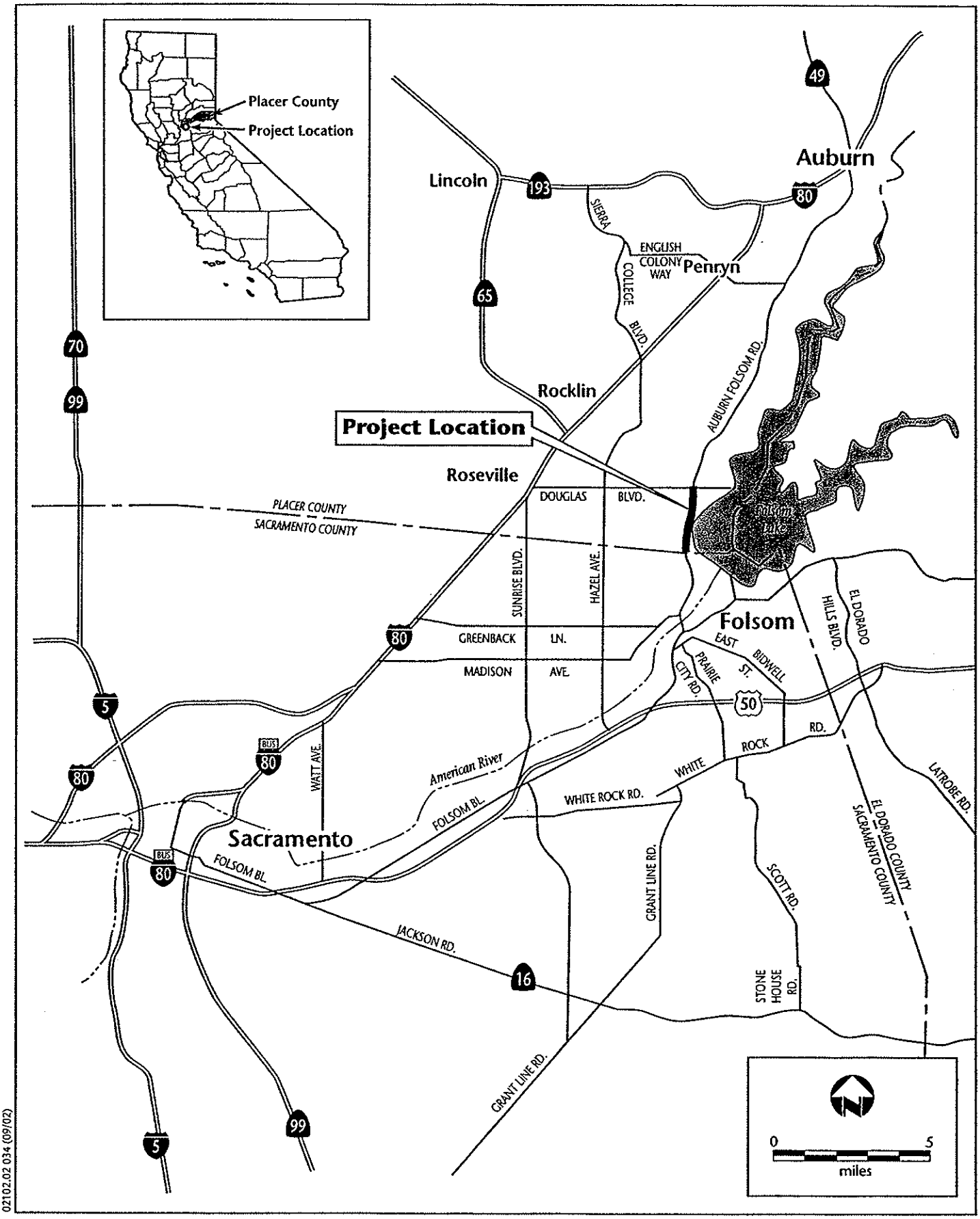
Between the County line and Douglas Boulevard, drivers experience operational traffic problems during the morning and evening peak hours. Long queues form at the Eureka Road and Oak Hill Drive signalized intersections. Drivers turning onto Auburn-Folsom Road from driveways and residential streets, such as Fuller Drive, have difficulty finding gaps in traffic and therefore sometimes experience

delays of several minutes. Pedestrians, including students attending the Wilma E. Cavitt Junior High School (just east of the Fuller Drive intersection), are not able to easily cross Auburn-Folsom Road. The vertical and horizontal curves of the existing roadway also reduce the design speed and contribute to delays. Congestion on Auburn-Folsom Road results in drivers using cut-through routes, such as Barton Road and Oak Hill Drive. Finally, the frequency of accidents on Auburn-Folsom Road, between Eureka Road and Douglas Boulevard, exceeds the statewide average for similar transportation routes.

D. Proposed Improvements

The proposed project would widen approximately 3.2 kilometers (2.0 miles) of Auburn-Folsom Road from two lanes to four lanes from the Placer County/Sacramento County line to Douglas Boulevard. The road widening would generally follow the existing alignment. Improvements proposed include

- adding a 4.2-meter-wide (14-foot-wide) center lane that may include two-way left-turn lanes and/or raised or painted medians in many or all roadway segments;
- providing 1.8-meter-wide (6-foot-wide) shoulders with Class II bicycle lanes on each side of the road;
- redesigning the horizontal and vertical curve north of Lou Place to improve the sight distance to achieve a design speed of 88 kph (55 mph) or 80 kph (50 mph);
- installing curb and gutter at certain locations;
- constructing/improving a multi-use/equestrian trail on the west side of Auburn-Folsom Road, from the Baldwin Reservoir access road to the Oak Hill Drive intersection;
- constructing a new traffic signal at the Fuller Road intersection;
- improving traffic signal operations at the Eureka Road and Oak Hill Drive intersections;
- restriping Auburn-Folsom Road between Fuller Drive and Douglas Boulevard to accommodate the alignment of Auburn-Folsom Road south of Fuller Drive; and
- implementing sight-distance improvements along Eureka Road approximately 300 meters (980 feet) west of the Auburn-Folsom Road/Eureka Road intersection. Approximately 190 meters (620 feet) would be lowered by approximately 1 meter (3 feet) to improve the vertical sight distance along this portion of Eureka Road. This improvement would allow residents of the Ridgeview Mobile Home Park to use the Eureka Road driveway, which is currently gated. Reopening this driveway will allow the residents to enter and exit to Eureka Road, thereby allowing for the extension of the northbound left-turn lane and a raised or painted median on the northbound approach to the Auburn-Folsom Road/Eureka Road intersection.



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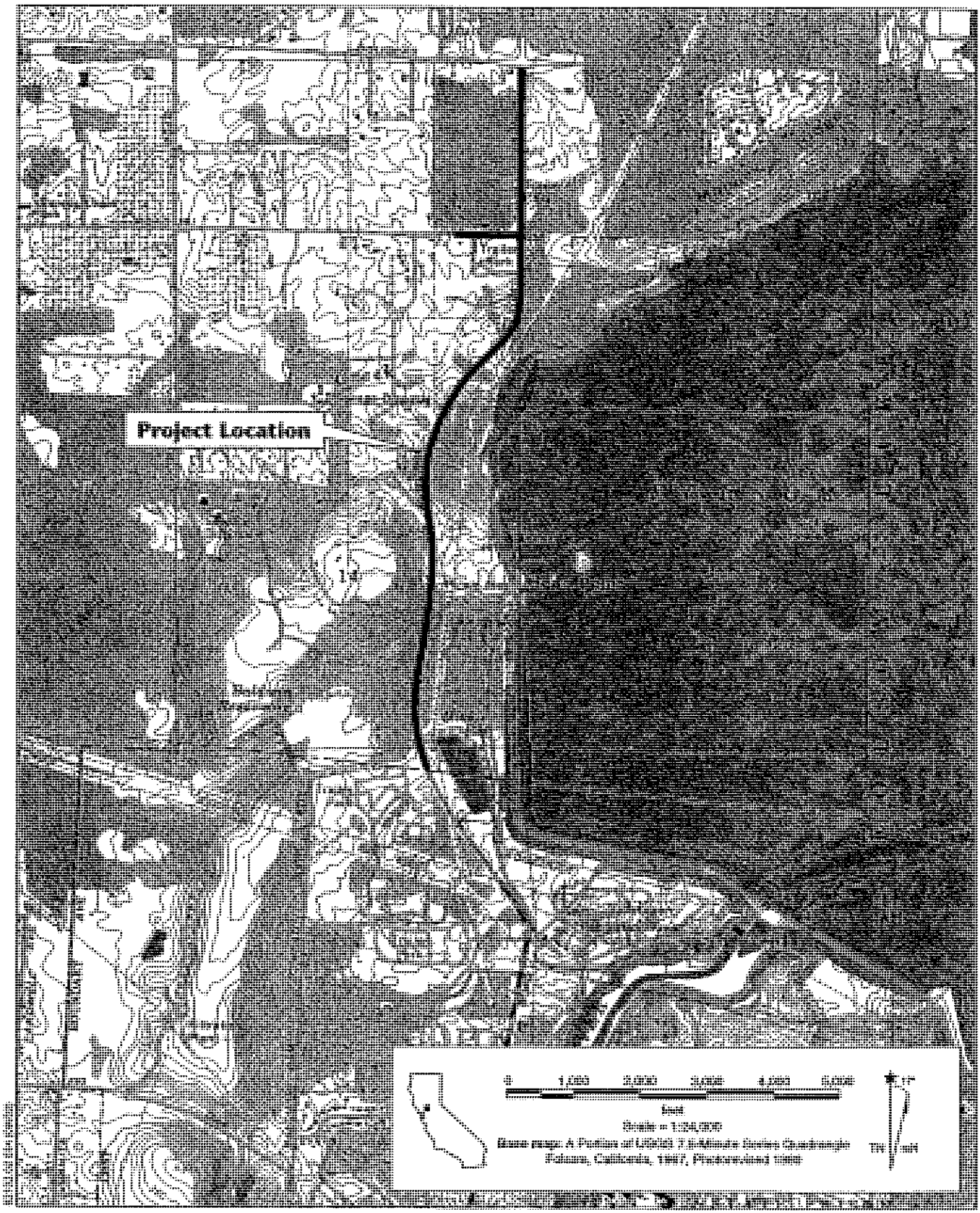
Jones & Stokes

Figure 1
Regional Location:
Auburn-Folsom Widening Project



Jones & Stokes

Figure 2
Project Location

E. Construction Information

At least one construction staging area will be required for the contractor to store equipment and materials during construction. One temporary construction staging area has been identified at the south end of the project corridor, on the west side of the road, opposite the San Juan Water District offices. This area is currently undeveloped and was used as the construction staging area for an unrelated project, completed in 2001. Two temporary construction staging area sites have been identified at the north end of the project alignment, just south of Fuller Drive. Both temporary construction staging areas at the north end of the project would be located on the east side of the road.

The anticipated construction schedule is as follows:

- Complete preliminary design—2002
- Complete environmental review—2003
- Complete final design—2003/2004
- Advertise and award bids—spring 2004
- Start construction—2004

It is anticipated that the project would require 18 months to construct. The project would be implemented in its entirety during two construction seasons. The Placer County Department of Public Works Standard Construction Specifications require that one lane in each direction be open at all times. A traffic management plan would be required with any of the build alternatives.

F. Environmental Commitments

This section describes the environmental commitments (mitigation measures) that the project proponent has agreed to implement as part of the proposed project.

Nine elderberry shrubs, which could provide VELB habitat, are located in and within 30 meters (100 feet) of the project alignment and may be affected by construction activities (Figure 3). Effects on VELB and their host elderberry plants will be minimized by implementing the USFWS's *Conservation Guidelines for the Valley Elderberry Longhorn Beetle* (U.S. Fish and Wildlife Service 1999), which include the following measures.

Mitigation Measure 1. Establish a Minimum 6-Meter-Wide (20-Foot-Wide) Buffer around All Elderberry Shrubs That Will Not Be Removed

Before any ground-disturbing activity, Placer County DPW shall ensure that a minimum 1.2-meter-tall (4-foot-tall) temporary, plastic mesh–type construction fence (Tensor Polygrid or equivalent) is installed at least 6 meters (20 feet) from the driplines of elderberry shrubs that are within 30.5 meters (100 feet) of the

construction area but that will not be removed. This fencing is intended to prevent encroachment by construction vehicles and personnel. The exact location of the fencing shall be determined by a qualified biologist, with the goal of protecting sensitive biological resources (i.e., habitat for VELB). The fencing shall be strung tightly on posts set at a maximum interval of 3 meters (10 feet). The fencing shall be installed in a way that prevents equipment from enlarging the work area beyond the area necessary to complete the work. The fencing shall be checked and maintained weekly until all construction is completed. This buffer zone shall be marked by a sign stating, "This is habitat of the valley elderberry longhorn beetle, a threatened species, and must not be disturbed. This species is protected by the Endangered Species Act of 1973, as amended. Violators are subject to prosecution, fines, and imprisonment."

No construction activity, including grading, shall be allowed until this condition is satisfied. No grading, clearing, storage of equipment or machinery, or other disturbance or activity may occur until a representative of Reclamation has inspected and approved all temporary construction fencing. The fencing and a note reflecting this condition shall be shown on the Improvement Plans.

Mitigation Measure 2. Implement Dust Control Measures

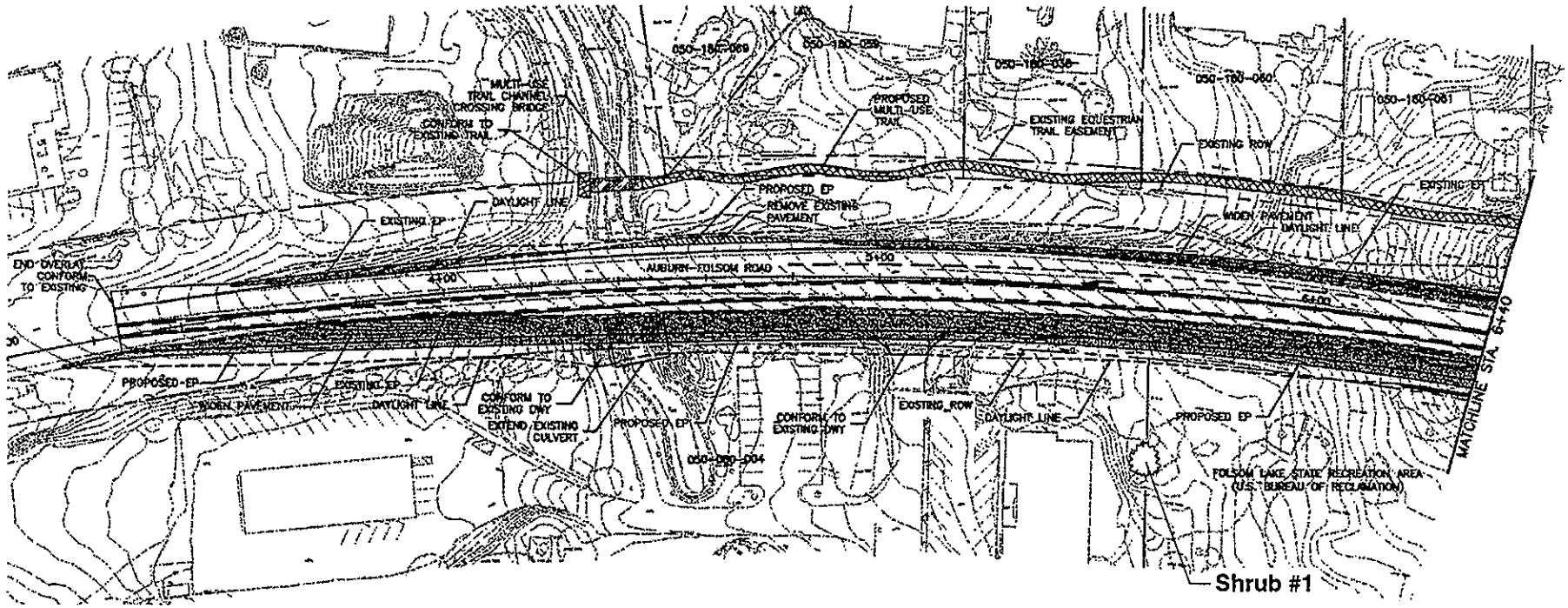
Placer County DPW shall ensure that dust control measures are implemented for all ground-disturbing activities in the project area. These measures may include application of water to graded and disturbed areas that are unvegetated. To avoid attracting Argentine ants, at no time shall water be sprayed within the driplines of elderberry plants.

Mitigation Measure 3. Transplant Elderberry Shrubs That Cannot Be Avoided

Placer County DPW shall ensure that all elderberry shrubs with one or more stems measuring 2.5 centimeters (1.0 inch) or more in diameter and that cannot be avoided during construction shall be transplanted to a conservation area in accordance with USFWS's *Conservation Guidelines for Valley Elderberry Longhorn Beetle* (U.S. Fish and Wildlife Service 1999). In the event that an elderberry shrub is unlikely to survive transplantation because of its poor condition or location, the shrub may be exempted from transplantation at the discretion of USFWS. Five shrubs are growing within 6 meters (20 feet) of proposed construction and will need to be transplanted.

Mitigation Measure 4. Compensate for Direct Impacts (Removal or Destruction) of Valley Elderberry Longhorn Beetle Habitat

Placer County DPW shall compensate for direct impacts (removal or destruction) on all elderberry stems measuring 2.5 centimeters (1.0 inch) or more at ground level (i.e., VELB habitat) that are located within 6 meters (20 feet) of construction activities. Compensation shall include replacement plantings of elderberry seedlings or cuttings and associated native plantings in a USFWS-approved conservation area, at a ratio between 1:1 and 8:1 (ratio = new plantings to affected stems), depending on the diameter of the stem at ground level, the presence or absence of exit holes, and whether the shrub is located in riparian habitat (Table 1). Five elderberry shrubs are growing within 6 meters (20 feet) of



Legend

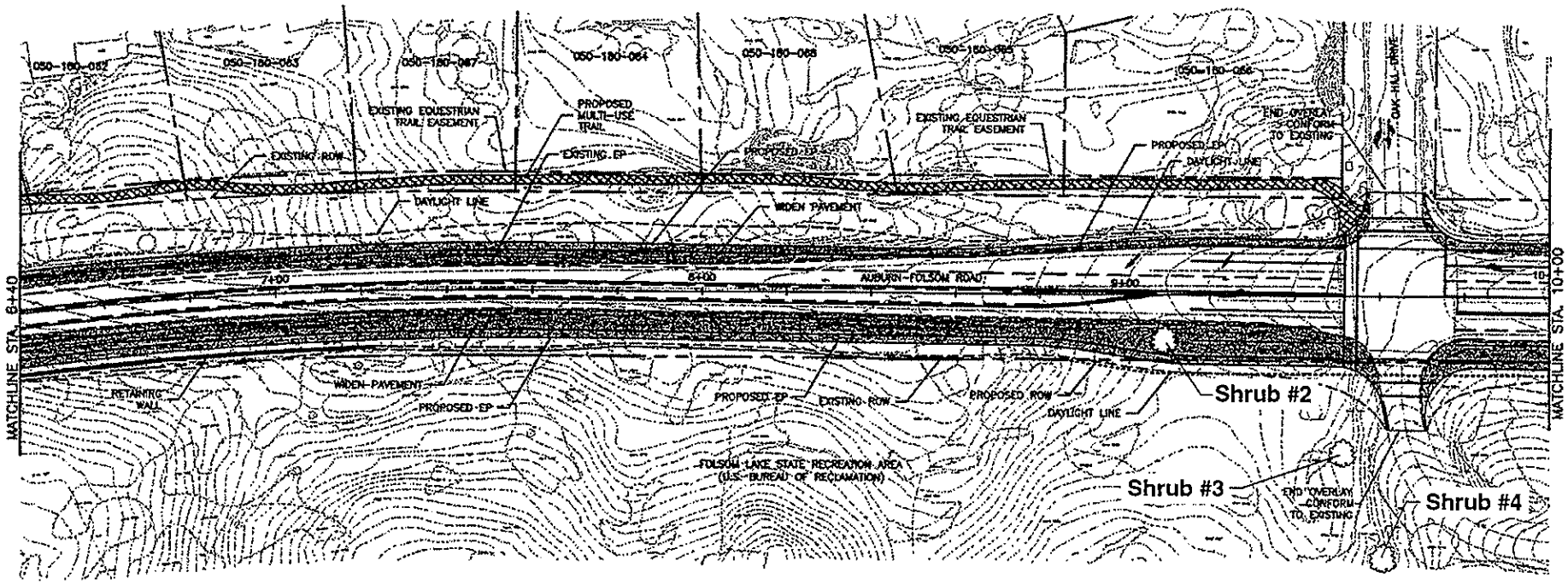
Elderberry Shrub

Source: Placer County 2002.

02102.02 034 (10/02)

Jones & Stokes

Figure 3a
Locations of Elderberry Shrubs within the Project Area



Legend

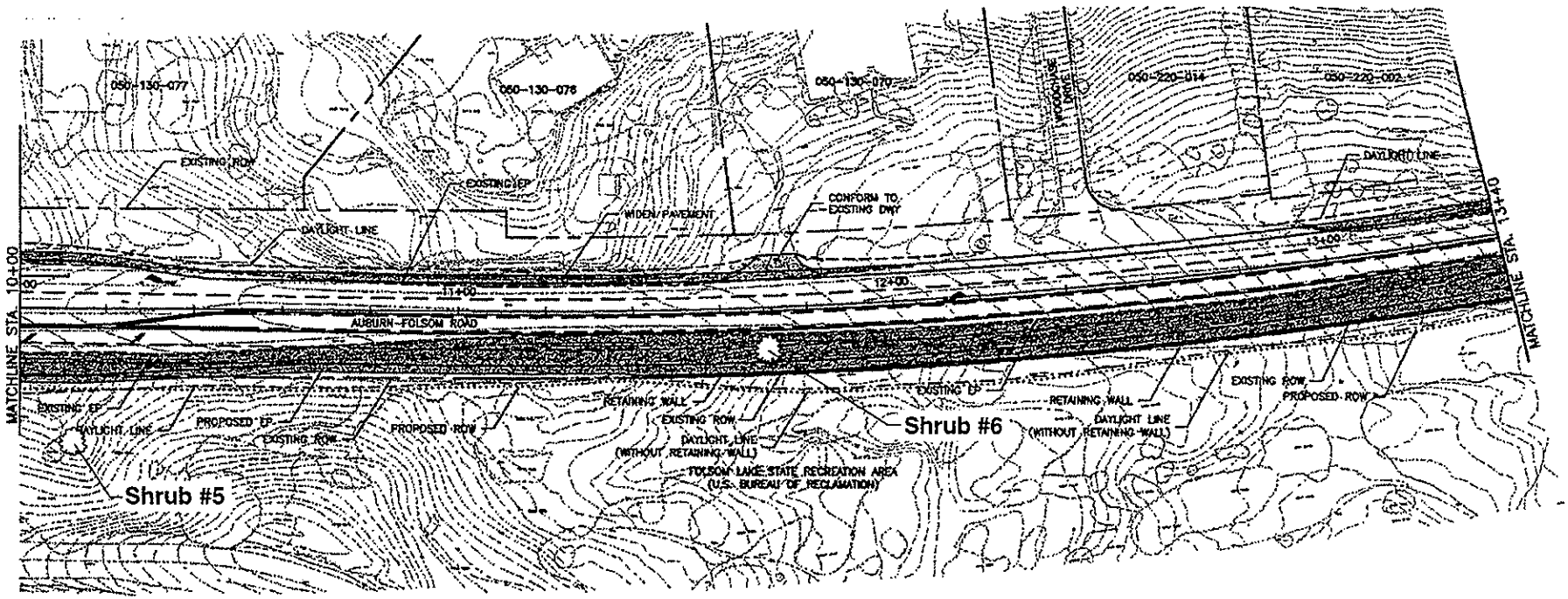
Elderberry Shrub

Source: Placer County 2002.

02102.02 034 (10/02)

Jones & Stokes

Figure 3b
Locations of Elderberry Shrubs within the Project Area



Legend

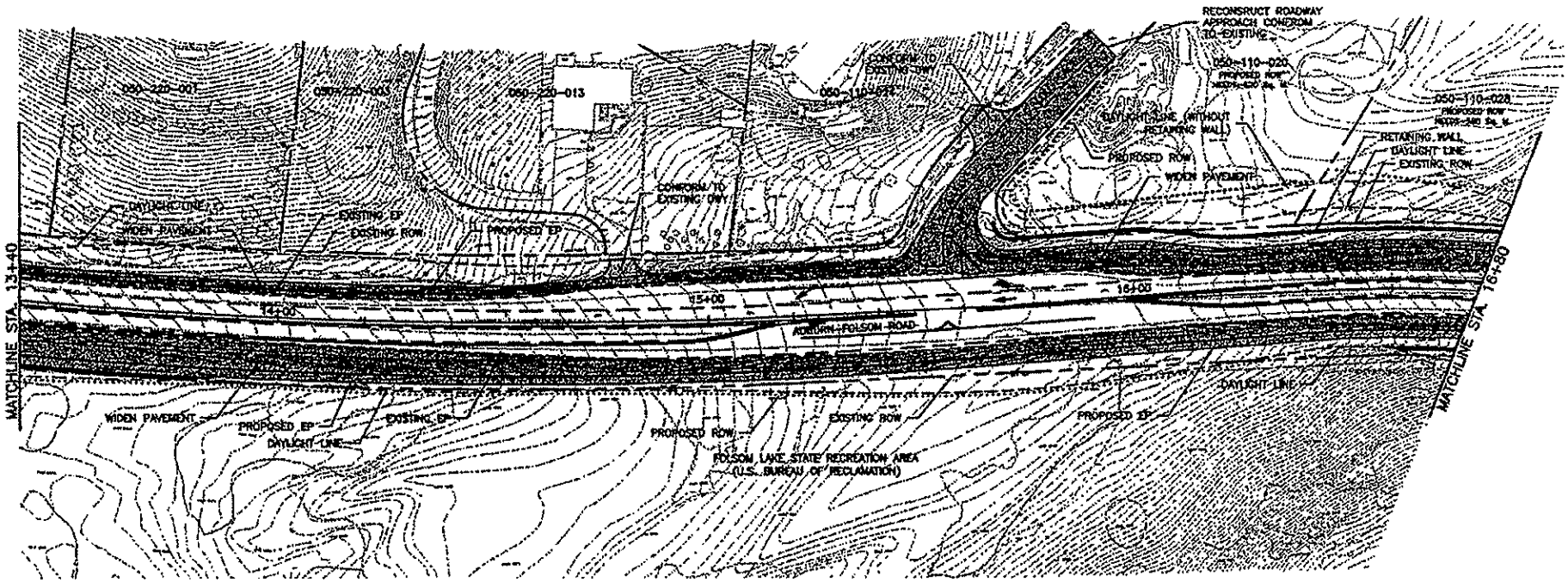
Elderberry Shrub

Source: Placer County 2002.

02102.02 034 (10/02)

Jones & Stokes

Figure 3c
Locations of Elderberry Shrubs within the Project Area



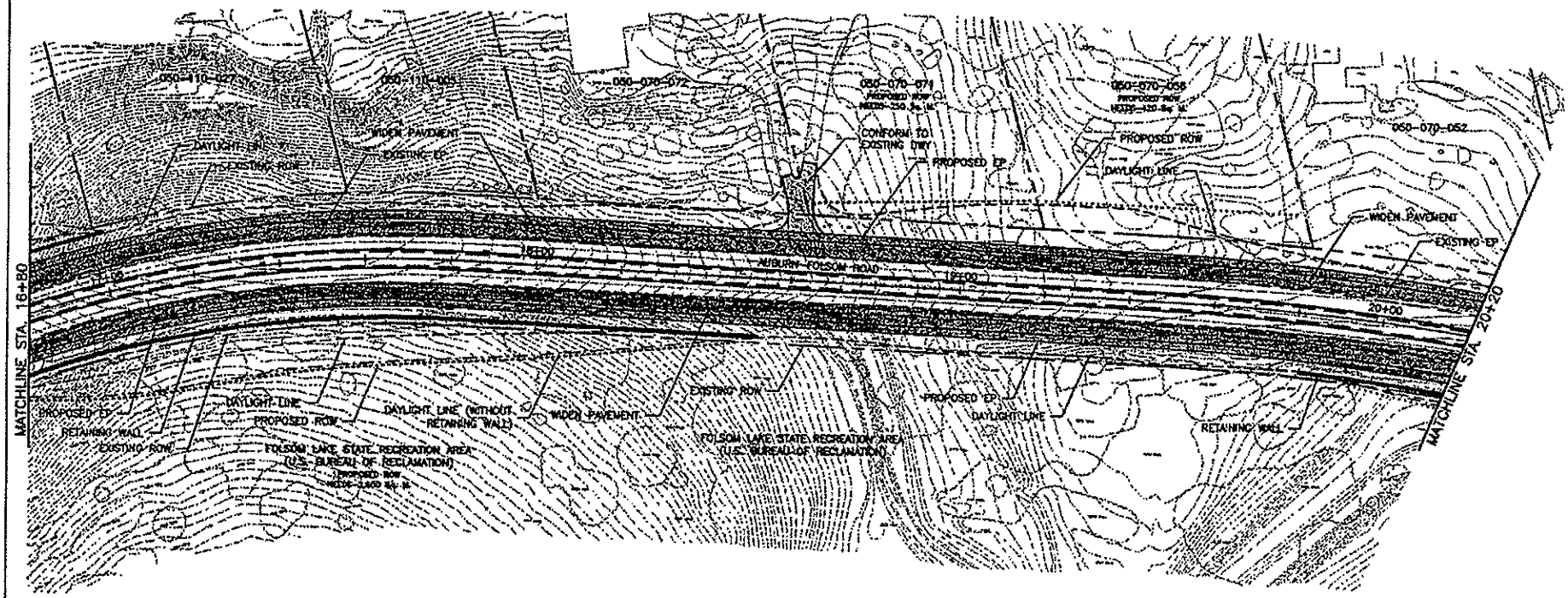
NO SHRUBS

Source: Placer County 2002.

02102.02 034 (10/02)

Jones & Stokes

Figure 3d
Locations of Elderberry Shrubs within the Project Area



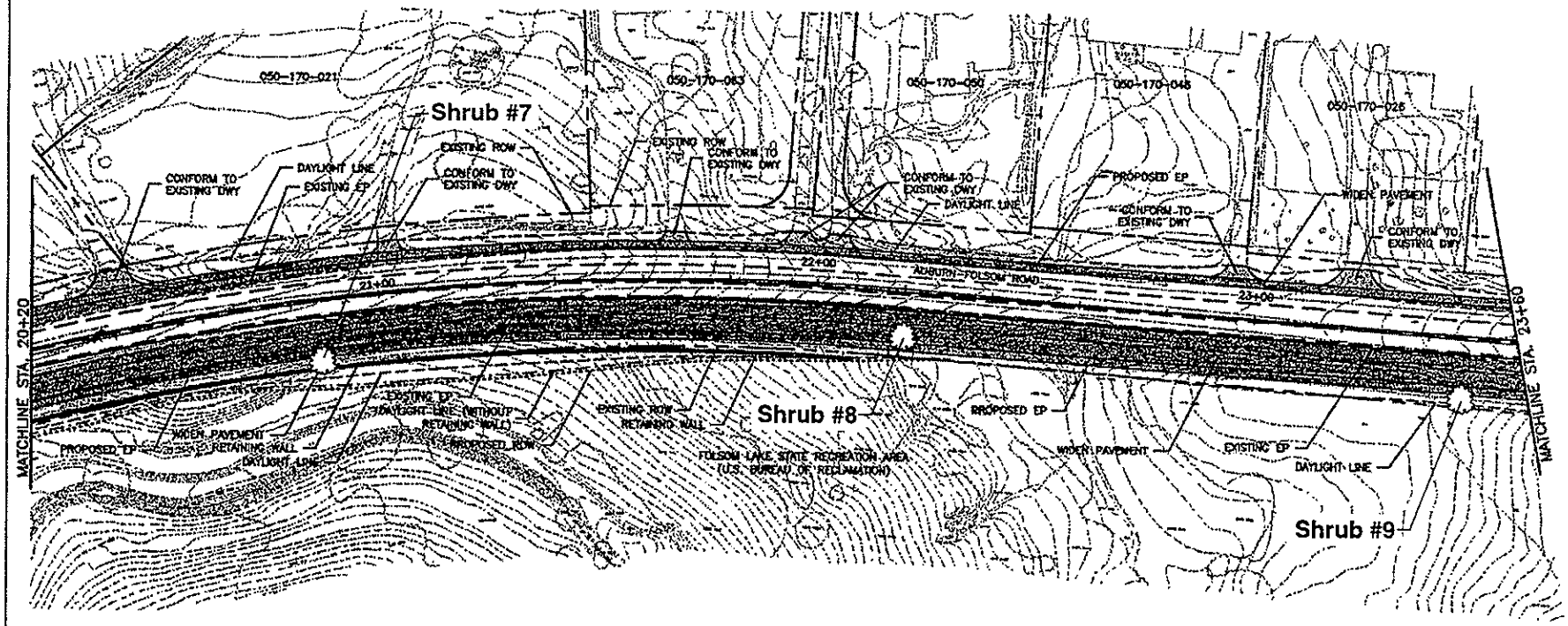
NO SHRUBS

Source: Placer County 2002.

02102.02.034 (10/02)

Jones & Stokes

Figure 3e
Locations of Elderberry Shrubs within the Project Area



Legend

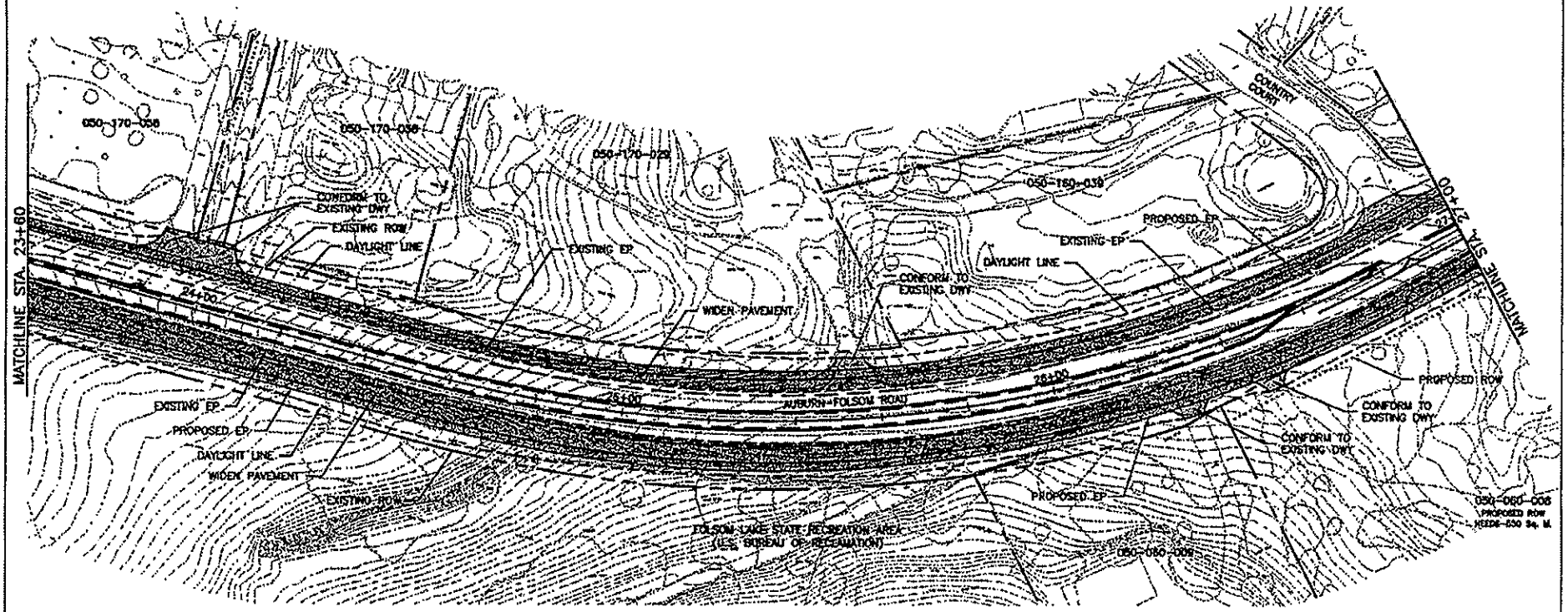
Elderberry Shrub

Source: Placer County 2002.

02102.02 034 (10/02)

Jones & Stokes

Figure 3f
Locations of Elderberry Shrubs within the Project Area



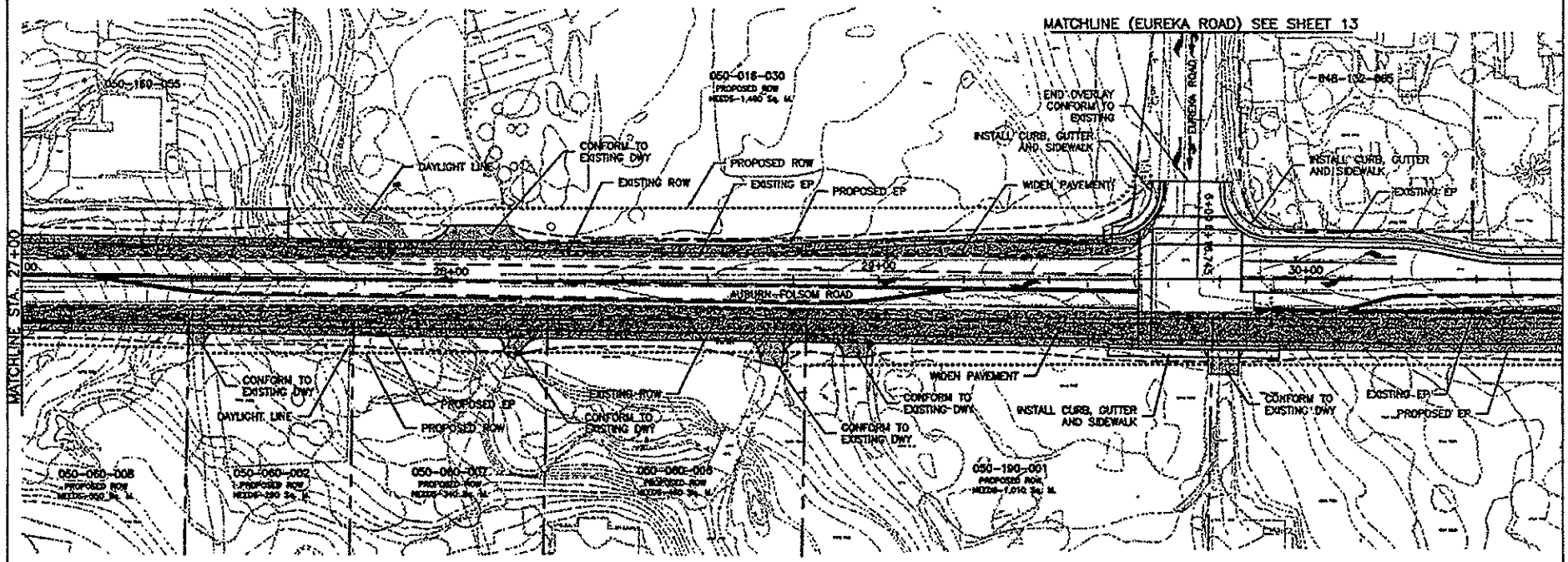
NO SHRUBS

Source: Placer County 2002.

02102.02 034 (10/02)

Jones & Stokes

Figure 3g
Locations of Elderberry Shrubs within the Project Area



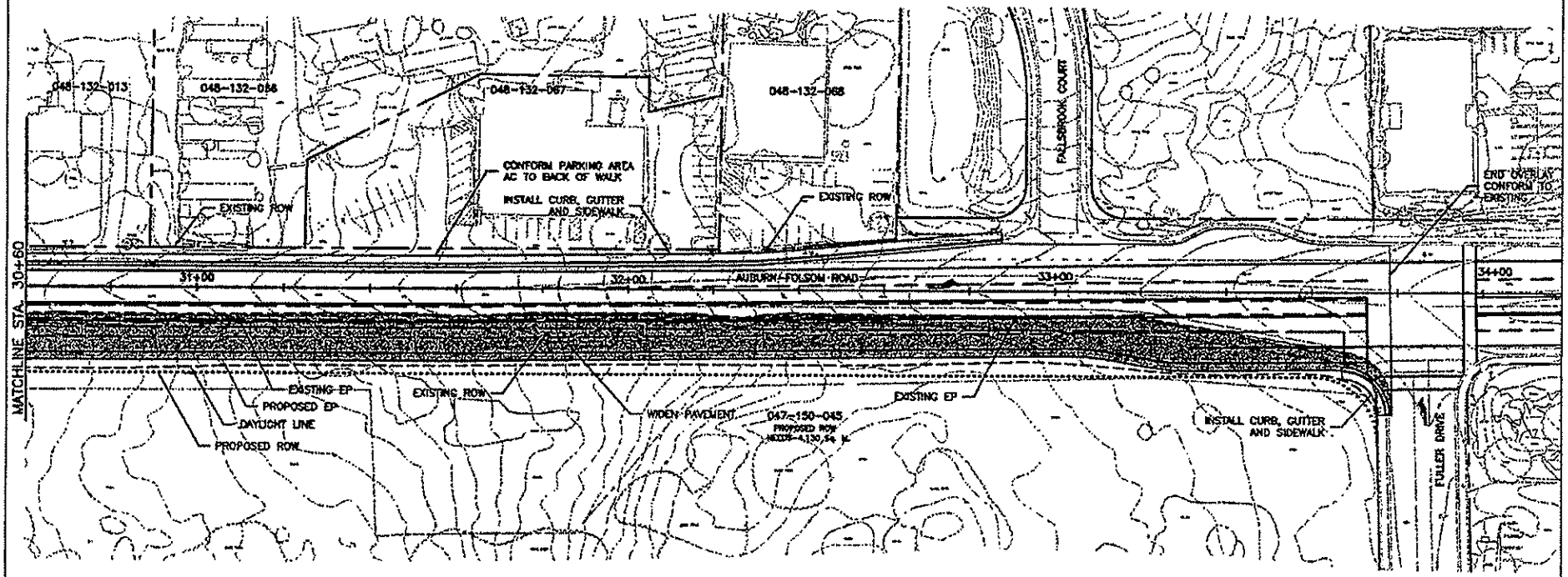
NO SHRUBS

Source: Placer County 2002.

02102.02 034 (10/02)

Jones & Stokes

Figure 3h
Locations of Elderberry Shrubs within the Project Area



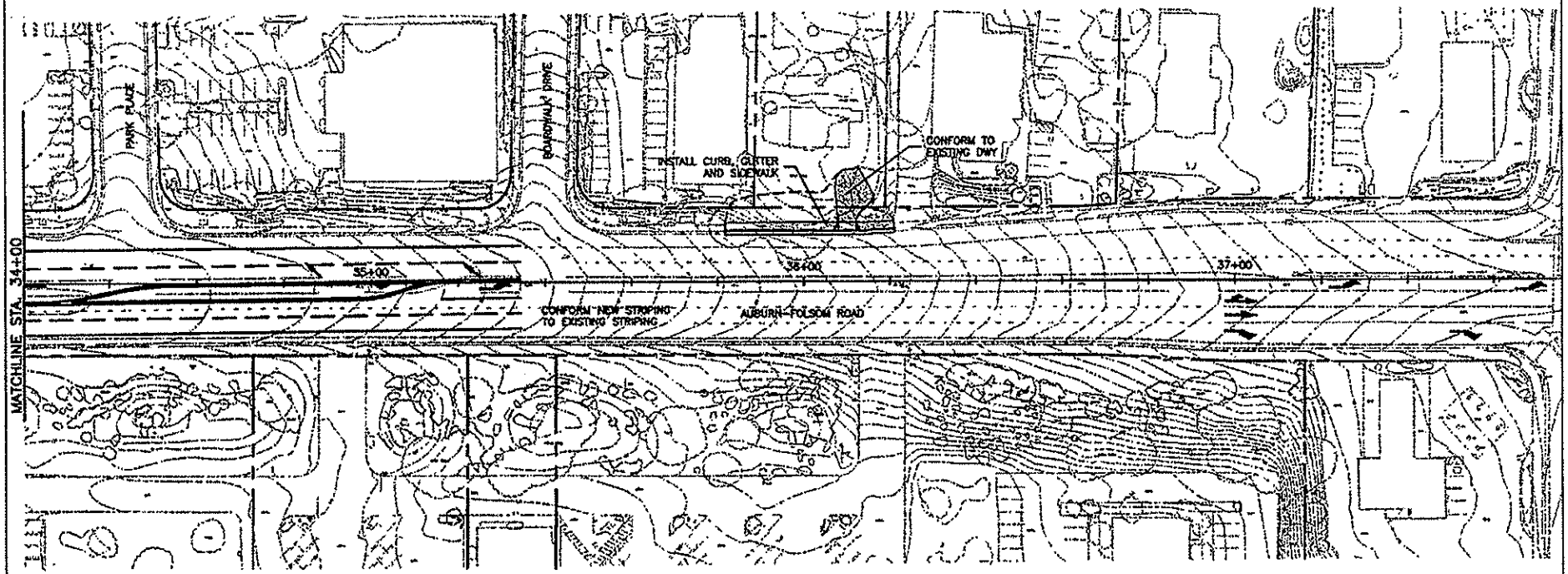
NO SHRUBS

Source: Placer County 2002.

02102.02 034 (10/02)

Jones & Stokes

Figure 3i
Locations of Elderberry Shrubs within the Project Area



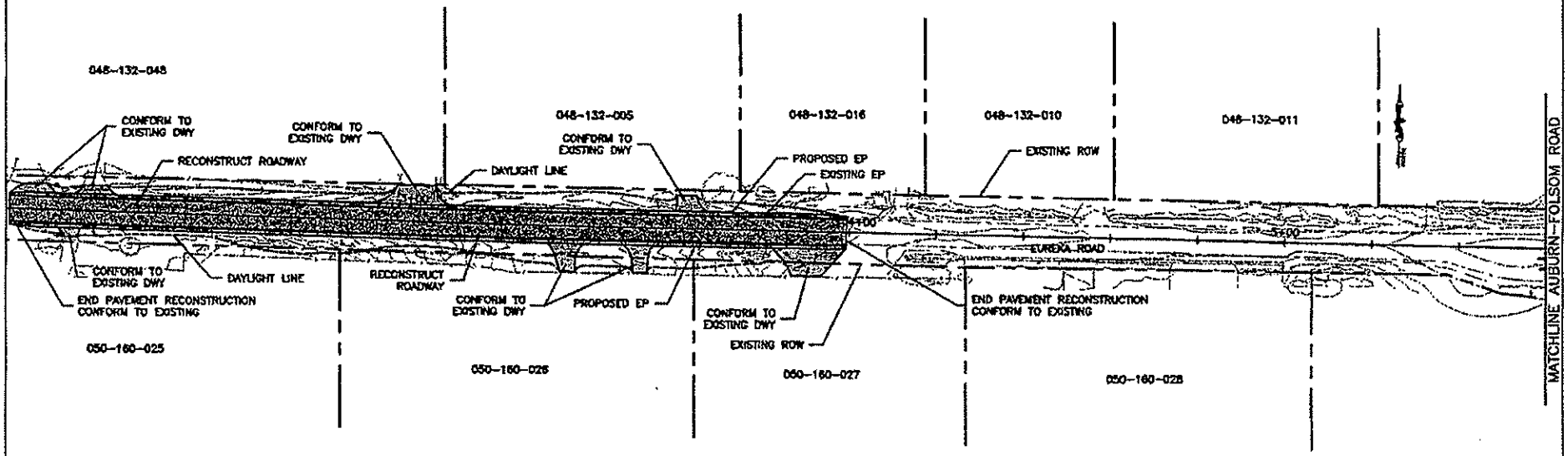
NO SHRUBS

Source: Placer County 2002.

02102.02 034 (10/02)

Jones & Stokes

Figure 3j
Locations of Elderberry Shrubs within the Project Area



NO SHRUBS

Source: Placer County 2002.

02102.02 034 (10/02)

Jones & Stokes

Figure 3k
Locations of Elderberry Shrubs within the Project Area

proposed road-widening activities (Table 2) and shall be compensated for by Placer County DPW (location of shrubs is depicted in Figure 3).

Table 1. USFWS-Approved Compensation Ratios for VELB Habitat

Location	Stems (diameter in centimeters [inches] at ground level)	Exit Holes Y/N?	Elderberry Seedling Ratio	Associated Native Plant Ratio
Nonriparian	2.5–7.6 (1–3)	No:	1:1	1:1
		Yes:	2:1	2:1
Nonriparian	7.6–12.7 (3–5)	No:	2:1	1:1
		Yes:	4:1	2:1
Nonriparian	>12.7 (>5)	No:	3:1	1:1
		Yes:	6:1	2:1
Riparian	2.5–7.6 (1–3)	No:	2:1	1:1
		Yes:	4:1	2:1
Riparian	7.6–12.7 (3–5)	No:	3:1	1:1
		Yes:	6:1	2:1
Riparian	>12.7 (>5)	No:	4:1	1:1
		Yes:	8:1	2:1

Table 2. Summary of Stem Counts for Elderberry Shrubs along the Project Alignment

Shrub Identification Number	Directly Affected Y/N?	Presence of Exit Holes Y/N?	Riparian Habitat Y/N?	Number of Stems (By Diameter)		
				2.5–7.6 cm (1–3 in.)	7.6–12.7 cm (3–5 in.)	>12.7 cm (>5 in.)
1	N	N	N	2	0	0
2	Y	N	N	2	0	0
3	N	N	N	0	3	1
4	N	N	N	0	2	0
5	N	N	N	6	3	0
6	Y	N	N	2	1	0
7	Y	N	N	2	0	0
8	Y	N	N	1	0	1
9	Y	N	N	2	0	0
Total Stem Counts				17	9	2

Using the compensation ratios presented in Table 1 and information presented in Table 2, a total of 14 elderberry seedlings [(9 at 1:1 = 9) + (1 at 2:1 = 2) + (1 at 3:1 = 3)] would be required to compensate for removal or destruction of VELB habitat within 6 meters (20 feet) of construction activities. The compensation ratio for associated native plantings is 1:1, for a total of 11 (9+1+1) associated native plantings. These compensation ratios reflect the fact that none of the shrubs located in the potential impact area contains exit holes or occurs in riparian habitat.

Compensation for the removal or destruction of VELB habitat is described below.

Placer County DPW will purchase credits at the Wildland's Sheridan Conservation Bank in Placer County, which is a USFWS-approved mitigation bank. The cost to establish a conservation area for VELB at this bank is estimated to be $1,500 per unit; each unit includes five elderberry seedlings and five associated riparian plantings. At least three mitigation units (14 plantings) would be required to compensate for direct effects on VELB habitat, as computed above. Only whole units can be purchased. The cost to purchase three units is estimated to be $4,500; however, the exact cost will be determined at the time of purchase.

Mitigation Measure 5. Conduct Mandatory Contractor/Worker Awareness Training for Construction Personnel

Before any work occurs in the project area, including grading, a USFWS-approved biologist shall conduct mandatory contractor/worker awareness training for construction personnel. If new construction personnel are added to the project, the contractor shall ensure that the personnel receive the mandatory training before starting work.

VI. Project Area

The project area includes the proposed construction corridor and staging areas and extends an additional 30 meters (100 feet) beyond those areas.

VII. Species Account and Status of the Species in the Project Area

Based on a review of existing information provided by USFWS (Attachment A), biologists developed a list of special-status species identified as having potential to occur in the project area and vicinity. This list comprised 11 wildlife species that are federally listed as endangered, threatened, proposed for listing, or candidate for listing. Biologists also reviewed the 2002 CNDDB for the Auburn, Gold Hill, Greenwood, Colfax, Lake Combie, Wolf, Rocklin, Pilot Hill, and Coloma USGS 7.5-minute quadrangles (Attachment B). The locations of CNDDB-recorded observations within a 16-kilometer (10-mile) radius of the project area are depicted on Figures 4a and 4b. Five federally listed wildlife species (vernal pool fairy shrimp, vernal pool tadpole shrimp, VELB, bank swallow, and bald eagle) are known to occur within 16 kilometers (10 miles) of the project area. No suitable habitat is present in the project area for vernal pool fairy shrimp, vernal pool tadpole shrimp, or bank swallow. Suitable habitat (i.e., blue elderberry shrubs) for VELB is present in the project area, and the bald eagle is an occasional winter visitor but does not breed in the project region. The remaining six species on the USFWS list are not known to occur in the project region, and suitable habitat is not present in the project area.

VELB is the only species discussed in this BA; a species account for VELB is provided below.

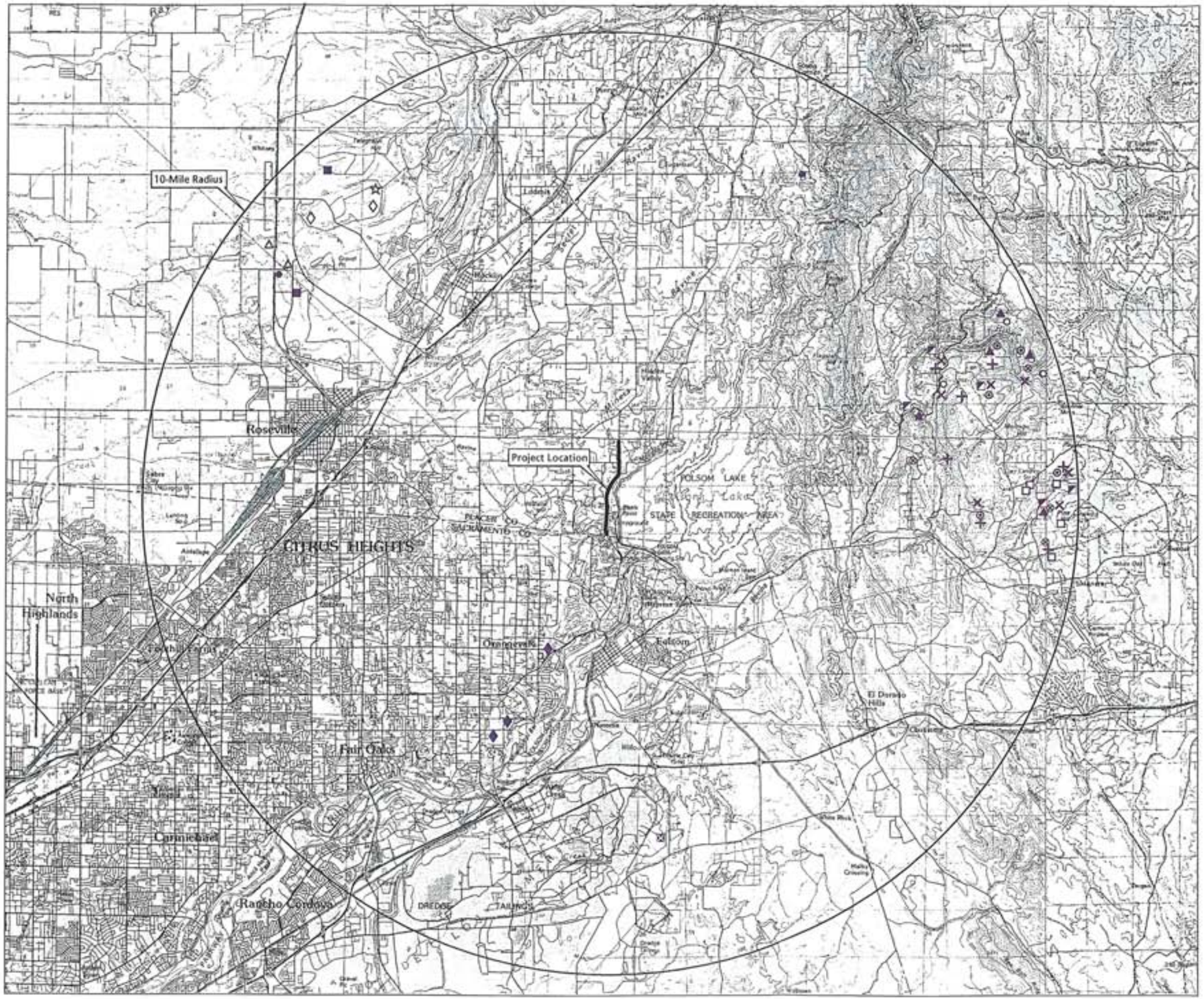


Figure 4a
Records of Special-Status Plant Species within 10 Miles of the Auburn-Folsom Road Widening Project

Legend

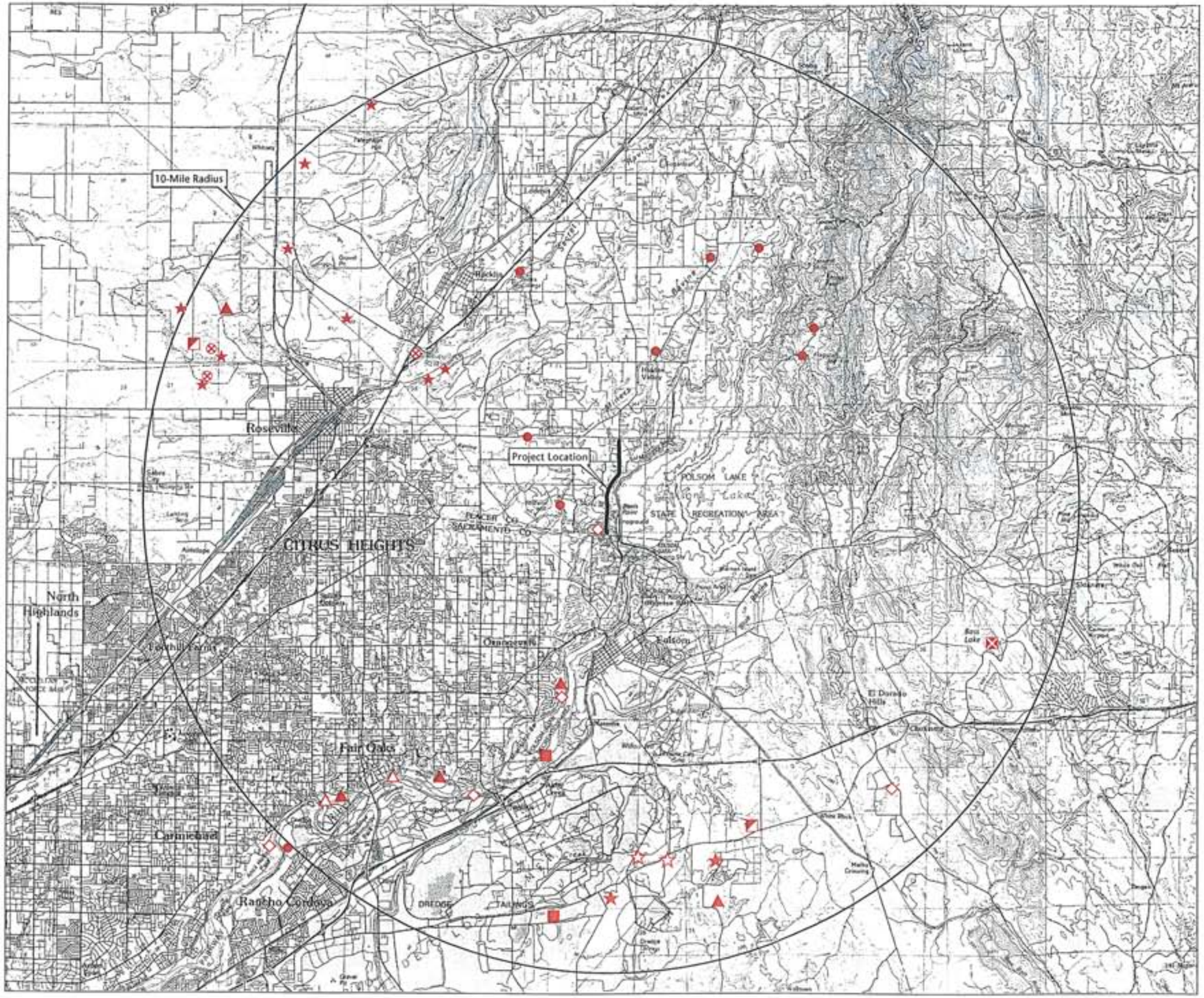
- ● *Balsamorphiza macrolepis* var. *macrolepis*
- ○ *Calystegia stebbinsii*
- ⊗ *Ceanothus roderickii*
- ⊙ *Chlorogalum grandiflorum*
- ★ *Clarkia biloba* ssp. *brandegeae*
- ☆ *Cordylanthus mollis* ssp. *hispidus*
- ■ *Downingia pusilla*
- □ *Fremontodendron decumbens*
- ◩ *Galium californicum* ssp. *sierrae*
- ⊠ *Gratiola heterosepala*
- ▲ *Helianthemum suffrutescens*
- △ *Juncus leiospermus* var. *leiospermus*
- ◇ *Legenere limosa*
- ◆ *Orcuttia viscida*
- + *Senecio layneae*
- × *Wyethia reticulata*

16 – 17°
TN mN

0 1 2 3 4 5
Miles
(original maps reduced to 75% of original size)

Base Map: Portions of USGS 30 x 60-Minute Series 1:100,000-scale Sacramento (1994), and Placerville (PR 1988), California, quadrangles

Jones & Stokes



(original maps reduced to 75% of original size)

Base Map: Portions of USGS 30 x 60-Minute Series 1:100,000-scale Sacramento (1994), and Placerville (PR 1988), California, quadrangles

Figure 4b
Records of Special-Status Wildlife Species within 10 Miles of the Auburn-Folsom Road Widening Project

Legend

- Valley elderberry longhorn beetle
- Vernal pool fairy shrimp
- Vernal pool tadpole shrimp
- Western spadefoot toad
- Western pond turtle
- Bank swallow
- White-tailed kite
- Cooper's hawk
- Swainson's hawk
- Bald eagle

Jones & Stokes

Jones & Stokes wildlife biologist Angela Alcala conducted reconnaissance-level field surveys in the project area on May 22 and July 11, 2002, to assess habitat suitability for sensitive wildlife species. During the surveys, Ms Alcala also mapped the locations of elderberry shrubs found within 30 meters (100 feet) of the project alignment onto construction drawings provided by Placer County (scale: 2.5 centimeters = 25.3 meters [1 inch = 83 feet]). A subsequent field visit was conducted on August 9, 2002, to obtain the precise location of elderberry shrubs using a global positioning system (GPS). These locations were plotted onto the final construction drawings and are shown in Figure 3.

A. Valley Elderberry Longhorn Beetle

Legal Status and Distribution

VELB is federally listed as a threatened species (Federal Register [FR] 45:52803). VELB was first described in 1921 from specimens collected in Sacramento (U.S. Fish and Wildlife Service 1984). By 1984, VELB was known from only three Central Valley drainages: the Merced River, Putah Creek, and the American River. Additional field surveys in the 1980s detected new locations of VELB through collections of adult beetles or observations of emergence (exit) holes in blue elderberry stems. The new locations included the Yuba, American, Cosumnes, Sacramento, Mokelumne, Calaveras, San Joaquin, Middle Fork of the American, Tuolumne, Stanislaus, and Merced River drainages. VELB's range extends throughout the associated foothills of the Central Valley in California, from Kern County in the south (Jones & Stokes Associates 1985, 1986, 1987) to Shasta County in the north.

Life History and Habitat Requirements

VELB is closely associated with blue elderberry, an obligate host for beetle larvae. The blue elderberry is considered a typical riparian shrub (Roberts et al. 1977, Katibah et al. 1984, Warner 1984) in California. It is a hardy shrub that successfully grows in a variety of riparian habitat types. In a study of Sacramento Valley riparian vegetation, Conard et al. (1977) found that blue elderberry grows mainly at an intermediate elevation level in the floodplain in association with box elder (*Acer negundo*) and buttonbush (*Cephalanthus occidentalis*). Where there is a source of water, elderberry shrubs grow in nonriparian habitats. However, most VELB occurrences are known from elderberry shrubs in or adjacent to riparian communities.

VELB's life history is assumed to follow a sequence of events similar to those of related taxa. Female beetles deposit eggs in crevices in the bark of living elderberry plants. Presumably, the eggs hatch shortly after they are laid, and the larvae bore into the pith of the trunk or stem. When larvae are ready to pupate, they move through the pith of the plant, open an emergence hole through the bark, and return to the pith for pupation. Adults exit through the emergence holes and can sometimes be found on elderberry foliage, flowers, or stems or on

adjacent vegetation. The entire life cycle of VELB is thought to encompass 2 years from the time eggs are laid and hatch to the time adults emerge and die (U.S. Fish and Wildlife Service 1984).

The presence of exit holes in elderberry stems indicates previous use by VELB. Exit holes are cylindrical and approximately 0.64 centimeter (0.25 inch) in diameter. Exit holes can be found on stems that are 2.5–20 centimeters (1–8 inches) in diameter. On the stems, holes may be located from a few inches above the ground to about 2.7–3 meters (9–10 feet) above the ground (Barr 1991).

Adult VELB can fly, although they are considered poor fliers. There is no information about the seasonal movements of this beetle. The movements of VELB are not well understood, but they probably follow drainage courses where elderberry shrubs are most common.

Reason for Decline

VELB has probably always been rare and of limited abundance (U.S. Fish and Wildlife Service 1984); information on the species' historic distribution and abundance is scarce. However, the substantial reduction in Central Valley riparian vegetation in the last 150 years suggests that the beetle's range has contracted and the remaining populations are discontinuous (U.S. Fish and Wildlife Service 1984).

Because the information on VELB population and distribution is limited, it is not possible to accurately assess the species' population status. However, based on the extent of habitat loss in the Central Valley, it is likely that populations have declined.

Occurrence in the Project Area

There are no records of VELB occurring in the project area. However, suitable habitat for VELB (i.e., blue elderberry shrubs) was identified in and adjacent to the project area. A total of nine elderberry shrubs were observed within 30 meters 100feet) of the proposed action (Figure 3). All nine shrubs had stems measuring at least 2.5 centimeters (1.0 inch) in diameter at ground level. The number and size of stems present on each shrub are listed above in Table 2.

A review of the CNDDB produced eight records for VELB occurrences within a 16-kilometer (10-mile) radius of the project area (California Natural Diversity Database 2002) (Figure 4b). The closest reported occurrence of VELB is located approximately 1.6 kilometers (1 mile) west of the study area.

VIII. Effects

The information in this section is based on the *Conservation Guidelines for the Valley Elderberry Longhorn Beetle* (U.S. Fish and Wildlife Service 1999) and informal consultation with USFWS.

A. Direct Effects

As defined under ESA, direct effects are caused by the proposed project and occur at the time of the project.

Valley Elderberry Longhorn Beetle

Potential direct effects on VELB in the project area could result from all road-widening activities (including grading, paving, and equipment staging) within 6 meters (20 feet) of the dripline of an elderberry shrub that result in the removal or destruction of the shrub. Direct effects involving the removal or destruction of VELB habitat would be considered to have an adverse effect on VELB potentially occurring in the project area, as defined by USFWS (U.S. Fish and Wildlife Service 1999). All elderberry shrubs directly affected by the proposed project will require compensation by transplanting shrubs and/or planting seedlings in a conservation area.

Implementation of the proposed project would result in direct effects on five elderberry shrubs in the project area. For the purpose of this BA, it is assumed that these shrubs cannot be avoided because of their close proximity to project activities and will therefore require transplanting.

B. Indirect Effects

As defined under ESA, indirect effects are caused by the proposed project and occur later in time and are reasonably certain to occur.

Valley Elderberry Longhorn Beetle

Indirect effects on VELB potentially occurring in the project area include increases in dust accumulation on shrubs from ground-disturbing activities, changes in hydrology around shrubs, and removal of associated woodland species that could result in the subsequent death of the shrub and loss of VELB habitat. A total of four elderberry shrubs occur within 30 meters (100 feet) but farther than 6 meters (20 feet) from proposed road-widening activities and could be indirectly affected by the proposed project.

Ground-disturbing activities occurring within 30 meters (100 feet) of an elderberry shrub could cause an accumulation of dust on elderberry shrubs, altering VELB habitat. Dust control measures will be implemented as part of the proposed project to minimize the effect of dust on VELB habitat.

Implementation of the proposed project would not change the hydrology of the existing habitat because water flows from east to west and the new section of roadway will not act as a barrier to overland flow or change the flow pattern of water runoff.

Associated plant species in this habitat include blue oak, interior live oak, buckeye, poison oak, and coyote bush. Tree and shrub removal activities along Auburn-Folsom Road in the project area will be minimized to the greatest extent possible and will involve only the removal of trees and shrubs necessary to construct the proposed project.

C. Interrelated and Interdependent Effects

Interrelated actions are those that are part of a larger action and depend on the larger action for their justification. Interdependent actions are actions that have no independent utility apart from the action under consideration.

The proposed Auburn-Folsom Road Widening Project is not part of a larger action. However, south of the project limits and within Sacramento County, the City of Folsom has proposed to widen Folsom-Auburn Road from two to four lanes. The City of Folsom and the Federal Highway Administration (FHWA) prepared an Environmental Assessment/Environmental Impact Report (EA/EIR) for the project in March 2002. The EIR was certified by the City of Folsom in July 2002. As of September 2002, FHWA had not yet signed the Finding of No Significant Impact (FONSI). The proposed Auburn-Folsom Road Widening Project would ultimately match the widened roadway to the south. The widening of Auburn-Folsom Road south of the proposed project is considered an independent action because it can proceed with or without the proposed project. Widening one section of the roadway would improve conditions in one area and can proceed without necessitating the widening of the other section.

IX. Cumulative Effects

The *Endangered Species Handbook* (U.S. Fish and Wildlife Service 1998) states that cumulative effects under ESA include all future, nonfederal actions "reasonably certain to occur" in the project area. Future federal actions that are unrelated to the proposed project are not considered in the cumulative effects analysis because these actions would require separate consultation pursuant to Section 7 of ESA.

Other nonfederal projects that would most likely occur in the project area include residential and commercial development. These nonfederal actions are based on

approved land used plans. The majority of present development in the project area occurs along the west side of Auburn-Folsom Road. Additional habitat for VELB is located on the east side of Auburn-Folsom Road in and adjacent to the project area. This habitat occurs within a state recreation area and is protected from future residential and urban development.

X. Analysis of Alternate Actions

The proposed project, as described above, was designed from an initial evaluation of three alternative designs, which were studied by the project design team under the direction of the County and evaluated in equal detail. A brief description of the three initial alternatives that were evaluated is provided below.

A. Alternative 1: Widen Roadway to the West

Alternative 1 proposes to widen Auburn-Folsom Road to the west. The existing southbound and northbound travel lanes would become northbound lanes under this alternative. A median/two-way left-turn lane and two southbound lanes would be added to the west. Both the horizontal and vertical elements of the curve north of Lou Place would be redesigned to achieve a design speed of 55 mph. The volume of material to be excavated under Alternative 1 is 65,200 cubic meters (85,278 cubic yards). Approximately 2.06 hectares (5.10 acres) of land would need to be acquired from portions of 35 parcels, with an estimated 6.5% of the needed area coming from Reclamation land. The total estimated project cost of this alternative is $9,950,000.

B. Alternative 2: Widen Roadway to the East

Alternative 2 proposes to widen Auburn-Folsom Road to the east. The existing southbound and northbound travel lanes would become southbound lanes under this alternative. A median/two-way left-turn lane and two northbound lanes would be added to the east. Both the horizontal and vertical elements of the curve north of Lou Place would be redesigned to achieve a design speed of 55 mph. The volume of material to be excavated under Alternative 2 is 83,300 cubic meters (108,952 cubic yards). Approximately 2.21 hectares (5.45 acres) of land would need to be acquired from portions of 9 parcels, with an estimated 57% of the needed area coming from Reclamation land. The total estimated project cost of this alternative is $10,775,000.

C. Alternative 3: Widen Roadway Equally on Both Sides

Alternative 3 proposes to widen Auburn-Folsom Road equally on both sides. The existing southbound and northbound travel lanes would become the median and center lanes under this alternative. Structural roadway sections would be added to both sides of the existing pavement. Both the horizontal and vertical elements of the curve north of Lou Place would be redesigned to achieve a design speed of 55 mph. The volume of material to be excavated under Alternative 3 is 72,100 cubic meters (94,303 cubic yards). Approximately 1.15 hectares (2.83 acres) of land would need to be acquired from portions of 21 parcels, with an estimated 19% of the needed area coming from Reclamation land. The total estimated project cost of this alternative is $9,819,000.

D. No-Build Alternative

Under the No-Build Alternative, Placer County would not widen Auburn-Folsom Road in the project area. Drivers would continue to experience delays and operational problems in the area and, as traffic volumes increase, the traffic level of service would degrade further.

XI. Conclusion and Determination

This BA represents Reclamation's biological assessment of the effects of the proposed project on the threatened VELB (*Desmocerus californicus dimorphus*), in accordance with Section 7 of ESA of 1973, as amended. A BA may conclude that the proposed project would:

- have *no effect*—the effects of the project would not affect any listed species or its critical habitat;
- *may affect, not likely to adversely affect*—the effects of the project on a species or its critical habitat are likely to be insignificant, discountable, or wholly beneficial; informal consultation is required; or
- *may affect, likely to adversely affect*—the project is likely to directly or indirectly have an adverse effect on a listed species or its critical habitat; formal consultation is required.

Based on the information presented in this BA, including the description of the proposed project, nine elderberry shrubs that potentially provide habitat for VELB could be directly affected (transplanted or destroyed) or indirectly effected (dust accumulation) by construction activities that occur within 30 meters (100 feet) of a shrub. Because removal of any elderberry shrub is considered "Take" of VELB habitat (as defined under the federal ESA), the proposed action "may affect, and is likely to adversely affect" the valley elderberry longhorn beetle.

Because the proposed action is only removing five elderberry shrubs and there is a high abundance of elderberry shrubs in the project vicinity (Folsom Lake SRA), the proposed action would not jeopardize the local population of VELB.

Mitigation measures have been identified above to minimize direct and indirect effects on elderberry shrubs to the greatest extent possible.

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Douglas, Jason. Biologist. U.S. Fish and Wildlife Service, Sacramento Endangered Species Field Office, Sacramento, CA. September 18, 2002—telephone conversation.

XIII. List of Contacts/Contributors/Preparers

Angela Alcala. Wildlife Biologist. B.S., wildlife, fisheries, and conservation biology, 1999. University of California, Davis, California. Three years of experience in conducting wildlife surveys and habitat assessments and preparing documentation and analysis of biological resources and impacts.

Attachment A

U.S. Fish and Wildlife Service Sensitive Species List

United States Department of the Interior

FISH AND WILDLIFE SERVICE

Sacramento Fish and Wildlife Office
2800 Cottage Way, Room W2605
Sacramento, California 95825

IN REPLY REFER TO:
1-1-02-SP-2881

August 15, 2002

Ms. Angela Alcala
Wildlife Biologist
Jones and Stokes
2600 V Street
Sacramento, California 95818-1914

Subject: Species List for Auburn-Folsom Road Widening. Douglas Boulevard South to Placer County Boundary. Two Lanes to Four, Placer County, California

Dear Ms. Alcala:

We are sending the enclosed list in response to your August 6, 2002, request for information about endangered and threatened species (Enclosure A). The list covers the following U.S. Geological Survey 7½ minute quad of Folsom.

Please read *Important Information About Your Species List* (enclosed). It explains how we made the list and describes your responsibilities under the Endangered Species Act. Please contact Justin Ly at (916) 414-6645, if you have any questions about the attached list or your responsibilities under the Endangered Species Act. For the fastest response to species list requests, address them to the attention of Species Lists at this address. You may fax requests to 414-6712 or 414-6713. You may also email them to harry_mossman@fws.gov.

Sincerely,

for Jan C. Knight
Chief, Endangered Species Division

Enclosures

GUIDELINES FOR CONDUCTING AND REPORTING BOTANICAL INVENTORIES FOR FEDERALLY LISTED, PROPOSED AND CANDIDATE PLANTS

(September 23, 1996)

These guidelines describe protocols for conducting botanical inventories for federally listed, proposed and candidate plants, and describe minimum standards for reporting results. The Service will use, in part, the information outlined below in determining whether the project under consideration may affect any listed, proposed or candidate plants, and in determining the direct, indirect, and cumulative effects.

Field inventories should be conducted in a manner that will locate listed, proposed, or candidate species (target species) that may be present. The entire project area requires a botanical inventory, except developed agricultural lands. The field investigator(s) should:

1. Conduct inventories at the appropriate times of year when target species are present and identifiable. Inventories will include all potential habitats. Multiple site visits during a field season may be necessary to make observations during the appropriate phenological stage of all target species.

2. If available, use a regional or local reference population to obtain a visual image of the target species and associated habitat(s). If access to reference populations is not available, investigators should study specimens from local herbaria.

3. List every species observed and compile a comprehensive list of vascular plants for the entire project site. Vascular plants need to be identified to a taxonomic level which allows rarity to be determined.

4. Report results of botanical field inventories that include:

   a. a description of the biological setting, including plant community, topography, soils, potential habitat of target species, and an evaluation of environmental conditions, such as timing or quantity of rainfall, which may influence the performance and expression of target species

   b. a map of project location showing scale, orientation, project boundaries, parcel size, and map quadrangle name

   c. survey dates and survey methodology(ies)

   d. if a reference population is available, provide a written narrative describing the target species reference population(s) used, and date(s) when observations were made

   e. a comprehensive list of all vascular plants occurring on the project site for each habitat type

   f. current and historic land uses of the habitat(s) and degree of site alteration

   g. presence of target species off-site on adjacent parcels, if known

h. an assessment of the biological significance or ecological quality of the project site in a local and regional context

5. If target species is(are) found, report results that additionally include:

   a. a map showing federally listed, proposed and candidate species distribution as they relate to the proposed project

   b. if target species is (are) associated with wetlands, a description of the direction and integrity of flow of surface hydrology. If target species is (are) affected by adjacent off-site hydrological influences, describe these factors.

   c. the target species phenology and microhabitat, an estimate of the number of individuals of each target species per unit area; identify areas of high, medium and low density of target species over the project site, and provide acres of occupied habitat of target species. Investigators could provide color slides, photos or color copies of photos of target species or representative habitats to support information or descriptions contained in reports.

   d. the degree of impact(s), if any, of the proposed project as it relates to the potential unoccupied habitat of target habitat.

6. Document findings of target species by completing California Native Species Field Survey Form(s) and submit form(s) to the Natural Diversity Data Base. Documentation of determinations and/or voucher specimens may be useful in cases of taxonomic ambiguities, habitat or range extensions.

7. Report as an addendum to the original survey, any change in abundance and distribution of target plants in subsequent years. Project sites with inventories older than three years from the current date of project proposal submission will likely need additional survey. Investigators need to assess whether an additional survey(s) is (are) needed.

8. Adverse conditions may prevent investigator(s) from determining presence or identifying some target species in potential habitat(s) of target species. Disease, drought, predation, or herbivory may preclude the presence or identification of target species in any year. An additional botanical inventory(ies) in a subsequent year(s) may be required if adverse conditions occur in a potential habitat(s). Investigator(s) may need to discuss such conditions.

9. Guidance from California Department of Fish and Game (CDFG) regarding plant and plant community surveys can be found in Guidelines for Assessing the Effects of Proposed Developments on Rare and Endangered Plants and Plant Communities, 1984. Please contact the CDFG Regional Office for questions regarding the CDFG guidelines and for assistance in determining any applicable State regulatory requirements.

ENCLOSURE A

Endangered and Threatened Species that May Occur in
or be Affected by Projects in the Selected Quads Listed Below
Reference File No. 1-1-02-SP-2881

Auburn-Folsom Road Widening

August 13, 2002

QUAD: 511B FOLSOM

Listed Species

Birds

bald eagle, *Haliaeetus leucocephalus* (T)

Reptiles

giant garter snake, *Thamnophis gigas* (T)

Amphibians

California tiger salamander, *Ambystoma californiense* (C/E)

California red-legged frog, *Rana aurora draytonii* (T)

Fish

delta smelt, *Hypomesus transpacificus* (T)

Central Valley steelhead, *Oncorhynchus mykiss* (T) NMFS

winter-run chinook salmon, *Oncorhynchus tshawytscha* (E) NMFS

Central Valley spring-run chinook salmon, *Oncorhynchus tshawytscha* (T) NMFS

Critical Habitat, Central Valley spring-run chinook, *Oncorhynchus tshawytscha* (T) NMFS

Sacramento splittail, *Pogonichthys macrolepidotus* (T)

Invertebrates

vernal pool fairy shrimp, *Branchinecta lynchi* (T)

valley elderberry longhorn beetle, *Desmocerus californicus dimorphus* (T)

vernal pool tadpole shrimp, *Lepidurus packardi* (E)

Plants

Sacramento Orcutt grass, *Orcuttia viscida* (E)

Proposed Species

Birds

mountain plover, *Charadrius montanus* (PT)

Candidate Species

Fish

Central Valley fall/late fall-run chinook salmon, *Oncorhynchus tshawytscha* (C) NMFS

Critical habitat, Central Valley fall/late fall-run chinook, *Oncorhynchus tshawytscha* (C) NMFS

Species of Concern

Mammals

Pacific western big-eared bat, *Corynorhinus (=Plecotus) townsendii townsendii* (SC)

spotted bat, *Euderma maculatum* (SC)

greater western mastiff-bat, *Eumops perotis californicus* (SC)

small-footed myotis bat, *Myotis ciliolabrum* (SC)

long-eared myotis bat, *Myotis evotis* (SC)

fringed myotis bat, *Myotis thysanodes* (SC)

long-legged myotis bat, *Myotis volans* (SC)

Yuma myotis bat, *Myotis yumanensis* (SC)

San Joaquin pocket mouse, *Perognathus inornatus* (SC)

Birds

tricolored blackbird, *Agelaius tricolor* (SC)

grasshopper sparrow, *Ammodramus savannarum* (SC)

short-eared owl, *Asio flammeus* (SC)

western burrowing owl, *Athene cunicularia hypugaea* (SC)

oak titmouse, *Baeolophus inornatus* (SLC)

Aleutian Canada goose, *Branta canadensis leucopareia* (D)

Swainson's hawk, *Buteo Swainsoni* (CA)

ferruginous hawk, *Buteo regalis* (SC)

Lawrence's goldfinch, *Carduelis lawrencei* (SC)

Vaux's swift, *Chaetura vauxi* (SC)

black tern, *Chlidonias niger* (SC)

black swift, *Cypseloides niger* (SC)

white-tailed (=black shouldered) kite, *Elanus leucurus* (SC)

little willow flycatcher, *Empidonax traillii brewsteri* (CA)

American peregrine falcon, *Falco peregrinus anatum* (D)

loggerhead shrike, *Lanius ludovicianus* (SC)

Lewis' woodpecker, *Melanerpes lewis* (SC)

long-billed curlew, *Numenius americanus* (SC)

Nuttall's woodpecker, *Picoides nuttallii* (SLC)

white-faced ibis, *Plegadis chihi* (SC)

bank swallow, *Riparia riparia* (CA)

rufous hummingbird, *Selasphorus rufus* (SC)

Brewer's sparrow, *Spizella breweri* (SC)

California thrasher, *Toxostoma redivivum* (SC)

Reptiles

northwestern pond turtle, *Clemmys marmorata marmorata* (SC)

California horned lizard, *Phrynosoma coronatum frontale* (SC)

Amphibians

western spadefoot toad, *Spea hammondii* (SC)

Fish

green sturgeon, *Acipenser medirostris* (SC)

longfin smelt, *Spirinchus thaleichthys* (SC)

Invertebrates

Midvalley fairy shrimp, *Branchinecta mesovallensis* (SC)

California linderiella fairy shrimp, *Linderiella occidentalis* (SC)

Plants

pincushion navarretia, *Naverretia myersii spp. myersii* (SC)

KEY:

(E)	*Endangered*	Listed (in the Federal Register) as being in danger of extinction.
(T)	*Threatened*	Listed as likely to become endangered within the foreseeable future.
(P)	*Proposed*	Officially proposed (in the Federal Register) for listing as endangered or threatened.
(PX)	*Proposed Critical Habitat*	Proposed as an area essential to the conservation of the species.
(C)	*Candidate*	Candidate to become a *proposed* species.
(SC)	*Species of Concern*	May be endangered or threatened. Not enough biological information has been gathered to support listing at this time.
(SLC)	*Species of Local Concern*	Species of local or regional concern or conservation significance.
(MB)	*Migratory Bird*	Migratory bird
NMFS	NMFS species	Under the jurisdiction of the National Marine Fisheries Service. Contact them directly.
(D)	*Delisted*	Delisted. Status to be monitored for 5 years.
(CA)	*State-Listed*	Listed as threatened or endangered by the State of California.
(*)	*Extirpated*	Possibly extirpated from this quad.
(**)	*Extinct*	Possibly extinct.
	Critical Habitat	Area essential to the conservation of a species.

ENCLOSURE A

Endangered and Threatened Species that May Occur in or be Affected by
Projects in the Area of the Following California Counties
Reference File No. 1-1-02-SP-28812881

Auburn-Folsom Road Widening

August 13, 2002

PLACER COUNTY

Listed Species

Birds

bald eagle, *Haliaeetus leucocephalus* (T)

Reptiles

giant garter snake, *Thamnophis gigas* (T)

Amphibians

California red-legged frog, *Rana aurora draytonii* (T)

California tiger salamander, *Ambystoma californiense* (C/E)

Fish

Central Valley spring-run chinook salmon, *Oncorhynchus tshawytscha* (T) NMFS

Central Valley steelhead, *Oncorhynchus mykiss* (T) NMFS

Critical Habitat, Central Valley spring-run chinook, *Oncorhynchus tshawytscha* (T) NMFS

Critical habitat, Central Valley steelhead, *Oncorhynchus mykiss* (T) NMFS

Lahontan cutthroat trout, *Oncorhynchus (=Salmo) clarki henshawi* (T)

Sacramento splittail, *Pogonichthys macrolepidotus* (T)

delta smelt, *Hypomesus transpacificus* (T) *

winter-run chinook salmon, *Oncorhynchus tshawytscha* (E) NMFS

Invertebrates

valley elderberry longhorn beetle, *Desmocerus californicus dimorphus* (T)

vernal pool fairy shrimp, *Branchinecta lynchi* (T)

vernal pool tadpole shrimp, *Lepidurus packardi* (E)

Plants

Truckee barberry, *Berberis sonnei* (E)

Proposed Species

Birds

mountain plover, *Charadrius montanus* (PT)

Candidate Species

Birds

Western yellow-billed cuckoo, *Coccyzus americanus occidentalis* (C) *

Plants

Tahoe yellow-cress, *Rorippa subumbellata* (C)

slender Moonwort (= narrowleaf grapefern), *Botrychium lineare* (C) *

Species of Concern

Mammals

American (=pine) marten, *Martes americana* (SC)

California wolverine, *Gulo gulo luteus* (CA)

Pacific fisher, *Martes pennanti pacifica* (SC)

Pacific western big-eared bat, *Corynorhinus (=Plecotus) townsendii townsendii* (SC)

San Joaquin pocket mouse, *Perognathus inornatus* (SC)

Sierra Nevada red fox, *Vulpes vulpes necator* (CA)

Sierra Nevada snowshoe hare, *Lepus americanus tahoensis* (SC)

Yuma myotis bat, *Myotis yumanensis* (SC)

fringed myotis bat, *Myotis thysanodes* (SC)

greater western mastiff-bat, *Eumops perotis californicus* (SC)

long-eared myotis bat, *Myotis evotis* (SC)

long-legged myotis bat, *Myotis volans* (SC)

pale Townsend's big-eared bat, *Corynorhinus (=Plecotus) townsendii pallescens* (SC)

small-footed myotis bat, *Myotis ciliolabrum* (SC)

spotted bat, *Euderma maculatum* (SC)

Birds

Aleutian Canada goose, *Branta canadensis leucopareia* (D)

American bittern, *Botaurus lentiginosus* (SC)

American dipper, *Cinclus mexicanus* (SLC)

American peregrine falcon, *Falco peregrinus anatum* (D)

Brewer's sparrow, *Spizella breweri* (SC)

California spotted owl, *Strix occidentalis occidentalis* (SC)

California thrasher, *Toxostoma redivivum* (SC)

Harlequin duck, *Histrionicus histrionicus* (SC)

Lawrence's goldfinch, *Carduelis lawrencei* (SC)

Lewis' woodpecker, *Melanerpes lewis* (SC)

Nuttall's woodpecker, *Picoides nuttallii* (SLC)

Swainson's hawk, *Buteo Swainsoni* (CA)

Vaux's swift, *Chaetura vauxi* (SC)

bank swallow, *Riparia riparia* (CA)

black swift, *Cypseloides niger* (SC)

common loon, *Gavia immer* (SC)

ferruginous hawk, *Buteo regalis* (SC)
grasshopper sparrow, *Ammodramus savannarum* (SC)
hermit warbler, *Dendroica occidentalis* (SC)
little willow flycatcher, *Empidonax traillii brewsteri* (CA)
long-billed curlew, *Numenius americanus* (SC)
northern goshawk, *Accipiter gentilis* (SC)
oak titmouse, *Baeolophus inornatus* (SLC)
olive-sided flycatcher, *Contopus cooperi* (SC)
rufous hummingbird, *Selasphorus rufus* (SC)
short-eared owl, *Asio flammeus* (SC)
tricolored blackbird, *Agelaius tricolor* (SC)
western burrowing owl, *Athene cunicularia hypugaea* (SC)
white-faced ibis, *Plegadis chihi* (SC)
white-headed woodpecker, *Picoides albolarvatus* (SLC)

Reptiles

California horned lizard, *Phrynosoma coronatum frontale* (SC)
northwestern pond turtle, *Clemmys marmorata marmorata* (SC)
southwestern pond turtle, *Clemmys marmorata pallida* (SC)

Amphibians

Mount Lyell salamander, *Hydromantes platycephalus* (SC)
foothill yellow-legged frog, *Rana boylii* (SC)
mountain yellow-legged frog, *Rana muscosa* (SC)
western spadefoot toad, *Spea hammondii* (SC)

Fish

Pacific lamprey, *Lampetra tridentata* (SC)
green sturgeon, *Acipenser medirostris* (SC)
river lamprey, *Lampetra ayresi* (SC)

Invertebrates

California linderiella fairy shrimp, *Linderiella occidentalis* (SC)
Lake Tahoe benthic stonefly, *Capnia lacustra* (SC)
Sagehen Creek goracean caddisfly, *Goeracea oregona* (SC)
Shirttail Creek stonefly, *Megaleuctra sierra* (SC)
South Forks ground beetle, *Nebria darlingtoni* (SC)
spiny rhyacophilan caddisfly, *Rhyacophila spinata* (SC)

Plants

Ahart's (dwarf) rush, *Juncus leiospermus var. ahartii* (SC)
Boggs Lake hedge-hyssop, *Gratiola heterosepala* (CA)

Brandegee's clarkia, *Clarkia biloba ssp brandegeae* (SLC)
Butte fritillary, *Fritillaria eastwoodiae* (SC)
Carson Range rock cress, *Arabis rigidissima var. demota* (SC)
Donner Pass buckwheat, *Eriogonum umbellatum var. torreyanum* (SC)
Plumas ivesia, *Ivesia sericoleuca* (SC)
Red Hills soaproot, *Chlorogalum grandiflorum* (SC)
Stebbins' phacelia, *Phacelia stebbinsii* (SC)
big-scale (=California) balsamroot, *Balsamorhiza macrolepis var macrolepis* (SLC)
common moonwort, *Botrychium lunaria* (SC)
felt-leaved (=woolly) violet, *Viola tomentosa* (SLC)
hispid bird's-beak, *Cordylanthus mollis ssp. hispidus* (SC)
legenere, *Legenere limosa* (SC)
long-petaled lewisia, *Lewisia longipetala* (SC)
saw-toothed lewisia, *Lewisia serrata* (SC)
stinkbells, *Fritillaria agrestis* (SLC)

KEY:

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(T)	*Threatened*	Listed as likely to become endangered within the foreseeable future.
(P)	*Proposed*	Officially proposed (in the Federal Register) for listing as endangered or threatened.
(PX)	*Proposed Critical Habitat*	Proposed as an area essential to the conservation of the species.
(C)	*Candidate*	Candidate to become a *proposed* species.
(SC)	*Species of Concern*	Other species of concern to the Service.
(SLC)	*Species of Local Concern*	Species of local or regional concern or conservation significance.
(D)	*Delisted*	Delisted. Status to be monitored for 5 years.
(CA)	*State-Listed*	Listed as threatened or endangered by the State of California.
NMFS	NMFS species	Under jurisdiction of the National Marine Fisheries Service. Contact them directly.
*	*Extirpated*	Possibly extirpated from the area.
**	*Extinct*	Possibly extinct
	Critical Habitat	Area essential to the conservation of a species.

Attachment B

California Natural Diversity Database Search Results

Search of the Folsom and 8 Surrounding 7.5 Minute Quadrangles

Common/Scientific Name	Federal/ State Status	Global/ State Rank	CNPS/ R-E-D	CDFG Status
AHART'S DWARF RUSH *JUNCUS LEIOSPERMUS VAR AHARTII*	None/ None	G2T1/ S1.2	1B/ 3-2-3	
ALKALI MEADOW	None/ None	G3/ S2.1		
ALKALI SEEP	None/ None	G3/ S2.1		
BALD EAGLE *HALIAEETUS LEUCOCEPHALUS*	Threatened/ Endangered	G4/ S2		
BANK SWALLOW *RIPARIA RIPARIA*	None/ Threatened	G5/ S2S3		
BIG-SCALE BALSAMROOT *BALSAMORHIZA MACROLEPIS VAR MACROLEPIS*	None/ None	G3T2/ S2.2	1B/ 2-2-3	
BISBEE PEAK RUSH-ROSE *HELIANTHEMUM SUFFRUTESCENS*	None/ None	G2Q/ S2.2	3/ 2-2-3	
BOGGS LAKE HEDGE-HYSSOP *GRATIOLA HETEROSEPALA*	None/ Endangered	G3/ S3.1	1B/ 1-2-2	
BRANDEGEE'S CLARKIA *CLARKIA BILOBA SSP BRANDEGEAE*	None/ None	G4T2/ S2.2	1B/ 2-2-3	
BURROWING OWL *ATHENE CUNICULARIA*	None/ None	G4/ S2		SC
CALIFORNIA LINDERIELLA *LINDERIELLA OCCIDENTALIS*	None/ None	G2G3/ S2S3		
COOPER'S HAWK *ACCIPITER COOPERII*	None/ None	G5/ S3		SC
DWARF DOWNINGIA *DOWNINGIA PUSILLA*	None/ None	G3/ S3.1	2/ 1-2-1	

Search of the Folsom and 8 Surrounding 7.5 Minute Quadrangles

Common/Scientific Name	Federal/ State Status	Global/ State Rank	CNPS/ R-E-D	CDFG Status
EL DORADO BEDSTRAW *GALIUM CALIFORNICUM SSP SIERRAE*	Endangered/ Rare	G5T1/ S1.2	1B/ 3-2-3	
EL DORADO COUNTY MULE EARS *WYETHIA RETICULATA*	None/ None	G2/ S2.2	1B/ 2-2-3	
GIANT GARTER SNAKE *THAMNOPHIS GIGAS*	Threatened/ Threatened	G2G3/ S2S3		
GREAT BLUE HERON *ARDEA HERODIAS*	None/ None	G5/ S4		
GREAT EGRET *ARDEA ALBA*	None/ None	G5/ S4		
HISPID BIRD'S-BEAK *CORDYLANTHUS MOLLIS SSP HISPIDUS*	None/ None	G2T2/ S2.1	1B/ 2-3-3	
LAYNE'S RAGWORT *SENECIO LAYNEAE*	Threatened/ Rare	G2/ S2.1	1B/ 2-2-3	
LEGENERE *LEGENERE LIMOSA*	None/ None	G2/ S2.2	1B/ 2-3-3	
MIDVALLEY FAIRY SHRIMP *BRANCHINECTA MESOVALLENSIS*	None/ None	G2/ S2		
NORTHERN HARDPAN VERNAL POOL	None/ None	G3/ S3.1		
NORTHERN VOLCANIC MUD FLOW VERNAL POOL	None/ None	G1/ S1.1		
NORTHWESTERN POND TURTLE *CLEMMYS MARMORATA MARMORATA*	None/ None	G4T4/ S3		SC
PINCUSHION NAVARRETIA *NAVARRETIA MYERSII SSP MYERSII*	None/ None	G1T1/ S1.1	1B/ 3-3-3	
PINE HILL CEANOTHUS *CEANOTHUS RODERICKII*	Endangered/ Rare	G2/ S2.1	1B/ 3-2-3	

Search of the Folsom and 8 Surrounding 7.5 Minute Quadrangles

Common/Scientific Name	Federal/ State Status	Global/ State Rank	CNPS/ R-E-D	CDFG Status
PINE HILL FLANNELBUSH *FREMONTODENDRON DECUMBENS*	Endangered/ Rare	G1/ S1.2	1B/ 3-2-3	
RED BLUFF DWARF RUSH *JUNCUS LEIOSPERMUS VAR LEIOSPERMUS*	None/ None	G2T2/ S2.2	1B/ 2-3-3	
RED HILLS SOAPROOT *CHLOROGALUM GRANDIFLORUM*	None/ None	G2/ S2.2	1B/ 2-2-3	
SACRAMENTO ORCUTT GRASS *ORCUTTIA VISCIDA*	Endangered/ Endangered	G1/ S1.1	1B/ 3-3-3	
SANFORD'S ARROWHEAD *SAGITTARIA SANFORDII*	None/ None	G3/ S3.2	1B/ 2-2-3	
SLENDER ORCUTT GRASS *ORCUTTIA TENUIS*	Threatened/ Endangered	G3/ S3.1	1B/ 2-3-3	
STEBBINS'S MORNING-GLORY *CALYSTEGIA STEBBINSII*	Endangered/ Endangered	G1/ S1.1	1B/ 3-3-3	
SWAINSON'S HAWK *BUTEO SWAINSONI*	None/ Threatened	G4/ S2		
TRICOLORED BLACKBIRD *AGELAIUS TRICOLOR*	None/ None	G3/ S3		SC
VALLEY ELDERBERRY LONGHORN BEETLE *DESMOCERUS CALIFORNICUS DIMORPHUS*	Threatened/ None	G3T2/ S2		
VALLEY NEEDLEGRASS GRASSLAND	None/ None	G1/ S3.1		
VERNAL POOL FAIRY SHRIMP *BRANCHINECTA LYNCHI*	Threatened/ None	G2G3/ S2S3		
VERNAL POOL TADPOLE SHRIMP *LEPIDURUS PACKARDI*	Endangered/ None	G2G3/ S2S3		

Search of the Folsom and 8 Surrounding 7.5 Minute Quadrangles

Common/Scientific Name	Federal/ State Status	Global/ State Rank	CNPS/ R-E-D	CDFG Status
WESTERN SPADEFOOT *SCAPHIOPUS HAMMONDII*	None/ None	G3?/ S3?		SC
WHITE-TAILED KITE *ELANUS LEUCURUS*	None/ None	G5/ S3		

Appendix K

Linda Creek Hydraulic Study (Bound Separately)

The following hydraulic study is supported by modeling data that are bound separately because of their technical content. These data are available on a limited basis at the Placer County offices in Auburn and at the U.S. Department of the Interior, Bureau of Reclamation.

Linda Creek Hydraulic Study

Introduction

This study provides information and recommendations for the Auburn-Folsom Road crossing of Linda Creek, near Eureka Road in Placer County (County). This report is a preliminary, planning-level study to be used only for development and evaluation of the proposed Auburn-Folsom Road Widening Project alternatives under the California Environmental Quality Act. This report does not satisfy the civil design standards required by the County or the Placer County Flood Control and Water Conservation District (District) to construct the necessary project features.

Sources of Information

This study is based on information from the following references:

- the preliminary project plans (Placer County Department of Public Works, Transportation Division 2002);
- the Dry Creek Watershed Flood Control Plan (Flood Control Plan) (Placer County Flood Control and Water Conservation District and Sacramento County Water Agency 1992); and
- the Hydraulic Engineering Center's (HEC) River Analysis System (RAS) project files, developed by the U.S. Army Corps of Engineers (Corps) for the Dry Creek watershed and provided by the District.

Linda Creek

Linda Creek is a major tributary of Dry Creek. Dry Creek and its tributaries were studied extensively in the early 1990s, after extensive flooding affected the region in the 1986 floods. The District and the Sacramento County Water Agency retained James M. Montgomery Engineers to develop a flood control plan for the Dry Creek watershed, including Linda Creek.

The proposed project would cross Linda Creek approximately 200 feet south of the intersection of Eureka Road and Auburn-Folsom Road (station 28+00)

(Figure 1 [to come]). The existing crossing was studied in the Flood Control Plan. Aerial photographs from 1989 were used to develop watershed models for the Flood Control Plan. The land use estimates for future watershed conditions were based on full buildout of uses identified in the then current general and specific plans. Based on the topography, soils, culvert sizes, channel configuration, and land use information from the air photos and plans, existing and future floodflows for the Linda Creek crossing were calculated (Table 1).

Table 1. Floodflows for Existing and Future Conditions on Linda Creek at Auburn-Folsom Road

	Floodflows (cubic feet per second)					
	2-Year Flood	10-Year Flood	25-Year Flood	100-Year Flood	200-Year Flood	500-Year Flood
Existing conditions (1989)	79	193	255	349	398	455
Future (buildout) conditions	125	291	377	510	582	666

Source: Placer County Flood Control and Water Conservation District and Sacramento County Water Agency 1992.

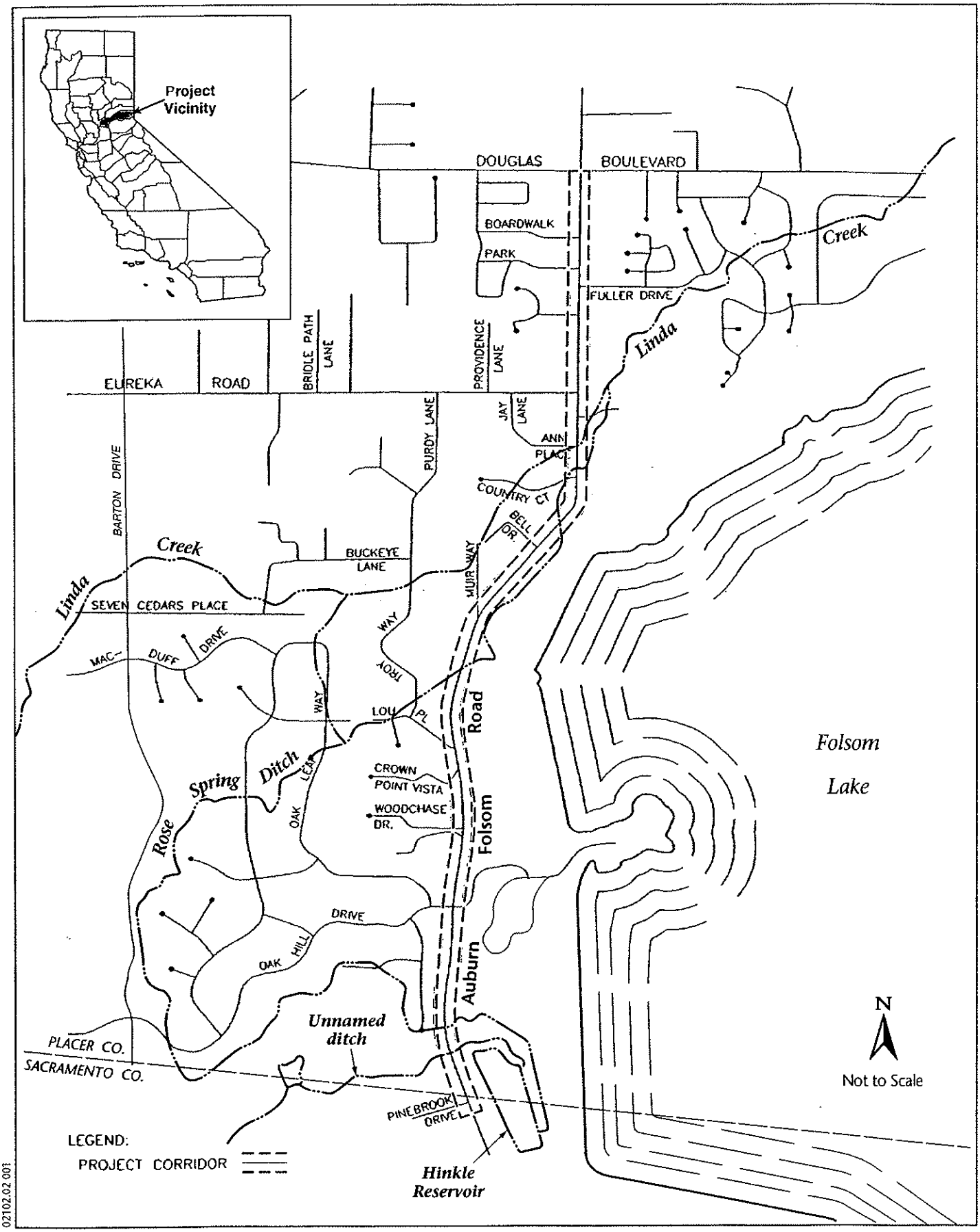
According to the Flood Control Plan and field verification, the existing Linda Creek crossing consists of a 72-foot-long, 4.3- by 6-foot corrugated metal arch culvert with approximately 0.28% slope. The culvert has a capacity of approximately 180 cubic feet per second (cfs). Consequently, during flood events exceeding the 10-year flood, Linda Creek overtops Auburn-Folsom Road.

Based on severe flooding in 1995, the District revised its hydrology model to better match observed flood levels by decreasing the time of concentration (i.e., the overland travel time for water to reach a defined channel), which results in more rapid runoff. The District's assumptions about 100-year floodflows on Linda Creek at Auburn-Folsom Road were increased to 400 cfs for existing conditions and 520 cfs for future conditions.

Existing Conditions

Auburn-Folsom Road crosses Linda Creek just south of the Eureka Road intersection. Because the crossing is located in a topographic low, when the road is overtopped by floodflows, the excess water essentially flows over the road at the same location as the culvert.

Based on a site visit, there is some evidence of erosion where water has flowed over the road, most recently in 1995 or possibly 1997. This erosion appears limited to materials with angular gravels. Because the native soil materials are sandy loams derived from the underlying decomposed granite, the materials with angular gravels are probably fills that were placed when the road was initially constructed. Along the Linda Creek channel in the vicinity of the crossing, the channel is down cut to the more resistant granitic bedrock. Based on the



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Jones & Stokes

Figure 1
Water Resources in the Project Area

confining nature of the underlying granitic materials, there is not a substantial bank stability issue.

Immediately downstream of the crossing, Linda Creek is directed sharply to the north and then almost immediately to the south by large boulder clusters. These changes of direction and confinement by the boulders significantly constrain the channel and likely control the water surface at the outlet of the culvert during high flows.

Assumptions

The following assumptions were made in preparing this study.

- It was assumed that the HEC-RAS input provided by the District was prepared under standard professional practices and that the input data and model results reflect the conditions found at the project site.
- It was assumed that the roadway alignment alternatives for the proposed project would not result in an increase in the flows provided in the HEC-RAS input files. It is not anticipated that, during flood events, there would be substantially more runoff from the new road surface than from the existing ground surface because
    - the soils in the project area that drain to Linda Creek are relatively shallow,
    - the underlying granitic bedrock is largely impermeable, and
    - the alignment alternatives would follow the existing topography.
- It was assumed that the following County and District flood and erosion control requirements would provide the basis for developing project features. These requirements are established in County general plan policies and District policies as follows:
    - **General Plan Policy 4.F. 1.** The County shall require that arterial roadways and expressways, residences, commercial and industrial uses and emergency facilities be protected, at a minimum, from a 100-year storm event.
    - **General Plan Policy 4.F. 14.** The County shall ensure that new storm drainage systems are designed in conformance with the Placer County Flood Control and Water Conservation District's Stormwater Management Manual and the County's Land Development Manual.
    - **District Policy 2.** The 100-year flood shall be the criterion for measures intended to minimize property damage, injury, and loss of life.

- **District Policy 3a.** Improvements of any kind shall not transfer a problem from one location to another except when the transfer is part of a regional solution to flood problems.
- **District Policy 3b.** Channel modifications which create problems downstream shall be avoided. Potential problems include erosion, downstream sediment deposition, increase of runoff peaks, and debris transport.

Methods

This study was completed using HEC-RAS 3.0.0, which is the standard backwater flood stage model developed and used by the Corps and the District. The program input files provided by the District were from a previous version of HEC-RAS (2.*) and required minor adjustment to accommodate the additional features of the current model version. The adjustments included reducing the width of the bridge decks by 1 foot on the upstream and downstream faces of the bridges, so that there was the minimum required distanee between the bridge and the cross sections describing the bridge openings (e.g., culverts, boxes, spans). After making these changes, the model was run, and the results were compared to the output files provided by the District to ensure that the changes did not alter the results. Additional model runs were completed using different input data for the size, shape, and material of the culvert. Model runs were conducted on an iterative basis until an acceptable hydraulic solution was found to conveying the assumed 100-year floodflow for future conditions of 520 cfs without overtopping the Auburn-Folsom Road.

Model Runs

Numerous model runs were completed, with various input data that hypothetically modified the culvert length, size, and material to accommodate the assumed 100-year floodflow for future conditions of 520 cfs without overtopping Auburn-Folsom Road. The strategy was to first evaluate the model results based on the model input files for existing conditions, then modify the input files incrementally to update the geometry input file to the current model version, then increase the length of the culvert to accommodate the proposed roadway width, and finally modify the culvert size, shape, and material to accommodate the specified floodflow. The model runs, their variations, and their results are summarized below.

- Run 1. Description: Model as received from the District. Result: Road is overtopped and downstream water surface elevation is essentially the same as the road crest. This result confirms the field observation that downstream channel confinement controls the water surface at the existing culvert outlet. The roadbed acts as a broad-crested weir, and the culvert is subject to pressure flow (water submerges the culvert inlet).

- Run 2. Description: Model updated to HEC-RAS 3.0.0. Bridges modified to provide the minimum clearance required between bridge face and downstream controlling cross section. Result: Compared to Run 1, no change.
- Run 3. Description: 4.5-foot-diameter corrugated metal pipe (CMP) replaced with 4.3- by 6-foot CMP arch. Originally the input files developed by the Corps were intended to be used with a previous version of the model (HEC-RAS 1 or HEC-2) that could not compute flows through arch culverts. The input files were modified to match the conditions observed in the field. Result: Compared to Run 1, the water surface elevation decreased slightly upstream of the road, and flow over the road decreased.
- Run 4. Description: CMP length increased from 72 feet to 132 feet to accommodate proposed increased roadway width. Result: Compared to Run 1, the water surface elevation increased slightly upstream of the road, and flow over the road increased. This result would be expected because of the decreased culvert capacity caused by increased frictional losses in a longer culvert.
- Run 5. Description: CMP size increased to 5.6 by 7.9 feet, as recommended by the Flood Control Plan to pass the 25-year floodflow. Previously, regulations required only that crossings accommodate the 25-year floodflow. This size culvert is essentially the largest culvert that can fit under the existing roadbed and generally conform to the width of the natural channel upstream of the culvert. Result: Compared to Run 1, upstream water surface decreased by approximately 1 foot and flow over the road decreased.
- Run 6. Description: CMP arch changed to 6- by 8-foot box culvert to maximize conveyance in existing culvert footprint. This size was the maximum box that could fit under the existing road bed and conform to the natural channel. Result: Compared to Run 1, upstream water surface decreased further and flow over the road decreased.
- Run 7. Description: Box culvert increased to 12 feet wide to more closely match the downstream channel. This alternative would require that the upstream channel be modified somewhat to match the box culvert. Result: Compared to Run 1, flow over the road decreased.
- Run 8. Description: Roadbed elevation increased by 2 feet and box culvert height increased to 8 feet (8- by 12-foot box) Result: Passed the 400 cfs floodflow for existing 100-year conditions, but the 520 cfs floodflow for future 100-year conditions still overtopped road.
- Run 9. Description: Roadbed elevation increased by 3.5 feet over existing conditions (398.5 feet above mean sea level) and box height increased to 9 feet (9- by 12-foot box). Result: For the 520 cfs floodflow for future 100-year conditions, the upstream water surface decreased by approximately 5 feet and some flood control benefit was provided upstream (approximately 500 feet to next limiting (undersized) culvert or bridge. Above this point, there is no benefit because the limiting bridge controls the water surface elevation further upstream. Water would flow freely, not under pressure, through the box culvert, and the depth in culvert would be about 2 feet below

the top of the road (396.4 feet). This arrangement would allow for a design that uses the box lid as the road surface, similar to the crossing found on Auburn Folsom Road near the San Juan Suburban Water District Treatment Plant.

Recommendations

Based on the findings of this study, it is recommended that the existing CMP culvert conveying Linda Creek be replaced with a cast-in-place concrete box and that the roadbed be elevated to prevent floodflows from overtopping the road under the 520 cfs floodflow for future 100-year conditions, as required by the County General Plan. Because of downstream channel restrictions, simply increasing the width of the channel and culvert at the crossing will not alleviate overtopping of the road. Although the recommended solution would reduce upstream water surface elevations and thereby reduce the channel storage, the volume reduction would be small because the channel is narrow; there should be no adverse downstream effects. Because of the grade and alignment of the channel in this area, all of the alignment alternatives for the road widening project would require a similar culvert structure—there is no superior alignment alternative from a hydraulic perspective. When a preferred alternative is selected based on other environmental and safety conditions (e.g., sight lines), the following measures can be taken to optimize the box culvert:

- change the box culvert to a trapezoid to better conform to channel banks,
- shape the channel bank approaches to reduce constrictions near inlets and outlets, and
- possibly reduce bridge deck thickness through engineering design, resulting in lowering of the roadbed to minimize the recommended raise of the roadbed.

References Cited

Placer County Department of Public Works, Transportation Division. 2002. *Preliminary project plans for the Auburn-Folsom Road Widening Project.* Auburn, CA.

Placer County Flood Control and Water Conservation District and Sacramento County Water Agency. 1992. *Final report—Dry Creek Watershed Flood Control Plan.* Prepared by J. M. Montgomery Engineers, Sacramento, CA.

Placer County Flood Control and Water Conservation District. 1994. *Storm water management manual.* February. Auburn, CA.

Appendix L

Arborist Report and Tree Removal Analysis

This appendix contains the following:

- Sierra Nevada Arborists' June 2002 letter report and supporting data; the report includes an inventory of trees in the study area
- A summary of tree removal requirements by alternative, including an alternative comparison table and Sierra Nevada Arborists' October 2002 alternative-based tree data

Arborist Report

SIERRA NEVADA ARBORISTS

June 26, 2002

VIA HAND DELIVERY

Ms. Lynn Finley
Project Manager
Jones & Stokes
2600 V Street
Sacramento, California 95818-1914

RE: Auburn-Folsom Road Four Lane Widening Project
JAS Project No. 02102.02.001
Tree Inventory/Assessment

Dear Ms. Finley:

Enclosed please find the Tree Inventory and Assessment, along with a Tree Location Map, which you requested for the Auburn-Folsom Road Four Land Widening Project. As you will recall, my services were retained by Jones & Stokes to conduct a tree survey and prepare an Arborist Report for those trees 6" in diameter and larger located along Auburn-Folsom Road which were within 50 feet of edge of pavement from the Sacramento/Placer County Line to the project limit located slightly west of Douglas Boulevard. The inventory was to identify the type, size and health of all trees located within the study area. It is my understanding that this Arborist Report will be used to evaluate impacts to the native oaks located within the study area and to determine appropriate mitigation measures.

As you will see, the enclosed Tree Inventory/Assessment identifies the trees in the study area by tree number, common name, species identification, and then provides specific data relating to diameter, dripline radius and overall conditional rating. For your ease of reference, Appendix A to the Tree Inventory/Assessment defines the terms and ratings used within this Report.

The Inventory/Assessment has been divided into separate geographical categories using parcel number information or property addresses, as applicable. The Bureau of Reclamation properties are contained within one section. These geographical categories are identified in the Report with subheadings, each of which correspond to the Tree Location Map which has been provided for your reference. In addition, the trees in the field are tagged with metal numbering tags, the numbers of which correspond to the numbers which have been rough-plotted on the Tree Location Map. In some instances, it was not possible to affix the metal tree tag to the tree on the property due to access issues, fencing, dogs, dense black berries and/or severe poison oak. In those circumstances, the tree tags have been affixed to a property fence or accessible location near the subject trees for future reference.

503 Anthony Court ◆ Roseville, CA 95678 ◆ 916-784-7940 ◆ 916-784-1901 Fax

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By way of summary, 796 trees were identified, inventoried and assessed within the study area. Of that total, 679 trees are native trees and 117 are non-native trees. Cumulative inches for the 796 subject trees equals 15,207, comprise of 13,139 inches of native trees and 2,068 inches of non-native trees.

Thank you for allowing Sierra Nevada Arborists to assist you with this project. Please feel free to give me a call if you have any questions or required additional clarification.

Very truly yours,

Edwin E. Stirtz
ISA Certified Arborist WC-0510

EES:ks
Enclosures

JONES & STOKES

Auburn-Folsom Road Four Lane Widening Project

ARBORIST REPORT

Submitted by:

Edwin E. Stirtz
ISA Certified Arborist WC-0510
SIERRA NEVADA ARBORISTS

June 26, 2002

Definitions and Ratings

Within this specific inventory data you will find the following information:

Tree Number: Corresponds to aluminum tag attached to the tree.

Species Identification: Scientific and common species name.

Multi: Indicates all stem diameters of a multiple-trunk tree.

Diameter ("DBH"): This is the trunk diameter as measured in inches at breast height (industry standard 4.5 feet above ground level). This includes the aggregate total of all stems on a "multi".

Dripline radius ("DLR"): Measurement of the tree's dripline in feet from the trunk to the farthest most branch tip.

Structure and Vigor Ratings:

GOOD - A tree in this category has no trunk or root crown cavities or injuries; there is no indication of hollowness; no foreign objects are embedded in its structure; the root crown is above grade; there is no decay present except for small stubs; the structure is strong; the trunk is tapers; the bark thickness is normal; there is no fluxing; no fungus is evident; there is a below average amount of dead limbs and twigs present which is normal for the size and age of the species; there is no co-dominant branching present; there are no large callused areas and any small callusing present is vigorous and intact; there are no abnormally heavy insect infestations; the growth rate is and has been average or above; limb weight is not excessive; buds are normal size and viable; the leaf size, color, and density is normal or better; and barring any unforeseen negative effects, the life expectancy should exceed thirty years.

FAIR - There is no decay or indications of large hollow areas in the large limbs, root crown, or trunk; a few small callused-over foreign objects, e.g., nails, may be present, the structure is strong; no fungus is evident other than small saprophytes on exposed wood; some small, callusing injuries may be present, some small limbs may be dead and decaying but callus is forming at their base; some excessive limb weight may exist; there may be some minor fluxing; the amount of dead limbs and twigs present is within the normal range; some large callused areas may be present; some small cavities and areas of decay may be present; the growth rate is average or slightly below average; and some leaf size, color, and density may vary.

POOR - Significant cavities, dead areas, and decay may be present; the tree is actually defective; fungus fruiting bodies may be present; the amount of dead limbs and twigs is far above normal; major co-dominant branching with embedded bark may be present; buds are small and some may not be viable; leaves may be below average size and may be abnormal in color; significant pest damage may be present; and the predicted structural life and/or viability is less than ten years.

The ratings **"good to fair"** and **"fair to poor"** are used to describe trees that fall between the described major categories and have elements of both.

AUBURN-FOLSOM ROAD 4-LANE WIDENING PROJECT
Tree Inventory/Assessment

TREE #	COMMON NAME	SPECIES	MULTI	DBH	DLR	Condition/Structure P	Condition/Structure P-F	Condition/Structure F	Condition/Minor P	Condition/Minor P-F	Condition/Minor F	NON NATIVE	NATIVE	COMMENTS
Going South on West Side/Auburn-Folsom from Oak Hill Drive to County Line														
900	Live Oak	*Quercus wislizenii*	5,6,7	18	13			X			X		18	
191	Blue Oak	*Quercus douglasii*		11	16			X			X		11	
192	Live Oak	*Quercus wislizenii*	8,11,11	30	24			X			X		30	
193	Blue Oak	*Quercus douglasii*		16	20			X			X		16	
194	Blue Oak	*Quercus douglasii*		17	23			X			X		17	
195	Blue Oak	*Quercus douglasii*	11,12	23	22		X				X		23	
901	Live Oak	*Quercus wislizenii*	7,12	19	19			X			X		19	
196	Live Oak	*Quercus wislizenii*	8,10,12	30	21			X			X		30	
197	Live Oak	*Quercus wislizenii*	10,13	23	20			X		X			23	
200	Live Oak	*Quercus wislizenii*	8,12	20	27		X			X			20	
198	Live Oak	*Quercus wislizenii*	10,12,12	34	28		X			X			34	
199	Blue Oak	*Quercus douglasii*		6	11		X				X		6	
201	Live Oak	*Quercus wislizenii*	8,12	20	23			X			X		20	
202	Live Oak	*Quercus wislizenii*	6,10,12	28	20		X				X		28	
203	Blue Oak	*Quercus douglasii*		17	22			X			X		17	
204	Blue Oak	*Quercus douglasii*		11	21			X			X		11	
205	Blue Oak	*Quercus douglasii*		19	24			X			X		19	
902	Live Oak	*Quercus wislizenii*		18	28		X				X		18	
206	Live Oak	*Quercus wislizenii*	10,11	21	20			X			X		21	
207	Blue Oak	*Quercus douglasii*	13,17	30	22			X			X		30	
208	Blue Oak	*Quercus douglasii*		15	26			X			X		15	
209	Blue Oak	*Quercus douglasii*	4,4	8	11			X			X		8	
210	Live Oak	*Quercus wislizenii*	7,11	18	24		X				X		18	
211	Blue Oak	*Quercus douglasii*		26	30			X			X		26	
212	Live Oak	*Quercus wislizenii*	14,16	30	30			X			X		30	
214	Live Oak	*Quercus wislizenii*	8,10,10,12,14	54	30			X			X		54	
213	Live Oak	*Quercus wislizenii*	8,8,16	32	28			X			X		32	
215	Live Oak	*Quercus wislizenii*	9,10,12,12,14	57	25		X				X		57	
216	Blue Oak	*Quercus douglasii*		29	30			X			X		29	
217	Blue Oak	*Quercus douglasii*		8	11		X				X		8	
218	Live Oak	*Quercus wislizenii*	6,8	14	14		X				X		14	
219	Blue Oak	*Quercus douglasii*	12,13	25	27			X			X		25	
220	Live Oak	*Quercus wislizenii*	5,7	12	16		X				X		12	
221	Blue Oak	*Quercus douglasii*		22	27	X					X		22	

AUBURN-FOLSOM ROAD 4-LANE WIDENING PROJECT
Tree Inventory/Assessment

TREE #	COMMON NAME	SPECIES	MULTI	DBH	DLR	Condition/Structure P	P-F	F	Condition/Vigor P	P-F	F	NON NATIVE	NATIVE	COMMENTS
222	Blue Oak	*Quercus douglasii*		19	26			X			X		19	
223	Live Oak	*Quercus wislizenii*		8	17			X			X		8	
224	Live Oak	*Quercus wislizenii*	7,14	21	21			X			X		21	
225	Live Oak	*Quercus wislizenii*	7,8,11	26	16			X			X		26	
226	Live Oak	*Quercus wislizenii*	5,5,6,6,6,6	34	27		X				X		34	
227	Blue Oak	*Quercus douglasii*		10	16			X			X		10	
228	Blue Oak	*Quercus douglasii*		17	23			X			X		17	
229	Live Oak	*Quercus wislizenii*		18	28			X			X		18	
230	Live Oak	*Quercus wislizenii*	6,12	18	31		X				X		18	
231	Blue Oak	*Quercus douglasii*		6	12			X			X		6	
232	Blue Oak	*Quercus douglasii*		14	20			X			X		14	
903	Blue Oak	*Quercus douglasii*		14	25			X			X		14	
233	Live Oak	*Quercus wislizenii*	4,4	8	7			X			X		8	
234	Blue Oak	*Quercus douglasii*		6	9			X		X			6	
235	Live Oak	*Quercus wislizenii*	5,5,5,6,6,7,8,8	50	25	X				X			50	
236	Blue Oak	*Quercus douglasii*		7	13			X			X		7	
237	Blue Oak	*Quercus douglasii*		17	20			X		X			17	
239	Blue Oak	*Quercus douglasii*		8	12			X			X		8	
904	Blue Oak	*Quercus douglasii*		4	5								4	Dead
905	Foothill Pine	*Pinus sabiniana*		26	30	X			X				26	
241	Live Oak	*Quercus wislizenii*	6,8	14	13		X				X		14	
906	Live Oak	*Quercus wislizenii*		8	12		X				X		8	
242	Live Oak	*Quercus wislizenii*		15	18			X			X		15	
243	Blue Oak	*Quercus douglasii*	7,8	15	13			X			X		15	
244	Blue Oak	*Quercus douglasii*	7,8	15	16			X			X		15	
245	Blue Oak	*Quercus douglasii*		8	12			X			X		8	
246	Blue Oak	*Quercus douglasii*		10	15			X			X		10	
247	Blue Oak	*Quercus douglasii*		15	22			X			X		15	
248	Blue Oak	*Quercus douglasii*		6	9		X				X		6	
249	Live Oak	*Quercus wislizenii*	6,7,9	22	21	X					X		22	
250	Blue Oak	*Quercus douglasii*		6	16		X				X		6	
252	Blue Oak	*Quercus douglasii*	4,4	8	7			X			X		8	
251	Blue Oak	*Quercus douglasii*		7	13			X			X		7	
253	Live Oak	*Quercus wislizenii*	7,8,9	24	22			X			X		24	
254	Blue Oak	*Quercus douglasii*		11	16			X			X		11	

AUBURN-FOLSOM ROAD 4-LANE WIDENING PROJECT
Tree Inventory/Assessment

TREE #	COMMON NAME	SPECIES	MULTI	DBH	CLR	Condition Structural P	Condition Structural P/F	Condition Structural F	Condition Vigor P	Condition Vigor P/F	Condition Vigor F	NON NATIVE	NATIVE	COMMENTS
255	Blue Oak	*Quercus douglasii*		8	16			X			X		8	
256	Blue Oak	*Quercus douglasii*		13	16		X				X		13	
257	Foothill Pine	*Pinus sabiniana*		32	40		X				X		32	
258	Live Oak	*Quercus wislizenii*		22	30		X				X		22	
259	Blue Oak	*Quercus douglasii*		9	12			X			X		9	
261	Live Oak	*Quercus wislizenii*		11	18		X				X		11	
262	Live Oak	*Quercus wislizenii*		21	25			X			X		21	
260	Live Oak	*Quercus wislizenii*		14	21	X					X		14	
263	Blue Oak	*Quercus douglasii*		8	17		X				X		8	
264	Blue Oak	*Quercus douglasii*		18	17			X			X		18	
265	Live Oak	*Quercus wislizenii*	8,14,17	39	23			X			X		39	
266	Live Oak	*Quercus wislizenii*		13	25		X				X		13	
268	Blue Oak	*Quercus douglasii*		15	24			X			X		15	
267	Live Oak	*Quercus wislizenii*	6,8,9,12	35	23			X			X		35	
907	Live Oak	*Quercus wislizenii*	16,17	33	27			X			X		33	
269	Foothill Pine	*Pinus sabiniana*		28	33			X			X		28	
270	Live Oak	*Quercus wislizenii*	7,8,9,11	35	19			X			X		35	
271	Live Oak	*Quercus wislizenii*	12,15	27	27			X			X		27	
273	Live Oak	*Quercus wislizenii*		13	17			X			X		13	
272	Live Oak	*Quercus wislizenii*	8,9,10,11	38	23			X			X		38	
274	Live Oak	*Quercus wislizenii*	9,9,11,13	42	19		X				X		42	
275	Live Oak	*Quercus wislizenii*	6,11	17	18		X				X		17	
276	Live Oak	*Quercus wislizenii*	3,4,13	20	23			X			X		20	
277	Live Oak	*Quercus wislizenii*	8,8,11	27	19			X			X		27	
278	Live Oak	*Quercus wislizenii*	6,8,8,9,11	42	27			X			X		42	
279	Live Oak	*Quercus wislizenii*	6,8,11	25	19			X			X		25	
280	Live Oak	*Quercus wislizenii*	28 at 3	28	27			X			X		28	
281	Blue Oak	*Quercus douglasii*		20	24			X			X		20	
282	Live Oak	*Quercus wislizenii*		9	17		X				X		9	
283	Live Oak	*Quercus wislizenii*		8	21		X				X		8	
908	Foothill Pine	*Pinus sabiniana*		8	12			X			X		8	
284	Live Oak	*Quercus wislizenii*	5,7,11	23	19			X			X		23	
285	Foothill Pine	*Pinus sabiniana*		10	20			X			X		10	
910	Live Oak	*Quercus wislizenii*	5,8	13	16			X			X		13	
911	Foothill Pine	*Pinus sabiniana*		20	27			X			X		20	

AUBURN-FOLSOM ROAD 4-LANE WIDENING PROJECT
Tree Inventory/Assessment

TREE #	COMMON NAME	SPECIES	MULTI	DBH	DLR	Condition/Structure P	Condition/Structure PF	Condition/Structure F	Condition/Vigor P	Condition/Vigor PF	Condition/Vigor F	NON NATIVE	NATIVE	COMMENTS
912	Foothill Pine	*Pinus sabiniana*		11	16			X			X		11	
286	Live Oak	*Quercus wislizenii*		15	19		X				X		15	
287	Live Oak	*Quercus wislizenii*		11	14		X				X		11	
288	Live Oak	*Quercus wislizenii*		8	18			X			X		8	
289	Live Oak	*Quercus wislizenii*		12	15			X			X		12	
290	Live Oak	*Quercus wislizenii*		14	24			X			X		14	
146	Live Oak	*Quercus wislizenii*	8,8,15,17	48	30			X			X		48	
East Side of Auburn-Folsom at Sac. County Line North through San Juan Water														
1	Coast Redwood	*Sequoia sempervirens*		15	16			X			X		15	
2	Coast Redwood	*Sequoia sempervirens*		16	17			X			X		16	
3	Coast Redwood	*Sequoia sempervirens*		15	15			X			X		15	
4	Coast Redwood	*Sequoia sempervirens*		14	15			X			X		14	
5	Coast Redwood	*Sequoia sempervirens*		15	14			X			X		15	
6	Coast Redwood	*Sequoia sempervirens*		16	15			X			X		16	
7	Coast Redwood	*Sequoia sempervirens*		17	17			X			X		17	
8	Coast Redwood	*Sequoia sempervirens*		16	16			X			X		16	
9	Coast Redwood	*Sequoia sempervirens*		15	16			X			X		15	
10	Coast Redwood	*Sequoia sempervirens*		16	17			X			X		16	
11	Coast Redwood	*Sequoia sempervirens*		16	17			X			X		16	
12	Coast Redwood	*Sequoia sempervirens*		14	15			X			X		14	
13	Coast Redwood	*Sequoia sempervirens*		15	15			X			X		15	
14	Coast Redwood	*Sequoia sempervirens*		16	15			X			X		16	
15	Coast Redwood	*Sequoia sempervirens*		16	15			X			X		16	
16	Coast Redwood	*Sequoia sempervirens*		17	17			X			X		17	
441	Live Oak	*Quercus wislizenii*	8,11	19	17			X			X		19	
442	Live Oak	*Quercus wislizenii*		16	18			X			X		16	
17	Camphor Tree	*Cinnamomum camphora*		10	15			X			X	10		
18	California Sycamore	*Platanus racemosa*		12	16			X			X		12	
19	California Sycamore	*Platanus racemosa*		17	10			X			X		17	
20	California Sycamore	*Platanus racemosa*		9	17			X			X		9	
21	California Sycamore	*Platanus racemosa*		10	17			X			X		10	
22	California Sycamore	*Platanus racemosa*		14	18			X			X		14	
23	Cypress sp.	*Cupressus*		8	8			X			X	8		
24	California Sycamore	*Platanus racemosa*	7,8	15	13			X			X		15	
25	California Sycamore	*Platanus racemosa*		7	12			X			X		7	

TREE #	COMMON NAME	SPECIES	MULTI	DBH	DLR	Condition/Structure P	Condition/Structure P-F	Condition/Structure F	Condition/Vigor P	Condition/Vigor P-F	Condition/Vigor F	NON NATIVE	NATIVE	COMMENTS
26	California Sycamore	*Platanus racemosa*		8	17			X			X		8	
27	Blue Oak	*Quercus douglasii*		18	22			X		X			18	
28	Live Oak	*Quercus wislizenii*		18	22		X				X		18	
29	Live Oak	*Quercus wislizenii*		26	29	X					X		26	
147	Live Oak	*Quercus wislizenii*	6,8,10,11	35	17			X			X		35	
148	Blue Oak	*Quercus douglasii*		17	22			X			X		17	
149	Blue Oak	*Quercus douglasii*		8	12			X			X		8	
150	Blue Oak	*Quercus douglasii*		6	7			X			X		6	
151	Blue Oak	*Quercus douglasii*		22	26		X				X		22	
152	Blue Oak	*Quercus douglasii*	8,10,11	29	17			X			X		29	
153	Foothill Pine	*Pinus sabiniana*		16	8								16	Dead
154	Live Oak	*Quercus wislizenii*		17	22			X			X		17	
30	Blue Oak	*Quercus douglasii*		17	20			X			X		17	
31	Live Oak	*Quercus wislizenii*	6,9	15	17			X			X		15	
32	Live Oak	*Quercus wislizenii*	6,6	12	14			X			X		12	
33	Blue Oak	*Quercus douglasii*		6	10			X			X		6	
156	Live Oak	*Quercus wislizenii*	12,12	24	17			X			X		24	
158	Blue Oak	*Quercus douglasii*		22	23			X			X		22	
159	Blue Oak	*Quercus douglasii*		27	26			X			X		27	
34	Live Oak	*Quercus wislizenii*		12	16			X			X		12	
160	Live Oak	*Quercus wislizenii*	4,4,5,5,6,7	31	12			X			X		31	
161	Live Oak	*Quercus wislizenii*	4,5	9	11			X			X		9	
162	Blue Oak	*Quercus douglasii*		14	17			X			X		14	
163	Live Oak	*Quercus wislizenii*	4,6	10	12	X			X				10	
35	Blue Oak	*Quercus douglasii*		14	17			X			X		14	
36	Blue Oak	*Quercus douglasii*		12	16			X			X		12	
37	Blue Oak	*Quercus douglasii*		14	17			X			X		14	
38	Live Oak	*Quercus wislizenii*	4,6	10	12			X			X		10	
39	Live Oak	*Quercus wislizenii*	7,9	16	12			X			X		16	
164	Blue Oak	*Quercus douglasii*		16	21			X			X		16	
165	Oracle Oak	*Quercus morehus*	4,4,5,5,6,6,6,6	42	17			X			X		42	
166	Live Oak	*Quercus wislizenii*	9,10,11	30	17			X			X		30	
167	Live Oak	*Quercus wislizenii*	6,7,9	22	16		X				X		22	
169	Foothill Pine	*Pinus sabiniana*		8	14			X			X		8	
170	Live Oak	*Quercus wislizenii*		21	27	X					X		21	

TREE #	COMMON NAME	SPECIES	MULTI	DBH	CLR	Condition/Structure P	Condition/Structure PF	Condition/Structure F	Condition/Vigor P	Condition/Vigor PF	Condition/Vigor F	NON-NATIVE	NATIVE	COMMENTS
171	Live Oak	*Quercus wislizenii*	10,11,11,14	46	24			X			X		46	
172	Live Oak	*Quercus wislizenii*	6,8	14	17			X			X		14	
173	Live Oak	*Quercus wislizenii*	5,7,7	19	14			X		X			19	
40	Foothill Pine	*Pinus sabiniana*		8	15			X			X		8	
41	Foothill Pine	*Pinus sabiniana*		7	12			X			X		7	
42	Live Oak	*Quercus wislizenii*	5,11	16	17			X			X		16	
43	Live Oak	*Quercus wislizenii*	4,5	9	12			X			X		9	
174	Live Oak	*Quercus wislizenii*	8,9	17	16			X			X		17	
44	Live Oak	*Quercus wislizenii*		8	12			X			X		8	
45	Foothill Pine	*Pinus sabiniana*		12	14			X			X		12	
46	Live Oak	*Quercus wislizenii*	15,15	30	25			X			X		30	
47	Blue Oak	*Quercus douglasii*		16	26			X			X		16	
48	Foothill Pine	*Pinus sabiniana*		8	10			X			X		8	
49	Foothill Pine	*Pinus sabiniana*		6	9			X			X		6	
50	Live Oak	*Quercus wislizenii*	12,12,15	39	28		X				X		39	
51	Blue Oak	*Quercus douglasii*		24	24			X			X		24	
52	Oracle Oak	*Quercus morehus*	4,5	9	10		X				X		9	
53	Live Oak	*Quercus wislizenii*	16,17	33	24			X			X		33	
54	Live Oak	*Quercus wislizenii*	12,16,18	46	33			X			X		46	
55	Live Oak	*Quercus wislizenii*	17,22	39	25			X			X		39	
186	Live Oak	*Quercus wislizenii*	9,10,12,14,15	60	22			X			X		60	
185	Live Oak	*Quercus wislizenii*	6,9	15	18			X			X		15	
184	Live Oak	*Quercus wislizenii*	5,6,6,8,8	33	17			X			X		33	
183	Live Oak	*Quercus wislizenii*	5,5,6,6,6	28	13			X			X		28	
182	Live Oak	*Quercus wislizenii*	4,6	10	12			X			X		10	
181	Blue Oak	*Quercus douglasii*		18	24			X			X		18	
180	Live Oak	*Quercus wislizenii*		10	17			X			X		10	
179	Live Oak	*Quercus wislizenii*	6,8,8,9	31	17			X			X		31	
178	Live Oak	*Quercus wislizenii*		19	22	X					X		19	
177	Live Oak	*Quercus wislizenii*	7,8	15	14		X				X		15	
176	Live Oak	*Quercus wislizenii*	7,8,8	23	16			X			X		23	
175	Live Oak	*Quercus wislizenii*	6,7,7,11,14	45	20			X			X		45	

TREE #	COMMON NAME	SPECIES	MULTI	DBH	DLR	Condition/Structure P	Condition/Structure F-P	Condition/Structure F	Condition/Vigor P	Condition/Vigor F-P	Condition/Vigor F	NON NATIVE	NATIVE	COMMENTS
South Side of Road at Beales Point Entry to East														
56	Live Oak	*Quercus wislizenii*	13,15	28	24			X			X		28	
57	Foothill Pine	*Pinus sabiniana*		6	12			X			X		6	
58	Live Oak	*Quercus wislizenii*	14,14,16	44	27		X				X		44	
59	Live Oak	*Quercus wislizenii*		7	8	X				X			7	
60	Live Oak	*Quercus wislizenii*		15	20		X				X		15	
61	Live Oak	*Quercus wislizenii*	12,14	26	21			X			X		26	
62	Blue Oak	*Quercus douglasii*		17	22			X			X		17	
63	Live Oak	*Quercus wislizenii*		10	17			X			X		10	
64	Live Oak	*Quercus wislizenii*		14	21			X			X		14	
65	Live Oak	*Quercus wislizenii*	10,10	20	19			X			X		20	
66	Foothill Pine	*Pinus sabiniana*		37	40			X			X		37	
67	Live Oak	*Quercus wislizenii*		15	21			X			X		15	
68	Live Oak	*Quercus wislizenii*		23	22	X					X		23	
69	Live Oak	*Quercus wislizenii*		8	19			X			X		8	
70	Foothill Pine	*Pinus sabiniana*		12	19			X			X		12	
71	Live Oak	*Quercus wislizenii*		6	12			X			X		6	
72	Live Oak	*Quercus wislizenii*	7,7,8,9,14,14	59	25		X				X		59	
73	Live Oak	*Quercus wislizenii*	7,10	17	19			X			X		17	
74	Live Oak	*Quercus wislizenii*	6,6,7,8	27	16	X					X		27	
75	Live Oak	*Quercus wislizenii*	8,9	17	18			X			X		17	
76	Live Oak	*Quercus wislizenii*	7,8	15	15			X			X		15	
77	Foothill Pine	*Pinus sabiniana*		8	9			X			X		8	
78	Live Oak	*Quercus wislizenii*	5,6,8,9	28	22			X			X		28	
79	Live Oak	*Quercus wislizenii*	5,6,8,9	28	17		X				X		28	
80	Live Oak	*Quercus wislizenii*	10,10,14	34	21			X			X		34	
81	Live Oak	*Quercus wislizenii*		11	22			X			X		11	
82	Live Oak	*Quercus wislizenii*	6,8,8,9,9,11	51	22			X			X		51	
83	Foothill Pine	*Pinus sabiniana*		7	22	X					X		7	
84	Live Oak	*Quercus wislizenii*	7,9,14,17	47	27		X				X		47	
85	Live Oak	*Quercus wislizenii*	7,7	14	22	X					X		14	
86	Live Oak	*Quercus wislizenii*	8,9	17	20			X			X		17	
87	Live Oak	*Quercus wislizenii*	6,8,9	23	23		X				X		23	
88	Live Oak	*Quercus wislizenii*	14,15,17	46	27		X				X		46	
89	Foothill Pine	*Pinus sabiniana*		14	17			X			X		14	

TREE #	COMMON NAME	SPECIES	MULTI	DBH	OLR	Condition/Structure P	P/F	F	Condition/Vigor P	P/F	F	NON NATIVE	NATIVE	COMMENTS
90	Foothill Pine	*Pinus sabiniana*		16	24			X			X		16	
91	Live Oak	*Quercus wislizenii*	4,6	10	14			X			X		10	
92	Live Oak	*Quercus wislizenii*	6,7	13	15			X			X		13	
93	Live Oak	*Quercus wislizenii*	5,5	10	14			X			X		10	
94	Blue Oak	*Quercus douglasii*		23	26			X			X		23	
95	Blue Oak	*Quercus douglasii*		31	28			X			X		31	
96	Blue Oak	*Quercus douglasii*		29	30			X			X		29	
97	Foothill Pine	*Pinus sabiniana*		7	16			X			X		7	
98	Live Oak	*Quercus wislizenii*		7	14		X				X		7	
99	Live Oak	*Quercus wislizenii*	3,4,5	12	12			X			X		12	
100	Foothill Pine	*Pinus sabiniana*		15	17			X			X		15	
101	Foothill Pine	*Pinus sabiniana*		28	29			X			X		28	
102	Live Oak	*Quercus wislizenii*	6,9	15	8			X			X		15	
103	Live Oak	*Quercus wislizenii*	4,4	8	12			X			X		8	
104	Live Oak	*Quercus wislizenii*	3,4,5	12	12			X			X		12	
105	Live Oak	*Quercus wislizenii*		7	14			X			X		7	
106	Live Oak	*Quercus wislizenii*	5,5	10	13			X			X		10	
107	Live Oak	*Quercus wislizenii*	11,14,15,16	56	28			X			X		56	
108	Foothill Pine	*Pinus sabiniana*		18	27			X			X		18	
109	Live Oak	*Quercus wislizenii*	6,6,8	20	17			X			X		20	
110	Live Oak	*Quercus wislizenii*		6	12			X			X		6	
111	Fig	*Ficus*	3,3,3,3,3,3,4,4,4,5,5,5,6	51	18			X			X	51		
112	Fig	*Ficus*	3,3,3,4,4,4,4,5,5,5,6,6	52	17			X			X	52		
113	Plum	Prunus sp.	5,6,7	18	13			X			X	18		
114	Foothill Pine	*Pinus sabiniana*		10	15			X			X		10	
115	Foothill Pine	*Pinus sabiniana*		8	12			X			X		8	
116	Live Oak	*Quercus wislizenii*	9,16	25	21			X			X		25	
117	Foothill Pine	*Pinus sabiniana*		7	9			X			X		7	
118	Live Oak	*Quercus wislizenii*		11	17			X			X		11	
119	Valley Oak	*Quercus lobata*		13	16			X			X		13	
120	Live Oak	*Quercus wislizenii*		10	12			X			X		10	
121	Live Oak	*Quercus wislizenii*	18,19	37	30			X			X		37	
122	Fig	*Ficus*	4,4,5,5,6,6,7,8,8,9,10	72	26			X			X	72		
123	Live Oak	*Quercus wislizenii*	16,18,19	53	24			X			X		53	
124	Live Oak	*Quercus wislizenii*	6,9	15	16			X			X		15	

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TREE #	COMMON NAME	SPECIES	MULTI	DBH	DLR	Condition/Structure P	Condition/Structure PF	Condition/Structure F	Condition/Vigor P	Condition/Vigor PF	Condition/Vigor F	NON NATIVE	NATIVE	COMMENTS
125	Live Oak	*Quercus wislizenii*		26	28			X			X		26	
126	Foothill Pine	*Pinus sabiniana*		11	17			X			X		11	
127	Foothill Pine	*Pinus sabiniana*		8	30	X					X		8	
128	Foothill Pine	*Pinus sabiniana*		10	14			X			X		10	
129	Willow	*Salix sp.*	8,8	16	19		X				X		16	
130	Live Oak	*Quercus wislizenii*		11	17		X				X		11	
131	Willow	*Salix sp.*		14	17			X			X		14	
132	Live Oak	*Quercus wislizenii*		7	19			X			X		7	
133	Live Oak	*Quercus wislizenii*	6,8	14	12			X			X		14	
134	Willow	*Salix sp.*	5,6,6	17	13			X			X		17	
135	Cottonwood	*Populus sp.*	18,22	40	28			X			X		40	
136	Blue Oak	*Quercus douglasii*		15	17	X					X		15	
137	Live Oak	*Quercus wislizenii*	3,3,4,4,5	19	9			X			X		19	
138	Live Oak	*Quercus wislizenii*	14,16	30	24		X				X		30	
139	Foothill Pine	*Pinus sabiniana*		10	16			X			X		10	
140	Live Oak	*Quercus wislizenii*	8,13	21	19	X					X		21	
141	Blue Oak	*Quercus douglasii*	8,8,9	25	18			X			X		25	
142	Blue Oak	*Quercus douglasii*	9,9	18	15			X			X		18	
143	Live Oak	*Quercus wislizenii*		17	23		X				X		17	
144	Blue Oak	*Quercus douglasii*		8	12		X				X		8	
145	Live Oak	*Quercus wislizenii*	5,5,6,8,10	34	16			X			X		34	
301	Live Oak	*Quercus wislizenii*	8,8,9	25	14	X					X		25	
302	Live Oak	*Quercus wislizenii*		8	16			X			X		8	
303	Blue Oak	*Quercus douglasii*		8	10			X			X		8	
304	Blue Oak	*Quercus douglasii*	6,9	15	17			X			X		15	
305	Live Oak	*Quercus wislizenii*	9,10	19	18			X			X		19	
306	Blue Oak	*Quercus wislizenii*		27	26			X			X		27	
307	Blue Oak	*Quercus douglasii*		14	18			X			X		14	
309	Live Oak	*Quercus wislizenii*	8,9,10	27	17			X			X		27	
308	Blue Oak	*Quercus douglasii*	14,28	42	28			X			X		42	
310	Plum	*Prunus sp.*		8	8	X			X			8		
311	Blue Oak	*Quercus douglasii*		17	19			X			X		17	
312	Live Oak	*Quercus wislizenii*	8,9,10,10,14,15,15	81	22		X				X		81	
313	Live Oak	*Quercus wislizenii*	7,8,9,12,13	49	24			X			X		49	
314	Live Oak	*Quercus wislizenii*	7,17	24	18		X				X		24	

TREE #	COMMON NAME	SPECIES	MULTI	DBH	DLR	Condition/Structure P	Condition/Structure F	Condition/Structure G	Condition/Vigor P	Condition/Vigor F	Condition/Vigor G	NON NATIVE	NATIVE	COMMENTS
315	Live Oak	*Quercus wislizenii*	9,10	19	18		X				X		19	
316	Live Oak	*Quercus wislizenii*	8,12,15,17	52	28		X				X		52	
317	Live Oak	*Quercus wislizenii*	6,6,8,8,9,9	46	22		X				X		46	
318	Plum	*Prunus sp.*	4,4,4,5,5,6	28	13		X				X	28		
319	Live Oak	*Quercus wislizenii*		6	8			X			X		6	
320	Live Oak	*Quercus wislizenii*	8,17	25	30			X			X		25	
321	Live Oak	*Quercus wislizenii*	6,10,11,15,16,18	76	30			X			X		76	
322	Live Oak	*Quercus wislizenii*	5,5,7,8,11,12	48	27		X				X		48	
323	Live Oak	*Quercus wislizenii*	5,5	10	12			X			X		10	
324	Live Oak	*Quercus wislizenii*	6,7	13	13			X			X		13	
325	Foothill Pine	*Pinus sabiniana*		10	12			X			X		10	
326	Live Oak	*Quercus wislizenii*	8,12,14	34	23		X				X		34	
327	Live Oak	*Quercus wislizenii*	10,11,19	40	28			X			X		40	
328	Live Oak	*Quercus wislizenii*		9	22	X					X		9	
329	Live Oak	*Quercus wislizenii*	9,11,14	34	26		X				X		34	
330	Willow	*Salix sp.*	16,18	34	9	X					X		34	
331	Pecan	*Carya illinoinensis*		13	21			X			X	13		
332	Pecan	*Carya illinoinensis*		13	20		X				X	13		
333	Live Oak	*Quercus wislizenii*	12,18,19	49	25			X			X		49	
334	Live Oak	*Quercus wislizenii*		25	19		X				X		25	
335	Pecan	*Carya illinoinensis*		12	17			X			X		12	
336	Valley Oak	*Quercus lobata*		11	16			X			X		11	
337	Live Oak	*Quercus wislizenii*		15	18	X			X				15	
338	Live Oak	*Quercus wislizenii*	16,18	34	20		X			X			34	
339	Foothill Pine	*Pinus sabiniana*		9	11			X			X		9	
340	Live Oak	*Quercus wislizenii*	5,6,7	18	14			X			X		18	
341	Live Oak	*Quercus wislizenii*	3,4,4	11	13		X				X		11	
342	Live Oak	*Quercus wislizenii*		14	18			X			X		14	
343	Foothill Pine	*Pinus sabiniana*		11	16			X			X		11	
344	Foothill Pine	*Pinus sabiniana*		13	17			X			X		13	
345	Live Oak	*Quercus wislizenii*	4,4,5	13	14			X			X		13	
346	Live Oak	*Quercus wislizenii*		9	17			X			X		9	
347	Live Oak	*Quercus wislizenii*	5,5	10	13			X			X		10	
348	Live Oak	*Quercus wislizenii*	5,7,7	19	18		X				X		19	
349	Live Oak	*Quercus wislizenii*	7,10,11,11	39	26		X				X		39	

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TREE #	COMMON NAME	SPECIES	MULTI	DBH	DLR	Condition/Structure P	P-F	F	Condition/Vigor P	P-F	F	NONE NATIVE	NATIVE	COMMENTS
350	Live Oak	*Quercus wislizenii*		12	18			X			X		12	
351	Live Oak	*Quercus wislizenii*		6	17			X			X		6	
352	Blue Oak	*Quercus douglasii*		6	7			X			X		6	
353	Live Oak	*Quercus wislizenii*	12,13	25	19		X				X		25	
354	Live Oak	*Quercus wislizenii*		11	16	X					X		11	
355	Live Oak	*Quercus wislizenii*		23	24		X				X		23	
356	Live Oak	*Quercus wislizenii*		17	20	X			X				17	
357	Foothill Pine	*Pinus sabiniana*		17	24			X			X		17	
358	Live Oak	*Quercus wislizenii*		13	17	X					X		13	
359	Foothill Pine	*Pinus sabiniana*		12	15			X			X		12	
360	Foothill Pine	*Pinus sabiniana*		7	12			X			X		7	
361	Foothill Pine	*Pinus sabiniana*		21	26			X			X		21	
362	Foothill Pine	*Pinus sabiniana*		15	24			X			X		15	
363	Live Oak	*Quercus wislizenii*	12,13,16	41	21	X					X		41	
364	Live Oak	*Quercus wislizenii*		12	18	X					X		12	
365	Live Oak	*Quercus wislizenii*	11,13,14	38	24			X			X		38	
366	Live Oak	*Quercus wislizenii*	6,7,12	25	16			X			X		25	
367	Live Oak	*Quercus wislizenii*	7,11	18	20		X				X		18	
368	Live Oak	*Quercus wislizenii*	10,14,18	42	30			X			X		42	
369	Live Oak	*Quercus wislizenii*	8,11	19	18			X			X		19	
370	Live Oak	*Quercus wislizenii*	8,8,10	26	23			X			X		26	
371	Blue Oak	*Quercus douglasii*		8	17			X			X		8	
372	Live Oak	*Quercus wislizenii*	12,12,17	41	29			X			X		41	
373	Live Oak	*Quercus wislizenii*	17,19	36	29		X				X		36	
374	Live Oak	*Quercus wislizenii*	5,6	11	17			X			X		11	
375	Valley Oak	*Quercus lobata*		13	17			X			X		13	
376	Foothill Pine	*Pinus sabiniana*		12	14			X			X		12	
377	Cottonwood	*Populus sp.*		15	17			X			X		15	
378	Live Oak	*Quercus wislizenii*		16	21		X				X		16	
379	Live Oak	*Quercus wislizenii*		17	23		X				X		17	
380	Valley Oak	*Quercus lobata*		6	11			X			X		6	
381	Valley Oak	*Quercus lobata*		12	17			X			X		12	
382	Live Oak	*Quercus wislizenii*	8,9	17	20			X			X		17	
383	Live Oak	*Quercus wislizenii*	5,7,9,13,17	51	25		X				X		51	
384	Live Oak	*Quercus wislizenii*	13,16	29	23			X			X		29	

AUBURN-FOLSOM ROAD 4-LANE WIDENING PROJECT
Tree Inventory/Assessment

TREE #	COMMON NAME	SPECIES	MULTI	DBH	DLR	Condition/Structure			Condition/Vigor			NON NATIVE	NATIVE	COMMENTS
385	Live Oak	*Quercus wislizenii*		6	13			X			X		6	
386	Live Oak	*Quercus wislizenii*	5,6,8,10,11	40	18		X				X		40	
387	Live Oak	*Quercus wislizenii*		8	17			X			X		8	
388	Live Oak	*Quercus wislizenii*	5,5	10	9			X			X		10	
389	Live Oak	*Quercus wislizenii*	4,4,4,4,4,5,5,6,6,6,7	55	17			X			X		55	
390	Live Oak	*Quercus wislizenii*		10	13			X			X		10	
391	Blue Oak	*Quercus douglasii*		6	9			X			X		6	
392	Blue Oak	*Quercus douglasii*		10	16			X		X			10	
393	Live Oak	*Quercus wislizenii*	5,7,9,9,10,11	51	20		X				X		51	
394	Valley Oak	*Quercus lobata*		6	8			X			X		6	
395	Live Oak	*Quercus wislizenii*	5,7	12	16	X					X		12	
396	Live Oak	*Quercus wislizenii*		7	14	X					X		7	
397	Live Oak	*Quercus wislizenii*	5,6,6,7	24	15		X				X		24	
398	Live Oak	*Quercus wislizenii*	5,6,7	18	16		X				X		18	
399	Glossy Privet	*Ligustrum lucidum*	4,5,5,6	20	8			X			X	20		
400	Glossy Privet	*Ligustrum lucidum*		6	7			X			X	6		
401	Glossy Privet	*Ligustrum lucidum*	3,3,4,4	14	11			X			X	14		
402	Glossy Privet	*Ligustrum lucidum*	4,6,7	17	15			X			X	17		
403	Glossy Privet	*Ligustrum lucidum*	4,5,5,6	20	14			X			X	20		
404	Glossy Privet	*Ligustrum lucidum*	2,2,2,2,3	11	12			X			X	11		
405	Glossy Privet	*Ligustrum lucidum*	2,3,3,4	12	9			X			X	12		
406	Glossy Privet	*Ligustrum lucidum*	2,4,4,5	15	11			X			X	15		
407	Glossy Privet	*Ligustrum lucidum*	4,5	9	10			X			X	9		
408	Glossy Privet	*Ligustrum lucidum*	2,3	5	7			X			X	5		
409	Glossy Privet	*Ligustrum lucidum*	4,4,5,5	18	11			X			X	18		
410	Glossy Privet	*Ligustrum lucidum*	4,4,5,5	18	9			X			X	18		
411	Glossy Privet	*Ligustrum lucidum*	2,2,3,3	10	7			X			X	10		
412	Glossy Privet	*Ligustrum lucidum*	5,6	11	9			X			X	11		
413	Glossy Privet	*Ligustrum lucidum*	3,3,4,5	15	12			X			X	15		
414	Glossy Privet	*Ligustrum lucidum*	1,1,1,2,2,3	10	10			X			X	10		
415	Glossy Privet	*Ligustrum lucidum*	2,2,3,4	11	11			X			X	11		
416	Glossy Privet	*Ligustrum lucidum*	2,3,4	9	12			X			X	9		
417	Jeffrey Pine	*Pinus jeffreyi*		6	8			X			X		6	
End of Bureau Property														

AUBURN-FOLSOM ROAD 4-LANE WIDENING PROJECT
Tree Inventory/Assessment

TREE #	COMMON NAME	SPECIES	MULTI	DBH	DRIP	Condition/Structure			Condition/Vigor			NON NATIVE	NATIVE	COMMENTS
9145 Auburn-Folsom														
418	Blue Oak	*Quercus douglasii*		17	20		X				X		17	
419	Incense Cedar	*Calocedrus decurrens*		15	17			X			X		15	
420	Blue Oak	*Quercus douglasii*		17	19		X				X		17	
421	Blue Oak	*Quercus douglasii*		13	17			X			X		13	
422	Fruitless Mulberry	*Morus alba*		11	16			X			X	11		
9095 Auburn-Folsom														
423	Live Oak	*Quercus wislizenii*	6,6,7,7,8,10	44	20	X					X		44	
424	Live Oak	*Quercus wislizenii*	7,8	15	21	X					X		15	
425	Live Oak	*Quercus wislizenii*	7,10,14,15,17	63	23	X					X		63	
426	Blue Oak	*Quercus douglasii*	6,8	14	12		X				X		14	
427	Live Oak	*Quercus wislizenii*	6,7,8,8,9,9	47	20			X			X		47	
428	Foothill Pine	*Pinus sabiniana*		30	28			X			X		30	
429	Foothill Pine	*Pinus sabiniana*		27	30			X			X		27	
430	Live Oak	*Quercus wislizenii*		16	27			X			X		16	
431	Live Oak	*Quercus wislizenii*	6,7	13	17			X			X		13	
432	Live Oak	*Quercus wislizenii*	6,7,7	20	17		X				X		20	
9085 Auburn-Folsom														
433	Live Oak	*Quercus wislizenii*		11	20	X					X		11	
434	Live Oak	*Quercus wislizenii*		17	21		X				X		17	
435	Live Oak	*Quercus wislizenii*	10,12	22	21			X			X		22	
436	Cottonwood	*Populus*	16,29,33	78	30			X			X		78	
437	Live Oak	*Quercus wislizenii*	6,10,11	27	17			X			X		27	
438	Live Oak	*Quercus wislizenii*		7	16		X				X		7	
439	Live Oak	*Quercus wislizenii*		15	22			X			X		15	
440	Live Oak	*Quercus wislizenii*		7	12		X				X		7	
9065 Auburn-Folsom														
441	Willow	*Salix sp.*	24,29	53	30		X				X		53	
442	Live Oak	*Quercus wislizenii*	7,11	18	20			X			X		18	
443	Live Oak	*Quercus wislizenii*	7,9,11,12	39	27			X			X		39	
444	Willow	*Salix sp.*		20	27	X					X		20	
445	Willow	*Salix sp.*		16	24		X				X		16	
446	Live Oak	*Quercus wislizenii*		12	16		X				X		12	
447	Live Oak	*Quercus wislizenii*		16	26			X			X		16	

AUBURN-FOLSOM ROAD 4-LANE WIDENING PROJECT
Tree Inventory/Assessment

TREE #	COMMON NAME	SPECIES	NOTE	DBH	DLR	Condition/Structure P	F	E	Condition/Vitality P	F	E	NON NATIVE	NATIVE	COMMENTS
9045 Auburn-Folsom														
448	Blue Oak	*Quercus douglasii*		17	26			X			X		17	
449	Live Oak	*Quercus wislizenii*	6,7	13	12		X				X		13	
450	Live Oak	*Quercus wislizenii*	4,7	11	16			X			X		11	
451	Foothill Pine	*Pinus sabiniana*		16	27			X			X		16	Not tagged
452	Foothill Pine	*Pinus sabiniana*		29	40			X			X		29	Not tagged
453	Foothill Pine	*Pinus sabiniana*		32	39		X				X		32	Not tagged
454	Live Oak	*Quercus wislizenii*	9,12	21	30		X				X		21	
455	Live Oak	*Quercus wislizenii*	11,30	41	25	X					X		41	
456	Blue Oak	*Quercus douglasii*	4,7	11	8			X			X		11	
457	Blue Oak	*Quercus douglasii*		7	8			X			X		7	
458	Live Oak	*Quercus wislizenii*	5,7	12	12		X				X		12	
459	Live Oak	*Quercus wislizenii*		24	27		X				X		24	
460	Foothill Pine	*Pinus sabiniana*		35	44			X			X		35	
461	Valley Oak	*Quercus lobata*		21	26			X			X		21	
Lake Trail Court (APN 050-190-001)														
462	Live Oak	*Quercus wislizenii*		12	17		X				X		12	
463	Valley Oak	*Quercus lobata*		7	12			X		X			7	
464	Valley Oak	*Quercus lobata*		10	14			X		X			10	
465	Valley Oak	*Quercus lobata*	6,9	15	18			X		X			15	
466	Live Oak	*Quercus wislizenii*	2,4,5	11	10			X			X		11	
467	Live Oak	*Quercus wislizenii*	4,4,4	12	12			X			X		12	
468	Valley Oak	*Quercus lobata*		15	20			X			X		15	
469	Live Oak	*Quercus wislizenii*		23	20	X					X		23	
470	Valley Oak	*Quercus lobata*	7,8	15	16			X			X		15	
471	Foothill Pine	*Pinus sabiniana*		37	38		X				X		37	
472	Foothill Pine	*Pinus sabiniana*		7	8			X			X		7	
473	Foothill Pine	*Pinus sabiniana*		14	17			X			X		14	
474	Live Oak	*Quercus wislizenii*		12	16		X				X		12	
475	Foothill Pine	*Pinus sabiniana*		27	30			X			X		27	
476	Foothill Pine	*Pinus sabiniana*		6	7			X			X		6	
477	Valley Oak	*Quercus lobata*		18	22			X			X		18	
478	Foothill Pine	*Pinus sabiniana*		8	12			X			X		8	
479	Valley Oak	*Quercus lobata*		15	20			X			X		15	
480	Foothill Pine	*Pinus sabiniana*		14	12			X			X		14	

TREE #	COMMON NAME	SPECIES	MULTI	DBH	DLR	Condition/Structure P	P/F	F	Condition/Vigor P	P/F	F	NON NATIVE	NATIVE	COMMENTS
481	Foothill Pine	*Pinus sabiniana*		16	20			X			X		16	
482	Foothill Pine	*Pinus sabiniana*		28	30			X			X		28	
483	Live Oak	*Quercus wislizenii*	14,18	32	24			X			X		32	
484	Foothill Pine	*Pinus sabiniana*		17	29			X			X		17	
485	Foothill Pine	*Pinus sabiniana*		16	22			X			X		16	
486	Foothill Pine	*Pinus sabiniana*		14	25			X			X		14	
487	Foothill Pine	*Pinus sabiniana*		19	26			X			X		19	
488	Foothill Pine	*Pinus sabiniana*		17	35		X				X		17	
489	Foothill Pine	*Pinus sabiniana*		9	40		X				X		9	
490	Valley Oak	*Quercus lobata*		18	24			X			X		18	
491	Valley Oak	*Quercus lobata*		9	16			X			X		9	
492	Valley Oak	*Quercus lobata*		8	14			X			X		8	
493	Foothill Pine	*Pinus sabiniana*		8	16			X			X		8	
494	Foothill Pine	*Pinus sabiniana*		8	17			X			X		8	
495	Valley Oak	*Quercus lobata*		16	24			X			X		16	
496	Valley Oak	*Quercus lobata*		15	22			X			X		15	
497	Valley Oak	*Quercus lobata*		14	22		X				X		14	
498	Willow	*Salix sp.*		16	25			X			X		16	
499	Willow	*Salix sp.*	8,10	18	16			X			X		18	
500	Willow	*Salix sp.*		14	22			X			X		14	
Pump Station Driveway (APN 047-150-045) [switching to round tags 501-600]														
501	Valley Oak	*Quercus lobata*		15	24			X			X		15	
502	Valley Oak	*Quercus lobata*		16	25			X			X		16	
503	Valley Oak	*Quercus lobata*		8	17			X			X		8	
504	Live Oak	*Quercus wislizenii*		8	19		X				X		8	
505	Live Oak	*Quercus wislizenii*		8	18	X					X		8	
506	Valley Oak	*Quercus lobata*		17	24			X			X		17	
507	Foothill Pine	*Pinus sabiniana*		34	40		X				X		34	
508	Valley Oak	*Quercus lobata*		8	22			X			X		8	
509	Valley Oak	*Quercus lobata*		7	15			X			X		7	
510	Valley Oak	*Quercus lobata*		6	9			X			X		6	
511	Foothill Pine	*Pinus sabiniana*		6	8			X			X		6	
512	Foothill Pine	*Pinus sabiniana*		14	19			X			X		14	
513	Foothill Pine	*Pinus sabiniana*		17	25			X			X		17	
514	Valley Oak	*Quercus lobata*		6	8			X			X		6	

AUBURN-FOLSOM ROAD 4-LANE WIDENING PROJECT
Tree Inventory/Assessment

TREE #	COMMON NAME	SPECIES	MULTI	DBH	DLR	Condition/Structure P	Condition/Structure PF	Condition/Structure F	Condition/Vigor P	Condition/Vigor PF	Condition/Vigor F	NON NATIVE	NATIVE	COMMENTS
515	Foothill Pine	*Pinus sabiniana*		14	20			X			X		14	
516	Live Oak	*Quercus wislizenii*		20	23			X			X		20	
517	Blue Oak	*Quercus douglasii*		16	22			X			X		16	
518	Blue Oak	*Quercus douglasii*		11	17			X			X		11	
West Side of Auburn-Folsom from North to South (APN 048-360-050)														
519	Foothill Pine	*Pinus sabiniana*		24	28			X			X		24	
520	Foothill Pine	*Pinus sabiniana*		15	17			X			X		15	
APN 048-410-035														
521	Foothill Pine	*Pinus sabiniana*		17	22			X			X		17	
522	Coast Live Oak	*Quercus agrifolia*		12	15			X			X		12	
523	Coast Live Oak	*Quercus agrifolia*	7,10	17	14			X			X		17	
APN 048-590-031														
524	Live Oak	*Quercus wislizenii*	10,12	22	20	X					X		22	
525	Live Oak	*Quercus wislizenii*	10,14	24	24	X					X		24	
526	Live Oak	*Quercus wislizenii*		10	21	X					X		10	
APN 048-130-067														
527	Live Oak	*Quercus wislizenii*	10,13,15	38	20	X					X		38	
APN 048-130-013														
528	Blue Oak	*Quercus douglasii*	9,12,13	34	16	X					X		34	
529	Foothill Pine	*Pinus sabiniana*		21	20	X					X		21	
530	Blue Oak	*Quercus douglasii*		14	17			X			X		14	
APN 048-130-065														
531	Japanese Black Pine	*Pinus thunbergiana*		8	10			X			X	8		Not tagged in the field
532	Jeffrey Pine	*Pinus jeffreyi*		7	10			X			X	7		Not tagged in the field
533	Blue Oak	*Quercus douglasii*	7,8,8	23	11			X			X		23	Not tagged in the field
534	Japanese Black Pine	*Pinus thunbergiana*		15	16		X				X	15		Not tagged in the field
535	Japanese Black Pine	*Pinus thunbergiana*		10	12			X			X	10		Not tagged in the field
APN 050-016-030														
536	Blue Oak	*Quercus douglasii*		6	6			X			X		6	Not tagged in the field
537	Valley Oak	*Quercus lobata*		23	24			X			X		23	
APN 050-160-039														
538	Live Oak	*Quercus wislizenii*	9,11,12,14,14,20	80	26		X				X		80	

AUBURN-FOLSOM ROAD 4-LANE WIDENING PROJECT
Tree Inventory/Assessment

TREE #	COMMON NAME	SPECIES	MULTI	DBH	DLR	Condition/Structure P	Condition/Structure PF	Condition/Structure F	Condition/Vigor P	Condition/Vigor PF	Condition/Vigor F	NON-NATIVE	NATIVE	COMMENTS
APN 050-170-029														
539	Blue Oak	*Quercus douglasii*		8	12			X			X		8	
540	Live Oak	*Quercus wislizenii*	10,11,13	34	17			X			X		34	
541	Live Oak	*Quercus wislizenii*	4,5,6,6,6,8	35	20			X			X		35	
542	Valley Oak	*Quercus lobata*	7,12	19	16			X			X		19	
543	Live Oak	*Quercus wislizenii*		8	15			X			X		8	
544	Valley Oak	*Quercus lobata*		8	12		X				X		8	
545	Valley Oak	*Quercus lobata*		10	15		X				X		10	
546	Black Walnut	*Juglans nigra*	6,8,8,10	32	16		X				X		32	
547	Valley Oak	*Quercus lobata*		14	17		X				X		14	
548	Live Oak	*Quercus wislizenii*	11,15	26	20			X			X		26	
549	Live Oak	*Quercus wislizenii*		8	14			X			X		8	
APN 050-170-038														
550	Live Oak	*Quercus wislizenii*	5,8,8	21	16		X				X		21	
551	Live Oak	*Quercus wislizenii*	4,6,12	22	16			X			X		22	
552	Valley Oak	*Quercus lobata*		12	16			X			X		12	
553	Fruitless Mulberry	*Morus alba*	4,6,7	17	12			X			X	17		
APN 050-170-058														
554	Eucalyptus sp.			8	12			X			X	8		
555	Eucalyptus sp.			9	12			X			X	9		
556	Eucalyptus sp.			7	10			X			X	7		
557	Eucalyptus sp.			9	12			X			X	9		
558	Eucalyptus sp.		4,4,4,5,5	22	8			X			X	22		
559	Eucalyptus sp.			6	7			X			X	6		
560	Eucalyptus sp.		4,6	10	7			X			X	10		
561	Eucalyptus sp.			4	6			X			X	4		
562	Eucalyptus sp.		5,5	10	6			X			X	10		
563	Eucalyptus sp.			6	8			X			X	6		
564	Eucalyptus sp.		6,7	13	8			X			X	13		
565	Eucalyptus sp.			4	6			X			X	4		
566	Eucalyptus sp.			4	5			X			X	4		
567	Eucalyptus sp.		4,4,5	13	8			X			X	13		
568	Eucalyptus sp.		8,8	16	10			X			X	16		
569	Eucalyptus sp.		5,6,7	18	10			X			X	18		
570	Eucalyptus sp.		5,6	11	8			X			X	11		

AUBURN-FOLSOM ROAD 4-LANE WIDENING PROJECT
Tree Inventory/Assessment

TREE #	COMMON NAME	SPECIES	MULTI	DBH	DLR	Condition/Structure P	PP	F	Condition/Vigor P	PP	F	NON NATIVE	NATIVE	COMMENTS
571	Eucalyptus sp.		3,6	9	8			X			X	9		
572	Eucalyptus sp.			8	9			X			X	8		
573	Eucalyptus sp.			8	10			X			X	8		
574	Eucalyptus sp.			10	12			X			X	10		
575	Eucalyptus sp.			12	16			X			X	12		
APN 050-170-026														
576	Eucalyptus sp.		5,6	11	8			X			X	11		
Located in Front 20 Feet of Parcel at 9250 Auburn-Folsom (APN 050-170-048)														
577	Eucalyptus sp.			18	20			X			X	18		Not Tagged
578	Eucalyptus sp.			13	16			X			X	13		Not Tagged
579	Eucalyptus sp.			14	15			X			X	14		Not Tagged
580	Eucalyptus sp.		4,6	10	12			X			X	10		Not Tagged
581	Eucalyptus sp.		2,6	8	6			X			X	8		Not Tagged
582	Eucalyptus sp.			23	25			X			X	23		Not Tagged
583	Eucalyptus sp.		6,7	13	17			X			X	13		Not Tagged
584	Eucalyptus sp.		4,5	9	12			X			X	9		Not Tagged
585	Eucalyptus sp.			14	16			X			X	14		Not Tagged
586	Eucalyptus sp.		5,5	10	16			X			X	10		Not Tagged
587	Eucalyptus sp.		6,8	14	14			X			X	14		Not Tagged
588	Eucalyptus sp.			9				X			X	9		Not Tagged
589	Eucalyptus sp.		5,6	11	10			X			X	11		Not Tagged
590	Eucalyptus sp.		6,7	13	12			X			X	13		Not Tagged
591	Eucalyptus sp.		5,6	11	10			X			X	11		Not Tagged
592	Eucalyptus sp.		4,4	8	8			X			X	8		Not Tagged
593	Eucalyptus sp.		8,9	17	12			X			X	17		Not Tagged
594	Eucalyptus sp.		3,3	6	7			X			X	6		Not Tagged
595	Live Oak	*Quercus wislizenii*	4,6,7	17	12			X			X		17	Not Tagged
596	Live Oak	*Quercus wislizenii*	6,6,8,11,14	45	22			X			X		45	
597	Valley Oak	*Quercus lobata*		15	22			X			X		15	
APN 050-170-050														
598	Valley Oak	*Quercus lobata*		15	26			X			X		15	
599	Valley Oak	*Quercus lobata*		12	17			X			X		12	
600	Valley Oak	*Quercus lobata*		8	14			X			X		8	
601	Valley Oak	*Quercus lobata*		12	16			X			X		12	
602	Valley Oak	*Quercus lobata*		7	17			X			X		7	

AUBURN-FOLSOM ROAD 4-LANE WIDENING PROJECT
Tree Inventory/Assessment

TREE #	COMMON NAME	SPECIES	MULTI	DBH	DLR	Condition/Structure P	Condition/Structure PF	Condition/Structure F	Condition/Vigor P	Condition/Vigor PF	Condition/Vigor F	NON NATIVE	NATIVE	COMMENTS
603	Live Oak	*Quercus wislizenii*	10,13,14	37	21			X			X		37	
604	Valley Oak	*Quercus lobata*	5,5	10	14			X			X		10	
605	Live Oak	*Quercus wislizenii*		12	16			X			X		12	
606	Valley Oak	*Quercus lobata*		23	22			X			X		23	
607	Valley Oak	*Quercus lobata*		7	10			X			X		7	
608	Live Oak	*Quercus wislizenii*		9	14			X			X		9	
609	Coast Redwood	*Sequoia sempervirens*		8	8			X			X		8	
610	Deodar Cedar	*Cedrus deodara*		12	14			X			X		12	
APN 050-170-063														
611	Monterey Pine	*Pinus radiata*		12	12			X		X			12	
612	Coast Redwood	*Sequoia sempervirens*		13	12			X			X		13	
613	Eucalyptus sp.			12	13			X			X		12	
614	Eucalyptus sp.			7	9			X			X		7	
615	Eucalyptus sp.			26	23			X			X		26	
616	Lodge Pole Pine	*Pinus contorta*		11	10			X			X		11	
617	Japanese Black Pine	*Pinus thunbergiana*		7	9			X			X	7		
618	Lodge Pole Pine	*Pinus contorta*		18	21			X			X		18	
619	Privot	*Ligustrum*	3,3,4,4	14	8			X			X	14		
APN 050-170-021														
620	Eucalyptus sp.			9	10			X			X	9		
621	Japanese Black Pine	*Pinus thunbergiana*		8	12		X				X	8		
622	Jeffrey Pine	*Pinus jeffreyi*		8	10			X			X		8	
623	Jeffrey Pine	*Pinus jeffreyi*		9	12			X			X		9	
624	Monterey Pine	*Pinus radiata*		9	12			X	X				9	
625	Incense Cedar	*Calocedrus decurrens*		24	20			X			X		24	
626	Incense Cedar	*Calocedrus decurrens*		11	10			X			X		11	
627	Monterey Pine	*Pinus radiata*		21	20			X	X				21	
628	Monterey Pine	*Pinus radiata*		14	17			X		X			14	
629	Incense Cedar	*Calocedrus decurrens*		19	17			X			X		19	
630	Monterey Pine	*Pinus radiata*		16	17			X			X		16	
631	Silk Tree	*Albizia julibrissin*		8	10			X			X	8		
632	Silk Tree	*Albizia julibrissin*		8	12			X			X	8		
633	Monterey Pine	*Pinus radiata*		17	16			X		X			17	
634	Plum	Pinus sp.		10	12			X			X	10		Short bristled 3 to a sack
635	Monterey Pine	*Pinus radiata*		8	10			X			X		8	

TREE #	COMMON NAME	SPECIES	MULTI	DBH	DLR	Condition/Structure P	Condition/Structure R-F	Condition/Structure F	Condition/Vigor P	Condition/Vigor R-F	Condition/Vigor F	NON NATIVE	NATIVE	COMMENTS
636	Monterey Pine	*Pinus radiata*	6,8,9	23	12			X			X		23	
637	Monterey Pine	*Pinus radiata*		8	10		X				X		8	
638	Plum	Pinus sp.		15	16			X			X	15		
639	Monterey Pine	*Pinus radiata*		16	17			X		X			16	
640	Eucalyptus sp.		5,5,6,6,8,9	39	16			X			X	39		
641	Live Oak	*Quercus wislizenii*	3,5	8	9			X			X		8	
642	Eucalyptus sp.		5,5,5,6,6,6,7	40	12		X				X	40		
643	Eucalyptus sp.		5,5,5,6,6	27	15		X				X	27		
644	Valley Oak	*Quercus lobata*		9	12			X			X		9	
645	Eucalyptus sp.			16	17			X			X	16		
APN 050-070-052														
646	Eucalyptus sp.		4,4,5,5,5,15	38	20		X				X	38		
647	Eucalyptus sp.		4,4,5,5,6,6,8	38	14		X				X	38		
648	Eucalyptus sp.		4,4,4,4,5,5,6,6,7,8	53	16		X				X	53		
649	Eucalyptus sp.		4,4,5,5,5,6,6,9	44	12		X				X	44		
650	Eucalyptus sp.		4,4,5,5	18	12		X				X	18		
651	Eucalyptus sp.		4,4,5,5,6,6,7	37	13		X				X	37		
652	Eucalyptus sp.		6,8,12,15	41	20		X				X	41		
653	Eucalyptus sp.		4,4,5,5,6,7,8	39	10		X				X	39		
654	Eucalyptus sp.		4,4,4,4,5,5,6,8	40	12		X				X	40		
655	Eucalyptus sp.		4,4,5,6,7	26	13		X				X	26		
656	Live Oak	*Quercus wislizenii*	2,2,3,3	10	8			X			X		10	
657	Eucalyptus sp.		4,4,4,5,5,6,7,9	44	14		X				X	44		
658	Eucalyptus sp.		3,4,4,5,5,5,6	32	13		X				X	32		
659	Eucalyptus sp.		4,4,5,5,7	25	12		X				X	25		
660	Eucalyptus sp.		5,5,6,6,6	28	14		X				X	28		
661	Eucalyptus sp.		5,5,6,6,6,6,6,7,8,8	63	14		X				X	63		
APN 050-070-056														
662	Eucalyptus sp.		4,4,4,4,5,5,6,7	39	16		X				X	39		
663	Valley Oak	*Quercus lobata*		38	40			X			X		38	
664	Valley Oak	*Quercus lobata*		12	16			X			X		12	
665	Willow	*Salix sp.*	5,6,11	22	19			X			X		22	
666	Live Oak	*Quercus wislizenii*	3,3,4	10	12			X			X		10	
667	Live Oak	*Quercus wislizenii*		6	13			X			X		6	
668	Live Oak	*Quercus wislizenii*		[illegible]	[illegible]			X			X		[illegible]	

AUBURN-FOLSOM ROAD 4-LANE WIDENING PROJECT
Tree Inventory/Assessment

TREE #	COMMON NAME	SPECIES	MULTI	DBH	DLR	Condition/Structure P	F	F	Condition/Vigor P	P-F	F	NON-NATIVE	NATIVE	COMMENTS
669	Live Oak	*Quercus wislizenii*	7,9	16	18			X			X		16	
670	Eucalyptus sp.			11	12			X			X	11		
671	Eucalyptus sp.			10	15			X			X	10		
672	Eucalyptus sp.			15	17			X			X	15		
673	Eucalyptus sp.			16	18			X			X	16		
674	Jeffrey Pine	*Pinus jeffreyi*		7	10			X			X		7	
APN 050-070-071														
675	Jeffrey Pine	*Pinus jeffreyi*		8	12			X			X		8	
676	Jeffrey Pine	*Pinus jeffreyi*		10	13			X			X		10	
677	Jeffrey Pine	*Pinus jeffreyi*		8	10			X			X		8	
678	Jeffrey Pine	*Pinus jeffreyi*		12	14			X			X		12	
679	Jeffrey Pine	*Pinus jeffreyi*		8	10			X			X		8	
680	Black Locust	*Robinia pseudoacacia*	10,10	20	18			X			X	20		
681	Blue Oak	*Quercus douglasii*		18	20			X			X		18	
682	Live Oak	*Quercus wislizenii*	12,13,18,20,22,25	110	30		X				X		110	
APN 050-070-072														
683	Jeffrey Pine	*Pinus jeffreyi*		21	23			X			X		21	
684	White Alder	*Alnus rhombifolia*	6,6	12	10			X			X		12	
685	Jeffrey Pine	*Pinus jeffreyi*		16	18			X			X		16	
686	Jeffrey Pine	*Pinus jeffreyi*		14	16			X			X		14	
687	Jeffrey Pine	*Pinus jeffreyi*		13	14			X			X		13	
688	Jeffrey Pine	*Pinus jeffreyi*		8	10			X			X		8	
689	Jeffrey Pine	*Pinus jeffreyi*		14	15			X			X		14	
APN 050-110-027														
690	Live Oak	*Quercus wislizenii*	8,8,10,10,12,16,20	84	24		X				X		84	
691	Live Oak	*Quercus wislizenii*	6,8,14,15,17	60	22		X				X		60	
692	Live Oak	*Quercus wislizenii*	4,4,4,5,6,6,9	38	20		X				X		38	
693	Stump Sprout		14,16,16	46	26		X				X		46	
694	Foothill Pine	*Pinus sabiniana*		30	40		X				X		30	
695	Live Oak	*Quercus wislizenii*	4,4,5,6	19	13			X			X		19	
APN 050-110-028														
696	Live Oak	*Quercus wislizenii*	4,5,5,6,6,6,7,8,9,10,11,12,13,14	116	27		X				X		116	
697	Live Oak	*Quercus wislizenii*	12,13,13,14	52	30		X				X		52	
698	Live Oak	*Quercus wislizenii*	13,15	28	18			X			X		28	
699	Live Oak	*Quercus wislizenii*		19	22			X			X		19	

AUBURN-FOLSOM ROAD 4-LANE WIDENING PROJECT
Tree Inventory/Assessment

TREE #	COMMON NAME	SPECIES	MULTI	DBH	DLR	Condition/Structure			Condition/Vigor			NONNATIVE	NATIVE	COMMENTS
APN 050-110-020, North Side Continuing West														
700	Live Oak	*Quercus wislizenii*		29	30			X			X		29	
701	Live Oak	*Quercus wislizenii*		6	9			X			X		6	
702	Valley Oak	*Quercus lobata*		9	17			X			X		9	
703	Valley Oak	*Quercus lobata*		10	15			X			X		10	
APN 050-220-003														
704	Olive	*Olea europaea*	6,6	12	13			X			X	12		
705	Monterey Pine	*Pinus radiata*		15	18		X				X		15	Topped for line clearance
706	Monterey Pine	*Pinus radiata*		12	13		X			X			12	Topped for line clearance
707	Monterey Pine	*Pinus radiata*		12	13		X			X			12	Topped for line clearance
708	Monterey Pine	*Pinus radiata*		9	10		X		X				9	Topped for line clearance
709	Monterey Pine	*Pinus radiata*		15	16		X			X			15	Topped for line clearance
710	Monterey Pine	*Pinus radiata*		16	12			X		X			16	Topped for line clearance
711	Monterey Pine	*Pinus radiata*		15	16		X		X				15	Topped for line clearance
712	Monterey Pine	*Pinus radiata*		12	10	X			X				12	Topped for line clearance
713	Monterey Pine	*Pinus radiata*		14	9	X			X				14	Topped for line clearance
714	Monterey Pine	*Pinus radiata*		12	10	X			X				12	Topped for line clearance
715	Monterey Pine	*Pinus radiata*		16	15			X			X		16	Topped for line clearance
716	Monterey Pine	*Pinus radiata*		11	12		X				X		11	Topped for line clearance
717	Monterey Pine	*Pinus radiata*		11	9	X				X			11	Topped for line clearance
718	Monterey Pine	*Pinus radiata*		15	16	X				X			15	Topped for line clearance
719	Monterey Pine	*Pinus radiata*		15	11	X				X			15	Topped for line clearance
720	Monterey Pine	*Pinus radiata*		10	12	X				X			10	Topped for line clearance
721	Monterey Pine	*Pinus radiata*		12	15	X				X			12	Topped for line clearance
722	Monterey Pine	*Pinus radiata*		12	12	X				X			12	Topped for line clearance
723	Monterey Pine	*Pinus radiata*		11	12			X			X		11	Topped for line clearance
724	Monterey Pine	*Pinus radiata*		9	8			X			X		9	Topped for line clearance
725	Monterey Pine	*Pinus radiata*		11	12			X			X		11	Topped for line clearance
726	Monterey Pine	*Pinus radiata*		12	10	X				X			12	
727	Olive	*Olea europaea*	4,4,4,5,5,6,6,6	40	12		X				X	40		
728	Monterey Pine	*Pinus radiata*		7	8	X					X		7	
729	Monterey Pine	*Pinus radiata*		9	12			X			X		9	
730	Monterey Pine	*Pinus radiata*		11	12			X		X			11	
731	Monterey Pine	*Pinus radiata*		15	18			X			X		15	
732	Monterey Pine	*Pinus radiata*		8	9			X			X		8	

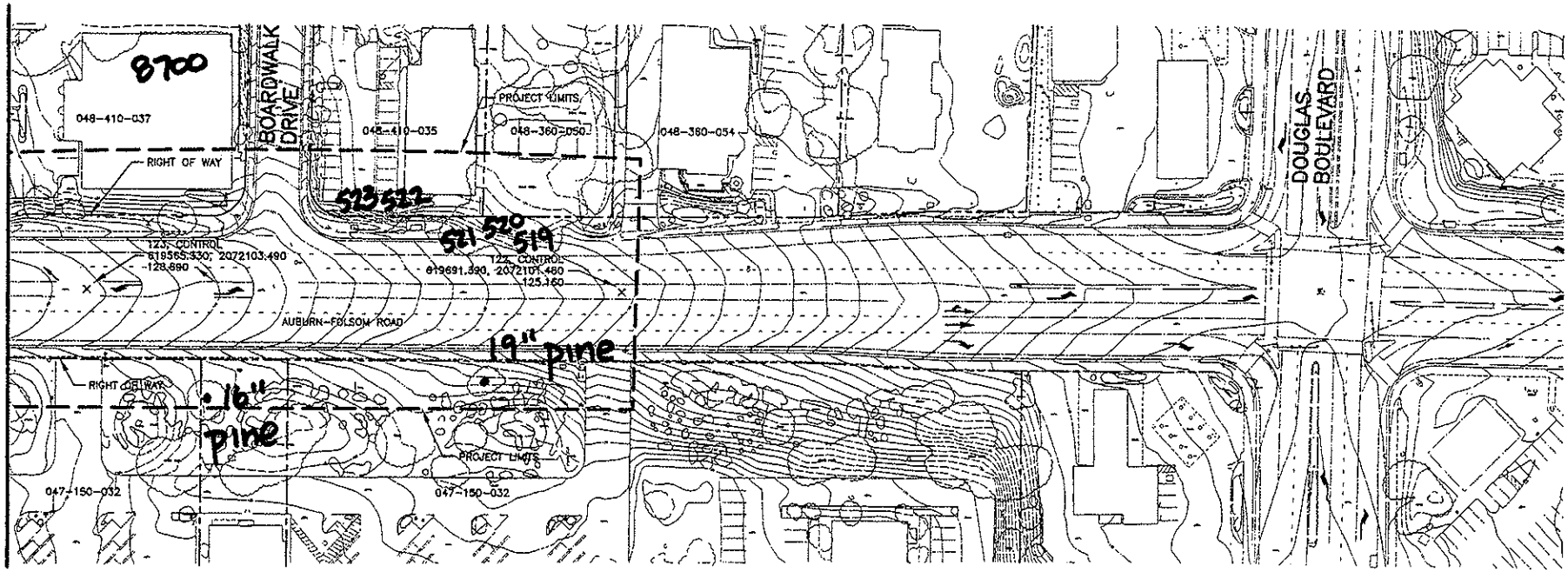
TREE #	COMMON NAME	SPECIES	MULTI	DBH	FLR	Condition/Structure P	Condition/Structure PF	Condition/Structure F	Condition/Vigor P	Condition/Vigor PF	Condition/Vigor F	NON NATIVE	NATIVE	COMMENTS
733	Monterey Pine	*Pinus radiata*		8	9	X				X			8	
734	Monterey Pine	*Pinus radiata*		6	8	X				X			6	
735	Monterey Pine	*Pinus radiata*		11	10	X				X			11	
736	Monterey Pine	*Pinus radiata*		8	9	X			X				8	
737	Monterey Pine	*Pinus radiata*		10	10	X			X				10	
738	Monterey Pine	*Pinus radiata*		9	11	X				X			9	
739	Monterey Pine	*Pinus radiata*		8	10			X		X			8	
740	Monterey Pine	*Pinus radiata*		10	12			X		X			10	
741	Monterey Pine	*Pinus radiata*		8	10			X			X		8	
742	Monterey Pine	*Pinus radiata*		8	9			X			X		8	
743	Monterey Pine	*Pinus radiata*		11	12	X				X			11	
744	Monterey Pine	*Pinus radiata*		13	12	X				X			13	
745	Monterey Pine	*Pinus radiata*		11	12			X			X		11	
746	Monterey Pine	*Pinus radiata*		13	13			X			X		13	
747	Monterey Pine	*Pinus radiata*		9	10			X			X		9	
748	Monterey Pine	*Pinus radiata*		11	12			X			X		11	
749	Monterey Pine	*Pinus radiata*		10	10	X				X			10	
750	Live Oak	*Quercus wislizenii*		6	10		X				X		6	
751	Monterey Pine	*Pinus radiata*		15	12	X				X			15	
752	Monterey Pine	*Pinus radiata*		13	14			X			X		13	
753	Monterey Pine	*Pinus radiata*		14	11			X			X		14	
754	Live Oak	*Quercus wislizenii*	5,7	12	12			X			X		12	
755	Brazilian Pepper	*Schinus terebinthifolius*	7,7,7,7	28	12			X			X	28		
APN 050-220-001														
756	Black Walnut	*Juglans nigra*	4,4	8	10		X				X		8	
757	Live Oak	*Quercus wislizenii*	4,6	10	10			X			X		10	
758	Foothill Pine	*Pinus sabiniana*		12	12	X					X		12	
759	Live Oak	*Quercus wislizenii*	3,4,5	12	10			X			X		12	
760	Live Oak	*Quercus wislizenii*		7	10	X					X		7	
761	Black Walnut	*Juglans nigra*	3,3,4,4	14	9	X					X		14	
762	Valley Oak	*Quercus lobata*	4,4,5	13	9	X					X		13	
763	Live Oak	*Quercus wislizenii*	4,7	11	10		X				X		11	
764	Live Oak	*Quercus wislizenii*	6,7	13	13		X				X		13	

TREE #	COMMON NAME	SPECIES	MULTI	DBH	DIR	Condition/Structure P	P-F	F	Condition/Vigor P	P-F	F	NON-NATIVE	NATIVE	COMMENTS
APN 050-220-014														
765	White Alder	*Alnus rhombifolia*	6,8	14	17	X					X		14	
766	Flowering Pear	*Pyrus communis*		14	16		X				X	14		
767	Flowering Pear	*Pyrus communis*		13	12		X				X	13		
768	Flowering Pear	*Pyrus communis*		11	14		X				X	11		
769	Flowering Pear	*Pyrus communis*		14	15		X				X	14		
APN 050-130-070														
770	Flowering Pear	*Pyrus communis*		13	17		X				X	13		
771	Willow	*Salix sp.*	6,6,7,8	27	22			X			X		27	
772	Willow	*Salix sp.*	8,12	20	14		X				X		20	
773	Foothill Pine	*Pinus sabiniana*		20	17	X					X		20	
774	Willow	*Salix sp.*	8,8,9	25	15		X				X		25	
775	Foothill Pine	*Pinus sabiniana*		21	16	X					X		21	
776	California Sycamore	*Platanus racemosa*		14	16			X			X		14	
APN 050-130-076														
777	Valley Oak	*Quercus lobata*	10,11,13,16	50	24		X				X		50	
778	Foothill Pine	*Pinus sabiniana*		8	12			X			X		8	
779	Live Oak	*Quercus wislizenii*	3,6,9	18	16			X			X		18	
780	Live Oak	*Quercus wislizenii*	7,8	15	14			X			X		15	
781	Live Oak	*Quercus wislizenii*	5,5,6,6,8,9	39	17		X			X			39	
782	Live Oak	*Quercus wislizenii*	5,5,6,6,7	29	16		X				X		29	
783	Live Oak	*Quercus wislizenii*	26,28	54	30			X			X		54	
784	Live Oak	*Quercus wislizenii*	5,6,8	19	14			X			X		19	
785	Live Oak	*Quercus wislizenii*	14,24	38	30			X			X		38	
786	Live Oak	*Quercus wislizenii*	6,6,7	19	20		X				X		19	
787	Blue Oak	*Quercus douglasii*		19	21			X			X		19	
788	Live Oak	*Quercus wislizenii*		7	19		X				X		7	
APN 050-130-077														
789	Live Oak	*Quercus wislizenii*	7,11	18	18		X				X		18	
790	Live Oak	*Quercus wislizenii*	7,8,10,18,18	61	20		X				X		61	
791	Live Oak	*Quercus wislizenii*	6,6,8,8,8,10,12	58	19		X				X		58	
792	London Plane	*Platanus acerifolia*	10,14	24	20			X			X	24		
793	Foothill Pine	*Pinus sabiniana*		15	17			X			X		15	
794	Blue Oak	*Quercus douglasii*	9,15	24	20			X			X		24	
795	Foothill Pine	*Pinus sabiniana*		7	10			X			X		7	

AUBURN-FOLSOM ROAD 4-LANE WIDENING PROJECT
Tree Inventory/Assessment

TREE #	COMMON NAME	SPECIES	MULTI	DBH	DIR	Condition/Structure P	Condition/Structure F	Condition/Structure P	Condition/Vigor P	Condition/Vigor F	Condition/Vigor P	NON NATIVE	NATIVE	COMMENTS
796	Live Oak	*Quercus wislizenii*	6,6,7,7,8,10	44	20		X				X		44	
797	Live Oak	*Quercus wislizenii*	6,7,7,9,10	39	20			X			X		39	
798	Live Oak	*Quercus wislizenii*	15,15,16,19	65	30			X			X		65	
799	Blue Oak	*Quercus douglasii*	14,15	29	20			X			X		29	
800	Blue Oak	*Quercus douglasii*		12	15		X			X			12	
801	Live Oak	*Quercus wislizenii*	10,12,16,17,18,21	94	30		X				X		94	
Ends at Oak Hill Drive				15207								2068	13139	
TOTAL NO. NON-NATIVE TREES = 117														
TOTAL NO. NATIVE TREES = 679														
TOTAL NO. TREES = 796														

PRELIMINARY DESIGN PLANS
NOT FOR CONSTRUCTION



TREE INVENTORY MAP –
JUNE 2002 TREE INVENTORY/ASSESSMENT
Prepared by Sierra Nevada Arborists

FOR REDUCED PLANS
ORIGINAL SCALE IS IN CENTIMETERS 0 1 2 3 4 5

NOTE:

THE CONTROL POINTS SHOWN INDICATE:
POINT NUMBER, DESCRIPTION
NORTHING, EASTING
ELEVATION

SCALE
HORIZONTAL 1:500
VERTICAL N.A.

DATE
DESIGNED: C. ERELING 050702
DRAWN: C. ERELING 050702
CHECKED: E. MCCARTHY 050702

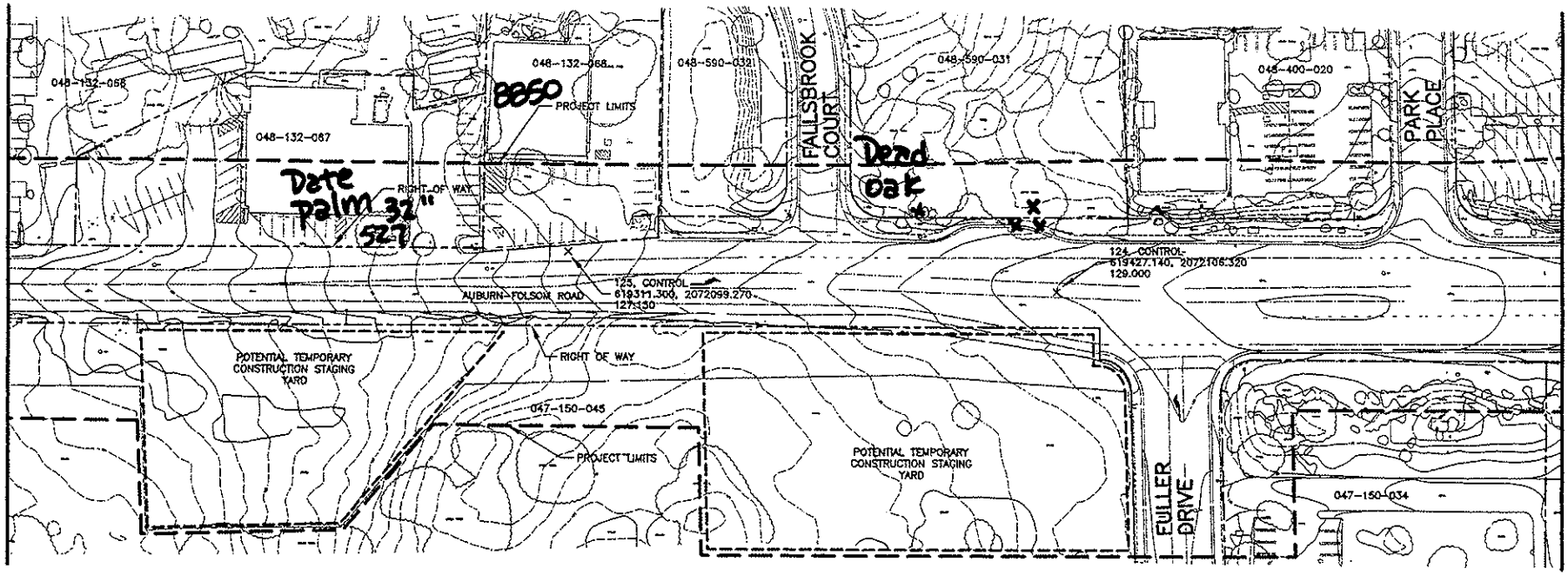
PLACER COUNTY
PROJECT NUMBER:
PC 2784

AUBURN-FOLSOM ROAD
4-LANE WIDENING PROJECT
PROJECT STUDY LIMITS

COUNTY OF PLACER
DEPARTMENT OF PUBLIC WORKS
TRANSPORTATION DIVISION

SHEET NO
10
OF
10

PRELIMINARY DESIGN PLANS
NOT FOR CONSTRUCTION



TREE INVENTORY MAP –
JUNE 2002 TREE INVENTORY/ASSESSMENT
Prepared by Sierra Nevada Arborists

FOR REDUCED PLANS
ORIGINAL SCALE IS IN CENTIMETERS 0 1 2 3 4 5

NOTE:
THE CONTROL POINTS SHOWN INDICATE:
POINT NUMBER, DESCRIPTION
NORTHING, EASTING
ELEVATION

SCALE
HORIZONTAL 1:500
VERTICAL N.A.

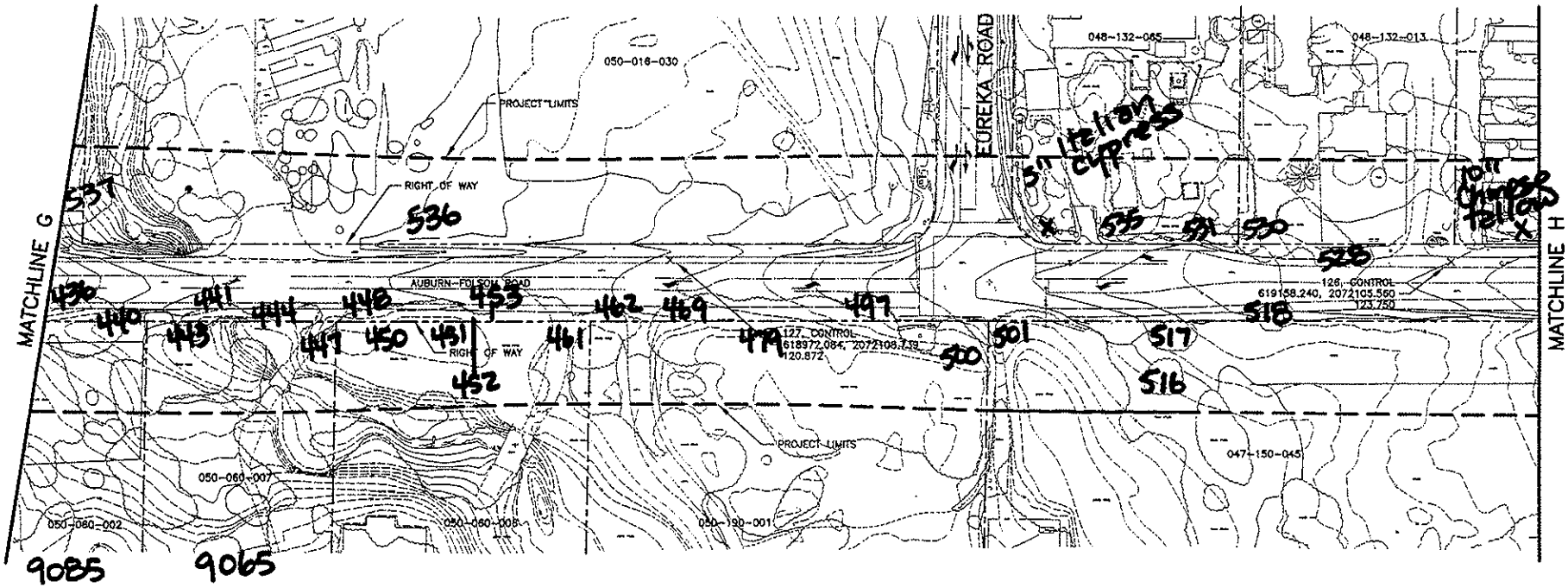
PLACER COUNTY PROJECT NUMBER: PC 2764
DESIGNED: C. EBELING 050702
DRAWN: C. EBELING 050702
CHECKED: E. MCCARTHY 050702
DATE:

AUBURN-FOLSOM ROAD
4-LANE WIDENING PROJECT
PROJECT STUDY LIMITS

COUNTY OF PLACER
DEPARTMENT OF PUBLIC WORKS
TRANSPORTATION DIVISION

SHEET NO.
9
OF
10

PRELIMINARY DESIGN PLANS
NOT FOR CONSTRUCTION



TREE INVENTORY MAP –
JUNE 2002 TREE INVENTORY/ASSESSMENT
Prepared by Sierra Nevada Arborists

NOTE:

THE CONTROL POINTS SHOWN INDICATE:
POINT NUMBER, DESCRIPTION
NORTHING, EASTING
ELEVATION

FOR REDUCED PLANS
ORIGINAL SCALE IS IN CENTIMETERS 0 1 2 3 4 5

SCALE
HORIZONTAL 1:500
VERTICAL N.A.

DATE
DESIGNED C. ERELING 050702
DRAWN C. ERELING 050702
CHECKED E. MCCARTHY 050702

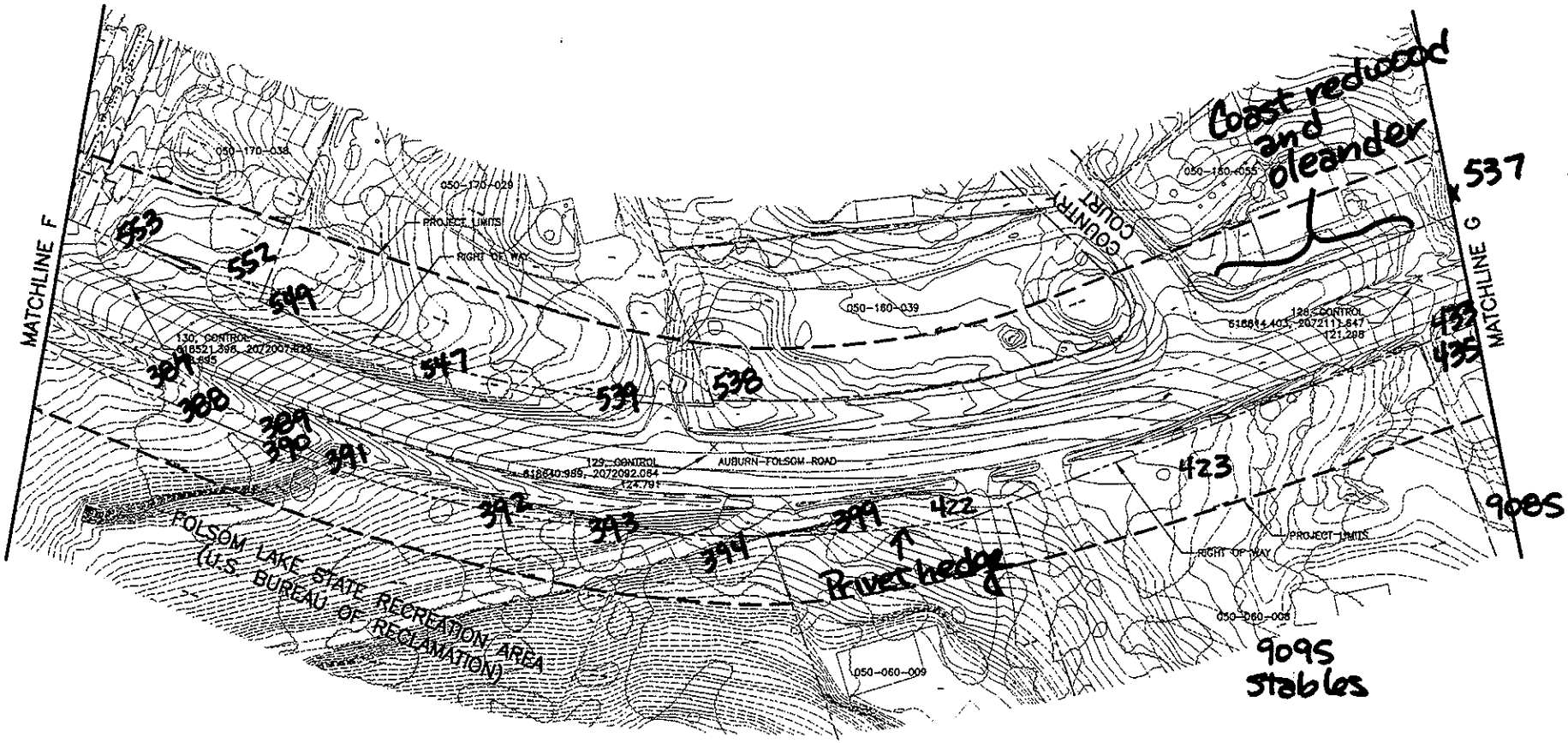
PLACER COUNTY
PROJECT NUMBER:
PG 2764

AUBURN–FOLSOM ROAD
4–LANE WIDENING PROJECT
PROJECT STUDY LIMITS

COUNTY OF PLACER
DEPARTMENT OF PUBLIC WORKS
TRANSPORTATION DIVISION

SHEET NO.
8
OF
10

PRELIMINARY DESIGN PLANS
NOT FOR CONSTRUCTION



TREE INVENTORY MAP –
JUNE 2002 TREE INVENTORY/ASSESSMENT
Prepared by Sierra Nevada Arborists

NOTE:

THE CONTROL POINTS SHOWN INDICATE:
POINT NUMBER, DESCRIPTION
NORTHING, EASTING
ELEVATION

FOR REDUCED PLANS
ORIGINAL SCALE IS IN CENTIMETERS 0 1 2 3 4 5

SCALE
HORIZONTAL: 1:500
VERTICAL: N.A.

PLACER COUNTY
PROJECT NUMBER: PC 2784

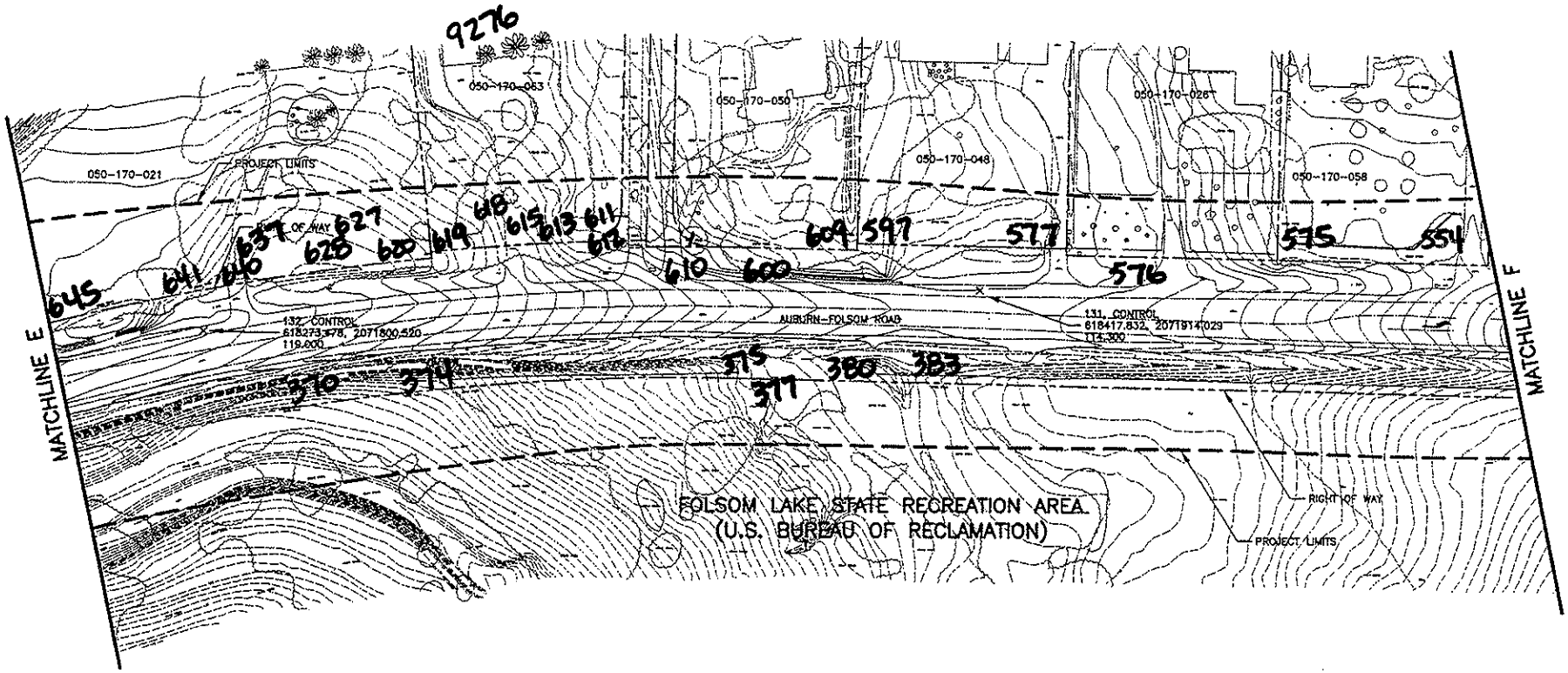
DESIGNED: C. FRELING 050702
DRAWN: C. FRELING 050702
CHECKED: E. MCCARTHY 050702

AUBURN-FOLSOM ROAD
4-LANE WIDENING PROJECT
PROJECT STUDY LIMITS

COUNTY OF PLACER
DEPARTMENT OF PUBLIC WORKS
TRANSPORTATION DIVISION

SHEET NO.
7
OF
10

PRELIMINARY DESIGN PLANS
NOT FOR CONSTRUCTION



TREE INVENTORY MAP –
JUNE 2002 TREE INVENTORY/ASSESSMENT
Prepared by Sierra Nevada Arborists

NOTE:

THE CONTROL POINTS SHOWN INDICATE:
POINT NUMBER, DESCRIPTION
NORTHING, EASTING
ELEVATION

FOR REDUCED PLANS
ORIGINAL SCALE IS IN CENTIMETERS 0 1 2 3 4 5

SCALE
HORIZONTAL: 1:500
VERTICAL: N.A.

PLACER COUNTY
PROJECT NUMBER:
PC 2764

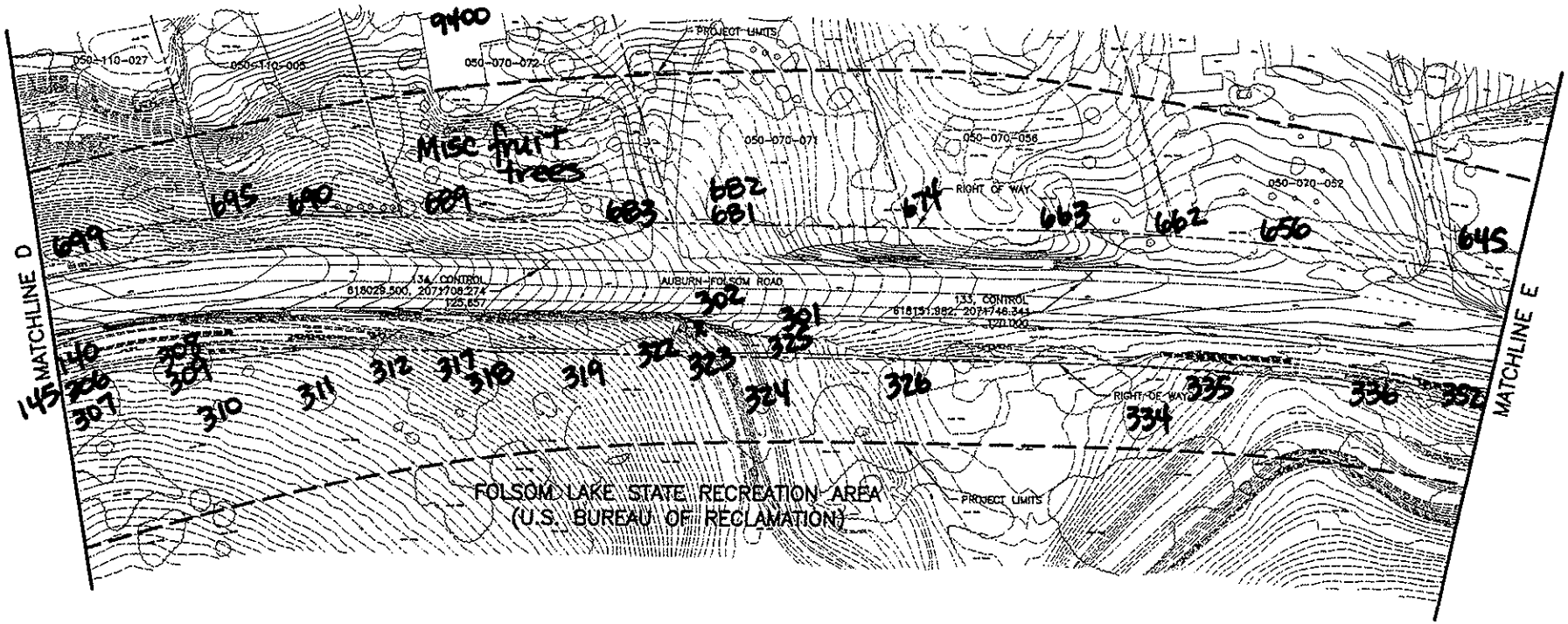
DESIGNED: C. EBELING 050702
DRAWN: C. EBELING 050702
CHECKED: E. MCCARTHY 050702
DATE:

AUBURN-FOLSOM ROAD
4-LANE WIDENING PROJECT
PROJECT STUDY LIMITS

COUNTY OF PLACER
DEPARTMENT OF PUBLIC WORKS
TRANSPORTATION DIVISION

SHEET NO.
6
OF
10

PRELIMINARY DESIGN PLANS
NOT FOR CONSTRUCTION



TREE INVENTORY MAP –
JUNE 2002 TREE INVENTORY/ASSESSMENT
Prepared by Sierra Nevada Arborists

NOTE:

THE CONTROL POINTS SHOWN INDICATE:
POINT NUMBER, DESCRIPTION
NORTHING, EASTING
ELEVATION

FOR REDUCED PLANS
ORIGINAL SCALE IS IN CENTIMETERS 0 1 2 3 4 5

SCALE
HORIZONTAL 1:200
VERTICAL N.A.

		DATE
DESIGNED	G. EBELING	06/07/02
DRAWN	G. EBELING	06/07/02
CHECKED	E. MCCARTHY	06/07/02

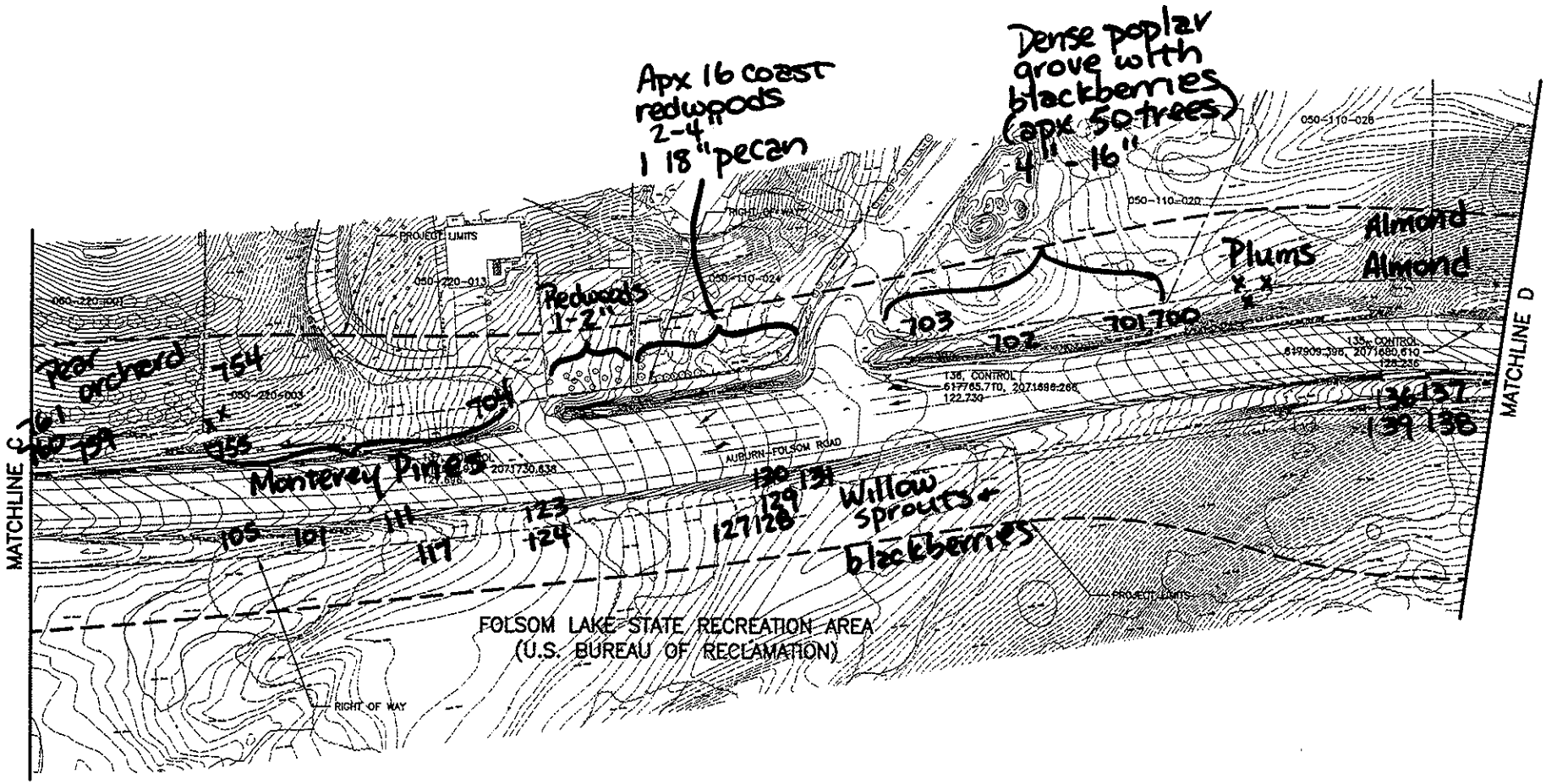
PLACER COUNTY PROJECT NUMBER: PC 2784

AUBURN–FOLSOM ROAD
4–LANE WIDENING PROJECT
PROJECT STUDY LIMITS

COUNTY OF PLACER
DEPARTMENT OF PUBLIC WORKS
TRANSPORTATION DIVISION

SHEET NO. 5 OF 10

PRELIMINARY DESIGN PLANS
NOT FOR CONSTRUCTION



TREE INVENTORY MAP –
JUNE 2002 TREE INVENTORY/ASSESSMENT
Prepared by Sierra Nevada Arborists

NOTE:

THE CONTROL POINTS SHOWN INDICATE:
POINT NUMBER, DESCRIPTION
NORTHING, EASTING
ELEVATION

FOR REDUCED PLANS
ORIGINAL SCALE IS IN CENTIMETERS 0 1 2 3 4 5

SCALE
HORIZONTAL 1:500

DESIGNED S. ENGLAND 06/07/02
DRAWN S. ENGLAND 06/07/02
DATE

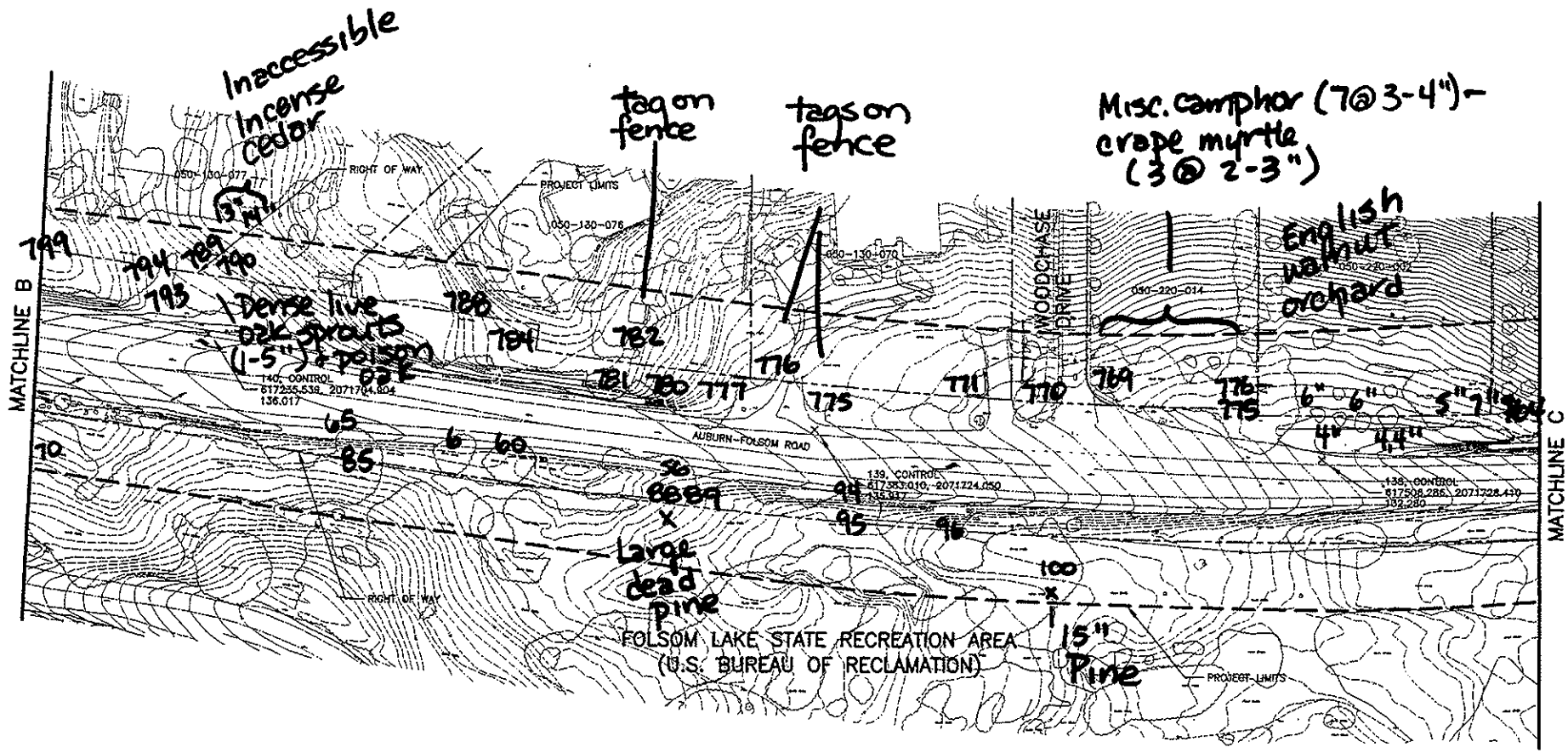
PLACER COUNTY PROJECT NUMBER: PC 2784

COUNTY OF PLACER
DEPARTMENT OF PUBLIC WORKS
TRANSPORTATION DIVISION

AUBURN-FOLSOM ROAD
4-LANE WIDENING PROJECT
PROJECT STUDY LIMITS

SHEET NO. 4 OF 10

PRELIMINARY DESIGN PLANS
NOT FOR CONSTRUCTION



TREE INVENTORY MAP –
JUNE 2002 TREE INVENTORY/ASSESSMENT
Prepared by Sierra Nevada Arborists

NOTE:
THE CONTROL POINTS SHOWN INDICATE:
POINT NUMBER, DESCRIPTION
NORTHING, EASTING
ELEVATION

FOR REDUCED PLANS
ORIGINAL SCALE IS IN CENTIMETERS 0 1 2 3 4 5

SCALE
HORIZONTAL: 1:500
VERTICAL: N.A.

DATE
DESIGNED: G. EBELING 050702
DRAWN: G. EBELING 050702
CHECKED: E. MCCARTHY 050702

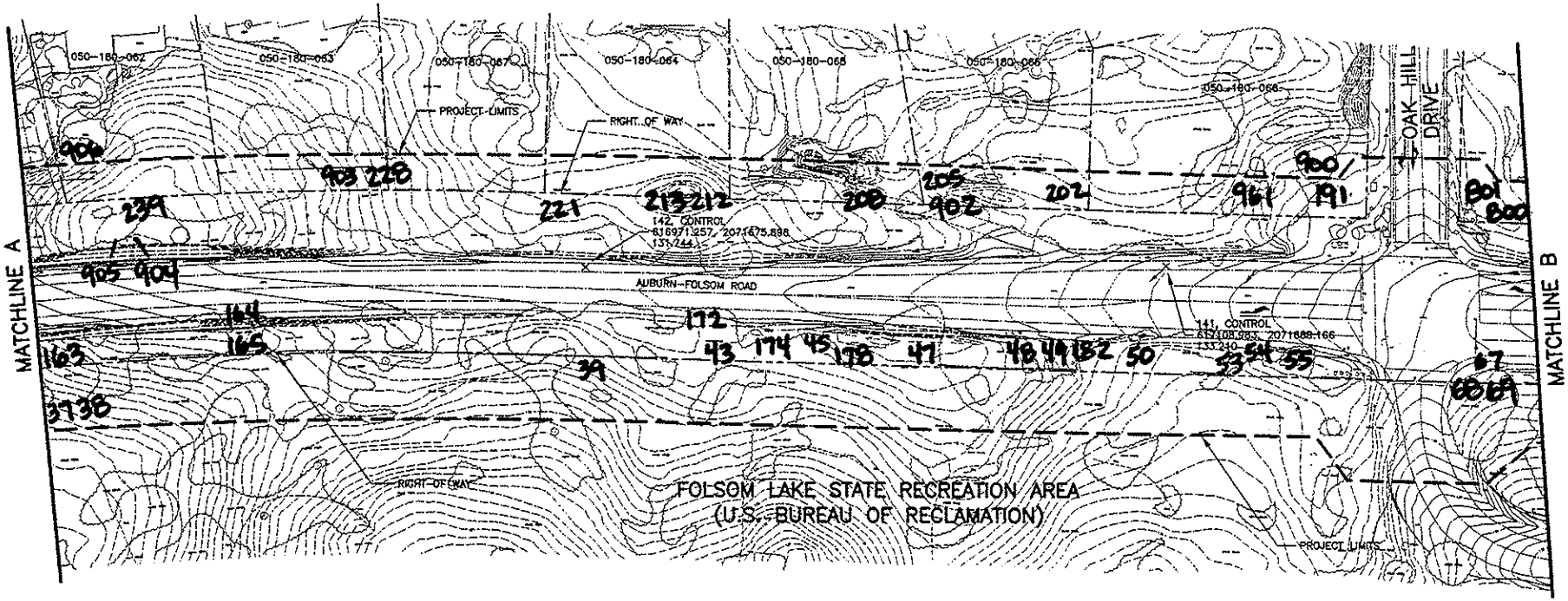
PLACER COUNTY
PROJECT NUMBER:
PC 2764

AUBURN-FOLSOM ROAD
4-LANE WIDENING PROJECT
PROJECT STUDY LIMITS

COUNTY OF PLACER
DEPARTMENT OF PUBLIC WORKS
TRANSPORTATION DIVISION

SHEET NO.
3
OF
10

PRELIMINARY DESIGN PLANS
NOT FOR CONSTRUCTION



TREE INVENTORY MAP –
JUNE 2002 TREE INVENTORY/ASSESSMENT
Prepared by Sierra Nevada Arborists

NOTE:

THE CONTROL POINTS SHOWN INDICATE:
POINT NUMBER, DESCRIPTION
NORTHING, EASTING
ELEVATION

FOR REDUCED PLANS
ORIGINAL SCALE IS IN CENTIMETERS 0 1 2 3 4 5

SCALE
HORIZONTAL 1:500
VERTICAL N.A.

DESIGNED S. EBELING 06/07/02
DRAWN S. EBELING 06/07/02
CHECKED K. MCKARTHY 06/07/02

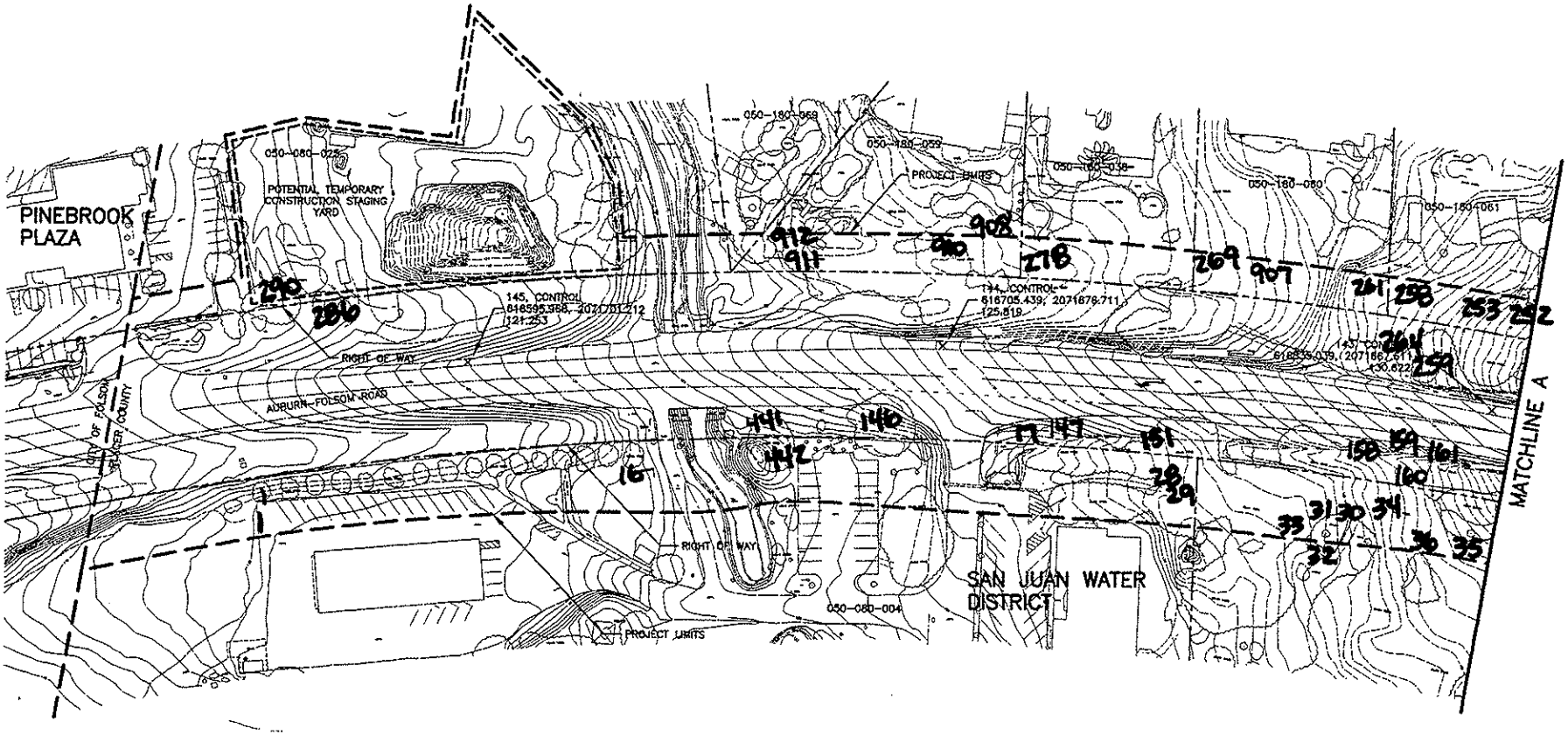
PLACER COUNTY PROJECT NUMBER: PC 2284

AUBURN-FOLSOM ROAD
4-LANE WIDENING PROJECT
PROJECT STUDY LIMITS

COUNTY OF PLACER
DEPARTMENT OF PUBLIC WORKS
TRANSPORTATION DIVISION

SHEET NO. 2 OF 10

PRELIMINARY DESIGN PLANS
NOT FOR CONSTRUCTION



TREE INVENTORY MAP –
JUNE 2002 TREE INVENTORY/ASSESSMENT
Prepared by Sierra Nevada Arborists

NOTE:

THE CONTROL POINTS SHOWN INDICATE:
POINT NUMBER, DESCRIPTION
NORTHING, EASTING
ELEVATION

FOR REDUCED PLANS
ORIGINAL SCALE IS IN CENTIMETERS 0 1 2 3 4 5

SCALE
HORIZONTAL: 1:500
VERTICAL: N.A.

PLACER COUNTY PROJECT NUMBER: PC 2784

DESIGNED: C. ERELING 050702
DRAWN: C. ERELING 050702
CHECKED: E. MCCARTHY 050702

AUBURN-FOLSOM ROAD
4-LANE WIDENING PROJECT
PROJECT STUDY LIMITS

COUNTY OF PLACER
DEPARTMENT OF PUBLIC WORKS
TRANSPORTATION DIVISION

SHEET NO. 1 OF 10

Tree Removal Analysis

SIERRA NEVADA ARBORISTS

October 16, 2002

VIA HAND DELIVERY

Ms. Kim Erickson
Jones & Stokes
2600 V Street
Sacramento, California 95818-1914

RE: Auburn-Folsom Road Four Lane Widening Project
JAS Project No. 02102.02.001
Tree Loss Impact Assessment

Dear Ms. Erickson:

Enclosed please find the Tree Loss Impact Assessment which you requested for the Auburn-Folsom Road Four Lane Widening Project. As you will recall, my services were originally retained by Jones & Stokes to conduct a tree inventory and prepare an Arborist Report for those trees 6" in diameter and larger located along Auburn-Folsom Road which were within 50 feet of edge of pavement from the Sacramento/Placer County Line to the project limit located slightly west of Douglas Boulevard. The inventory identified the type, size and health of all trees located within the study area. Subsequently, you forwarded to me maps depicting four separate widening scenarios and asked that I evaluate tree impacts for each scenario and provide a tree loss comparison for the four widening proposals.

As you will see, I have prepared a summary table which compares each proposed widening option and identifies the potential tree losses for each scenario by geographic location, tree type and diameter class. This summary table utilizes the data contained in the supporting spreadsheets which have been prepared for each widening alternative. For ease of reference, the trees which would require removal for each widening alternative have been identified and highlighted in the supporting spreadsheets. The spreadsheets are divided into separate geographical categories using parcel number information or property addresses, as applicable. The Bureau of Reclamation properties are contained within one section. These geographical categories are identical to those previously identified in the Arborist Report dated June, 2002, and correspond to the Tree Location Map which was previously provided for reference.

503 Anthony Court ♦ Roseville, CA 95678 ♦ 916-784-7940 ♦ 916-784-1901 Fax

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Thank you for allowing Sierra Nevada Arborists to assist you with this project. Please feel free to give me a call if you have any questions or require additional clarification.

Very truly yours,

Edwin E. Stirtz
ISA Certified Arborist WC-0510

EES:ks
Enclosures

Table L-1. Summary Comparison of Tree Losses by Alternative

Tree Losses by Type	Alternative 1: Widen Roadway to the West		Alternative 2: Widen Roadway to the East		Alternative 3: Widen Equally on Both Sides		Alternative 4: County DPW–Preferred	
	Number of Trees	Inches	Number of Trees	Inches	Number of Trees	Inches	Number of Trees	Inches
Native oaks	195	4,432	267	5,454	254	5,457	242	4,921
Other natives	101	1,391	92	1,669	64	1,157	71	1,247
Nonnatives	75	1,468	30	538	46	706	33	531
Total	371	7,291	389	7,661	364	7,320	346	6,699

Source: Sierra Nevada Arborists. Summary Comparison of Tree Losses by Location, Type, and Size. October 15, 2002.

AUBURN-FOLSOM 4 LANE WIDENING PROJECT
Summary Comparison of Tree Losess by Alternative

TREE LOSSES BY LOCATION, TYPE AND SIZE	ALTERNATIVE 1 Widen Roadway to the West		ALTERNATIVE 2 Widen Roadway to the East		ALTERNATIVE 3 Widen Roadway Equally On Both		ALTERNATIVE 4 County DPW Preferred Alternative	
	NUMBER OF TREES	INCHES	NUMBER OF TREES	INCHES	NUMBER OF TREES	INCHES	NUMBER OF TREES	INCHES
East Side Auburn Folsom north from Sac. Co. Line to Beales Point Rd.								
Native Oaks								
6"-11.5"	0		11		6		7	
12"-17.5"	0		19		13		13	
18"-22.5"	0		10		9		8	
23"-27.5"	0		5		2		3	
28+"	0		17		13		13	
Subtotal	0	0	62	1347	43	979	44	989
Other Natives								
6"-11.5"	0		22		6		7	
12"-17.5"	0		0		5		7	
18"-22.5"	0		0		1		0	
23"-27.5"	0		0		0		0	
28+"	0		0		0		0	
Subtotal	0	0	22	406	12	144	14	163
Other Non-Natives								
6"-11.5"	0		2		2		2	
12"-17.5"	0		0		0		0	
18"-22.5"	0		0		0		0	
23"-27.5"	0		0		0		0	
28+"	0		0		0		0	
Subtotal	0	0	2	18	2	18	2	18
East Side Auburn Folsom north from Beales Point Rd. to Fort Placer								
Native Oaks								
6"-11.5"	0		16		6		9	
12"-17.5"	0		14		6		9	
18"-22.5"	0		2		1		2	
23"-27.5"	0		7		3		2	
28+"	0		11		2		4	
Subtotal	0	0	50	973	18	309	26	445
Other Natives								
6"-11.5"	0		9		2		4	
12"-17.5"	0		8		3		3	
18"-22.5"	0		0		0		0	
23"-27.5"	0		0		0		0	
28+"	0		3		2		3	
Subtotal	0	0	20	302	7	125	10	183

AUBURN-FOLSOM 4 LANE WIDENING PROJECT
Summary Comparison of Tree Losess by Alternative

TREE LOSSES BY LOCATION, TYPE AND SIZE	ALTERNATIVE 1 Widen Roadway to the West		ALTERNATIVE 2 Widen Roadway to the East		ALTERNATIVE 3 Widen Roadway Equally for Both		ALTERNATIVE 4 County DBW Preferred Alternative	
	NUMBER OF TREES	INCHES	NUMBER OF TREES	INCHES	NUMBER OF TREES	INCHES	NUMBER OF TREES	INCHES
Other Non-Natives								
6"-11.5"	0		0		0		0	
12"-17.5"	0		0		0		0	
18"-22.5"	0		1		0		0	
23"-27.5"	0		0		0		0	
28+"	0		3		2		2	
Subtotal	0	0	4	195	2	103	2	103
East Side Auburn Folsom north from Lou Place to Bureau Boundary								
Native Oaks								
6"-11.5"	4		25		14		20	
12"-17.5"	5		19		14		11	
18"-22.5"	4		10		8		7	
23"-27.5"	4		12		7		7	
28+"	4		24		16		15	
Subtotal	21	498	90	2055	59	1360	60	1310
Other Natives								
6"-11.5"	1		5		2		2	
12"-17.5"	0		6		2		2	
18"-22.5"	0		1		1		1	
23"-27.5"	0		0		0		0	
28+"	0		1		1		1	
Subtotal	1	10	13	186	6	97	6	107
Other Non-Natives								
6"-11.5"	0		1		1		0	
12"-17.5"	1		3		2		2	
18"-22.5"	0		0		0		0	
23"-27.5"	0		0		0		0	
28+"	0		1		1		0	
Subtotal	1	13	5	74	4	62	2	26
East Side Auburn Folsom: APN 050-060-009								
Native Oaks								
6"-11.5"	0		1		0		0	
12"-17.5"	0		3		0		0	
18"-22.5"	0		0		0		0	
23"-27.5"	0		0		0		0	
28+"	0		0		0		0	
Subtotal	0	0	4	65	0	0	0	0

AUBURN-FOLSOM 4 LANE WIDENING PROJECT
Summary Comparison of Tree Losess by Alternative

TREE LOSSES BY LOCATION, TYPE AND SIZE	ALTERNATIVE 1: Widen Roadway to the West		ALTERNATIVE 2: Widen Roadway to the East		ALTERNATIVE 3: Widen Roadway Equally on Both		ALTERNATIVE 4: County DPW Preferred Alternative	
	NUMBER OF TREES	INCHES	NUMBER OF TREES	INCHES	NUMBER OF TREES	INCHES	NUMBER OF TREES	INCHES
Other Natives								
6"-11.5"	0		1		1		1	
12"-17.5"	0		1		0		0	
18"-22.5"	0		0		0		0	
23"-27.5"	0		0		0		0	
28+"	0		0		0		0	
Subtotal	0	0	2	21	1	6	1	6
Other Non-Natives								
6"-11.5"	0		10		9		9	
12"-17.5"	0		4		5		5	
18"-22.5"	0		4		4		4	
23"-27.5"	0		0		0		0	
28+"	0		0		0		0	
Subtotal	0	0	18	242	18	231	18	231
East Side Auburn Folsom APN 050-060-008								
Native Oaks								
6"-11.5"	0		0		0		0	
12"-17.5"	0		5		1		1	
18"-22.5"	0		1		1		1	
23"-27.5"	0		0		0		0	
28+"	0		3		2		2	
Subtotal	0	0	18	232	4	143	4	143
Other Natives								
6"-11.5"	0		0		0		0	
12"-17.5"	0		0		0		0	
18"-22.5"	0		0		0		0	
23"-27.5"	0		1		0		0	
28+"	0		1		1		1	
Subtotal	0	0	2	57	1	30	1	30
Other Non-Natives								
6"-11.5"	0		0		0		0	
12"-17.5"	0		0		0		0	
18"-22.5"	0		0		0		0	
23"-27.5"	0		0		0		0	
28+"	0		0		0		0	
Subtotal	0	0	0	0	0	0	0	0

AUBURN-FOLSOM 4 LANE WIDENING PROJECT
Summary Comparison of Tree Losess by Alternative

TREE LOSSES BY LOCATION, TYPE AND SIZE	ALTERNATIVE 1 Widen Roadway to the West		ALTERNATIVE 2 Widen Roadway to the East		ALTERNATIVE 3 Widen Roadway Equally On Both		ALTERNATIVE 4 County DPW Preferred Alternative	
	NUMBER OF TREES	INCHES	NUMBER OF TREES	INCHES	NUMBER OF TREES	INCHES	NUMBER OF TREES	INCHES
East Side Auburn Folsom APN 050-060-002								
Native Oaks								
6"-11.5"	0		3		2		2	
12"-17.5"	0		2		1		1	
18"-22.5"	0		1		1		1	
23"-27.5"	0		1		1		1	
28+"	0		0		0		0	
Subtotal	0	0	7	106	5	84	5	84
Other Natives								
6"-11.5"	0		0		0		0	
12"-17.5"	0		0		0		0	
18"-22.5"	0		0		0		0	
23"-27.5"	0		0		0		0	
28+"	0		1		1		1	
Subtotal	0	0	1	78	1	78	1	78
Other Non-Natives								
6"-11.5"	0		0		0		0	
12"-17.5"	0		0		0		0	
18"-22.5"	0		0		0		0	
23"-27.5"	0		0		0		0	
28+"	0		0		0		0	
Subtotal	0	0	0	0	0	0	0	0
East Side Auburn Folsom APN 050-060-007								
Native Oaks								
6"-11.5"	0		0		0		0	
12"-17.5"	0		2		1		1	
18"-22.5"	0		1		1		1	
23"-27.5"	0		0		0		0	
28+"	0		1		1		1	
Subtotal	0	0	4	85	3	69	3	69
Other Natives								
6"-11.5"	0		0		0		0	
12"-17.5"	0		1		1		1	
18"-22.5"	0		1		1		1	
23"-27.5"	0		0		0		0	
28+"	0		1		1		1	
Subtotal	0	0	3	89	3	89	3	89

AUBURN-FOLSOM 4 LANE WIDENING PROJECT
Summary Comparison of Tree Losess by Alternative

TREE LOSSES BY LOCATION, TYPE AND SIZE	ALTERNATIVE 1 Widen Roadway to the West		ALTERNATIVE 2 Widen Roadway to the East		ALTERNATIVE 3 Widen Roadway Equally On Both		ALTERNATIVE 4 County DPW Preferred Alternative	
	NUMBER OF TREES	INCHES	NUMBER OF TREES	INCHES	NUMBER OF TREES	INCHES	NUMBER OF TREES	INCHES
Other Non-Natives								
6"-11.5"	0		0		0		0	
12"-17.5"	0		0		0		0	
18"-22.5"	0		0		0		0	
23"-27.5"	0		0		0		0	
28+"	0		0		0		0	
Subtotal	0	0	0	0	0	0	0	0
East Side Auburn Folsom, APN 050-060-006								
Native Oaks								
6"-11.5"	0		3		3		3	
12"-17.5"	0		3		3		3	
18"-22.5"	0		2		1		1	
23"-27.5"	0		1		1		1	
28+"	0		1		1		1	
Subtotal	0	0	10	178	9	157	9	157
Other Natives								
6"-11.5"	0		0		0		0	
12"-17.5"	0		1		0		0	
18"-22.5"	0		0		0		0	
23"-27.5"	0		0		0		0	
28+"	0		3		1		1	
Subtotal	0	0	4	112	1	35	1	35
Other Non-Natives								
6"-11.5"	0		0		0		0	
12"-17.5"	0		0		0		0	
18"-22.5"	0		0		0		0	
23"-27.5"	0		0		0		0	
28+"	0		0		0		0	
Subtotal	0	0	0	0	0	0	0	0
East Side Auburn Folsom, APN 050-190-001								
Native Oaks								
6"-11.5"	0		4		3		4	
12"-17.5"	0		8		6		8	
18"-22.5"	0		2		0		2	
23"-27.5"	0		1		1		1	
28+"	0		1		1		1	
Subtotal	0	0	16	219	11	164	16	237

AUBURN-FOLSOM 4 LANE WIDENING PROJECT
Summary Comparison of Tree Losess by Alternative

TREE LOSSES BY LOCATION, TYPE AND SIZE	ALTERNATIVE 1 Widen Roadway to the West		ALTERNATIVE 2 Widen Roadway to the East		ALTERNATIVE 3 Widen Roadway Equally on Both		ALTERNATIVE 4 County DPW Preferred Alternative	
	NUMBER OF TREES	INCHES	NUMBER OF TREES	INCHES	NUMBER OF TREES	INCHES	NUMBER OF TREES	INCHES
Other Natives								
6"-11.5"	0		4		0		4	
12"-17.5"	0		9		1		9	
18"-22.5"	0		2		0		2	
23"-27.5"	0		1		1		1	
28+"	0		2		2		2	
Subtotal	0	0	18	315	4	106	18	297
Other Non-Natives								
6"-11.5"	0		0		0		0	
12"-17.5"	0		0		0		0	
18"-22.5"	0		0		0		0	
23"-27.5"	0		0		0		0	
28+"	0		0		0		0	
Subtotal	0	0	0	0	0	0	0	0
East Side Auburn Folsom APN 047-150-045								
Native Oaks								
6"-11.5"	0		6		4		8	
12"-17.5"	0		3		0		2	
18"-22.5"	0		0		1		0	
23"-27.5"	0		0		0		0	
28+"	0		0		0		0	
Subtotal	0	0	9	95	5	48	10	93
Other Natives								
6"-11.5"	0		1		3		1	
12"-17.5"	0		2		4		3	
18"-22.5"	0		0		0		0	
23"-27.5"	0		0		0		0	
28+"	0		0		0		0	
Subtotal	0	0	3	37	7	84	4	51
Other Non-Natives								
6"-11.5"	0		0		0		0	
12"-17.5"	0		0		0		0	
18"-22.5"	0		0		0		0	
23"-27.5"	0		0		0		0	
28+"	0		0		0		0	
Subtotal	0	0	0	0	0	0	0	0

AUBURN-FOLSOM 4 LANE WIDENING PROJECT
Summary Comparison of Tree Losess by Alternative

TREE LOSSES BY LOCATION, TYPE AND SIZE	ALTERNATIVE 1 Widen Roadway to the West		ALTERNATIVE 2 Widen Roadway to the East		ALTERNATIVE 3 Widen Roadway Equally On Both		ALTERNATIVE 4 County DPW Preferred Alternative	
	NUMBER OF TREES	INCHES	NUMBER OF TREES	INCHES	NUMBER OF TREES	INCHES	NUMBER OF TREES	INCHES
West Side Auburn Folsom APN 048-360-050								
Native Oaks								
6"-11.5"	0		0		0		0	
12"-17.5"	0		0		0		0	
18"-22.5"	0		0		0		0	
23"-27.5"	0		0		0		0	
28+"	0		0		0		0	
Subtotal	0	0	0	0	0	0	0	0
Other Natives								
6"-11.5"	0		0		0		0	
12"-17.5"	1		1		1		1	
18"-22.5"	0		0		0		0	
23"-27.5"	1		1		1		1	
28+"	0		0		0		0	
Subtotal	2	39	2	39	2	39	2	39
Other Non-Natives								
6"-11.5"	0		0		0		0	
12"-17.5"	0		0		0		0	
18"-22.5"	0		0		0		0	
23"-27.5"	0		0		0		0	
28+"	0		0		0		0	
Subtotal	0	0	0	0	0	0	0	0
West Side Auburn Folsom APN 048-410-035								
Native Oaks								
6"-11.5"	0		0		0		0	
12"-17.5"	0		0		0		0	
18"-22.5"	0		0		0		0	
23"-27.5"	0		0		0		0	
28+"	0		0		0		0	
Subtotal	0	0	0	0	0	0	0	0
Other Natives								
6"-11.5"	0		0		0		0	
12"-17.5"	1		1		1		1	
18"-22.5"	0		0		0		0	
23"-27.5"	0		0		0		0	
28+"	0		0		0		0	
Subtotal	1	17	1	17	1	17	1	17

AUBURN-FOLSOM 4 LANE WIDENING PROJECT
Summary Comparison of Tree Losess by Alternative

TREE LOSSES BY LOCATION, TYPE AND SIZE	ALTERNATIVE 1 Widen Roadway to West		ALTERNATIVE 2 Widen Roadway to the East		ALTERNATIVE 3 Widen Roadway Equally on Both		ALTERNATIVE 4 County's PWP Preferred Alternative	
	NUMBER OF TREES	INCHES	NUMBER OF TREES	INCHES	NUMBER OF TREES	INCHES	NUMBER OF TREES	INCHES
Other Non-Natives								
6"-11.5"	0		0		0		0	
12"-17.5"	0		0		0		0	
18"-22.5"	0		0		0		0	
23"-27.5"	0		0		0		0	
28+"	0		0		0		0	
Subtotal	0	0	0	0	0	0	0	0
West Side Auburn-Folsom 2 APN 048-590-031								
Native Oaks								
6"-11.5"	0		0		0		0	
12"-17.5"	0		0		0		0	
18"-22.5"	0		0		0		0	
23"-27.5"	0		0		0		0	
28+"	0		0		0		0	
Subtotal	0	0	0	0	0	0	0	0
Other Natives								
6"-11.5"	0		0		0		0	
12"-17.5"	0		0		0		0	
18"-22.5"	0		0		0		0	
23"-27.5"	0		0		0		0	
28+"	0		0		0		0	
Subtotal	0	0	0	0	0	0	0	0
Other Non-Natives								
6"-11.5"	0		0		0		0	
12"-17.5"	0		0		0		0	
18"-22.5"	0		0		0		0	
23"-27.5"	0		0		0		0	
28+"	0		0		0		0	
Subtotal	0	0	0	0	0	0	0	0
West Side Auburn-Folsom 1 APN 048-130-067								
Native Oaks								
6"-11.5"	0		0		0		0	
12"-17.5"	0		0		0		0	
18"-22.5"	0		0		0		0	
23"-27.5"	0		0		0		0	
28+"	1		0		1		0	
Subtotal	[illegible]	38	[illegible]	0	[illegible]	38	[illegible]	0

AUBURN-FOLSOM 4 LANE WIDENING PROJECT
Summary Comparison of Tree Losess by Alternative

TREE LOSSES BY LOCATION, TYPE AND SIZE	ALTERNATIVE 1 Widen Roadway to the West		ALTERNATIVE 2 Widen Roadway to the East		ALTERNATIVE 3 Widen Roadway Equally On Both		ALTERNATIVE 4 County DPW Preferred Alternative	
	NUMBER OF TREES	INCHES	NUMBER OF TREES	INCHES	NUMBER OF TREES	INCHES	NUMBER OF TREES	INCHES
Other Natives								
6"-11.5"	0		0		0		0	
12"-17.5"	0		0		0		0	
18"-22.5"	0		0		0		0	
23"-27.5"	0		0		0		0	
28+"	0		0		0		0	
Subtotal	0	0	0	0	0	0	0	0
Other Non-Natives								
6"-11.5"	0		0		0		0	
12"-17.5"	0		0		0		0	
18"-22.5"	0		0		0		0	
23"-27.5"	0		0		0		0	
28+"	0		0		0		0	
Subtotal	0	0	0	0	0	0	0	0
West Side Auburn-Folsom - APN 048-130-013								
Native Oaks								
6"-11.5"	0		0		0		0	
12"-17.5"	1		0		1		0	
18"-22.5"	0		0		0		0	
23"-27.5"	0		0		0		0	
28+"	1		0		1		0	
Subtotal	2	48	0	0	2	48	0	0
Other Natives								
6"-11.5"	0		0		0		0	
12"-17.5"	0		0		0		0	
18"-22.5"	1		0		1		0	
23"-27.5"	0		0		0		0	
28+"	0		0		0		0	
Subtotal	1	21	0	0	1	21	0	0
Other Non-Natives								
6"-11.5"	0		0		0		0	
12"-17.5"	0		0		0		0	
18"-22.5"	0		0		0		0	
23"-27.5"	0		0		0		0	
28+"	0		0		0		0	
Subtotal	0	0	0	0	0	0	0	0

AUBURN-FOLSOM 4 LANE WIDENING PROJECT
Summary Comparison of Tree Losess by Alternative

TREE LOSSES BY LOCATION, TYPE AND SIZE	ALTERNATIVE 1 Widen Roadway to the West		ALTERNATIVE 2 Widen Roadway to the East		ALTERNATIVE 3 Widen Roadway Equally On Both		ALTERNATIVE 4 County DPW Preferred Alternative	
	NUMBER OF TREES	INCHES	NUMBER OF TREES	INCHES	NUMBER OF TREES	INCHES	NUMBER OF TREES	INCHES
West Side Auburn-Folsom - APN 046-130-065								
Native Oaks								
6"-11.5"	0		0		0		0	
12"-17.5"	0		0		0		0	
18"-22.5"	0		0		0		0	
23"-27.5"	1		0		1		0	
28+"	0		0		0		0	
Subtotal	1	23	0	0	1	23	0	0
Other Natives								
6"-11.5"	0		0		0		0	
12"-17.5"	0		0		0		0	
18"-22.5"	0		0		0		0	
23"-27.5"	0		0		0		0	
28+"	0		0		0		0	
Subtotal	0	0	0	0	0	0	0	0
Other Non-Natives								
6"-11.5"	3		0		3		0	
12"-17.5"	1		0		1		0	
18"-22.5"	0		0		0		0	
23"-27.5"	0		0		0		0	
28+"	0		0		0		0	
Subtotal	4	40	0	0	4	40	0	0
West Side Auburn-Folsom - APN 050-016-080								
Native Oaks								
6"-11.5"	1		0		0		0	
12"-17.5"	0		0		0		0	
18"-22.5"	0		0		0		0	
23"-27.5"	1		0		1		0	
28+"	0		0		0		0	
Subtotal	2	29	0	0	1	23	0	0
Other Natives								
6"-11.5"	0		0		0		0	
12"-17.5"	0		0		0		0	
18"-22.5"	0		0		0		0	
23"-27.5"	0		0		0		0	
28+"	0		0		0		0	
Subtotal	0	0	0	0	0	0	0	0

AUBURN-FOLSOM 4 LANE WIDENING PROJECT
Summary Comparison of Tree Losess by Alternative

TREE LOSSES BY LOCATION, TYPE AND SIZE	ALTERNATIVE 1 Widen Roadway to the West		ALTERNATIVE 2 Widen Roadway to the East		ALTERNATIVE 3 Widen Roadway Equally On Both		ALTERNATIVE 4 County DPW Preferred Alternative	
	NUMBER OF TREES	INCHES	NUMBER OF TREES	INCHES	NUMBER OF TREES	INCHES	NUMBER OF TREES	INCHES
Other Non-Natives								
6"-11.5"	0		0		0		0	
12"-17.5"	0		0		0		0	
18"-22.5"	0		0		0		0	
23"-27.5"	0		0		0		0	
28+"	0		0		0		0	
Subtotal	0	0	0	0	0	0	0	0
West Side Auburn-Folsom: APN 050-160-039								
Native Oaks								
6"-11.5"	0		0		0		0	
12"-17.5"	0		0		0		0	
18"-22.5"	0		0		0		0	
23"-27.5"	0		0		0		0	
28+"	1		0		0		0	
Subtotal	1	80	0	0	0	0	0	0
Other Natives								
6"-11.5"	0		0		0		0	
12"-17.5"	0		0		0		0	
18"-22.5"	0		0		0		0	
23"-27.5"	0		0		0		0	
28+"	0		0		0		0	
Subtotal	0	0	0	0	0	0	0	0
Other Non-Natives								
6"-11.5"	0		0		0		0	
12"-17.5"	0		0		0		0	
18"-22.5"	0		0		0		0	
23"-27.5"	0		0		0		0	
28+"	0		0		0		0	
Subtotal	0	0	0	0	0	0	0	0
West Side Auburn-Folsom: APN 050-170-029								
Native Oaks								
6"-11.5"	5		0		3		3	
12"-17.5"	1		0		1		1	
18"-22.5"	1		0		0		0	
23"-27.5"	1		0		0		0	
28+"	2		0		1		1	
Subtotal	10	170	0	0	5	74	5	74

AUBURN-FOLSOM 4 LANE WIDENING PROJECT
Summary Comparison of Tree Losess by Alternative

TREE LOSSES BY LOCATION, TYPE AND SIZE	ALTERNATIVE 1: Widen Roadway to the West		ALTERNATIVE 2: Widen Roadway to the East		ALTERNATIVE 3: Widen Roadway Equally On Both		ALTERNATIVE 4: County DEWR Preferred Alternative	
	NUMBER OF TREES	INCHES	NUMBER OF TREES	INCHES	NUMBER OF TREES	INCHES	NUMBER OF TREES	INCHES
Other Natives								
6"-11.5"	0		0		0		0	
12"-17.5"	0		0		0		0	
18"-22.5"	0		0		0		0	
23"-27.5"	0		0		0		0	
28+"	1		0		1		1	
Subtotal	1	32	0	0	1	32	1	32
Other Non-Natives								
6"-11.5"	0		0		0		0	
12"-17.5"	0		0		0		0	
18"-22.5"	0		0		0		0	
23"-27.5"	0		0		0		0	
28+"	0		0		0		0	
Subtotal	0	0	0	0	0	0	0	0
West Side Auburn Folsom - APN 050-170-038								
Native Oaks								
6"-11.5"	0		0		0		0	
12"-17.5"	1		0		0		0	
18"-22.5"	2		0		0		0	
23"-27.5"	0		0		0		0	
28+"	0		0		0		0	
Subtotal	3	55	0	0	0	0	0	0
Other Natives								
6"-11.5"	0		0		0		0	
12"-17.5"	0		0		0		0	
18"-22.5"	0		0		0		0	
23"-27.5"	0		0		0		0	
28+"	0		0		0		0	
Subtotal	0	0	0	0	0	0	0	0
Other Non-Natives								
6"-11.5"	0		0		0		0	
12"-17.5"	1		0		0		0	
18"-22.5"	0		0		0		0	
23"-27.5"	0		0		0		0	
28+"	0		0		0		0	
Subtotal	1	17	0	0	0	0	0	0

AUBURN-FOLSOM 4 LANE WIDENING PROJECT
Summary Comparison of Tree Losess by Alternative

TREE LOSSES BY LOCATION, TYPE AND SIZE	ALTERNATIVE 1 Widen Roadway to the West		ALTERNATIVE 2 Widen Roadway to the East		ALTERNATIVE 3 Widen Roadway Equally on Both		ALTERNATIVE 4 County DPW Preferred Alternative	
	NUMBER OF TREES	INCHES	NUMBER OF TREES	INCHES	NUMBER OF TREES	INCHES	NUMBER OF TREES	INCHES
West Side Auburn-Folsom - APN 050-170-058								
Native Oaks								
6"-11.5"	0		0		0		0	
12"-17.5"	0		0		0		0	
18"-22.5"	0		0		0		0	
23"-27.5"	0		0		0		0	
28+"	0		0		0		0	
Subtotal	0	0	0	0	0	0	0	0
Other Natives								
6"-11.5"	0		0		0		0	
12"-17.5"	0		0		0		0	
18"-22.5"	0		0		0		0	
23"-27.5"	0		0		0		0	
28+"	0		0		0		0	
Subtotal	0	0	0	0	0	0	0	0
Other Non-Natives								
6"-11.5"	11		0		0		0	
12"-17.5"	3		0		0		0	
18"-22.5"	2		0		0		0	
23"-27.5"	0		0		0		0	
28+"	0		0		0		0	
Subtotal	16	193	0	0	0	0	0	0
West Side Auburn-Folsom - APN 050-170-026								
Native Oaks								
6"-11.5"	0		0		0		0	
12"-17.5"	0		0		0		0	
18"-22.5"	0		0		0		0	
23"-27.5"	0		0		0		0	
28+"	0		0		0		0	
Subtotal	0	0	0	0	0	0	0	0
Other Natives								
6"-11.5"	0		0		0		0	
12"-17.5"	0		0		0		0	
18"-22.5"	0		0		0		0	
23"-27.5"	0		0		0		0	
28+"	0		0		0		0	
Subtotal	0	0	0	0	0	0	0	0
Other Non-Natives								

AUBURN-FOLSOM 4 LANE WIDENING PROJECT
Summary Comparison of Tree Losess by Alternative

TREE LOSSES BY LOCATION, TYPE AND SIZE	ALTERNATIVE 1 Widen Roadway to the West		ALTERNATIVE 2 Widen Roadway to the East		ALTERNATIVE 3 Widen Roadway Equally on Both		ALTERNATIVE 4 County's W Preferred Alternative	
	NUMBER OF TREES	INCHES	NUMBER OF TREES	INCHES	NUMBER OF TREES	INCHES	NUMBER OF TREES	INCHES
6"-11.5"	1		1		1		1	
12"-17.5"	0		0		0		0	
18"-22.5"	0		0		0		0	
23"-27.5"	0		0		0		0	
28+"	0		0		0		0	
Subtotal	1	11	1	11	1	11	1	11
West Side Auburn-Folsom: APN 050-170-048								
Native Oaks								
6"-11.5"	0		0		0		0	
12"-17.5"	2		0		0		0	
18"-22.5"	0		0		0		0	
23"-27.5"	0		0		0		0	
28+"	1		0		0		0	
Subtotal	3	77	0	0	0	0	0	0
Other Natives								
6"-11.5"	0		0		0		0	
12"-17.5"	0		0		0		0	
18"-22.5"	0		0		0		0	
23"-27.5"	0		0		0		0	
28+"	0		0		0		0	
Subtotal	0	0	0	0	0	0	0	0
Other Non-Natives								
6"-11.5"	1		0		0		0	
12"-17.5"	4		0		0		0	
18"-22.5"	0		0		0		0	
23"-27.5"	1		0		0		0	
28+"	0		0		0		0	
Subtotal	16	190	0	0	0	0	0	0
West Side Auburn-Folsom: APN 050-170-050								
Native Oaks								
6"-11.5"	5		1		3		1	
12"-17.5"	4		0		3		0	
18"-22.5"	0		0		0		0	
23"-27.5"	1		0		0		0	
28+"	1		0		1		0	
Subtotal	11	152	1	9	7	109	1	9

AUBURN-FOLSOM 4 LANE WIDENING PROJECT
Summary Comparison of Tree Losess by Alternative

TREE LOSSES BY LOCATION, TYPE AND SIZE	ALTERNATIVE 1 Widen Roadway to the West		ALTERNATIVE 2 Widen Roadway to the East		ALTERNATIVE 3 Widen Roadway equally to Both		ALTERNATIVE 4 County DRWP preferred Alternative	
	NUMBER OF TREES	INCHES	NUMBER OF TREES	INCHES	NUMBER OF TREES	INCHES	NUMBER OF TREES	INCHES
Other Natives								
6"-11.5"	1		0		0		0	
12"-17.5"	0		0		0		0	
18"-22.5"	0		0		0		0	
23"-27.5"	0		0		0		0	
28+"	0		0		0		0	
Subtotal	1	8	0	0	0	0	0	0
Other Non-Natives								
6"-11.5"	0		0		0		0	
12"-17.5"	1		0		1		0	
18"-22.5"	0		0		0		0	
23"-27.5"	0		0		0		0	
28+"	0		0		0		0	
Subtotal	1	12	0	0	1	12	0	0
West Side Auburn-Folsom: ARN 050-170-063								
Native Oaks								
6"-11.5"	0		0		0		0	
12"-17.5"	0		0		0		0	
18"-22.5"	0		0		0		0	
23"-27.5"	0		0		0		0	
28+"	0		0		0		0	
Subtotal	0	0	0	0	0	0	0	0
Other Natives								
6"-11.5"	2		0		0		0	
12"-17.5"	2		0		1		0	
18"-22.5"	1		0		0		0	
23"-27.5"	0		0		0		0	
28+"	0		0		0		0	
Subtotal	5	54	0	0	1	13	0	0
Other Non-Natives								
6"-11.5"	2		0		0		0	
12"-17.5"	2		0		2		0	
18"-22.5"	0		0		0		0	
23"-27.5"	1		0		1		0	
28+"	0		0		0		0	
Subtotal	5	66	0	0	3	52	0	0

AUBURN-FOLSOM 4 LANE WIDENING PROJECT
Summary Comparison of Tree Losess by Alternative

TREE LOSSES BY LOCATION, TYPE AND SIZE	ALTERNATIVE 1 Widen Roadway to the West		ALTERNATIVE 2 Widen Roadway to the East		ALTERNATIVE 3 Widen Roadway Equally on Both		ALTERNATIVE 4 County DFW Preferred Alternative	
	NUMBER OF TREES	INCHES	NUMBER OF TREES	INCHES	NUMBER OF TREES	INCHES	NUMBER OF TREES	INCHES
West Side Auburn-Folsom - APN 050-170-021								
Native Oaks								
6"-11.5"	2		0		1		1	
12"-17.5"	0		0		0		0	
18"-22.5"	0		0		0		0	
23"-27.5"	0		0		0		0	
28+"	0		0		0		0	
Subtotal	2	17	0	0	1	8	1	8
Other Natives								
6"-11.5"	6		0		2		0	
12"-17.5"	4		0		1		0	
18"-22.5"	2		0		0		0	
23"-27.5"	2		0		0		0	
28+"	0		0		0		0	
Subtotal	14	203	0	0	3	30	0	0
Other Non-Natives								
6"-11.5"	5		0		1		0	
12"-17.5"	2		0		2		2	
18"-22.5"	0		0		0		0	
23"-27.5"	1		0		0		0	
28+"	2		0		1		1	
Subtotal	10	180	0	0	4	79	3	70
West Side Auburn-Folsom - APN 050-070-052								
Native Oaks								
6"-11.5"	1		0		1		1	
12"-17.5"	0		0		0		0	
18"-22.5"	0		0		0		0	
23"-27.5"	0		0		0		0	
28+"	0		0		0		0	
Subtotal	1	10	0	0	1	10	1	10
Other Natives								
6"-11.5"	0		0		0		0	
12"-17.5"	0		0		0		0	
18"-22.5"	0		0		0		0	
23"-27.5"	0		0		0		0	
28+"	0		0		0		0	
Subtotal	0	0	0	0	0	0	0	0

AUBURN-FOLSOM 4 LANE WIDENING PROJECT
Summary Comparison of Tree Losess by Alternative

TREE LOSSES BY LOCATION, TYPE AND SIZE	ALTERNATIVE 1 Widen Roadway to the West		ALTERNATIVE 2 Widen Roadway to the East		ALTERNATIVE 3 Widen Roadway Equally On Both		ALTERNATIVE 4 County DEIR Preferred Alternative	
	NUMBER OF TREES	INCHES	NUMBER OF TREES	INCHES	NUMBER OF TREES	INCHES	NUMBER OF TREES	INCHES
Other Non-Natives								
6"-11.5"	0		0		0		0	
12"-17.5"	0		0		0		0	
18"-22.5"	1		0		0		0	
23"-27.5"	2		0		0		0	
28+"	12		0		0		0	
Subtotal	15	566	0	0	0	0	0	0
West Side Auburn-Folsom: APN 050-070-056								
Native Oaks								
6"-11.5"	3		2		3		3	
12"-17.5"	2		2		1		0	
18"-22.5"	0		0		0		0	
23"-27.5"	0		0		0		0	
28+"	1		0		0		0	
Subtotal	6	93	4	45	4	39	3	27
Other Natives								
6"-11.5"	1		0		0		0	
12"-17.5"	0		0		0		0	
18"-22.5"	1		0		1		0	
23"-27.5"	0		0		0		0	
28+"	0		0		0		0	
Subtotal	2	29	0	0	1	22	0	0
Other Non-Natives								
6"-11.5"	2		0		2		2	
12"-17.5"	2		0		2		2	
18"-22.5"	0		0		0		0	
23"-27.5"	0		0		0		0	
28+"	1		0		0		0	
Subtotal	5	91	0	0	4	52	4	52
West Side Auburn-Folsom: APN 050-070-071								
Native Oaks								
6"-11.5"	0		0		0		0	
12"-17.5"			0		0		0	
18"-22.5"	1		0		0		0	
23"-27.5"	0		0		0		0	
28+"	1		0		0		0	
Subtotal	2	28	0	0	0	0	0	0

AUBURN-FOLSOM 4 LANE WIDENING PROJECT
Summary Comparison of Tree Losess by Alternative

TREE LOSSES BY LOCATION, TYPE AND SIZE	ALTERNATIVE 1 Widen Roadway to the West		ALTERNATIVE 2 Widen Roadway to the East		ALTERNATIVE 3 Widen Roadway Equally On Both		ALTERNATIVE 4 County DPW Preferred Alternative	
	NUMBER OF TREES	INCHES	NUMBER OF TREES	INCHES	NUMBER OF TREES	INCHES	NUMBER OF TREES	INCHES
Other Natives								
6"-11.5"	4		1		2		2	
12"-17.5"	1		0		1		1	
18"-22.5"	0		0		0		0	
23"-27.5"	0		0		0		0	
28+"	0		0		0		0	
Subtotal	5	40	1	10	3	30	3	30
Other Non-Natives								
6"-11.5"	0		0		0		0	
12"-17.5"	0		0		0		0	
18"-22.5"	1		0		1		1	
23"-27.5"	0		0		0		0	
28+"	0		0		0		0	
Subtotal	1	20	0	0	1	20	1	20
West Side Auburn Folsom (ARN 050-070-072)								
Native Oaks								
6"-11.5"	0		0		0		0	
12"-17.5"	0		0		0		0	
18"-22.5"	0		0		0		0	
23"-27.5"	0		0		0		0	
28+"	0		0		0		0	
Subtotal	0	0	0	0	0	0	0	0
Other Natives								
6"-11.5"	1		0		0		1	
12"-17.5"	1		0		0		0	
18"-22.5"	0		0		0		0	
23"-27.5"	0		0		0		0	
28+"	0		0		0		0	
Subtotal	2	22	0	0	0	0	1	18
Other Non-Natives								
6"-11.5"	0		0		0		0	
12"-17.5"	0		0		0		0	
18"-22.5"	0		0		0		0	
23"-27.5"	0		0		0		0	
28+"	0		0		0		0	
Subtotal	0	0	0	0	0	0	0	0

AUBURN-FOLSOM 4 LANE WIDENING PROJECT
Summary Comparison of Tree Losess by Alternative

TREE LOSSES BY LOCATION, TYPE AND SIZE	ALTERNATIVE 1: Widen Roadway to the West		ALTERNATIVE 2: Widen Roadway to the East		ALTERNATIVE 3: Widen Roadway Equally on both		ALTERNATIVE 4: County DPW Preferred Alternative	
	NUMBER OF TREES	INCHES	NUMBER OF TREES	INCHES	NUMBER OF TREES	INCHES	NUMBER OF TREES	INCHES
West Side Auburn Folsom - APN 050-110-027								
Native Oaks								
6"-11.5"	0		0		0		0	
12"-17.5"	0		0		0		0	
18"-22.5"	1		0		1		1	
23"-27.5"	0		0		0		0	
28+"	3		0		2		2	
Subtotal	4	201	0	0	3	117	3	117
Other Natives								
6"-11.5"	0		0		0		0	
12"-17.5"	0		0		0		0	
18"-22.5"	0		0		0		0	
23"-27.5"	0		0		0		0	
28+"	2		0		0		0	
Subtotal	2	76	0	0	0	0	0	0
Other Non-Natives								
6"-11.5"	0		0		0		0	
12"-17.5"	0		0		0		0	
18"-22.5"	0		0		0		0	
23"-27.5"	0		0		0		0	
28+"	0		0		0		0	
Subtotal	0	0	0	0	0	0	0	0
West Side Auburn Folsom - APN 050-110-028								
Native Oaks								
6"-11.5"	0		0		0		0	
12"-17.5"	0		0		0		0	
18"-22.5"	1		0		1		1	
23"-27.5"	0		0		0		0	
28+"	3		0		3		3	
Subtotal	4	215	0	0	4	215	4	215
Other Natives								
6"-11.5"	0		0		0		0	
12"-17.5"	0		0		0		0	
18"-22.5"	0		0		0		0	
23"-27.5"	0		0		0		0	
28+"	0		0		0		0	
Subtotal	0	0	0	0	0	0	0	0

AUBURN-FOLSOM 4 LANE WIDENING PROJECT
Summary Comparison of Tree Losess by Alternative

TREE LOSSES BY LOCATION, TYPE AND SIZE	ALTERNATIVE 1: Widen Roadway to the West		ALTERNATIVE 2: Widen Roadway to the East		ALTERNATIVE 3: Widen Roadway Equally on Both		ALTERNATIVE 4: County DPW Preferred Alternative	
	NUMBER OF TREES	INCHES	NUMBER OF TREES	INCHES	NUMBER OF TREES	INCHES	NUMBER OF TREES	INCHES
Other Non-Natives								
6"-11.5"	0		0		0		0	
12"-17.5"	0		0		0		0	
18"-22.5"	0		0		0		0	
23"-27.5"	0		0		0		0	
28+"	0		0		0		0	
Subtotal	0	0	0	0	0	0	0	0
West Side Auburn-Folsom: APN 050-110-020								
Native Oaks								
6"-11.5"	3		0		3		3	
12"-17.5"	0		0		0		0	
18"-22.5"	0		0		0		0	
23"-27.5"	0		0		0		0	
28+"	1		0		1		1	
Subtotal	4	54	0	0	4	54	4	54
Other Natives								
6"-11.5"	0		0		0		0	
12"-17.5"	0		0		0		0	
18"-22.5"	0		0		0		0	
23"-27.5"	0		0		0		0	
28+"	0		0		0		0	
Subtotal	0	0	0	0	0	0	0	0
Other Non-Natives								
6"-11.5"	0		0		0		0	
12"-17.5"	0		0		0		0	
18"-22.5"	0		0		0		0	
23"-27.5"	0		0		0		0	
28+"	0		0		0		0	
Subtotal	0	0	0	0	0	0	0	0
West Side Auburn-Folsom: APN 050-220-003								
Native Oaks								
6"-11.5"	1		0		0		0	
12"-17.5"	1		0		0		0	
18"-22.5"	0		0		0		0	
23"-27.5"	0		0		0		0	
28+"	0		0		0		0	
Subtotal	2	18	0	0	0	0	0	0

AUBURN-FOLSOM 4 LANE WIDENING PROJECT
Summary Comparison of Tree Losess by Alternative

TREE LOSSES BY LOCATION, TYPE AND SIZE	ALTERNATIVE 1 Widen Roadway to the West		ALTERNATIVE 2 Widen Roadway to the East		ALTERNATIVE 3 Widen Roadway Equally On Both		ALTERNATIVE 4 County DPW Preferred Alternative	
	NUMBER OF TREES	INCHES	NUMBER OF TREES	INCHES	NUMBER OF TREES	INCHES	NUMBER OF TREES	INCHES
Other Natives								
6"-11.5"	27		0		0		0	
12"-17.5"	20		0		0		0	
18"-22.5"	0		0		0		0	
23"-27.5"	0		0		0		0	
28+"	0		0		0		0	
Subtotal	47	533	0	0	0	0	0	0
Other Non-Natives								
6"-11.5"	0		0		0		0	
12"-17.5"	1		0		1		0	
18"-22.5"	0		0		0		0	
23"-27.5"	0		0		0		0	
28+"	2		0		0		0	
Subtotal	3	80	0	0	1	12	0	0
West Side Auburn-Folsom: APN 050-220-001								
Native Oaks								
6"-11.5"	2		0		0		0	
12"-17.5"	2		0		1		0	
18"-22.5"	0		0		0		0	
23"-27.5"	0		0		0		0	
28+"	0		0		0		0	
Subtotal	4	42	0	0	1	13	0	0
Other Natives								
6"-11.5"	1		0		0		0	
12"-17.5"	2		0		0		0	
18"-22.5"	0		0		0		0	
23"-27.5"	0		0		0		0	
28+"	0		0		0		0	
Subtotal	3	34	0	0	0	0	0	0
Other Non-Natives								
6"-11.5"	0		0		0		0	
12"-17.5"	0		0		0		0	
18"-22.5"	0		0		0		0	
23"-27.5"	0		0		0		0	
28+"	0		0		0		0	
Subtotal	0	0	0	0	0	0	0	0

AUBURN-FOLSOM 4 LANE WIDENING PROJECT
Summary Comparison of Tree Losess by Alternative

TREE LOSSES BY LOCATION, TYPE AND SIZE	ALTERNATIVE 1 Widen Roadway to the West		ALTERNATIVE 2 Widen Roadway to the East		ALTERNATIVE 3 Widen Roadway Equally On Both		ALTERNATIVE 4 County DPW Preferred Alternative	
	NUMBER OF TREES	INCHES	NUMBER OF TREES	INCHES	NUMBER OF TREES	INCHES	NUMBER OF TREES	INCHES
West Side Auburn-Folsom - APN 050-220-014								
Native Oaks								
6"-11.5"	0		0		0		0	
12"-17.5"	0		0		0		0	
18"-22.5"	0		0		0		0	
23"-27.5"	0		0		0		0	
28+"	0		0		0		0	
Subtotal	0	0	0	0	0	0	0	0
Other Natives								
6"-11.5"	0		0		0		0	
12"-17.5"	1		1		1		1	
18"-22.5"	0		0		0		0	
23"-27.5"	0		0		0		0	
28+"	0		0		0		0	
Subtotal	1	14	0	0	1	14	1	14
Other Non-Natives								
6"-11.5"	1		0		0		0	
12"-17.5"	3		0		1		0	
18"-22.5"	0		0		0		0	
23"-27.5"	0		0		0		0	
28+"	0		0		0		0	
Subtotal	4	52	0	0	1	14	0	0
West Side Auburn-Folsom - APN 050-130-070								
Native Oaks								
6"-11.5"	0		0		0		0	
12"-17.5"	0		0		0		0	
18"-22.5"	0		0		0		0	
23"-27.5"	0		0		0		0	
28+"	0		0		0		0	
Subtotal	0	0	0	0	0	0	0	0
Other Natives								
6"-11.5"	0		0		0		0	
12"-17.5"	1		0		1		0	
18"-22.5"	3		0		1		0	
23"-27.5"	2		0		1		0	
28+"	0		0		0		0	
Subtotal	6	27	0	0	3	62	0	0

AUBURN-FOLSOM 4 LANE WIDENING PROJECT
Summary Comparison of Tree Losess by Alternative

TREE LOSSES BY LOCATION, TYPE AND SIZE	ALTERNATIVE 1 Widen Roadway to the West		ALTERNATIVE 2 Widen Roadway to the East		ALTERNATIVE 3 Widen Roadway Equally On Both		ALTERNATIVE 4 County DPW Preferred Alternative	
	NUMBER OF TREES	INCHES	NUMBER OF TREES	INCHES	NUMBER OF TREES	INCHES	NUMBER OF TREES	INCHES
Other Non-Natives								
6"-11.5"	0		0		0		0	
12"-17.5"	1		0		0		0	
18"-22.5"	0		0		0		0	
23"-27.5"	0		0		0		0	
28+"	0		0		0		0	
Subtotal	1	13	0	0	0	0	0	0
West Side Auburn-Folsom - ARN 050-130-076								
Native Oaks								
6"-11.5"	1		0		0		0	
12"-17.5"	1		0		1		1	
18"-22.5"	4		0		2		1	
23"-27.5"	0		0		0		0	
28+"	5		0		3		1	
Subtotal	11	307	0	0	6	180	3	72
Other Natives								
6"-11.5"	1		0		0		0	
12"-17.5"	0		0		0		0	
18"-22.5"	0		0		0		0	
23"-27.5"	0		0		0		0	
28+"	0		0		0		0	
Subtotal	1	8	0	0	0	0	0	0
Other Non-Natives								
6"-11.5"	0		0		0		0	
12"-17.5"	0		0		0		0	
18"-22.5"	0		0		0		0	
23"-27.5"	0		0		0		0	
28+"	0		0		0		0	
Subtotal	0	0	0	0	0	0	0	0
West Side Auburn-Folsom - ARN 050-130-077								
Native Oaks								
6"-11.5"	0		0		0		0	
12"-17.5"	1		0		1		0	
18"-22.5"	1		0		0		0	
23"-27.5"	1		0		1		1	
28+"	7		0		3		0	
Subtotal	10	144	0	0	5	220	1	24

AUBURN-FOLSOM 4 LANE WIDENING PROJECT
Summary Comparison of Tree Losess by Alternative

TREE LOSSES BY LOCATION, TYPE AND SIZE	ALTERNATIVE 1: Widen Roadway to the West		ALTERNATIVE 2: Widen Roadway to the East		ALTERNATIVE 3: Widen Roadway Equally on Both		ALTERNATIVE 4: County DPW Preferred Alternative	
	NUMBER OF TREES	INCHES	NUMBER OF TREES	INCHES	NUMBER OF TREES	INCHES	NUMBER OF TREES	INCHES
Other Natives								
6"-11.5"	1		0		0		0	
12"-17.5"	1		0		1		0	
18"-22.5"	0		0		0		0	
23"-27.5"	0		0		0		0	
28+"	0		0		0		0	
Subtotal	2	22	0	0	1	15	0	0
Other Non-Natives								
6"-11.5"	0		0		0		0	
12"-17.5"	0		0		0		0	
18"-22.5"	0		0		0		0	
23"-27.5"	1		0		0		0	
28+"	0		0		0		0	
Subtotal	1	24	0	0	0	0	0	0
West Side Auburn-Folsom south from Oak Hill to County Line								
Native Oaks								
6"-11.5"	25		0		15		12	
12"-17.5"	19		0		14		8	
18"-22.5"	17		1		8		7	
23"-27.5"	9		1		4		4	
28+"	20		0		10		8	
Subtotal	90	1733	2	45	51	982	39	784
Other Natives								
6"-11.5"	1		0		0		0	
12"-17.5"	0		0		1		1	
18"-22.5"	0		0		0		0	
23"-27.5"	0		0		1		1	
28+"	3		0		1		1	
Subtotal	4	96	0	0	3	68	3	68
Other Non-Natives								
6"-11.5"	0		0		0		0	
12"-17.5"	0		0		0		0	
18"-22.5"	0		0		0		0	
23"-27.5"	0		0		0		0	
28+"	0		0		0		0	
Subtotal	0	0	0	0	0	0	0	0
TOTAL REMOVAL INCHES BY ALTERNATIVE		7291		7766		7320		6699

Appendix M

Placer County Code—Tree Preservation Policy

Placer County Code—Tree Preservation Policy

12.16.030 General county-wide requirements.

A. This article is applicable to all native, landmark trees, riparian zone trees, and certain commercial firewood operations, except as exempted.

B. Riparian Zone Requirements.

1. Within any riparian zone, in all areas of the county in conjunction with any discretionary project and in any tree preservation zone for all development activity, compliance with this article for any development activity in the protected zone of a protected tree shall be required.

2. No tree permit or discretionary approval for any development activity within a riparian zone shall be approved until environmental impacts within the riparian zone are identified, an environmental determination is made and the mitigation measures identified (Chapter 18, Placer County Code). Additionally, no development activity shall be permitted until any stream alteration agreement or mitigation agreements required by the California Department of Fish and Game have been completed.

3. Advisory Comment. This is not a categorical prohibition on any tree removal within a riparian zone but rather a requirement for review of proposed development activity and approval of a tree permit or discretionary project prior to such disturbance occurring.

C. Commercial Firewood Cutting.

1. Licensing Required. Fuel wood production is considered commercial when a party cuts firewood for sale or profit. A commercial operator shall be required to hold a Class A or B timber operator's license pursuant to the laws of the state of California and have attended the training seminar offered by the California Division of Forestry pertaining to proper forest management techniques.

2. Permit Required. A tree permit shall be required for commercial firewood cutting of any size or type of tree in all areas of the county west of the Foresthill general plan area (see map available in the planning office) when the amount of wood taken from any given site exceeds two cords or two hundred fifty-six (256) cubic feet of wood within a one year period. In reviewing a permit application, the planning department will consider the following:

a. Whether the trees to be removed would have a significant negative environmental impact.

b. That the proposed removal will not result in clear-cutting, but will result in thinning or stand improvement.

c. Whether replanting is necessary to insure adequate regeneration.

d. Whether the removal would create the potential for soil erosion.

e. Whether any other limitations or conditions should be imposed in accordance with sound tree management practices.

f. Evaluate the resulting canopy cover.

D. Removal of More Than Fifty Percent of Trees. Except for developed, single-family residential lots that cannot be subdivided, the removal of more than fifty (50) percent of existing native trees, six inches dbh or greater, shall be subject to the issuance of a tree permit. Failure to obtain a permit prior to the removal of more than fifty (50) percent of the existing native trees in these areas may result in the denial or deferral of any application for development of that property for a period of up to ten (10) years.

E. The provisions of this article apply to all projects where discretionary permit approvals are required by the county provided, however, no landmark tree may be removed without obtaining a tree permit pursuant to Section 12.16.060. Except for subsection C, a landmark tree is not subject to the exemptions set forth in Section 12.16.050. (Ord. 5041-B § 3, 2000: prior code § 36.321)

12.16.040 Tree preservation zones.

Except as exempt, and as noted in Section 12.16.030, the provisions of this article are applicable to discretionary projects and to the following areas of the county: Dry Creek-West Placer community plan, Granite Bay community plan, portions of the Loomis Basin general plan, and the Auburn-Bowman community plan (see tree preservation zone map, available in the planning office). Also, see county-wide restrictions for riparian zones, commercial firewood cutting, restrictions for removal of more than fifty (50) percent of trees, and where discretionary permits are required. (Prior code § 36.320)

12.16.050 Exemptions.

A tree permit is not required for the removal of a protected tree under the following circumstances: (Except for subsection C, a landmark tree is not subject to the exemptions set forth below.)

A. Trees damaged and determined to be of immediate danger to either people or site improvements by thunderstorms, windstorms, floods, earthquakes, fires or other natural disasters. Upon discovery of a condition justifying removal, the planning department should be notified as soon as possible of the condition and action taken.

B. Tree removal necessary to comply with CDF fire safety regulations (i.e., clearing around homes) or tree removal undertaken as a part of a fuel reduction/fire safety/fire protection program in conformance with commonly accepted CDF policies.

C. When removal is determined to be necessary by fire department personnel actively engaged in fighting a fire.

D. When compliance would interfere with activities of a public utility necessary to comply with applicable safety regulations and/or necessary to repair or avoid the interruption of services provided by such a utility. Routine repair and maintenance of utilities would be exempt; new

construction projects (i.e., the installation of high power, transmission line corridor) are subject to review.

E. Trees (1) that have been identified by an arborist, forester, or county arborist/licensed landscape architect as "dying" or "unhealthy," (2) dead trees or (3) trees that are in a hazardous condition presenting an immediate danger to health and property.

F. Lots designated for commercial tree removal (i.e., Christmas tree farms, approved timber harvest plans, timber preserve zoned lands, approved logging operations, etc. (Note: Does not include commercial firewood cutting unless specifically exempt by state or federal permits and Eucalyptus or Poplar firewood plantations.)

G. Bona fide active agricultural uses as defined by the county agricultural commissioner are exempt, except commercial cutting of firewood, and development activity within a riparian zone are not exempt. (Also, see county-wide requirements, Section 12.16.030.) (Ord. 5041-B § 4, 2000: prior code § 36.330)

12.16.080 Replacement program and penalties.

A. The approving body may condition any tree permit or discretionary approval involving removal of a protected tree upon the replacement of trees in kind. The replacement requirement may be calculated based upon an inch for an inch replacement of the removed tree(s) and may require minimum fifteen (15) gallon size trees. The total of replacement trees may be required to have a combined diameter of the tree(s) removed. A minimum of fifty (50) percent of replacement trees shall be of a similar native tree. Replacement trees may be planted on-site or in other areas to the satisfaction of the planning department. Such replanting must not result in the over-planting of a site such that an unsafe fire condition is created.

B. The approving body may, instead of requiring replacement trees, require implementation of a revegetation plan. The county will require the developer to enter into a written agreement with the county obligating the developer to comply with the requirements of the revegetation program. A security deposit shall be required to insure that the agreement is fulfilled. The revegetation program may include the propagation of native oak trees from seed or saplings using currently accepted methods.

C. The approving body may decide that if the project site is not capable of supporting all of the replacement trees, the applicant shall pay to Placer County the current market value, as established by an arborist, forester, or registered landscape architect, of the replacement trees, including cost of installation, to go into a tree preservation fund (see subsection I of this section).

D. In addition, any protected or preserved tree shall not be damaged during construction. A penalty, payable to the county, in the amount of fifty dollars ($50.00) per scar will be required. If necessary, an arborist report may be required to be filed by the applicant to determine the extent of damage.

E. Any person, firm, or corporation that does not apply for a tree permit prior to removal of protected trees, and where no security deposit has been posted, shall replace trees as noted in subsection A, B, or C of this section, in addition to paying a fine of the current market value of the replacement trees.

F. Any person, firm, or corporation that removes or destroys any tree or trees that have been designated to be saved by an approving body shall be fined up to three times the current market value of the replacement trees and the cost of replacement, and/or replace up to three times the number of trees required by this article.

G. Except as provided in this article, if trees are removed without prior approval of an approving body, the approving body may choose to deny or defer approval of any application for development of that property for a period of up to five years.

H. The Board of Supervisors may consider the rezoning of a parcel or parcels of land on which a violation of this article has occurred.

I. Tree Preservation Fund. A tree preservation fund is established for Placer County. The moneys received in lieu of replacement of illegally removed or damaged trees shall be forwarded to the county treasurer for deposit in the tree preservation fund. Under no circumstances shall the funds collected by the county treasurer for deposit into the tree preservation fund be directed to any other fund to be used for any other purposes other than the planting of or maintenance of trees on publicly owned property, easements of rights-of-way, or used for educational programs or materials. A certain percentage of the fund (as determined by the board of supervisors) may be used for enforcement of the article and/or land acquisition.

J. A violation of this article shall be punishable as a misdemeanor or an infraction at the discretion of the county counsel and/or the district attorney.

K. Survivability.

1. Any person, firm or corporation that is required to replant, relocate or revegetate as a condition of his or her tree permit or discretionary project approval will be required to provide appropriate irrigation and maintenance for the trees. To assure survivability, a maintenance agreement shall be entered into and a deposit established by the approving body, not greater than the replacement costs, shall be posted with the county. The deposit shall be retained until the county arborist certifies the conditions of the tree permit are satisfied. After three years, an arborist or forester employed by the developer will identify to the county the condition of the replanted trees or revegetated area.

2. Any five gallon size tree or greater that was replanted or relocated that is dead after three years, must be replaced in kind with equal sized healthy replacements. Revegetated areas or areas where trees smaller than five gallon size were replanted must have at least seventy-five (75) percent of the trees still alive after three years.

3. Failure to provide adequate irrigation and maintenance for the replanted or relocated trees, or the revegetated areas, or the failure to replace trees which have not survived, will result in forfeiture of all or part of the survivability deposit. (Prior code § 36.600)

Appendix N

Distribution List

AUBURN FOLSOM ROAD WIDENING PROJECT
Distribution List

First Name	Last Name	Job Title	Company	Street Address	City	State	Postal Code
Rick	Dondro	Assistant Public Works Director	Placer County Department of Public Works	11444 B Avenue	Auburn	CA	95603
Ed	McCarthy	Senior Associate Civil Engineer	Placer County Department of Public Works	11444 B Avenue	Auburn	CA	95603
Charlie	Ebeling	Associate Civil Engineer	Placer County Department of Public Works	11444 B Avenue	Auburn	CA	95603
Tom	Brinkman	Associate Engineer	Placer County Department of Public Works	11444 B Avenue	Auburn	CA	95603
Tim	Kizer	Associate Civil Engineer	Placer County Department of Public Works	11444 B Avenue	Auburn	CA	95603
Gina	Langford	Senior Planner	Placer County Planning Department	11414 B Avenue	Auburn	CA	95603
Vance	Kimbrell	Senior Parks Planner	Placer County Facility Services, Parks and Grounds Division	11476 C Avenue	Auburn	CA	95603
John	Weber	Right-of-Way Agent	Placer County Department of Public Works	11444 B Avenue	Auburn	CA	95603
Dave	Nugen	Senior Civil Engineer	City of Folsom Public Works Department	50 Natoma Street	Folsom	CA	95630
David	Tait	Vice President	Smith, Kempton & Watts	980 Ninth Street	Sacramento	CA	95814
Sandi	Richerson	Natural Resources Specialist	U.S. Dept. of the Interior, Bureau of Reclamation	7794 Folsom Dam Road	Folsom	CA	95630
Gale	Moginie	Realty Specialist	U.S. Dept. of the Interior, Bureau of Reclamation	7794 Folsom Dam Road	Folsom	CA	95630-1799
Drew	Lessard	Civil Engineer	U.S. Dept. of the Interior, Bureau of Reclamation	7794 Folsom Dam Road	Folsom	CA	95630
Doug	Healey	Landscape Architect	California Dept. of Parks and Recreation	7806 Folsom Auburn Road	Folsom	CA	95630
Sally	Walters	Associate Parks Ecologist	California Dept. of Parks and Recreation	7806 Folsom Auburn Road	Folsom	CA	95630
Jim	Michaels	Associate Park & Recreation Specialist	California Dept. of Parks and Recreation	7806 Folsom Auburn Road	Folsom	CA	95630
Ben	Martinez	Engineering Manager	San Juan Water District	9935 Auburn Folsom Road	Granite Bay	CA	95746
Shauna	Lorance	Assistant General Manager	San Juan Water District	9935 Auburn Folsom Road	Granite Bay	CA	95746
John	Scroggs	Principal	KASL Consulting Engineers	7777 Greenback Lane	Citrus Heights	CA	95610
Scott	Hall	Officer	California Highway Patrol	9440 Indian Hill Road	Newcastle	CA	95658
Rick	Ward	Captain	California Highway Patrol	9440 Indian Hill Road	Newcastle	CA	95658
Keith	Burson	Fire Marshal	South Placer Fire District	6900 Eureka Road	Granite Bay	CA	95764
Tom	Cavanaugh		U.S. Army Corps of Engineers	1325 J Street	Sacramento	CA	95814

First Name	Last Name	Job Title	Company	Street Address	City	State	Postal Code
Justin	Ly		U.S. Fish and Wildlife Service	2800 Cottage Way, Room W-2605	Sacramento	CA	95825
Diane	Windham		National Marine Fisheries Service	Sacramento Area Office 650 Capitol Mall, Suite 6070	Sacramento	CA	95814
Pat	Gillum		SWRCB Division of Water Quality	3443 Routier Road, Ste. A	Sacramento	CA	95827
Terri	Roscoe		California Department of Fish and Game	1701 Nimbus Road, Ste. A	Rancho Cordova	CA	95670
Todd	Nishikawa	Acting Air Pollution Control Officer	Placer County Air Pollution Control District	11464 B Avenue	Auburn	CA	95603
Knox	Mellon		Office of Historic Preservation	P.O. Box 942896	Sacramento	CA	94296
Tom	Zlotkowski	Director	Sacramento County Department of Transportation	906 G Street	Sacramento	CA	95814
Gordon	Garry		Sacramento Area Council of Governments	3000 "S" Street	Sacramento	CA	95816
Bob	Fletcher	Division Chief	California Air Resources Board	P.O. Box 2815	Sacramento	CA	95812
Bill	Snyder		PG & E	343 Sacramento Street	Auburn	CA	95603
Rosemary	Hamill		AT & T	2741 North Main	Walnut Creek	CA	94596
Paul	Gallagher	Consultant to AT&T		2741 North Main	Walnut Creek	CA	94596
David	Price		Placer County Department of Public Works	11444 B Avenue	Auburn	CA	95603
Roger	Davies		Placer County Department of Environmental Health	11454 B Avenue	Auburn	CA	95603
Andrew	Darrow		Placer County Flood Control and Water Conservation District	11444 B Avenue	Auburn	CA	95603
			Granite Bay Municipal Advisory Council (MAC)	P.O. Box 2451	Granite Bay	CA	95746
Gerry	Brentall	Commissioner/ Board Member	Placer County Board of Supervisors	175 Fulweiler Avenue	Auburn	CA	95603
Ted	Gaines	Commissioner/ Board Member	Placer County Board of Supervisors	175 Fulweiler Avenue	Auburn	CA	95603

Appendix O

California Natural Diversity Database Search Results

Search of the Folsom and 8 Surrounding 7.5 Minute Quadrangles

Common/Scientific Name	Federal/ State Status	Global/ State Rank	CNPS/ R-E-D	CDFG Status
AHART'S DWARF RUSH *JUNCUS LEIOSPERMUS VAR AHARTII*	None/ None	G2T1/ S1.2	1B/ 3-2-3	
ALKALI MEADOW	None/ None	G3/ S2.1		
ALKALI SEEP	None/ None	G3/ S2.1		
BALD EAGLE *HALIAEETUS LEUCOCEPHALUS*	Threatened/ Endangered	G4/ S2		
BANK SWALLOW *RIPARIA RIPARIA*	None/ Threatened	G5/ S2S3		
BIG-SCALE BALSAMROOT *BALSAMORHIZA MACROLEPIS VAR MACROLEPIS*	None/ None	G3T2/ S2.2	1B/ 2-2-3	
BISBEE PEAK RUSH-ROSE *HELIANTHEMUM SUFFRUTESCENS*	None/ None	G2Q/ S2.2	3/ 2-2-3	
BOGGS LAKE HEDGE-HYSSOP *GRATIOLA HETEROSEPALA*	None/ Endangered	G3/ S3.1	1B/ 1-2-2	
BRANDEGEE'S CLARKIA *CLARKIA BILOBA SSP BRANDEGEAE*	None/ None	G4T2/ S2.2	1B/ 2-2-3	
BURROWING OWL *ATHENE CUNICULARIA*	None/ None	G4/ S2		SC
CALIFORNIA LINDERIELLA *LINDERIELLA OCCIDENTALIS*	None/ None	G2G3/ S2S3		
COOPER'S HAWK *ACCIPITER COOPERII*	None/ None	G5/ S3		SC
DWARF DOWNINGIA *DOWNINGIA PUSILLA*	None/ None	G3/ S3.1	2/ 1-2-1	

Search of the Folsom and 8 Surrounding 7.5 Minute Quadrangles

Common/Scientific Name	Federal/ State Status	Global/ State Rank	CNPS/ R-E-D	CDFG Status
EL DORADO BEDSTRAW *GALIUM CALIFORNICUM SSP SIERRAE*	Endangered/ Rare	G5T1/ S1.2	1B/ 3-2-3	
EL DORADO COUNTY MULE EARS *WYETHIA RETICULATA*	None/ None	G2/ S2.2	1B/ 2-2-3	
GIANT GARTER SNAKE *THAMNOPHIS GIGAS*	Threatened/ Threatened	G2G3/ S2S3		
GREAT BLUE HERON *ARDEA HERODIAS*	None/ None	G5/ S4		
GREAT EGRET *ARDEA ALBA*	None/ None	G5/ S4		
HISPID BIRD'S-BEAK *CORDYLANTHUS MOLLIS SSP HISPIDUS*	None/ None	G2T2/ S2.1	1B/ 2-3-3	
LAYNE'S RAGWORT *SENECIO LAYNEAE*	Threatened/ Rare	G2/ S2.1	1B/ 2-2-3	
LEGENERE *LEGENERE LIMOSA*	None/ None	G2/ S2.2	1B/ 2-3-3	
MIDVALLEY FAIRY SHRIMP *BRANCHINECTA MESOVALLENSIS*	None/ None	G2/ S2		
NORTHERN HARDPAN VERNAL POOL	None/ None	G3/ S3.1		
NORTHERN VOLCANIC MUD FLOW VERNAL POOL	None/ None	G1/ S1.1		
NORTHWESTERN POND TURTLE *CLEMMYS MARMORATA MARMORATA*	None/ None	G4T4/ S3		SC
PINCUSHION NAVARRETIA *NAVARRETIA MYERSII SSP MYERSII*	None/ None	G1T1/ S1.1	1B/ 3-3-3	
PINE HILL CEANOTHUS *CEANOTHUS RODERICKII*	Endangered/ Rare	G2/ S2.1	1B/ 3-2-3	

Search of the Folsom and 8 Surrounding 7.5 Minute Quadrangles

Common/Scientific Name	Federal/ State Status	Global/ State Rank	CNPS/ R-E-D	CDFG Status
PINE HILL FLANNELBUSH *FREMONTODENDRON DECUMBENS*	Endangered/ Rare	G1/ S1.2	1B/ 3-2-3	
RED BLUFF DWARF RUSH *JUNCUS LEIOSPERMUS VAR LEIOSPERMUS*	None/ None	G2T2/ S2.2	1B/ 2-3-3	
RED HILLS SOAPROOT *CHLOROGALUM GRANDIFLORUM*	None/ None	G2/ S2.2	1B/ 2-2-3	
SACRAMENTO ORCUTT GRASS *ORCUTTIA VISCIDA*	Endangered/ Endangered	G1/ S1.1	1B/ 3-3-3	
SANFORD'S ARROWHEAD *SAGITTARIA SANFORDII*	None/ None	G3/ S3.2	1B/ 2-2-3	
SLENDER ORCUTT GRASS *ORCUTTIA TENUIS*	Threatened/ Endangered	G3/ S3.1	1B/ 2-3-3	
STEBBINS'S MORNING-GLORY *CALYSTEGIA STEBBINSII*	Endangered/ Endangered	G1/ S1.1	1B/ 3-3-3	
SWAINSON'S HAWK *BUTEO SWAINSONI*	None/ Threatened	G4/ S2		
TRICOLORED BLACKBIRD *AGELAIUS TRICOLOR*	None/ None	G3/ S3		SC
VALLEY ELDERBERRY LONGHORN BEETLE *DESMOCERUS CALIFORNICUS DIMORPHUS*	Threatened/ None	G3T2/ S2		
VALLEY NEEDLEGRASS GRASSLAND	None/ None	G1/ S3.1		
VERNAL POOL FAIRY SHRIMP *BRANCHINECTA LYNCHI*	Threatened/ None	G2G3/ S2S3		
VERNAL POOL TADPOLE SHRIMP *LEPIDURUS PACKARDI*	Endangered/ None	G2G3/ S2S3		

Search of the Folsom and 8 Surrounding 7.5 Minute Quadrangles

Common/Scientific Name	Federal/ State Status	Global/ State Rank	CNPS/ R-E-D	CDFG Status
WESTERN SPADEFOOT *SCAPHIOPUS HAMMONDII*	None/ None	G3?/ S3?		SC
WHITE-TAILED KITE *ELANUS LEUCURUS*	None/ None	G5/ S3		

Appendix P

Traffic Data (Bound Separately)

Traffic data is bound separately because of its technical content. The data are available on a limited basis at the Placer County offices in Auburn and at the U.S. Department of the Interior, Bureau of Reclamation.

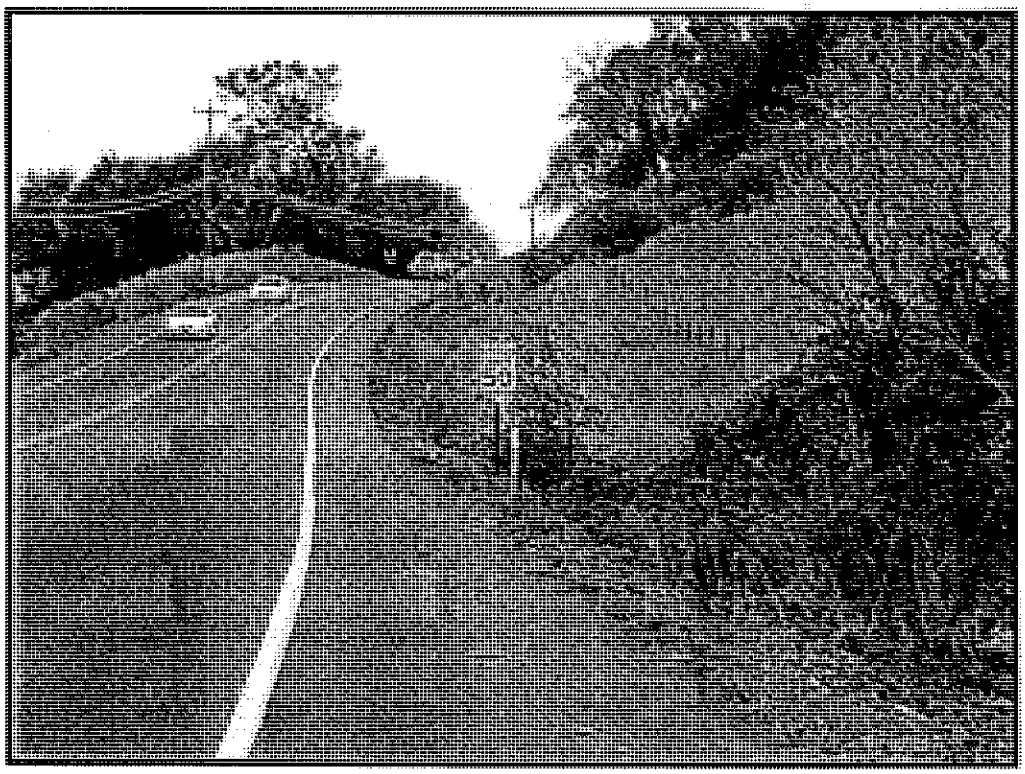
1387-420
File Copy

Auburn-Folsom Road Widening Project

Placer County, California

State Clearinghouse Number 2002042036

Final Environmental Impact Report/ Finding of No Significant Impact



Prepared by the:
Placer County
Department of Public Works
and
U.S. Department of Interior
Bureau of Reclamation
Central California Area Office,
Folsom, California

June 2004/January 2005

Auburn-Folsom Road Widening Project

From the Placer County Line North to Douglas Boulevard

Final Environmental Impact Report

Federal Lead Agency:
U.S. Bureau of Reclamation

State Lead Agency:
Placer County

State Clearinghouse Number 2002042036

September 2003

Auburn-Folsom Road Widening Project

Final Environmental Impact Report

State Clearinghouse Number 2002042036

State Lead Agency:

Placer County
Department of Public Works
11444 B Avenue
DeWitt Center
Auburn, CA 95603
Contact: Ed McCarthy, P.E.
530/889-7586

Environmental Consultant:

Jones & Stokes
2600 V Street
Sacramento, CA 95818-1914
Contact: Lynn Wall
916/737-3000

September 2003

Placer County. 2003. Auburn-Folsom Road widening project
final environmental impact report. September. (J&S 02-102.) Sacramento, CA.
Environmental consultant: Jones & Stokes.

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Clair Brinker, Space 12, Ridgeview MHP 2-54
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Cecil ___, Space 22, Ridgeview MHP 2-58
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Acronyms and Abbreviations

ADT	Average Daily Traffic volume
APN	Assessor's Parcel Number
Caltrans	California Department of Transportation
CEQA	California Environmental Quality Act
CHP	California Highway Patrol
CIP	Capital Improvement Program
County	Placer County
dB	decibel
dBA	A-Weighted decibel
DPW	Department of Public Works
EA/EIR	environmental assessment/environmental impact report
EIR	environmental impact report
FHWA	Federal Highway Administration
HOA	homeowners' association
MAC	Municipal Advisory Council
MHP	mobile home park
mph	miles per hour
NEPA	National Environmental Policy Act
Reclamation	U.S. Department of the Interior, Bureau of Reclamation
RTP	Regional Transportation Plan
SACOG	Sacramento Area Council of Governments
SRA	State Recreation Area

Chapter 1
Introduction

Background

Placer County (County) has prepared the Auburn-Folsom Road Widening Project Environmental Assessment (EA)/Draft Environmental Impact Report (Draft EIR) to disclose the environmental impacts of widening Auburn-Folsom Road from the Placer County/Sacramento County line north to Douglas Boulevard. The EA/Draft EIR was prepared in compliance with the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA). Under CEQA, Placer County is the lead agency for the project; under NEPA, the U.S. Department of the Interior, Bureau of Reclamation (Reclamation), is the lead agency for the project.

Public Review Process

The EA/Draft EIR was circulated to interested agencies and to the public for a 45-day review period. The County held a public workshop during the public review period to solicit public comments and presented the project alternatives and the findings of the environmental review process at the Granite Bay Municipal Advisory Council (MAC) meeting. The public workshop was held on March 27, 2003, at the Eureka Elementary School. Members of the public were encouraged to document their comments on comment cards. Additional agencies, groups, and individuals responded in writing throughout the comment period. All commenters are listed in Chapter 2 of this Final EIR.

Under CEQA, the lead agency (Placer County) is required to respond to public and agency comments received on the Draft EIR during the review period. CEQA requires that a Final EIR consist of revisions to the Draft EIR; comments and recommendations reeeived on the Draft EIR; a list of persons, organizations, and public agencies commenting on the Draft EIR; and the responses of the lead agency to significant environmental points raised in the review and consultation process. The content and format of this Final EIR were developed to meet the requirements of CEQA and the State CEQA Guidelines.

Contents of This Final EIR

This Final EIR meets the requirements of CEQA and the State CEQA Guidelines as follows:

- Chapter 1, "Introduction," describes the background of the project and gives an overview of the EIR process.
- Chapter 2, "Comments and Responses to Comments on the Draft EIR":
  - explains the methods used to respond to comments;
  - provides "master responses" to common concerns;
  - includes the written comments of all agencies, organizations, and individuals commenting on the Draft EIR,
  - provides responses to all comments received;
  - where appropriate, includes excerpts from the Draft EIR showing revisions or changes to the original document text.
- Chapter 3, "List of Preparers," lists the people responsible for preparing this Final EIR.
- Chapter 4, "References Cited," lists references used in preparation of this Final EIR.

Chapter 2

Comments and Responses to Comments

Introduction

The primary objective and purpose of the public review process is to obtain comments on the adequacy of the analysis of environmental impacts and the mitigation measures proposed. Copies of the comment letters received on the Draft EIR, as well as individual responses to each comment, are included in this chapter. CEQA requires that Placer County respond to all significant environmental comments at a level of detail appropriate to the comment (State CEQA Guidelines, Section 15088). Comments that do not directly relate to the analysis in this document (i.e., that are outside the scope of this document) are not given specific responses. However, all comments are included in this chapter so that the Placer County Board of Supervisors will know the opinions of the commenters.

Many of the comments received discussed similar issues or posed similar questions. For this reason, *master responses* have been prepared to respond to these comments in a consistent and succinct way. Following the master responses, additional comments and questions that are not addressed by the master responses are addressed individually. Individual responses follow a copy of each commenter's correspondence. If there are multiple comments in the comment letter or card, they are designated by numbers that correspond to Placer County's response.

Where changes to the Draft EIR are warranted, excerpts are shown, with additions indicated by underlined text and deletions indicated by ~~strikeout text.~~ These excerpts represent official revisions to the Draft EIR. However, the only such revisions are shown in the next section, "Staff-Initiated Revisions to the Draft EIR"; the comments received on the Draft EIR did not result in any additional revisions to the document.

Staff-Initiated Revisions to the Draft EIR

The staff of Placer County has made editorial revisions to the Draft EIR, as follows. These revisions represent the only revisions made to the Draft EIR as part of the Final EIR process.

The following change and new mitigation measure are hereby added to page 6-15 in Chapter 6, "Noise." Implementation of this measure would further reduce the effects described in Impact 6-3. The addition of this measure is also hereby incorporated into Table ES-1 of the Draft EIR.

Mitigation Measure P6.3a: Use Noise-Reducing Pavement
Placer County DPW shall place noise-reducing open-graded asphalt pavement or equivalent throughout the project area. Placer County DPW shall consult staff from Sacramento County and Caltrans to identify the formulation specifications for the open-graded asphalt that are most effective in reducing traffic noise. The pavement type selected shall have a minimum sound reduction capacity of 3 dB, based on long-term weathered conditions.

Mitigation Measure P6.3b: Design Cut Slopes and Retaining Walls to Minimize Noise Reflections
Placer County DPW shall design cut slopes and retaining walls included as part of the final project design so that noise reflections on adjacent residences are minimized. An earthen cut slope adjacent to the roadway can be used to minimize reflections. Treatments for retaining walls to minimize reflections may include, but are not limited to:

- the use of acoustically absorptive material on the wall face,
- walls that are sloped back to reflect sound up and away from adjacent residences, and
- use of irregular wall surfaces to disperse reflections.

Agencies, Organizations, and Individuals Commenting on the Draft EIR

The agencies, organizations, and individuals who submitted comments on the Draft EIR through May 29, 2003, are listed below and numbered 0 through 74. This chapter contains each comment letter and responses to the comments contained in each letter.

Table 2-1. Agencies, Organizations, and Individuals Commenting on the Draft EIR

No.	Date Received	Agency, Organization, or Individual
0	May 5, 2003	Facility Services
1	May 5, 2003	State of California Department of Parks and Recreation
2	May 5, 2003	South Placer Fire District
3	April 23, 2003	State of California Highway Patrol
4	April 14, 2003	National Oceanic and Atmospheric Administration
5	April 30, 2003	Granite Bay Community Association
6	April 2, 2003	County of Sacramento Public Works Agency
7	April 21, 2003	Madelaine Kiliany
8	May 1, 2003	Kent and Barbara Hayes
9	May 1, 2003	Lois Fletcher
10	April 25, 2003	Robert and Penny Beamer
11	April 25, 2003	Charles and Lou Flores
12	April 25, 2003	James Clay
13	May 5, 2003	Paul Romey
14	April 25, 2003	Matthew and Paula Vessell
15	April 25, 2003	Mitchell and Elizabeth McClemon
16	May 4, 2003	Luther Foxx
17	May 3, 2003	Col. Lyle Jewell
18	May 1, 2003	Cydney Bradford
19	May 4, 2003	Peggy Brown
20	May 4, 2003	Garry Sewell
21	no date	Margaret Rodenberger
22	no date	Jan Flatinger
23	April 29, 2003	Edgar Mobley III, Crown Point Vista Homeowners' Association (HOA)
24	April 30, 2003	Woodchase HOA
25	April 30, 2003	Sandra Russell, Friends of Anburn-Folsom Road
26	May 5, 2003	Mohammad and Margie Sohani
27	May 1, 2003	Al and Ann Pavik
28	April 20, 2003	Al and Ann Pavik
29	May 1, 2003	Richard and Mary Longacre
30	May 1, 2003	Lenora Moran
31	April 28, 2003	Karen Branson, Owner, Ridgeview HOA
32	May 1, 2003	Jim Phillips, Folsom Lake Estates HOA
33	April 25, 2003	Geraldine ____, Space 33, Ridgeview Mobile Home Park (MHP)

No.	Date Received	Agency, Organization, or Individual
34	April 25, 2003	Bonnie Brinker, Space 12, Ridgeview MHP
35	April 25, 2003	Clair Brinker, Space 12, Ridgeview MHP
36	April 25, 2003	JoAnn Pappen, Space 18, Ridgeview MHP
37	April 25, 2003	Joleen Adams, Space 2, Ridgeview MHP
38	April 25, 2003	Mary Short, Space 13, Ridgeview MHP
39	April 25, 2003	Cecil ___, Space 22, Ridgeview MHP
40	April 25, 2003	Shirley Roberts, Space 14, Ridgeview MHP
41	April 25, 2003	Stella Luskoski, Space 23, Ridgeview MHP
42	April 25, 2003	Bonnylu Schuh, Space 17, Ridgeview MHP
43	April 25, 2003	Dale Roberts, Space 14, Ridgeview MHP
44	April 25, 2003	Judith Thompson, Space 1, Ridgeview MHP
45	April 25, 2003	Timothy O'Leary, Space 45, Ridgeview MHP
46	April 25, 2003	Timothy O'Leary Sr., Space 45, Ridgeview MHP
47	April 25, 2003	Rhea O'Kims, Space 49, Ridgeview MHP
48	April 25, 2003	P. Brownyork, Space 30, Ridgeview MHP
49	April 25, 2003	Barbara Barton, Space 2, Ridgeview MHP
50	April 25, 2003	Carol Wansher, Space 21, Ridgeview MHP
51	April 25, 2003	George Keeber, Space 43, Ridgeview MHP
52	April 25, 2003	Alice D., Space 50, Ridgeview MHP
53	April 25, 2003	R. D., Space 50, Ridgeview MHP
54	April 28, 2003	Residents of Ridgeview MHP
55	no date	Lenora Moran
56	April 4, 2003	Michael and Wilma Moreno
57	April 14, 2003	Bruce Sutherland
58	April 10, 2003	Gary Mitchell
59	April 1, 2003	M. Ray Harrison
60	no date	Kris Johnson
61	no date	Steve and Debbie Uribe
62	no date	Mary Terrell
63	no date	Steve and Julie Jensen
64	no date	Gretchen Dwyer
65	no date	Tom Merchant
66	no date	Heidi Best
67	no date	Heidi Best
68	no date	Heidi Best

No.	Date Received	Agency, Organization, or Individual
69	no date	Kathleen Dunklin
70	no date	Guentert Erika Halwachs
71	no date	Chance E. Gable
72	no date	Jane Gagnier
73	no date	Michael Russell
74	no date	Frank and Hope Ruiz

Master Responses

Comments received on the Draft EIR by the above-listed agencies, organizations, and individuals identified several common issues of concern. To present Placer County's response to these issues in a readily accessible and consistent manner, the responses to these concerns are addressed as "master responses." This format allows readers of this Final EIR to obtain a cursory appreciation of the main issues of concern. The master responses describe issues related to noise, safety, traffic, access restrictions, trees, property values, cost, and aesthetics.

Master Response 1: Project-Level Environmental Analysis versus General Plan and Community Plan Analysis

The proposed project is one of the transportation improvements identified in the Placer County General Plan, the Granite Bay Community Plan, and the corresponding Capital Improvement Program (CIP). The proposed project is the result of the County's analysis of different roadway system alternatives to alleviate forecast increases in congestion on area roadways. The Auburn-Folsom Road Widening Project was identified as a preferred alternative, in addition to other transportation improvements, that would provide a reasonable balance of travel through the project area. At this time, no other corridors or alignments have been identified by any current, approved County planning documents to replace the Auburn-Folsom Road corridor.

The Auburn-Folsom Road Widening Project EA/Draft EIR is a project-level document addressing the widening of Auburn-Folsom Road between the Sacramento County line and Douglas Boulevard. The document presents impacts specific to this project. Before the publication of the EA/Draft EIR, EIRs were prepared for both the Granite Bay Community Plan and the Placer County General Plan. These planning-level EIRs evaluated other transportation projects and long-term planning for the project region. These documents address regional transportation impacts and serve as the basis for identifying projects for the CIP.

Master Response 2: Potential Noise Effects

Measures to Reduce Traffic Noise

In general, noise impacts that may result from the project, including potential impacts on residents along Auburn-Folsom Road, are analyzed in Chapter 6 of the Draft EIR. Mitigation measures are identified for reducing construction noise and minimizing the expected noise increases associated with increased traffic that would result from the project.

Many public comments received on the Draft EIR indicated that residents are concerned about increased traffic noise levels. The County addressed this concern in two ways in the Draft EIR, as summarized below.

- The County proposed a design variation (Alternative 4) that involves widening the road as far east as possible within the existing right-of-way in the middle and southerly portions of the project area. That is, Alternative 4 proposes widening to the east where most residences are located along the west of the alignment.
- The County will use open-graded asphalt to mitigate any project-related traffic noise impacts.

The Draft EIR concluded that the use of open-graded asphalt would allow the County to avoid causing significant traffic noise impacts. Other potential mitigation measures, such as soundwalls and sound berms, are not warranted and are not considered effective for any residence with a driveway connecting to Auburn-Folsom Road. A driveway would necessitate an opening in the soundwall that would render the soundwall ineffective, because sound would pass through the opening and reach the residence. The use of noise-reducing pavement (open-graded asphalt) was incorporated into the project to avoid significant traffic noise impacts. As indicated in the Draft EIR, it is assumed that the use of open-graded asphalt would reduce traffic noise by at least 3 decibels (dB). This is a conservative assumption, considering that studies have indicated that open-graded asphalt can reduce traffic noise by up to 4 to 6 dB on a roadway with 10% heavy trucks (California Department of Transportation 2002a). Research has shown that tire noise is a dominant component of automobile passby noise (Wayson 1998). Research has also shown that tire noise dominates (over, for example, engine noise) even at speeds as low as 25 miles per hour (mph) (Sandberg 1979 in Wayson 1998). Although open-graded asphalt does not directly affect engine noise, studies have shown it to be effective in reducing the overall traffic noise level, which is dominated by the noise generated by the tire-pavement interaction. Based on the analysis described below, the use of such noise-reducing open-graded pavement is considered to be sufficient to reduce traffic impacts to less-than-significant levels. There is substantial evidence that open-graded asphalt reduces traffic noise. Open-graded asphalt is therefore considered to be a reasonable and sufficient means to avoid significant traffic noise impacts.

The assessment of traffic noise impacts was conducted as follows:

- **Step 1: Identify Potential Receiver Locations.** Locations in the project area that could be exposed to traffic noise impacts resulting from the project were identified.
- **Step 2: Measure Existing Sound Levels.** Sound level measurements were taken at locations potentially exposed to traffic noise impacts; traffic data (counts and speeds) were counted simultaneously.

  Both short-term and long-term noise monitoring was conducted for this project to calibrate the model only. Short-term monitoring locations are identified in Figure 6-1 and Table 6-1 of the Draft EIR, whereas the results of short-term monitoring episodes are presented in Table 6-2 in the Draft EIR. Long-term monitoring was conducted for 24 hours per day over a 4-day period. The results of the long-term monitoring episodes are presented in Tables 6-3 through 6-5 in the Draft EIR. The locations of the long-term noise monitoring locations are as follows:

  - South end: in the Folsom Lake State Recreation Area (SRA) across from noise monitoring position 15.
  - Middle: on the southbound side of Auburn-Folsom Road, across from Assessor's Parcel Number (APN) 50-170-048.
  - North end: at noise monitoring position 1.

- **Step 3: Digitize Geometric Features.** Geometric features, including roadway lanes, receiver locations, existing terrain, and existing walls in the detailed impact assessment area, were digitized into a three-dimensional, sealed reference coordinate system for existing and project conditions.

  Drawings provided by the project engineers, a digitizing table, and the digitizing module of the Federal Highway Administration (FHWA) Traffic Noise Model were used to produce three-dimensional representations of key inputs in the project area. The physical dimensions of the roadway were digitized as single or double lanes along the lane centerlines in each direction. Shielding from the existing edge of the roadway was modeled using barriers.

  Step 4: Calibrate Noise Model. The traffic noise model was calibrated as necessary using the measured sound level data, actual traffic counts, and digitized geometric features for existing conditions.

  Sound32, the California Department of Transportation (Caltrans) version of the FHWA Traffic Noise Prediction Model (FHWA-RD-77-108) was used in this analysis. Digitized roadway, receiver, and barrier locations were entered into the model, then traffic volumes that were counted during the short-term measurement period were scaled up to 1 hour and entered into the model.

- **Step 5: Predict Traffic Noise Levels.** Using worst-noise-hour traffic volumes under existing and design-year conditions, the traffic noise model was used to predict worst-noise-hour noise levels for existing and design-year conditions for each alternative. Traffic noise impacts were not analyzed

for holiday weekend conditions because these conditions occur during infrequent events that do not adequately represent typical daily traffic conditions. Traffic noise impact assessments, including the present analysis, are, instead, based on representative daily traffic conditions.

- **Step 6: Identify Traffic Noise Impacts and Consider Abatement.** The traffic noise modeling results for existing and design-year conditions were used to determine whether traffic noise impacts would occur under each alternative. Where impacts were identified, abatement was considered.

Impacts under NEPA were assessed based on Title 23, Code of Federal Regulations, Part 772 (23 CFR 772). Impacts under CEQA were assessed based on the local Placer County policies contained in the County's General Plan Noise Element. Placer County Policies 9.A.9 and 9.A.10, in the County's General Plan, establish applicable goals and policies relating to noise in the county. Policy 9.A.9 establishes maximum allowable noise exposure levels for noise created by new transportation noise sources. However, the project would not create a new transportation noise source because the proposed project would reduce noise levels compared to existing and future no-project conditions by incorporating noise-reducing pavement. Therefore, the project is not required to mitigate noise levels to the standards specified in Table 6-7 of the Draft EIR.

An acoustical analysis was conducted to identify any potential noise impacts and identify mitigation measures that would reduce impacts to less-than-significant levels. This analysis was conducted with reference to Policy 9.A.10, which requires the preparation of an acoustical analysis for projects that would add noise-sensitive land uses to areas with noise that exceeds County standards. However, the policy is not directly applicable to the proposed project because it pertains to land use and development projects that would put new noise-sensitive land uses in areas with high levels of noise (i.e., noise in excess of County standards). The policy also establishes criteria for waiving the acoustical analysis requirement. Because the proposed project does not meet the requirements of Policy 9.A.10 (i.e., it is not a development project that would expose new noise-sensitive land uses to noise), the requirements to conduct an acoustical analysis are not applicable to the proposed project. Nevertheless, an analysis was prepared.

It should be noted that mitigation is required only to mitigate noise generated directly by the proposed project. Traffic noise attributed to projected future ambient growth (i.e., growth under future conditions without the proposed project) is not subject to mitigation, as this growth is not directly attributable to the proposed project. This holds true for recent traffic noise increases; the purpose of the noise analysis is to analyze noise resulting directly from the proposed project, and not noise that is occurring without the project. Mitigation is required only for traffic noise resulting directly from the proposed project (i.e., growth under future conditions with the proposed project). Because the project design would incorporate noise-reducing pavement, projected traffic noise would actually decrease under future-with-project conditions (i.e., no traffic noise increases would result directly from the widening of Auburn-Folsom Road

because the noise-reducing pavement would reduce noise to levels that are quieter than existing conditions).

Because the proposed project would generate traffic noise at levels below future-without-project conditions, the proposed project is not classified as a "noise generating project," and is not subject to County Policy 9.A.9. Mitigation is not required to reduce noise to levels below those indicated in Table 6-7 of the Draft EIR because the project is not subject to Policy 9.A.9 and because mitigation is not required for noise that is attributable to future ambient growth (i.e., traffic noise not related to the project).

Noise from Heavy Trucks

The traffic noise model used to assess traffic noise impacts (FHWA-RD-77-108) incorporates noise emission levels typical of heavy trucks. Accordingly, noise caused by heavy trucks has been included and evaluated in the modeling process.

Weekend Traffic Levels

Some commenters were concerned that weekend traffic levels had not been considered when conducting the traffic noise analysis for the Draft EIR. Although not reported in the Draft EIR, the long-term noise measurements taken for the project analysis included traffic noise on a summer weekend (Saturday, August 17, and Sunday, August 18, 2002). Traffic noise levels on this weekend were clearly lower than traffic noise levels during the preceding weekdays. Traffic counts conducted by the County also show that traffic volumes on summer weekends are lower than during the weekdays. No traffic or sound level data has been collected for holiday weekends because traffic and noise impacts assessments are not based on these infrequent events.

Reflection of Noise from Retaining Walls and Cut Slopes

The analysis presented in the Draft EIR did not include a specific evaluation of reflections from retaining walls because the location of the walls and the type of construction to be used for the walls was not known when the noise study was prepared. However, studies conducted by Caltrans indicate that reflections from retaining walls or other structures seldom increase noise levels by more than 1 or 2 dB (California Department of Transportation 1998a, b). Increases of this magnitude are generally not considered to be perceptible to humans, or would be barely perceptible. Mitigation Measure P6.3b has been added to the Draft EIR (see "Staff-Initiated Revisions to the Draft EIR" above) to ensure that adverse effects from reflections are minimized.

Increase in Noise and Traffic along Douglas Boulevard

Traffic data shown in Figures 3-11 and 3-12 in the Draft EIR indicate that 2005 (construction-year) average daily traffic volumes (ADT) for no-project conditions along Douglas Boulevard will be 35,900 cars per day, whereas 2005 (construction-year) ADT for with-project conditions would be 36,600 cars per day. This increase in traffic corresponds to a 0.1-dB increase in noise, which is not considered noticeable to humans.

Traffic data shown in Figures 3-13 and 3-14 indicate that cumulative (2020) ADT for no-project conditions along Douglas Boulevard will be 38,500 cars per

day, whereas cumulative (2020) ADT for with-project conditions would be 42,800 cars per day. This increase in traffic corresponds to a 0.5-dB increase in noise, which, again, is not noticeable to humans. Consequently, the contribution of the project to traffic noise impacts along Douglas Boulevard is not considered to be cumulatively considerable.

Master Response 3: Change in Property Values

Pursuant to Section 15358(b) of the State CEQA Guidelines, effects analyzed under CEQA must be related to physical changes in the environment; therefore, potential changes in property values are not usually analyzed in CEQA documents unless those changes would result in environmental effects. However, because the potential environmental effects of the project have been addressed by mitigation measures designed to reduce impacts to less-than-significant levels, any adverse physical change identified would be mitigated and would not correlate to a reduction in property values.

The widening of Auburn-Folsom Road would represent implementation of a project that has been identified in the County's General Plan and the Granite Bay Community Plan for many years. Implementation of such local plans does not constitute a reduction in property values because the plans are pre-existing public documents. For example, a resident living next to an undeveloped lot could not claim that future development of the lot in accordance with existing zoning would decrease the resident's property values because development of the lot is not unexpected or unforeseen.

Master Response 4: Speed Limits

Many commenters requested a reduced speed limit on Auburn-Folsom Road. The California Vehicle Code provides for a number of ways to set speed limits. First, if no speed limit is identified for a roadway, drivers must abide by the maximum speed limit regulation in accordance with Section 22349 of the California Vehicle Code. When speed limits are set on a particular roadway, the Board of Supervisors has the option to maintain the existing speed limit or approve a traffic and engineering study to set a speed limit that is radar-enforceable by the California Highway Patrol.

A traffic and engineering survey is used to set speed limits by sampling the prevailing speeds of traffic on the roadway using traffic engineering measurement equipment. For radar enforcement, the speed limit is set at the first 5-mph increment below the 85th percentile speed (i.e., the speed that 85% of drivers are traveling at or below on the surveyed road). The data is analyzed and the engineer reviews accident records and highway, traffic, and roadside conditions that are not be readily apparent to drivers. If such conditions are found, the recommended speed can be adjusted down an additional 5 mph.

Based on the engineering survey and roadway analysis, the engineer then recommends a speed limit to the Board of Supervisors for its approval. For example, if the 85th percentile speed is 58 mph, the speed limit recommended is 55 mph, or 50 mph if there are conditions not readily apparent to drivers that warrant a slower speed.

The Placer County Department of Public Works (Placer County DPW) would conduct a traffic and engineering study on Auburn-Folsom Road 6 months after completing the proposed project. The Placer County DPW would then recommend a posted speed limit for the widened portion of Auburn-Folsom Road. The Board of Supervisors would make the final decision on the setting the speed limit.

Master Response 5: Access

Although potential turning restrictions would result in slightly longer travel routes for desired left-turn movements, the desired movements can be accomplished via U-turns at nearby locations. The installation of raised or painted medians may restrict turning movements at some roadways and driveways. The locations of the raised or painted medians will be determined during the design process and approved by the Board of Supervisors. The design process will include the opportunity for the public to provide comments on the project's final design.

Although outgoing travel time would be lengthened by requiring U-turns instead of left turns, the total delay is not expected to be significant compared to the time spent waiting to turn left between adequate gaps in the traffic flow, especially during peak traffic periods. In addition, left-turn movements across uncontrolled traffic flow are inherently less safe than right-turn movements to and from Auburn-Folsom Road. Left-turn movements are even more unsafe where driveways are located on a grade, reducing the sight distance for drivers.

Master Response 6: Cost

The cost-effectiveness of the proposed project is not a physical environmental issue that requires analysis under CEQA. However, when considering project approval, the County will take into account the anticipated benefits, the costs, and the significant environmental effects of the project in order to make a balanced decision that is beneficial to the community. The ultimate decision will be made by the Board of Supervisors. The County expects to fund the project using traffic mitigation fees collected from development projects.

Master Response 7: Truck Traffic Response

The proposed project does not involve restrictions on trucks; in keeping with the project description, the noise analysis considered a complete mix of vehicle types. However, the proposed project does not preclude consideration of another discretionary project that could be undertaken by the Placer County Board of Supervisors that could include truck restrictions on Auburn-Folsom Road and the designation of appropriate truck routes elsewhere in the county.

Master Response 8: Traffic Signal Coordination

The purpose of coordinating traffic signals at a series of intersections is to increase the efficiency of a particular roadway corridor and thereby increase the capacity of the roadway. When traffic signals are coordinated at several intersections, vehicles progress through the system of traffic signals in groups. Increasing the distance between intersections usually breaks up these groups of vehicles. Many traffic engineering studies have shown that coordinating traffic signals that are more than 1,000 feet apart tends to not be effective because the groups of vehicles break down significantly over this distance. In the northern portion of the project corridor, the signal at Eureka Road and the new proposed traffic signal at Fuller Drive would work well together. Unfortunately, this northern group of signals is too far away from the possible new traffic signal at Lou Place or the existing traffic signal at Oak Hill Drive. In the southern portion of the project corridor, the signals at Oak Hill Drive, Pinebrook Drive, and Folsom Dam Road could be coordinated as part of the project.

Master Response 9: Safety and Design

The environmental review process is intended to evaluate physical impacts on specific resources in the surrounding area. In addition to the environmental review of the proposed project and the identification of optional project design components, the County will address roadway safety issues by applying civil engineering design practices, engineering judgment, and the use of many published and adopted design standards. Design standards for the Auburn-Folsom Road Widening Project include, but are not limited to, Placer County's Land Development Manual, General Specifications Manual, and Stormwater Management Manual. State and federal standards and publications will also be used, including Caltrans's Highway Design Manual, Traffic Manual, and Standard Plans and Specifications, and the Federal Highway Administration's (FHWA's) Manual on Uniform Traffic Control Devices, Roadside Design Guidelines, and Highway Drainage Guidelines.

Master Response 10: School Bus Turnouts

In response to concerns about the safety of children boarding and leaving school buses along Auburn-Folsom Road, the County has agreed to incorporate school bus turnouts into the final project design, in consultation with Eureka School District and the Roseville Joint Union High School District. The bus turnouts are not expected to create new impacts or worsen the impacts identified in the Draft EIR.

Master Response 11: Access to Eureka Road from the Ridgeview MHP

The proposed project includes improvements to Eureka Road, including improvements to the line of sight near the private entrance to the Ridgeview MHP; these improvements will be implemented only if the owner of the Ridgeview MHP agrees to open the gated exit onto Eureka Road. If implemented, these roadway improvements will facilitate the use of the gated exit onto Eureka Road. However, access and control of the gate is the responsibility of the property owner. Placer County has no jurisdiction over private property. Implementation of the roadway improvements would make access onto Eureka Road a viable alternative and significantly reduce safety risks associated with access.

exists in the current situation. A signalized intersection will provide a safe crossing for trail users. Certainly this signal may cause some controversy with commuters, however that is not adequate rationale to relegate this aspect of the project to mitigation measure status and for the County to adopt a "wait and see" stance toward this project element. DPR believes that this signal should be included in the project design for all action alternatives. 1b cont.

State Parks does not see any provision for the pedestrian trail identified in the Granite Bay Community Plan (Figure 11-1) along the west side of Auburn Folsom Road between Eureka and Oak Hill Drive. Class II bike lanes along both sides of the road are part of the project design. However, Class II bike lanes do not provide a safe passage for pedestrians. This project seems like the logical opportunity to construct this identified pedestrian route. DPR believes that this transportation project should meet the needs of all users of the transportation corridor, including pedestrians. State Parks does not see that any of the mitigation measures address the omission of including this pedestrian pathway along the corridor in the project design. 1c

Figure 11-1 also shows a connection between the County equestrian trail at Eureka Road and Auburn Folsom Road and the SRA. However, because of private property located between the roadway and the SRA boundary, no connection currently exists at this location. We have discussed with you the possibility of providing a trail connection along the east-side of Auburn Folsom Road from Eureka Road to the gated service road/trail at Dike 5. We realize there are challenges to providing this connection including a creek in this area and the private property. However, it doesn't seem that these challenges alleviate the responsibility of the County to provide this trail connection. 1d

State Parks staff recently met with staff from Placer County Facility Services regarding the sewer line than runs through the SRA/Bureau property in this area. With the new security barriers the Bureau has installed on the dikes, the county has problems accessing this line for maintenance. The County staff were unsure of the County easements for maintenance of this line. Perhaps a creative solution could be developed that provides access for sewer line maintenance in combination with a trail connection. We would like to see the County use some creativity and develop ideas on how this trail connection might be provided. 1e

Mitigation for Oak Trees Removed on SRA Lands

State Parks will defer to the Bureau of Reclamation regarding the inch for inch mitigation requirement for oak trees removed on Bureau lands. We believe the language in Mitigation Measure P8.3b (1), page 8-42 Seedlings should not read "Seedlings should be from acorns collected within 30 miles of the project location in Placer or Sacramento Counties in the American River Watershed and between the elevations of 100 and 800 feet." Eliminate the qualification, "If feasible...". There are ample sources of oak trees propagated from local acorn stock. If this is a requirement contractors completing the work will meet this requirement. 1f

Screening for Trails and Campground (Mitigation Measures P7.4c.)
DPR supports the preparations of a revegetation and restoration plan that also provides additional screening for recreation facilities. State Parks would like to provide input and review this landscape plan. 1g

Beals Point Entrance
State Parks supports the provision of deceleration and acceleration lanes north and south of the Beals Point entrance road. In determining the length of the southbound left-hand turn pocket into Beals Point entrance road we would ask the County to consider that longer vehicles such as motor homes and vehicles with trailers are among the visitors that will utilize this turn lane. 1h

While it appears that the county has sufficient right-of-way to accomplish most of it's road widening without impacting State Park facilities, our expectation is that if the road widening does require moving the entrance sign, fencing or other facilities the county would be responsible for replacement or moving these items. 1i

Lastly, as we have discussed with the County, during peak use weekends the amount of traffic seeking to enter the SRA at Beals Point can cause back-ups and congestion along Auburn-Folsom Road. One problem is that some people attempt to park on the shoulder of Auburn Folsom Road. As part of this project, DPR requests the County provide adequate signing along the roadway that no parking is allowed. 1j

Raised Median/Visual Quality Along the Corridor
State Parks understands that a fourteen-foot wide median will be provided in all alternatives. This median will serve as a left-hand turn lane or raised median in various locations, to be determined. Portions of the median may be landscaped to improve the visual quality of the widened roadway. State Parks recommends the median landscaping be composed of native vegetation that is drought tolerant and similar to the native vegetation on the adjacent SRA lands. State Parks also suggests that another way to help improve the visual quality of the corridor is to consider assisting State Parks and the Bureau with replacing the existing t-post and wire fence with a more visually appealing fence at our property boundary along the roadway. 1k

Thank you for your consideration of these comments and suggestions. If you have any questions regarding this letter please contact Jim Micheaels, the Gold Fields District Planner, at (916) 988-0513.

Sincerely,

Scott Nakaji
Folsom Sector Superintendent

CC Sandi Richerson, Bureau of Reclamation

Response to Letter 1, from the State of California Department of Parks and Recreation

Response to Comment 1a: The trail components included as part of the project are listed in Chapter 11. Placer County DPW believes these improvements satisfy the requirements of the Granite Bay Community Plan. Additional trail improvements may be identified in the revisions to the Granite Bay Community Plan. However, because this plan is not yet adopted, proposed changes are considered speculative at this point and would not be implemented as part of this project.

Response to Comment 1b: The traffic signal and the path between Oak Hill Road and Lou Place are included in the Draft EIR as potential measures that may resolve the trail connectivity issue. Whether included as a mitigation measure or as a project component, the signal may be installed as indicated in the Draft EIR. The Board of Supervisors will make the final decision on which option may be used during the final design process.

Response to Comment 1c: Placer County believes that the proposed improvements meet the requirements of the Community Plan. Bicycle lanes will be improved along the roadway, and pedestrian trails currently run parallel to the road within the SRA. Placer County is proposing to maintain safe access to, and connectivity of, the trail network. Bicycle and pedestrian access will be provided within the Class II bike lane and shoulder on each side of the roadway. These trails are represented schematically in Figure 11-1.

Response to Comment 1d: As required by the Community Plan, Placer County has included several trail improvements as components of the project. The connection of and extension of the equestrian trial at Eureka Road is not included as a project component. This improvement would be undertaken as a separate project. The implementation of the road widening project would not prevent the equestrian trail project from occurring at a later date. As noted, there are several potential impacts associated with the trail project itself that would need to be evaluated.

Response to Comment 1e: These access and detailed design elements will be addressed in the final design plan.

Response to Comment 1f: Reclamation had no comment on this language. No change to the document is required.

Response to Comment 1g: The comment is noted; specific provisions will be addressed in the final design plan.

Response to Comment 1h: The comment is noted; specific provisions will be addressed in the final design plan.

Response to Comment 1i: The comment is noted; specific provisions will be addressed in the final design plan.

Response to Comment 1j: The comment is noted; specific provisions will be addressed in the final design plan.

Response to Comment 1k: The comment is noted; specific provisions will be addressed in the final design plan.

South Placer Fire District
6900 Eureka Road
Granite Bay, California 95746
(916) 791-7059
Fax (916) 791-2199

Board of Directors
John de Graaff
Ron Feist
Dave Giblin
Gregory Grenfell
Mike Short

Fire Chief
Tony Corado

An Organization Committed To The Well-being Of The South Placer Community

May 5, 2003

Placer County Planning Department
Attn: Lori Lawrence
11414 "B" Ave.
Auburn, CA 95603

Subject: Auburn Folsom Widening Project

Lori:

After trying to digest the Draft EIR for the Auburn-Folsom Road Widening Project, and trying to put into context the different proposals, I would like to express the Fire District's concern regarding access to the East side of Auburn Folsom Rd, North of 9170 Auburn Folsom Rd. Due to the fact that Auburn-Folsom Rd fronts State Park Property, the only homes that are within the South Placer Fire District are located just north of 9170 Auburn Folsom Rd. There are approximately thirteen residential structures on the east side.

The concern that this office has is that the proposed divider break at Country Court will isolate the homes at 9095 and 9145 Auburn Folsom. The location of this break will necessitate units to responded father south and then turn around or cross over the divider break at County Court and proceed south bound in the north bound lane. This would be extremely dangerous to both the public and fire personnel.

An additional concern would be the proposed closure of the north bound access from the Ridgeview Trailer park, 9060 Auburn Folsom Rd. The demographics of the trailer park are generally elderly and we receive constant requests for service. Should a Code 3 response be required to the hospital, our units would have to proceed south bound to the nearest divider break or break traffic north bound in the south bound lane. Again, this option would be extremely dangerous to both the public and fire personnel.

Regardless of the final design determination, consideration should be given to those homes on the east side of the Auburn Folsom and the elderly residences in the Ridgeview Trailer Park. Any adverse design of the center median could lead to a decreased level of service during an emergency. Any decrease in service to our community should be taken very seriously and all avenues addressed to mitigate any possible service level decrease.

I look forward to working with you on this issue to assure that emergency response access is assured to all of our community members.

Sincerelely,

Keith Burson, B/C
Fire Marshal

Original via US Mail

Response to Letter 2, from the South Placer Fire District

Response to Comment Letter 2: Please see Master Response 5. Placer County DPW will coordinate with South Placer Fire District during the design phase to ensure safe, efficient access.

State of California—Business, Transportation and Housing Agency GRAY DAVIS, Governor

DEPARTMENT OF CALIFORNIA HIGHWAY PATROL
California Highway Patrol
9440 Indian Hill Road
Newcastle, CA 95658
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(800) 735-2929 (TT/TDD)
(800) 735-2922 (Voice)

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APR 30 2003
BY:

RECEIVED
APR 03 2003

April 23, 2003

File No.: 220.10284.8837.SCH #2002042036

Placer County Department of Public Works
Mr. Charles W. Ebeling
11444 B Avenue
Auburn, CA 95603

Dear Mr. Ebeling:

The Auburn Area Office of the California Highway Patrol (CHP) received the Auburn-Folsom Road Widening Project Draft Environmental Assessment/Draft Environmental Impact Report (EIR), State Clearing House (SCH) #2002042036. After review, we believe this project will have an impact on operations in our Area. With the expected growth at this location and the increased traffic volumes anticipated, this improvement will be a beneficial improvement to Auburn-Folsom Road. However, there are several concerns we wish to address.

As discussed in our earlier response to the Notice of Preparation for the Auburn-Folsom Widening Project dated April 29, 2002, we expressed concern over the possible addition of a center divider along certain portions of this project. South Placer County Consolidated Fire District officials were concerned with additional response time in the event they were forced to pass a location on account of the divider and find a safe location to turn. Due to the size and nature of fire equipment, the detour may be a distance from the location they are responding to. We also discussed the increase of vehicles forced to make U-turns to arrive at their intended destinations. These U-turns would be accomplished in areas that would now have a higher and faster traffic flow. Furthermore, people may be inclined to make U-turns at an area that, although convenient for them, may not be safe. The additional lanes will allow for a higher and faster volume of traffic. The downside, however, is an increase in the frequency and severity of collisions. 3a

It is anticipated that the majority of traffic using northbound Auburn-Folsom Road will be turning west (left) onto Douglas Boulevard. Currently, there are two left turn lanes to handle this movement. The additional traffic will burden the left turn lanes, causing a back up into the through lanes which may result in additional rear end collisions. It may be possible to mitigate this by extending the left turn lanes beyond the current length. 3b

Flex your POWER
BE ENERGY EFFICIENT

As previously stated, the majority of traffic will turn west onto Douglas Boulevard. However, as more people discover this route, there will be additional traffic northbound north of Douglas. This will place an additional burden on Auburn-Folsom Road where it reverts to one lane in each direction. Additionally, there may be an increase in sideswipe and rear end collisions just north of Douglas Boulevard where the roadway narrows to one northbound lane. 3c

Although the CHP has no opinion for which of the four alternatives are implemented, with the recent closure of the Folsom Dam Road and the traffic problems created as a result of the closure, it is apparent that some improvements are warranted. We do sanction the signalizing of the intersection of Auburn-Folsom Road and Fuller Drive. The signalizing will be a welcome improvement and increase the safety of this intersection. 3d

Another concern with this project is the impact that it may have on traffic and the issue of safety to workers and the motoring public during construction. We would recommend the use of CHP officers working construction zone enforcement to assist with securing the construction site and to aid in traffic control as needed. However, with our current staffing level , we may not be able to provide the needed officers and may require a reimbursable contract to afford the necessary coverage. The presence of uniformed CHP officers on site has shown to significantly improve the compliance of the motoring public to directional signs and traffic control personnel. Compliance reduces the exposure to danger faced by the on site construction workers and to the motorists traversing the construction site. 3e

If you have any questions or concerns regarding this letter and our comments, please contact me or Officer M. Turner at (916) 663-3344.

RICK WARD, Captain
Commander
Auburn Area

cc: State Clearinghouse, Office of Planning and Research, Ms. Katie Shulte Joung
Special Projects Section, Attention: Lieutenant J. Page
Valley Division, Attention: Assistant Chief C. Carlson

Response to Letter 3, from the State of California Highway Patrol

Response to Comment 3a: Please see Master Response 5. Placer County DPW will use engineering design and safety standards and will coordinate with the California Highway Patrol (CHP) during the design phase to ensure safe, efficient access.

Response to Comment 3b: In preparing the final design, the Placer County DPW will consider median breaks, mountable medians, and other design access options. This issue will be evaluated during the final design process, in consultation with CHP.

Response to Comment 3c: There will be less than a 5% near-term increase in northbound through traffic. As volumes increase to 2020 values, the County will implement Mitigation Measure P3.2 to ensure safe and efficient operating conditions for intersections and roadways.

Response to Comment 3d: The comment is noted.

Response to Comment 3e: The comment is noted; in accordance with Mitigation Measure P3.1, Placer County DPW will require a Traffic Management Plan to be prepared and implemented during the construction project.

Letter 4

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Sacramento Area Office
650 Capitol Mall, Suite 8-300
Sacramento, California 95814-4706

RECEIVED
APR 15 2003
PLANNING DEPT.

April 14, 2003

In Reply Refer To:
SWR-02-SA-8888:JCB

Lori Lawrence
Placer County Planning Department
11414 "B" Avenue
Auburn, California 95603

Dear Ms. Lawrence:

Thank you for the opportunity to provide information regarding the National Marine Fisheries Service's (NOAA Fisheries) concerns regarding the potential effects of the Auburn-Folsom Road Widening Project. This response is provided as informal, technical assistance and coordination, and is not intended to take the place of formal comments or consultation as required under the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 *et seq*).

The proposed project consist of construction activities to widen the roadway from two to four lanes, provide continuous Class II bicycle lanes on each side of the roadway, provide a medium that may include two-way left-turn lanes and/or raised or painted mediums, and install a traffic signal at the Auburn-Folsom Road/Fuller Drive intersection. The project will also include constructing/improving a multi-use trail/equestrian trail on the west side of Auburn-Folsom Road that will extend from the Baldwin Reservoir access road to the Auburn-Folsom Road/Oak Hill Drive intersection, and implementing improvements to Eureka Road west of the Auburn-Folsom/Eureka Road intersection.

No species under the jurisdiction of NOAA Fisheries that are presently listed under the Federal Endangered Species Act (Act) as well as those that are proposed for listing and candidate species are likely to be present in the area of the proposed Auburn-Folsom Road Widening Project, Placer County, California. As such, NOAA Fisheries has no comments regarding the Auburn-Folsom Road Widening Project

If you have any questions, please contact John Baker in our Sacramento Area Office, 650 Capitol Mall, Suite 8-300, Sacramento, CA 95814. Mr. Baker may be reached by telephone at (916) 930-3616 or by Fax at (916) 930-3629.

Sincerely,

Michael E. Aceituno
Supervisor, Sacramento Area Office

cc: NMFS-PRD, Long Beach, CA
Stephen A. Meyer, ASAC, NMFS, Sacramento, CA

Response to Letter 4, from the National Oceanic and Atmospheric Administration

Response to Comment Letter 4: No response is required.

Letter 5

GRANITE BAY COMMUNITY ASSOCIATION

P.O. BOX 2704 * GRANITE BAY, CALIFORNIA 95746 * (916) 791-7427

RECEIVED
MAY 02 2003
PLANNING DEPT.

April 30, 2003

Lori Lawrence
Placer County Planning Department
11414 B Avenue
Auburn, CA 95603

Re: Auburn-Folsom Road Widening Project - Draft Environmental Impact Report

Dear Ms. Lawrence:

Thank you for the opportunity to respond to the DEIR on the Auburn-Folsom Road Widening Project. The objective of this project is "serving the existing traffic circulation needs of the Granite Bay community, and accommodating projected rapid increases in commuter traffic volumes on Auburn-Folsom Road" yet the project description itself seems too limited to accomplish the objective. In light of the impacts presented in the DEIR, our concerns stem from the limited consideration of alternatives: that the only way to accomplish the objective of the project is simply the widening of Auburn-Folsom Road.

The traffic impacts caused by the large amount of pass through traffic are being felt throughout Granite Bay and this document reinforces the community's belief that widening the road to four lanes will only aggravate this problem. Even though Granite Bay mitigation fees are the primary source of funding, the community feels the widening project is mainly for the benefit of pass through traffic and the improvements will be more than offset by increased through traffic. Additionally, the community will lose hundreds of trees, some wetlands, privacy for residents along the route, and the ability to make left hand turns from many of the homes along the route. Also, at the expense of Granite Bay residents, the DEIR suggests median openings on Douglas Boulevard should be eliminated as a future mitigation to facilitate pass through traffic. 5a

The study shows that by widening Auburn-Folsom, the traffic bottleneck bubble will be pushed north to the intersection of Auburn-Folsom and Douglas Boulevard (page 1-13 - "The p.m. peak hour delay at Auburn-Folsom and Douglas intersection would increase with construction of project as more traffic uses Auburn-Folsom Road. The Auburn-Folsom/Eureka Road, Barton Road/Eureka Road, and Barton Road Douglas intersections would continue to operate at LOS F"). This being said, $10 million is a lot to spend to just push the traffic bottleneck to another location at no net benefit to the community. In fact, the logical path for drivers to seek at the congested Auburn-Folsom Road intersection would be to take a left on Eureka or continue north on Auburn-Folsom Road to Cavitt Stallman Road or Wells Road, east to Barton and then north to Rocklin Road to proceed east. Those held up at Barton and Douglas will turn north on Barton and proceed to Rocklin Road and then east thus pushing the traffic further into the community. Eventually, at great expense to County, these interior roads would have to be improved to handle more and more pass through traffic. Where is the money to do this going to come from? Granite Bay is about built out and mitigation funds won't be forthcoming. We have other roads in the community that need attention and trails are needed along interior roads for the safety of residents. 5b 5c 5d

The study notes that congestion at the Auburn-Folsom/Douglas intersection will not be improved as part of this $10 million project and will probably get worse, but there are no immediate plans to improve the intersection which seems shortsighted. It doesn't make sense to speed the traffic north and then have it 5e

back up at this intersection blocking business accesses in that area. Currently, there is only one merging southbound turn lane from Douglas to Auburn-Folsom which is extremely dangerous as it also shares traffic entering and exiting the busy service station on the corner. 5e cont.

The study projects that when the road is widened, traffic will not seek other routes through Folsom Lake Estates or Eureka Road. (The addition of STOP signs and the lowering of the speed limit on Eureka Road would appear to refute this claim.) As noted above, the bottleneck will just move north and west and to avoid these two intersections, and traffic seeking the path of least resistance will probably continue cutting through Folsom Lake Estates, Eureka Road, and other residential neighborhoods. Perhaps an immediate and cheaper solution to this problem which wasn't considered as an alternative in the study would be to make Oak Hill and Eureka Road signal lights "no left turn" between 6:00 and 8:00 a.m. 5f

The study notes that a traffic signal at Fuller will improve the safety of this area. A traffic signal at Fuller has been asked for by the community many times and could be installed separate from widening Auburn-Folsom, but the study did not note this alternative. 5g

The bottleneck from Fuller Drive south to Pinebrook (Page 1-7 LOS F) could be alleviated by timing the signal lights at Eureka Road, Oak Hill Drive, and Pinebrook to favor the through traffic at morning and evening rush hours, but this was not an alternative in the study. 5h

On Page 1-8 and 1-9 the charts show that only two intersections would show a LOS improvement with the project. Auburn-Folsom Road/Eureka Road Would go from LOS E to LOS C and Auburn-Folsom Road/Oak Hill Drive would go from LSO D to LOS B. The $10 million price tag is a lot to spend for this small increment of improvement that is short lived and there is no guarantee that driver's will abandon their current travel patterns. 5i

Table ES-1 "Implement strategies to alleviate the need to widen Douglas boulevard to 6 lanes" On page 3-30 these strategies are listed as:

- Work with PCTPA, SACOG, and neighboring jurisdictions to address a regional solution to the amount of though traffic in Granite Bay.
- Add turn lanes at major intersections along Douglas Boulevard to provide LOS A.
- Potentially close some median openings along Douglas Boulevard to maintain its ability to carry traffic at higher levels of service. 5i

With respect to the first bullet "Work with PCTPA, SACOG, etc." The study covers traffic projections for 20 years, but doesn't include the scenario of replacing the two lane Folsom Dam crossing with a four lane bridge. Placer, Sacramento, and El Dorado Counties are the fastest growing counties in the state and it seems short sighted to spend $10 million for a solution that isn't even going to improve the existing impacts. Before all the money is spent on such a short sighted project, perhaps the time to work with neighboring jurisdictions is **NOW**. Placer County should take the position that it won't support a four lane replacement bridge unless alternate routes are developed such as improving Oak Avenue, or building a two lane expressway along an existing power line easement from Auburn-Folsom Road to Sierra College Boulevard in order to facilitate east/west traffic. If Placer County doesn't take a proactive stand on this matter, the County will have to bear the burden of improving south Placer roads and lowering property values in the community by having a quasi-beltway through the heart of this residential area. This alternative was not part of the study and should have been. 5k

Bullet 2 - add lanes - To add lanes at Douglas Boulevard and Auburn-Folsom Road would be a costly engineering project as all four corners are developed in close proximity to the intersection and it is doubtful this would happen in the near future. 5l

Bullet 3 - to close median openings along Douglas is an inconvenience to Granite Bay residents to facilitate pass through traffic. The funds for this project are coming from mitigation funds raised in Granite Bay and the community feels there should major benefits to residents. 5m

The widening of Auburn-Folsom is part of the Granite Bay Community Plan, but with intense growth in the region and the addition of the new bridge over Lake Natomas, pass through traffic has exceeded what this community expected when this was a consideration. Given the current circumstances, this solution seems short sighted and uneconomical to the County. 5n

CEQA requires consideration of alternatives that would "feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project." The consideration of alternatives presented does not satisfy this requirement. The only "alternatives" considered are alternatives of the same proposal - to widen Auburn-Folsom Road. It has been suggested in the DEIR that the "no project" alternative does not satisfy the objectives of the project. 5o

Alternative 1 suggests a widening of the roadway to the west; which merely means that construction of this road widening occur on the west side of the existing roadway. The suggestion that this is an alternative is ludicrous; it is merely an accommodation of construction. Likewise, Alternative 2 suggests a widening of the roadway to the east; meaning construction of improvements would occur on the east side of the roadway. 5p

The third alternative widens the roadway equally on both sides and the fourth alternative seems to be a combination of alternatives 2 and 3. In any event, all of the impacts borne by the community are the same irrespective of the specific alternative and none of them satisfies the CEQA requirement.

None of the above "alternatives" are really alternatives at all: they are simply suggested construction configurations of the widening of Auburn-Folsom Road. The proposed project is the widening of Auburn-Folsom Road. Whether it is done on the west side of the road, the east side, or equally between the two, it is still the same project and not an alternative. 5q

A reasonable consideration of alternatives, in compliance with CEQA requirements, would include consideration of developing another east/west commuter route such as a two lane expressway along the power easement, and that Placer County work with the proper entities to improve Oak Avenue to share some of the traffic driving north from the Lake Natomas Crossing. 5r

Widening Auburn-Folsom Road to relocate a bottleneck created by the widening of Folsom-Auburn Road in Sacramento County is not an objective solution to the goals of this project. Accommodating the needs of the Granite Bay Community would consider redirecting pass through traffic in such a way that our roadways do not need to be widened to accommodate such traffic; there is no benefit to the community. 5s

Specific alternatives, other than variations on widening of Auburn-Folsom Road, need to be considered.

The DEIR does not adequately consider alternatives in achieving the objectives of this project; however, if the project proceeds, the community supports the following:

- Development of another east/west route to share the traffic impacts.
- The roadway must maintain and preserve the rural character of the existing road.
- A raised landscaped median similar to Douglas Boulevard must be part of the project in order to protect the scenic quality of the area. 5t
- Pass through truck traffic must be diverted around this residential community.
- Wetlands and trees must be mitigated in Granite Bay and not out of the area.
- The speed limit should be 45 mph for the safety of residents along the route.
- Noise along the route must be mitigated.
- Retaining walls must use aesthetic materials and be landscaped to maintain aesthetic quality of the community.

Overall, we believe the project description is too narrow, alternatives to the project have not been properly explored, and it is not possible to achieve the objectives of "serving the existing traffic circulation needs of the Granite Bay community, and accommodating projected rapid increases in commuter traffic volumes on Auburn-Folsom Road". 5u

It is the hope of the community that the decision makers take a hard look at the figures before proceeding to spend $10 million on this short sighted project that isn't a good investment at this time.

Very truly yours,

Sandra H. Harris, Secretary
Granite Bay Community Association

Cc: Board of Supervisors
Planning Commissioners
Granite Bay MAC

Response to Letter 5, from the Granite Bay Community Association

Response to Comment 5a: Please see Master Response 1.

Response to Comment 5b: In accordance with Mitigation Measure P3.2, the County will evaluate the need for improvements and maintain a safe and efficient road network.

Response to Comment 5c: Level of service will continue to degrade during the next 15 years; however, residents would enjoy improved level of service over this time compared to no-project conditions. The analysis does not include any other planned improvements that would further improve service.

Response to Comment 5d: Please see Master Response 6.

Response to Comment 5e: Please see Master Responses 1 and 9.

Response to Comment 5f: The traffic study finds that, although cut-through traffic would gradually increase over time, the project would substantially reduce the increase in cut-through traffic. Therefore, these additional measures would not be warranted.

The Auburn-Folsom Road widening project has been listed as a Capital Improvement Project (CIP) for more than 10 years, in the Community Plan. Other traffic improvements may be evaluated as a separate project.

Response to Comment 5g: Fuller Drive is included in the project to avoid segmenting closely related improvements into separate projects and thereby substantially increasing the project construction costs.

Response to Comment 5h: Please see Master Response 1.

Response to Comment 5i: Please see Master Response 1. Placer County is working with the Sacramento Area Council of Governments (SACOG), and the project is listed in the Regional Transportation Plan (RTP).

Response to Comment 5j: These other projects are speculative at this time and, as such, their effects cannot be adequately quantified. Once these projects are included in the General or Community Plan or become separate and distinct projects, they will require individual environmental review. Section 15125 of the State CEQA Guidelines indicates that the environmental setting shall be based on conditions at the time the Notice of Preparation is prepared. Furthermore, the analysis shall rely on the adopted plan. Projects and plans that are not yet adopted at the time the Notice of Preparation is prepared are considered speculative and are not used in the CEQA analysis.

Response to Comment 5k: The comment is noted Please refer to Master Response 1.

Response to Comment 5l: Please see Master Response 9. Placer County evaluates the need for traffic and intersection improvements based on engineering and safety criteria. Improvements at this intersection would be addressed as a separate project.

Response to Comment 5m: Please See Master Response 5.

Response to Comment 5n: Please See Master Response 1.

Response to Comment 5o: Please see Master Response 1.

Response to Comment 5p: The comment is noted; please see Master Response 1.

Response to Comment 5q: Please see Master Response 1.

Response to Comment 5r: Please see Master Response 1.

Response to Comment 5s: Please see Master Response 1.

Response to Comment 5t: Please see Master Response 1.

Response to Comment 5u: The comment is noted; please see the responses to the previous comments in this letter.

Letter 6

WARREN H. HARADA, Administrator
THOMAS J. ZLOTKOWSKI, Director, Department of Transportation

COUNTY OF SACRAMENTO
PUBLIC WORKS AGENCY

DEPARTMENT OF TRANSPORTATION
906 G Street, Suite 510
Sacramento, California 95814-1812
(916) 874-6291 • Fax No. (916) 874-7831

RECEIVED
APR 1 4 2003
PLANNING DEPT.

April 2, 2003

Ms. Lori Lawrence
Placer County Planning Department
11414 "B" Avenue
Auburn, CA 95603

SUBJECT: AUBURN-FOLSOM ROAD WIDENING PROJECT

Dear Ms. Lawrence:

The Sacramento County Department of Transportation has reviewed the Environmental Assessment/Draft Environmental Impact Report for the Auburn-Folsom Road Widening Project. We appreciate the opportunity to review this document, and have no comments at this time.

If you have any questions, please call me at 874-6291.

Sincerely,

Jeffrey E. Clark, P.E., T.E.
Senior Civil Engineer

JEC:ar

Response to Letter 6, from the County of Sacramento Public Works Agency

Response to Comment Letter 6: The comment is noted. No response is required.

Letter 7

April 21, 2003

RECEIVED
APR 24 2003
PLANNING DEPT.

Tori Lawrence
Placer County Planning Dept.
11414 "B" Ave.
Auburn, CA 95603

Re: Widening Auburn - Folsom Road

Dear Tori,

I encourage the County to build a landscaped median between the north and southbound lanes. I realize the accident rate is below the statewide average, yet I believe the median will make the route safer as well as a pleasing appearance.

Accidents on Douglas Boulevard may have been avoided by having the present median in place. There are numerous tire marks where cars have grazed the curb.

I believe having a landscaped median added to the widening project will add beauty to the route as well as safety.

Sincerely,

Madelaine Kilcoyne
7495 Red Rud Rd.

Response to Letter 7, from Madelaine Kiliany

Response to Comment Letter 7: The comment is noted. A landscaped median is a design option that will be evaluated during the final design process. Placer County DPW has agreed to present the final design to the Granite Bay MAC for comment prior to submitting the DPW's recommended project to the Board of Supervisors.

Letter 8

Supervisor Ted Gaines
175 Fulweiler Ave.
Auburn, Ca 95603

RECEIVED
MAY 01 2003
PLANNING DEPT.

Granite Bay MAC
P.O Box 2451
Granite Bay, CA 95746

Lori Lawrence, Planning Technician
Placer County Planning Department
11414 "B" Avenue, Auburn, CA 95603

Dear Sirs/Madam:

We would like to submit our concerns in regard to the Auburn Folsom Rd. widening project. We have participated in the town hall meetings and have provided feedback to the Department of Public Works. We have been asked to express our comments to you as well.

We realize the widening of Auburn Folsom Rd is a necessary project. This letter is not in opposition of the project, but a letter of concern in regard to areas that we feel have not been addressed adequately to date.

Our address is 9250 Auburn Folsom Rd. Our driveway to our property is on Auburn Folsom Rd. 90% of our exits from our driveway require a left turn. We are aware that the plan is to have a median put into place to divide the 4 lanes of traffic. The plan now has us losing our left turn out of our driveway. We will be forced into driving to the intersection of Oak Leaf Way prior to having the ability to make a u-turn and continue on to 90% of our destinations. This is simply too far to travel only to double back completely to get to Eureka Rd and Douglas Blvd. Our solution at this point would be to use Folsom Lakes Estates as a cut through instead of doubling back on Auburn Folsom Road. Traffic will rise considerably for this residential community. 8a

We feel that the noise review of the road is incorrect. There will be considerable increases in traffic at all hours of the day. We feel the noise impact will include more than tires on the roadway. We feel a sound wall is an appropriate solution for the residences of Auburn Folsom Rd. 8b

Our final concern is in regard to the school bus routes. Our home is a bus stop for students attending Oakhills Elementary, Ridgeview Elementary, and Cavitt Junior High. It is our understanding that the Eureka School District has not been brought in on discussions of bus transportation. We need to have safe pullouts for the busses. Our children need safe stops to enter and exit the busses. Our contact at Eureka Schools Transportation Department is Mrs. Barbara Smith, Manager. 8c

Thank you for the opportunity to express our concerns. We will continue to attend scheduled meetings and will continue to review the progress of this proposed project.

Sincerely,

Barbara S Hayes

Kent and Barbara Hayes
9250 Auburn Folsom Rd
Granite Bay, Ca 95746

Response to Letter 8, from Kent and Barbara Hayes

Response to Comment 8a: Please see Master Response 5. This is a design option that will be evaluated during the final design. Placer County DPW has agreed to present the final design to the Granite Bay MAC for comment prior to submitting the DPW's recommended project to the Board of Supervisors..

Response to Comment 8b: Please see Master Response 2.

Response to Comment 8c: Placer County DPW will consult with the Eureka School District to determine locations for school bus turnouts, which will be incorporated into the final design.

Letter 9

5-1-03

RECEIVED
MAY 0 2 2003
PLANNING DEPT.

Lori Lawrence,

I am a resident of Ridgeview Mobile Home Park.

There has been an increase in noise due to an increase in traffic. 9a

There is also an increase in water flow to the creek due to the increase of the size of the culvert. 9b

It is not safe to get access onto to Auburn Folsom Rd. by car. Maybe the speed limit could be lowered. 9c

If the barrier to allow safe 9d

access onto Eureka Rd. was removed, it would help a lot. We want that Gate opened. 9d cont.

Thank you for your time in reviewing these problems.

Mrs. Lois Fletcher
Space #24

Fletcher
#24
9060 Auburn Folsom Rd.
Granite Bay, CA 95746-9631

Response to Letter 9, from Lois Fletcher

Response to Comment 9a: Please see Master Response 2.

Response to Comment 9b: Please see Master Response 9. A hydrology study was prepared as part of the environmental analysis. The study was reviewed and approved by the Placer County Water Conservation and Flood Control District. The study found that the increased runoff caused by the widening would be incremental along the corridor and would not significantly contribute to peak flows in Linda Creek or its tributaries.

Response to Comment 9c: Please see Master Response 4.

Response to Comment 9d: The comment is noted. Please see Master Response 11.

PLACER COUNTY PLANNING DEPARTMENT

11414 B Avenue/Auburn, California 95603/Telephone (530) 886-3000/FAX (530) 886-3080
Web Page: http://www.placer.ca.gov/planning E-Mail: ljlawren@placer.ca.gov

May 8, 2003

Jones & Stokes
2600 V Street
Sacramento CA 95818-1914

Subject: **Auburn Folsom Road Widening - Draft EIR Comments**

The Draft EIR public review period for the subject proposal ended May 5, 2003. Comments generated during the review period are attached for your review and inclusion in the Final EIR.

The first draft of the Administrative Final EIR (10 copies) should be received by the Planning Department no later than **May 29, 2003**. The Final EIR shall be prepared in conformance with Section 18.20.060 of the County's Environmental Review Ordinance.

If you have any questions regarding this matter, please do not hesitate to contact this office.

Sincerely,

Lori Lawrence

LORI LAWRENCE
Planning Technician

Attached comments:
Facility Services, 5/5/03
State of California Parks and Recreation, 5/5/03
South Placer Fire District, 5/5/03
State of California Highway Patrol, 4/23/03
United States National Marine Fisheries, 4/14/03
Granite Bay Community Association, 4/30/03
County of Sacramento Public Works Agency, 4/2/03
Madelaine Kiliany, 4/21/03
Kent & Barbara Hayes, 5/1/03
Lois Fletcher, 5/1/03
Robert & Penney Beamer, 4/25/03
Charles & Lou Flores, 4/25/03
James Clay, 4/25/03
Paul Romey, 5/5/03
Matthew & Paula Vessell, 4/25/03
Mitchell & Elizabeth McClemon, 4/25/03

Luther Foxx, 5/4/03
Col. Lyle Jewell, 5/3/03
Cydney Bradford, 5/1/03
Peggy Brown, 5/4/03
Garry Sewell, 5/4/03
Margaret Rodenberger
Jan Flatinger
Edgar Mobley III, Crown Point Vista HOA, 4/29/03
Woodchase HOA, 4/30/03
Sandra Russell, 4/30/03
Mohammad & Margie Sohani, 5/5/03
Al & Ann Pavik, 5/1/03
Al & Ann Pavik, 4/20/03
Richard & Mary Longaere, 5/1/03
Lenora Moran, 5/1/03
Karen Branson, Owner, Ridgeview MHP, 4/28/03
Jim Phillips, Folsom Lake Estates HOA, 5/1/03
Geraldine ____, Space #33, Ridgeview MHP, 4/25/03
Bonnie Brinker, Space #12, Ridgeview MHP, 4/25/03
Clair Brinker, Space #12, Ridgeview MHP, 4/25/03
JoAnn Pappen, Space #18, Ridgeview MHP, 4/25/03
Joleen Adams, Space #2, Ridgeview MHP, 4/25/03
Mary Short, Space #13, Ridgeview MHP, 4/25/03
Cecil ___, Space #22, Ridgeview MHP, 4/25/03
Shirley Roberts, Space #14, Ridgeview MHP, 4/25/03
Stella Luskoski, Space #23, Ridgeview MHP, 4/25/03
Bonnylu Schuh, Space #17, Ridgeview MHP, 4/25/03
Dale Roberts, Space #14, Ridgeview MHP, 4/25/03
Judith Thompson, Space #1, Ridgeview MHP, 4/25/03
Timothy O'Leary, Space #45, Ridgeview MHP, 4/25/03
Timothy O'Leary Sr., Space #45, Ridgeview MHP, 4/25/03
Rhea O'Kims, Space #49, Ridgeview MHP, 4/25/03
P Brownyork, Space #30, Ridgeview MHP, 4/25/03
Barbara Barton, Space #2, Ridgeview MHP, 4/25/03
Carol Wansher, Space #21, Ridgeview MHP, 4/25/03
George Keeber, Space #43, Ridgeview MHP, 4/25/03
Alice ____, Space #50, Ridgeview MHP, 4/25/03
_____, Space #50, Ridgeview MHP, 4/25/03
Residents of Ridgeview MHP, 4/28/03
Lenora Moran
Michael & Wilma Moreno, 4/4/03
Bruce Sutherland, 4/14/03
Gary Mitchell, 4/10/03
M Ray Harrison, 4/1/03
Kris Johnson
Steve & Debbie Uribe
Mary Terrell
Steve & Julie Jensen

Gretchen Dwyer
Heidi Best
Tom Merchant
Kathleen Dunklin
Guentert Erika Halwachs
Chance Gable
Jame Gagnier
Michael Russell
Frank & Hope Ruiz

cc: ERC Members

Letter 0

MEMORANDUM

DEPARTMENT OF FACILITY SERVICES

COUNTY OF PLACER

To: LORI LAWRENCE, PLANNING DEPT Date: May 5, 2003

From: RON WOOD, SPECIAL DISTRICTS DIVISION

Subject: AUBURN-FOLSOM ROAD WIDENING PROJECT, ENVIRONMENTAL ASSESSMENT/DRAFT EIR, SCH#2002042036

Special Districts has completed a review of the above referenced Environmental Assessment/Draft Environmental Impact Review for the Auburn-Folsom Road Widening Project and find that the documents do not address possible impacts to existing public sanitary sewers. There are public sanitary sewers within the project area but are not shown on the plans. Although we do not foresee significant impacts to the sewer, we request that information be provided that clarifies what is proposed to mitigate any potential impacts to the sanitary sewer. We request that any information prepared in response to these comments be included in the project's environmental document. Additionally, that any proposed mitigation measures be included in the subsequent design documents for this project, as appropriate. Please provide a copy of the written response to these comments for our review.

cc: Charles Ebeling, DPW

File-T:FAC\Spc_Dist\9203\002\EIR_SCH2002042036\DraftEIRComments_1

Plan for Granite Bay did not have in mind a *freeway and consideration for through trucks! It was only 15 years ago that Douglas Blvd. was a 2-lane road!*

22h cont.

Granite Bay residents and especially those homeowners that will be impacted the most by this road widening should be demonstrating their concern with placards lining the entire A-F Road corridor in front of their homes and streets. These placards should protest the widening of the road completely and its use as a commuter thoroughfare for the benefit of others! If such efforts are not employed, they can say goodbye to their serene, convenient, bucolic community and a huge chunk of their equity!

As a REALTOR® for the last 17 years in Placer County and spanning a 27-year career, I have never had a buyer request to buy a home on a freeway or tell me that they only wanted to be able to make a right hand turn out of their street!!!!!

I do not mean to be intractable but this is a horrific idea and plan.

Now, I'll tell you how I really feel!

JAN FLATINGER ~ REALTOR®
6570 Crown Point Vista
Granite Bay, CA 95746
916-791-4843

Response to Letter 22, from Jan Flatinger

Response to Comment 22a: The comment is noted.

Response to Comment 22b: Please see Master Response 1.

Response to Comment 22c: Please see Master Response 1.

Response to Comment 22d: The comment is noted.

Response to Comment 22e: Please see Master Response 5.

Response to Comment 22f: The comment is noted.

Response to Comment 22g: Please see Master Response 1.

Response to Comment 22h: Please see Master Responses 1, 3, and 9.

Individual Responses to Comments

Response to Letter 0, from Facility Services

Response to Comment Letter 0: The project will not contribute new flows to the sanitary sewer. Specific utility connections, access issues, and alignments, including those for sanitary sewer, will be addressed in the final design plan. Placer County DPW will coordinate with the Special Districts Division during final design to address design considerations for sanitary sewer systems in the project corridor.

State of California • The Resources Agency Gray Davis, *Governor*

DEPARTMENT OF PARKS AND RECREATION • P.O. Box 942896 • Sacramento, CA 94296-001 Ruth G. Coleman, *Acting Director*

Gold Fields District
7806 Folsom Auburn Road
Folsom, CA 95630

May 5, 2003

Lori Lawrence, Senior Planning Technician
County of Placer
Transportation Division
Department of Public Works
11444 B Ave.
Auburn, CA 95603

Subject: Draft EA/EIR – Auburn-Folsom Road Widening Project

Dear Ms. Lawrence,

Thank you for the opportunity to review and comment on the Draft Environmental Assessment/Environmental Impact Report for the Auburn-Folsom Road Widening Project. Staff of the California Department of Parks and Recreation have met with Placer County staff on a number of occasions and provided comments on this project. This project proposes to widen Auburn-Folsom Road from Fuller Drive to the Placer/Sacramento County Line. Folsom Lake State Recreation Area (SRA) is adjacent to the project boundary.

Trail Connections

The document does a good job of outlining Placer County and Granite Bay Community policies regarding trails and bikeways including connecting County trails to those in neighboring jurisdictions.

Figure 11-1 displays the existing and proposed trails in the Granite Bay Community Plan. This includes equestrian trails that appear to be intended to connect to SRA trails at Eureka Road, Lou Place and Oak Hill Drive. Additionally a pedestrian/bicycle trail is indicated for the entire length of the west-side of Auburn Folsom Road. State Parks would expect that any transportation project would accommodate this trail system. 1a

State Parks supports the inclusion of constructing a multi-use trail from the Baldwin Reservoir access road to the Oak Hill Drive intersection to provide a connection for this Placer County Trail to the SRA trail system at Beals Point. We understand this will include a trail bridge across the channel on the north side of the access road.

Table ES-1 (p. 2) lists the installation of a traffic signal at Lou Place as a mitigation measure for all alternatives to address the inconsistency of the project with equestrian trail system policies in the Placer County General Plan and Granite Bay Community Plan. State Parks believes this signal should be part of the project description and not a mitigation measure. The County policy is clear about providing connections to trail systems of neighboring jurisdictions. Lou Place is identified as a location where a County equestrian trail route connects to the SRA. Widening Auburn Folsom Road will make crossing the roadway at non-signalized locations an even greater hazard than 1b

Letter 10

Robert and Penney Beamer
9276 Auburn-Folsom Road
Granite Bay, CA 95746
April 25, 2003

Board of Supervisors and Supervisor Ted Gaines
Granite Bay MAC
Placer County Planning Commission (Auburn-Folsom Road Widening Project)
Friends of Auburn-Folsom Road

Subject: Auburn-Folsom Road Widening Project/Placer County

Dear Sirs:

This project has a direct impact on my residence and value of my home. This letter is to protest the environmental report and address key issues of concern regarding the Auburn-Folsom Rd. Project. The baseline for the noise study is incorrect. Placer County based the noise study off of the last 6 months of traffic on Auburn-Folsom Rd. This report indicated that there is no noticeable difference in noise. The county should have based the study off of the last 2 years based on the impact of the new bridge in Folsom that clearly demonstrated a major increase of traffic on Auburn-Folsom Rd. Federal Funds were provided for the new Bridge in Folsom. 10a

There was no impact study on the traffic noise and pollution that this new bridge created for the residents of Auburn-Folsom Rd. Granite Bay residents are not benefiting from the new Folsom bridge or will from the proposed bridge over Folsom Dam. The majority of residents from El Dorado and Sacramento Counties are benefiting by using these bridges. The City of Folsom is using Federal Funds to widen their portion of the road and install sound walls. It is our understanding that Granite Bay taxes/mediation funds. We oppose Granite Bay taxes/mediation funds used for widening Auburn-Folsom Rd when the road DOES NOT BENEFIT Granite Bay residents. 10b

Additionally, the new proposed height of the road is planned to be 6 ft higher than the existing road. This is a tremendous impact to our home. Sound walls will serve as sound and security/privacy walls from this proposed project. We consider these major factors to be essential to the quality of life and value to our home. 10c

Also, the report indicated that a tremendous amount of trees are going to be removed. It took us years to plant/grow our existing trees/bushes. We used a jack hammer to plant each bush and tree in our yard. It is important that the trees be replaced with the same trees/bushes/hedges. 10d

The additional height of the road will impact the water drainage from the road to those homes in low areas and next to the road. With this significant impact on the water drainage, there is possible flooding from the Linda creek which is significant thru Bell Road yards via Muir Way. This creek runs through the back of my property and with the added drainage from the road widening, there is potential of flooding that is must to be addressed and corrected. 10e

We are requesting a left turn lane. There are three homes which will require this access. They are 9274, 9270 and 9276 Auburn-Folsom Road. We are requesting that we meet with the board of supervisors and Supervisor Ted Gaines on these major issues. In conclusion, sound walls, flooding remedies, access in and out of our homes and tree remediation are a must for this project. 10f

Looking forward to meeting with the Board of Supervisors on these issues.

Sincerely,

Robert and Penney Beamer

Cell 797-1253

Response to Letter 10, from Robert and Penny Beamer

Response to Comment 10a: Please see Master Responses 1 and 2.

Response to Comment 10b: Please see Master Response 6.

Response to Comment 10c: Please see Master Response 2.

Response to Comment 10d: Mitigation Measures P4.4a, b, and c identify measures to mitigate for the removal of trees by the project. As discussed in the visual resources and aesthetics chapter, trees would be removed by the project; however, the County has proposed measures to replace trees and revegetate disturbed areas.

Response to Comment 10e: Please see Master Response 9. A hydrology study was prepared as part of the environmental analysis. The study was reviewed and approved by the Placer County Water Conservation and Flood Control District. The study found that the increased runoff caused by the widening would be incremental along the corridor and would not significantly contribute to peak flows in Linda Creek or its tributaries.

Response to Comment 10f: Please see Master Response 5.

Letter 11

(Same as Letter 10)

Charles and Lou Flores
9290 Auburn-Folsom Road
Granite Bay, CA 95746
April 25, 2003

Board of Supervisors and Supervisor Ted Gaines
Granite Bay MAC
Placer County Planning Commission (Auburn-Folsom Road Widening Project)
Friends of Auburn-Folsom Road

Subject: Auburn-Folsom Road Widening Project/Placer County

Dear Sirs:

This project has a direct impact on my residence and value of my home. This letter is to protest the environmental report and address key issues of concern regarding the Auburn-Folsom Rd. Project. The baseline for the noise study is incorrect. Placer County based the noise study off of the last 6 months of traffic on Auburn-Folsom Rd. This report indicated that there is no noticeable difference in noise. 11a
The county should based the study off of the last 2 years based on the impact of the new bridge in Folsom that clearly demonstrated a major increase of traffic on Auburn-Folsom Rd. Federal Funds were provided for the new Bridge in Folsom. There was no impact study on the traffic noise and pollution that this new bridge created for the residents of Auburn-Folsom Rd. Granite Bay residents are not benefiting from the new Folsom bridge or will from the proposed bridge over Folsom Dam. The majority of residents from El Dorado and Sacramento Counties are benefiting by using these bridges. The City of Folsom is using Federal Funds to widen their portion of the road and install sound walls. It is our understanding that Granite Bay taxes/mediation funds. We oppose Granite Bay taxes/mediation funds used for widening Auburn-Folsom Rd when the road DOES NOT BENEFIT Granite Bay residents. 11b

Additionally, the new proposed height of the road is planned to be 6 ft higher than the existing road. This is a tremendous impact to our home. Sound walls will serve as sound and security/privacy walls from this proposed project. We consider these major factors to be essential to the quality of life and value to our home. 11c
Also, the report indicated that a tremendous amount of trees are going to be removed. It took us years to plant/grow our existing trees/bushes. We used a jack hammer to plant each bush and tree in our yard. It is important that the trees be replaced with the same trees/bushes/hedges. 11d

The additional height of the road will impact the water drainage from the road to those homes in low areas and next to the road. With this significant impact on the water drainage, there is possible flooding from the Linda creek which is significant thru Bell Road yards via Muir Way. There is potential of flooding that is must to be addressed and corrected. In conclusion, sound walls, flood and tree remediation are a must for this project. Looking forward to meeting with the Board of Supervisors on these issues. 11e

Sincerely,

Charles and Lou Flores

Response to Letter 11, from Charles and Lou Flores

Response to Comment 11a: Please see Master Responses 1 and 2.

Response to Comment 11b: Please see Master Response 6.

Response to Comment 11c: Please see Master Response 2.

Response to Comment 11d: Mitigation Measures P4.4a, b, and c identify measures to mitigate for the removal of trees by the project. As discussed in the visual resources and aesthetics chapter, trees would be removed by the project; however, the County has proposed measures to replace trees and revegetate disturbed areas.

Response to Comment 11e: Please see Master Response 9. A hydrology study was prepared as part of the environmental analysis. The study was reviewed and approved by the Placer County Water Conservation and Flood Control District. The study found that the increased runoff caused by the widening would be incremental along the corridor and would not significantly contribute to peak flows in Linda Creek or its tributaries.

Letter 12

(Same as Letter 10)

James Clay
9270 Auburn-Folsom Rd
Granite Bay, CA 95746
April 25, 2003

Board of Supervisors and Supervisor Ted Gaines
Granite Bay MAC
Placer County Planning Commission (Auburn-Folsom Road Widening Project)
Friends of Auburn-Folsom Road

Subject: Auburn-Folsom Road Widening Project/Placer County

Dear Sirs:

This project has a direct impact on my residence and value of my home. This letter is to protest the environmental report and address key issues of concern regarding the Auburn-Folsom Rd. Project. The baseline for the noise study is incorrect. Placer County based the noise study off of the last 6 months of traffic on Auburn-Folsom Rd. This report indicated that there is no noticeable difference in noise. The county should have based the study off of the last 2 years based on the impact of the new bridge in Folsom that clearly demonstrated a major increase of traffic on Auburn-Folsom Rd. Federal Funds were provided for the new Bridge in Folsom. There was no impact study on the traffic noise and pollution that this new bridge created for the residents of Auburn-Folsom Rd. Granite Bay residents are not benefiting from the new Folsom bridge or will from the proposed bridge over Folsom Dam. The majority of residents from El Dorado and Sacramento Counties are benefiting by using these bridges. The City of Folsom is using Federal Funds to widen their portion of the road and install sound walls. It is our understanding that Granite Bay taxes/mediation funds. We oppose Granite Bay taxes/mediation funds used for widening Auburn-Folsom Rd when the road DOES NOT BENEFIT Granite Bay residents. 12a 12b

Additionally, the new proposed height of the road is planned to be 6 ft higher than the existing road. This is a tremendous impact to our home. Sound walls will serve as sound and security/privacy walls from this proposed project. We consider these major factors to be essential to the quality of life and value to our home. Also, the report indicated that a tremendous amount of trees are going to be removed. It took us years to plant/grow our existing trees/bushes. We used a jack hammer to plant each bush and tree in our yard. It is important that the trees be replaced with the same trees/bushes/hedges. 12c 12d

The additional height of the road will impact the water drainage from the road to those homes in low areas and next to the road. With this significant impact on the water drainage, there is possible flooding from the Linda creek which is significant thru Bell Road yards via Muir Way. This creek runs through my property and with the added drainage from the road widening, there is potential of flooding that is must to be addressed and corrected. 12e

We are requesting a left turn lane. There are three homes which will require this access. They are 9274, 9270 and 9276 Auburn-Folsom Road. We are requesting that we meet with the board of supervisors and Supervisor Ted Gaines on these major issues. In conclusion, sound walls, flooding remedies, access in and out of our homes and tree remediation are a must for this project. 12f

Looking forward to meeting with the Board of Supervisors on these issues.

Sincerely,

James P Clay

Response to Letter 12, from James Clay

Response to Comment 12a: Please see Master Responses 1 and 2.

Response to Comment 12b: Please see Master Response 6.

Response to Comment 12c: Please see Master Response 2.

Response to Comment 12d: Mitigation Measures P4.4a, b, and c identify measures to mitigate for the removal of trees by the project. As discussed in the visual resources and aesthetics chapter, trees would be removed by the project; however, the County has proposed measures to replace trees and revegetate disturbed areas.

Response to Comment 12e: Please see Master Response 9. A hydrology study was prepared as part of the environmental analysis. The study was reviewed and approved by the Placer County Water Conservation and Flood Control District. The study found that the increased runoff caused by the widening would be incremental along the corridor and would not significantly contribute to peak flows in Linda Creek or its tributaries.

Response to Comment 12f: Please see Master Response 5.

Letter 13

Paul K. Romey
6640 Crown Point Vista
Granite Bay, CA 95746

5 May 2003

Lori Lawrence
Placer County Planning Department
11414 B Ave.
Auburn, CA 95603

Re: Environmental Impact Report – Auburn Folsom Road Widening Project

Dear Ms. Lawrence:

The purpose of this letter is to address my concerns, to you, as a representative of Placer County, regarding the "Draft" EIR for the Auburn Folsom Road Widening Project. I am basically in agreement with the letters written by the various "Friends" of the Auburn Folsom Road and the Crown Point Vista Homeowners' Association. I also would like to preserve the rural setting and suggest that rerouting the commuter traffic along a newly constructed road adjacent to the power lines be seriously considered. 13a

Additionally, I am strongly opposed to any portion of my property being taken for this purpose, when there is an area of at least 300 feet deep and several miles long of non residential property direct across Auburn Folsom Road from my home site. Further, it is complete folly to believe that a new road surface can silence additional motorcycle engine and exhaust noise or for that matter loud engine and exhaust noise from cars and trucks. Moreover, I don't know of any road material that can mediate the deadly fumes generated by this additional high speed traffic that will be a result of the "Widening Project". 13b

If widening Auburn Folsom is the selected option, then I strongly urge that the County consider sound wall construction in order to abate some portion of the increase noise. 13c

To conclude, I would like to suggest and have not heard a logical reason, why the land for the "Widening Project", should not by appropriated from the Bureau of Reclamation/State of California (East Side of Auburn Folsom Road). 13d

Please keep us inform and thanks for all of your good work, I know that your position is difficult.

Sincerely,

Paul K Romey

Paul K. Romey, Jr

Response to Letter 13, from Paul Romey

Response to Comment 13a: Please see Master Response 1.

Response to Comment 13b: Please see Master Response 2.

Response to Comment 13c: Please see Master Response 2.

Response to Comment 13d: Alternative 2 investigated widening the roadway entirely to the east, which would have required appropriating additional land from the Bureau of Reclamation. However, the environmental review noted several benefits to Alternative 4.

Letter 14

(Same as Letter 10)

Matthew & Paula Vessell 9274 Auburn-Folsom Rd

Granite Bay, CA 95746
April 25, 2003

Board of Supervisors and Supervisor Ted Gaines
Granite Bay MAC
Placer County Planning Commission (Auburn-Folsom Road Widening Project)
Friends of Auburn-Folsom Road

Subject: Auburn-Folsom Road Widening Project/Placer County

Dear Sirs:

This project has a direct impact on my residence and value of my home. This letter is to protest the environmental report and address key issues of concern regarding the Auburn-Folsom Rd. Project. The baseline for the noise study is incorrect. Placer County based the noise study off of the last 6 months of traffic on Auburn-Folsom Rd. This report indicated that there is no noticeable difference in noise. The county should have based the study off of the last 2 years based on the impact of the new bridge in Folsom that clearly demonstrated a major increase of traffic on Auburn-Folsom Rd. Federal Funds were provided for the new Bridge in Folsom. There was no impact study on the traffic noise and pollution that this new bridge created for the residents of Auburn-Folsom Rd. Granite Bay residents are not benefiting from the new Folsom bridge or will from the proposed bridge over Folsom Dam. The majority of residents from El Dorado and Sacramento Counties are benefiting by using these bridges. The City of Folsom is using Federal Funds to widen their portion of the road and install sound walls. It is our understanding that Granite Bay taxes/mediation funds. We oppose Granite Bay taxes/mediation funds used for widening Auburn-Folsom Rd when the road DOES NOT BENEFIT Granite Bay residents. 14a 14b

Additionally, the new proposed height of the road is planned to be 6 ft higher than the existing road. This is a tremendous impact to our home. Sound walls will serve as sound and security/privacy walls from this proposed project. We consider these major factors to be essential to the quality of life and value to our home. Also, the report indicated that a tremendous amount of trees are going to be removed. It took us years to plant/grow our existing trees/bushes. We used a jack hammer to plant each bush and tree in our yard. It is important that the trees be replaced with the same trees/bushes/hedges. 14c 14d

The additional height of the road will impact the water drainage from the road to those homes in low areas and next to the road. With this significant impact on the water drainage, there is possible flooding from the Linda creek which is significant thru Bell Road yards via Muir Way. This creek runs through my property and with the added drainage from the road widening, there is potential of flooding that is must to be addressed and corrected. 14e

We are requesting a left turn lane. There are three homes which will require this access. They are 9274, 9270 and 9276 Auburn-Folsom Road. We are requesting that we meet with the board of supervisors and Supervisor Ted Gaines on these major issues. In conclusion, sound walls, flooding remedies, access in and out of our homes and tree remediation are a must for this project. 14f

Looking forward to meeting with the Board of Supervisors on these issues.

Sincerely,

Matthew M. Vessell

Response to Letter 14, from Matthew and Paula Vessell

Response to Comment 14a: Please see Master Responses 1 and 2.

Response to Comment 14b: Please see Master Response 6.

Response to Comment 14c: Please see Master Response 2.

Response to Comment 14d: Mitigation Measures P4.4a, b, and c identify measures to mitigate for the removal of trees by the project. As discussed in the visual resources and aesthetics chapter, trees would be removed by the project; however, the County has proposed measures to replace trees and revegetate disturbed areas.

Response to Comment 14e Please see Master Response 9. A hydrology study was prepared as part of the environmental analysis. The study was reviewed and approved by the Placer County Water Conservation and Flood Control District. The study found that the increased runoff caused by the widening would be incremental along the corridor and would not significantly contribute to peak flows in Linda Creek or its tributaries.

Response to Comment 14f: Please see Master Response 5.

Letter 15

(Same as Letter 10)

Mitchell & Elizabeth McClemon
6940 Country C
Granite Bay, Ca
95746

Granite Bay, CA 95746
April 25, 2003

Board of Supervisors and Supervisor Ted Gaines
Granite Bay MAC
Placer County Planning Commission (Auburn-Folsom Road Widening Project)
Friends of Auburn-Folsom Road

Subject: Auburn-Folsom Road Widening Project/Placer County

Dear Sirs:

This project has a direct impact on my residence and value of my home. This letter is to protest the environmental report and address key issues of concern regarding this Project. The baseline for the noise study is incorrect. Placer County based the noise study off of the last 6 months of traffic on Auburn-Folsom Rd. This report indicated that there is no noticeable difference in noise. The county should based the study off of the last 2 years based on the impact of the new bridge in Folsom that clearly demonstrated a major increase of traffic on Auburn-Folsom Rd. Federal Funds were provided for the new Bridge in Folsom. There was no impact study on the traffic noise and pollution that this new bridge created for the residents of Auburn-Folsom Rd. Granite Bay residents are not benefiting from the new Folsom bridge or will from the proposed bridge over Folsom Dam. The majority of residents from El Dorado and Sacramento Counties are benefiting by using these bridges. The City of Folsom is using Federal Funds to widen their portion of the road and install sound walls. It is our understanding that Granite Bay taxes/mediation funds will be used for this project. We oppose Granite Bay taxes/mediation funds used for widening Auburn-Folsom Rd when the road DOES NOT BENEFIT Granite Bay residents. 15a 15b

Additionally, the new proposed height of the road is planned to be 6 ft higher than the existing road. This is a tremendous impact to our home. Sound walls will serve as sound and security/privacy walls from this proposed project. We consider these major factors to be essential to the quality of life and value to our home. Also, the report indicated that a tremendous amount of trees are going to be removed. It took us years to plant/grow our existing trees/bushes. We used a jack hammer to plant each bush and tree in our yard. It is important that the trees be replaced with the same trees/bushes/hedges. 15c 15d

The additional height of the road will impact the water drainage from the road to those homes in low areas and next to the road. With this significant impact on the water drainage, there is possible flooding from the Linda creek which is significant thru Bell Rd residence/yards via Muir Way. There is potential of flooding that is must to be addressed and corrected as you have already planned for the Trailer Park. 15e

Finally, there is no mention of a Bus Stop for our children planned in this project. We contacted the Eureka School District, Transportation Manager, Mrs. Barbara Smith. Ms. Smith stated that she has not been consulted on this issue. We are requesting the area that exists in front of our mail boxes now continue to be turn out for a school bus stops. In conclusion, sound walls, bus stop for our children, flood and tree remediations are a must for this project. Looking forward to meeting with the Board of Supervisors on these issues. 15f

Sincerely,

Elizabeth McC
McClemon
Sophie McC

Response to Letter 15, from Mitchell and Elizabeth McClemon

Response to Comment 15a: Please see Master Responses 1 and 2.

Response to Comment 15b: Please see Master Response 6.

Response to Comment 15c: Please see Master Response 2.

Response to Comment 15d: Mitigation Measures P4.4a, b, and c identify measures to mitigate for the removal of trees by the project. As discussed in the visual resources and aesthetics chapter, trees would be removed by the project; however, the County has proposed measures to replace trees and revegetate disturbed areas.

Response to Comment 15e: Please see Master Response 9. A hydrology study was prepared as part of the environmental analysis. The study was reviewed and approved by the Placer County Water Conservation and Flood Control District. The study found that the increased runoff caused by the widening would be incremental along the corridor and would not significantly contribute to peak flows in Linda Creek or its tributaries.

Response to Comment 15f: Placer County DPW will consult with the Eureka School District to determine locations for school bus turnouts, which will be incorporated into the final design.

Letter 16

Luther Foxx
6650 Crown Point Vista
Granite Bay, CA 95746
(916) 791-1358

May 4, 2003

Lori Lawrence
Placer County Planning Department
11414 B Avenue
Auburn, California 95603

Re: Environmental Impact Report – Auburn-Folsom Road Widening Project

Dear Ms. Lawrence:

Regarding the draft environmental impact report (EIR) for the Auburn-Folsom Road Widening Project, it is our concern of getting in and out of our driveway. We should have a right and left hand lane onto Auburn-Folsom road. We have twelve homes up here and it is very important that we can enter and exit the road in safety. 16a

The retaining wall on the east side makes no sense, but one on the west side would prevent erosion and flooding. I also object to taking twenty feet from the west side of my property. It is also imperative that proper drainage be provided to correct erosion where my property meets the road. 16b

Sincerely,

Luther Foxx

Luther Foxx

Response to Letter 16, from Luther Foxx

Response to Comment 16a: Please see Master Response 5.

Response to Comment 16b: Please see Master Response 9.

Granite Bay
5-3-03

Placer County Planning Dept
Attn: Lori Laurence

Something about the project to widen Auburn/Folsom road as it goes throug Granite Bay
I don't like it — and yet
If I had the power of veto over the project I would not exercise that power. — The traffic problem along Auburn Folsom Needs major surgery.

And we who live along Auburn/Folson in Granite Bay need to brace our selves for any unavoidable discomfort that "whatever the solution" might bring to us individually.

The key word here is unavoidable
If there is an alternate route acceptable to all interested parties — that would be dandy!
But if our Country road must be replaced to a major thoroughfare, we who now live here have taxpayers right to demand that Coun

Granite Bay
5-3-03

Placer County Planning Dept
Attn Lori Laurence

Something about the project to widen Auburn/Folsom road as it goes throug Granite Bay
I don't like it — and yet
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And we who live along Auburn/Folson in Granite Bay need to brace our selves for any unavoidable discomfort that "whatever the solution" migh bring to us individually.

The Key word here is unavoidable
If there is an alternate route acceptable to all interested parties — that would be dandy.
But if our Country road must be replaced b a major thoroughfare, we who now live her have taxpayers right to demand that Coun

Response to Letter 17, from Col. Lyle Jewell

Response to Comment Letter 17: Please see Master Response 1.

May 1, 2003

Lori Lawrence
Placer County Planning Department
11414 B Avenue
Auburn, CA 95603

RE: Environmental Impact Report - Auburn-Folsom Road Widening Project

Dear Ms. Lawrence:

I am writing on behalf of myself, as a resident of Crown Point Vista, as well as a member of the Crown Point Vista Home Owners' Association, regarding the draft environmental impact report (EIR) for the Auburn-Folsom Road Widening Project.

I have reviewed a copy of the April 28, 2003 letter to you from Friends of Folsom Road and I believe that this letter hits the pertinent issues that are troubling to many of the residents along Auburn Folsom Road. Also, as a newer resident to Crown Point Vista, having moved there in January of this year, I would also like to say that some issues are of particular concern to me as they relate directly to Crown Point Vista, and are as follows:

* Safety - I have already had some rather harrowing experiences attempting to make a left turn out of or into Crown Point Vista because of the rapidly approaching traffic and the fact that there is no specific left turn lane or signal light onto our road. I am very much against seeing this portion of Auburn-Folsom Road turned into a four-lane boulevard, thereby making any left turns virtually impossible unless specific attention is paid to providing some type of turning/ merging lane. 18a

* Aesthetics - One of the most attractive features of living on Crown Point Vista is the fact that it is located in an area that has maintained a rural feeling because of the beautiful trees and foliage. Any sound wall or berm should strive to maintain this appearance, while maximizing reduction of noise and traffic speed. 18b

* Transportation and Circulation - It seems to me that the idea of creating a major north/south corridor out of Auburn-Folsom Road in order to move traffic from the Sacramento/Placer county lines to the central Roseville area is not the most logical route to follow. Further consideration needs to be given to a more direct route, and specifically one which is not already impacted by increased traffic during the summer weekends. 18c

Thank you for your attention to these concerns!

Cydney A. Bradford

Cydney A. Bradford
6565 Crown Point Vista, Granite Bay, CA

Response to Letter 18, from Cydney Bradford

Response to Comment 18a: The comment is noted. Please see Master Response 5.

Response to Comment 18b: The comment is noted.

Response to Comment 18c: Please see Master Response 1.

Letter 19

Peggy Brown
6575 Crown Point Vista
Granite Bay, CA 95746
(916) 791-0225

May 4, 2003

Lori Lawrence
Placer County Planning Department
11414 B Avenue
Auburn, California 95603

Re: Environmental Impact Report – Auburn-Folsom Road Widening Project

Dear Ms. Lawrence:

I'm writing regarding the draft environmental impact report (EIR) for the Auburn-Folsom Road Widening Project.

I would like to say that I concur with the letters written by Friends of Auburn Folsom Road and the Crown Point Vista Homeowners' Association. As a resident of this area since 1977, I ask that the County explore other alternatives that would preserve our rural lifestyle and satisfy the needs of commuters.

Sincerely,

Peggy Brown

Peggy Brown

Response to Letter 19, from Peggy Brown

Response to Comment Letter 19: Please see the responses to letter 25.

May 4, 2003

Lori Lawrence
Placer County Planning Department
11414 B Avenue
Auburn, Ca 95603

Re: EIR - Auburn-Folsom Widening Project

Dear Ms. Lawrence,

As a resident on Crown Point Vista I am very concerned about the Auburn-Folsom Road Widening Project. I'm in agreement with the letter that was written to you on the 28th of April of this year, from the Friends of Auburn Folsom Road.

Safety is one of my main concerns. I have children that will be close to driving age when this widening takes place. As they learn to drive I would hope that there is a safe entry and exit to and from our lane. I'm sure they will have many new young drivers (friends) drive to our home for visits thereby increasing the in and out traffic on our lane. I would like to see the Speed Limit be held to 45 mph. Currently the traffic travels much faster than the posted speed limit and those speeds will only increase when the road is wider and the perception is a "freeway like" road. A protected frontage road to Lou Place would help with the merging and turning; that is, if there is a stop light at Lou Place. 20a

As stated, the rest of my concerns were perfectly expressed in the letter written by Friends of Auburn Folsom Road dated April 28th 2003.

Thank you for your attention to this matter. I trust you will do all in your power to address these concerns and employ solutions that we will be comfortable with.

Sincerely,

Garry Sewell
Father of four and 32 year South Placer resident.

Response to Letter 20, from Garry Sewell

Response to Comment Letter 20: Please see Master Responses 1 and 4.

Margaret M. Rodenberger
Charles D. Rodenberger
6610 Crown Point Vista
Granite Bay, CA 95746
916.797.0316

Lori Lawrence
Placer County Planning Department
11414 B Avenue
Auburn, CA 95603

Re: Environmental Impact Report - Auburn Folsom Road Widening Project

Dear Ms. Lawrence:

We are writing to express our agreement with the concerns submitted to you by Mr. Edgar Mobley as President of the Crown Point Vista Home Owners' Association, in his letter of April 29, 2003.

In addition, we would like to emphasize our concern about access to our road. Crown Point Vista begins a rather steep upgrade quickly after the turn off Auburn Folsom. We are concerned that the widening project allow for safe and convenient access to and from Auburn Folsom Road, including reasonable grade, left turn access in and out, and sufficient lane space for slowing and accelerating on exit and entrance. We also believe that bicycle and pedestrian access along and across Auburn Folsom Road be maintained in at least as safe a manner as is currently available. 21a

We are given to understand that an alternative route exists in an existing right of way near the power lines and county border which goes from Auburn Folsom near the dam, to Sierra College Blvd. It seems to us that this would be a far superior means of travel from the Folsom area to the Roseville area, and should be given serious consideration before committing to the widening of Auburn Folsom Road. 21b

Thank you for your consideration.

Sincerely,

Margaret M. Rodenberger

MargaretM. Rodenberger

Charles D. Rodenberger

Response to Letter 21, from Margaret Rodenberger

Response to Comment 21a: Please see Master Responses 5 and 9.

Response to Comment 21b: Please see Master Response 1.

TO: Lori Lawrence, Placer County Planning Dept.

FROM: Jan Flatinger, REALTOR®
6570 Crown Point Vista
Granite Bay, CA 95746

SUBJ: Auburn-Folsom Road Widening

I welcome the opportunity to respond to this subject. Enough individuals have already informed you of their thoughts about the EIR so I do not chose to be redundant.

I want to personalize this with other information that is far more pertinent to our lives, e.g. being able to exit our street on to A-F Road safely and conveniently! There are 12 homes on Crown Point Vista (CPV). Within those 12 homes are the following:

20 cars and/or vans
5 trucks
7 children—ages 1 year old to 12
11 grandchildren—ages babies to teens
4 boats
2 motorcycles
11 bicycles
3 hauling-type trailers
1 tent trailer

22a

Not to mention unspecified numbers of friends, guests, other family members, UPS, FedEx and the mail delivery carriers.

As you can see from the above, we have a lot of activity coming and going on our street all day long in all sorts of modes of transportation. Also, in case you did not know, CPV is a private road.

Currently, there is always a delay exiting either North or South out of CPV but it has definitely increased since the new Folsom Bridge was built over the American River.

22b

By the way, the EIR is already out of date because of the recent closure of the Dam Road. Therefore, decisions can hardly be made without current facts. As you can imagine, there are many disgruntled commuters since they cannot use the Dam Road. I wonder what road(s) they are using now? 22c

I question, too, decisions of why anyone would want to live in Rocklin, Roseville or Lincoln and work, live or play in Folsom or El Dorado Hills or other towns further up I-50. The same is true for anyone who would want to commute to Roseville, Rocklin, Lincoln or other towns and chose to live in Folsom, El Dorado Hills or other towns on that side of town. It is especially difficult to understand now that the Dam Road is closed indefinitely. They certainly did not move the towns! Perhaps they like to clear their heads on their long commute home? 22d

None of the homeowners currently living on the street are original owners and have no knowledge of why the street was developed as a private road instead of being a county maintained road. *However, the homeowners believe that the county seems to think that we do not exist simply because we are a private road.* By being a private road, the homeowners have had to shoulder the burden of any/all resurfacing. In addition, because it is a *private* road, we do not even merit a county made sign. Ours was made and paid for—again—by the homeowners.

Now, we are being asked to embrace the widening of A-F Road with the inconceivable thought of *never* being able to make a left hand turn from our street and being happily expected to proceed down A-F Road going South to an undetermined locale only to then turn around to go North on A-F Road! This is not only ludicrous but also ridiculous. How far should we be expected to go for our turn—Folsom Lake Estates? The County Line? I am sure that the residents of Folsom Lake Estates would welcome the increased traffic—NOT! Not to mention, how would all of the various types and larger vehicles such as boats and campers and trailers negotiate a U-turn? Talk about your flow of traffic! 22e

It's ironic that because of our private road status and the fact that we have not had the benefit of any county funds being used to maintain 22f

it, that we are always getting ignored with little consideration to our ingress, egress or safety. This is unnerving when you consider just *our* street traffic alone! 22f cont.

This is why I am particularly concerned that once again when the public is requested to participate in this process by providing input, are we being duped?

Granite Bay is always described with adjectives such as "up scale" or the "tony" community when mentioned in the press. Even *considering* this road widening for the benefit of commuters is a slap in the face to those of us who live here. This bucolic setting and ambiance is being destroyed.

Historically, before Sacramento and Placer Counties became the growth magnets they are today, the governmental agencies, politicians, planners, etc., had the foresight to purchase the property and rights of way to connect I-80 with I-50 with a "beltway" concept. That route went down Sierra College/Hazel Blvd. When the expected growth did not materialize in the timeframe originally foreseen, the rights of way were abandoned. How unfortunate in retrospect because that is exactly where the emphasis and concentration should be when considering any road-widening project. Are Granite Bay residents now being obliged to correct these mistakes??? I think so! 22g

I am very hard pressed to understand how it can even be a consideration to tackle such an engineering challenge and expensive project as taking out curves and bends in any road, removing hills and mature trees, raising and lowering the level of the road, adding sound walls or berms, putting in a median strip, accommodating school bus stops, stop lights, turn lanes, public (or federal) land vs. private land, etc., when there is an absolutely straight road such as Sierra College/Hazel Blvd.—the intended route! 22h

Yes, I am aware that the General Plan for Granite Bay calls for A-F Road to be widened. I am also aware that the Governor is supposed to sign the state budget! Park entrance fees and DMV fees go up and down too. I am certain that the spirit and intent of the widening of the A-F Road when it was incorporated and approved into the General

Letter 23

Crown Point Vista Home Owners' Association
6550 Crown Point Vista
Granite Bay, CA 95746
(916) 791-8876

April 29, 2003

Lori Lawrence
Placer County Planning Department
11414 B Avenue
Auburn, California 95603

Re: Environmental Impact Report – Auburn-Folsom Road Widening Project

Dear Ms. Lawrence:

I'm writing on behalf of the Crown Point Vista Home Owners' Association regarding the draft environmental impact report (EIR) for the Auburn-Folsom Road Widening Project.

Having been involved with Friends of Auburn Folsom Road, I would like to say we concur with their letter to you dated April 28, 2003 since it does an excellent job summarizing issues pertaining to all residents along Auburn Folsom Road. However, I believe it is important to highlight issues that are specific to Crown Point Vista residents, which are as follows:

- **Transportation and Circulation** - While the widening of Auburn Folsom road is part of the Granite Bay master plan, we believe the desire to establish a north/south travel corridor is not in the spirit of the plan. Besides impacting the quality of life along the road, the excess capacity of the road widening may never be realized due to recreational traffic patterns and the opening of the Folsom Dam bridge. 23a

  An alternative is required to efficiently move traffic from the Sacramento/Placer county line to the central Roseville area where most people would be headed for jobs and shopping. Having these people take Auburn Folsom road is a circuitous route resulting in a lose-lose situation for commuters and residents along the road. Crown Point Vista residents would rather spend the mitigation monies on an alternative that would increase their quality of life.

- **Safety** – We believe it is imperative that the ability to make a left hand turn into and out of Crown Point Vista be maintained. We are also concerned with the safety issues associated with making a U-turn somewhere down Auburn Folsom Road especially during summer weekends when traffic is very heavy and our residents are pulling boats, campers, RVs and/or horse trailers. 23b

  Crown Point Vista is a very steep road. Since many of the Crown Point Vista residents own boats and RV's, we want to ensure that we can safely enter and exit

Crown Point Vista Home Owners' Association
6550 Crown Point Vista
Granite Bay, CA 95746
(916) 791-8876

our road. It is important that some type of acceleration/merge lane be provided in both the north and southbound directions for safety purposes. 23b cont.

- **Noise Pollution** – Crown Point Vista properties along Auburn Folsom, already impacted by road noise, will be impacted to an even greater extent unless sound walls or berms are constructed. Currently, the plan relies on noise reducing pavement, which will only take care of part of the problem since engine noise will not be addressed. 23c
- **Visual Resources/Aesthetics** - The sound wall or berm should maintain the rural appearance of the area. We also want to maintain as much of the natural trees and foliage as possible. We would prefer raised medians like the ones on Douglas, not only for aesthetic purposes, but for their positive impact on noise and traffic speed. In other words, we want to maintain the Granite Bay ambiance. 23d

On behalf of the Crown Point Vista Homeowners' Association, I appreciate your attention in this matter and look forward to a resolution that will benefit the members of the Granite Bay community.

Sincerely,

Edgar L. Mobley III
Co-President
Crown Point Vista Homeowners' Association

Response to Letter 23, from Edgar Mobley III, Crown Point Vista HOA

Response to Comment 23a: Please see Master Response 1.

Response to Comment 23b: Please see Master Response 5.

Response to Comment 23c: Please see Master Response 2.

Response to Comment 23d: Placer County DPW will implement Mitigation Measure P7.5, which requires that all walls, berms, and structures be enhanced for aesthetic purposes.

WOODCHASE HOME OWNERS ASSOCIATION
650 Commerce Drive, Suite A
Roseville, CA 95678
(916) 786-6000 EXT 324

April 30, 2003

Lori Lawrence
Placer County Planning Department
11414 B Avenue
Auburn, California 95603

Re: **Environmental Impact Report – Auburn Folsom Road Widening Project**

Dear Ms. Lawrence:

The Association of Woodchase Home Owners has requested that the governing Board of Directors for the Association formerly respond to the EIR regarding the proposed widening of the Auburn Folsom Road, and to ensure that the Placer County Planning Department understands, and takes into consideration the concerns of our community.

Upon careful review of the EIR it appears that many of the concerns raised by the residents of Woodchase a year ago, and included in the FRIENDS OF AUBURN FOLSOM ROAD committee's formal response, have been given little or no consideration. It is the opinion of the Woodchase Board of Directors that the draft EIR is inadequate in addressing the concerns of the residents of Woodchase, and requires additional clarification by the Placer County Planning Department.

1. Safety

a) There are approximately 14 elementary school aged children in our neighborhood whose safety is our greatest concern. There currently exists a sufficient turn out that accommodates the safe entry and exit of children form the school bus. However there is no mention in the EIR of a *public school bus turnout* at Woodchase or any other current stop along Auburn Folsom Road. This was addressed in the FRIENDS OF AUBURN FOLSOM ROAD response to the NOP, but not addressed in the EIR, nor has the transportation manager of Eureka School District been contacted regarding this potential problem. 24a

b) The current speed limit along Auburn Folsom Road at the intersection of Woodchase Drive is currently *45 mph* and should remain as such, or possibly lowered given the blind curves a few hundred feet north and south of the Auburn 24b

Folsom Road and Woodchase Drive intersection. There are too many bicyclists, pedestrians and recreational visitors to this area to allow for a higher speed limit.

Furthermore adding a *traffic signal* at Lou Place and synchronizing it with the traffic signals at Beal's Point-Folsom Lake Estates, and Eureka Road would mitigate the tendency for through traffic to exceed the lawful speed limit at the intersection of Auburn Folsom Road and Woodchase Drive. 24b cont.

c) There currently exists a *Left-turn* lane in the north bound lane allowing access into the Woodchase Neighborhood from Auburn Folsom Road, and a sufficiently large apron west of Auburn Folsom Road that accommodates a left turn from Woodchase Drive on to Auburn Folsom road. The EIR is not at all clear that the existing Left-turn lanes will remain. This would severely inconvenience the residents of Woodchase and place an ever-increasing traffic burden on arterial community roads intersecting Auburn Folsom Road. In general the EIR does not address the need for mitigation for those *turning into and out of driveways and roads along Auburn Folsom Road.* 24c

d) There is a general safety concern that there are no mention of acceleration or deceleration merge lanes in the EIR especially in light of the increased traffic the widen road will generate, and current inclination of out of area motorist to exceed posted speed limits, and tail gate residents attempting a turn out onto adjacent roads or driveways. This is a particularly serious safety concern for those residents with RV's, and boat or horse trailers. 24d

2. Noise

a) The concluding EIR *noise level data is incomplete.* The data compares only the last 6 months and does not take into consideration the noise levels for the past 2-3 years prior to the new two-lane bridge at Auburn Folsom Road and Greenback. The bridge has significantly increased the amount of traffic moving through the Granite Bay area.

b) There is no indication that the EIR took traffic *noise measurements over busy holiday weekends or summer weekends* when thousands of Sacramento area residents and vacationers use Auburn Folsom Road to access the Folsom Lake Recreation Area. Woodchase residents closest to Auburn Folsom Road have indicated that during summer months and holiday periods that traffic and road noise make it difficult to conduct a normal conversation in their front yard. 24e

c) Rubberized asphalt alone is not a sufficient mitigation to reduce the increased noise volume brought on by the widening the Auburn Folsom Road adjacent to Woodchase Drive. There must be a *comprehensive approach* that calls for environmentally appropriate noise abatement walls, berms and the use of replacement trees and bushes in addition to the use of rubberized asphalt.

d) The EIR contains no mitigation plan for *through truck traffic*; which would significantly impact the noise level (and air quality) for Woodchase residents. 24e cont.

3. Air Quality

a) The EIR contains no air quality measurement data during *peak traffic hours or during peak holiday and summer periods* when traffic patterns are at the most congested. 24f

3. Landscape

a) The EIR notes *rural aesthetics* appeal will be impaired by intruding elements such as utility poles and power lines, but does not mention a mitigation plan to address this concern. It would be to the benefit of the community if all utility lines are placed underground.

b) *All tree and brush removal* must be kept to an absolute minimum. In an effort to maintain the rural appeal of the community (as called for by the Granite Bay Community Plan) all trees and brush removed along Auburn Folsom Road due to the project should be replaced in the community along the project route.

c) The addition of *raised landscaped medians* will provide an aesthetic benefit in terms of maintaining the rural look and feel of the project area, and offset the impact brought on by the widening the road, mitigate noise, and provide for much improved (safer) traffic separation. 24g

d) Unobtrusive *sounds walls and berms* that blend with the current rural look of the area should be used. Any Auburn Folsom Road project should be modeled after the approach taken with Douglas Boulevard and East Roseville Parkway in Granite Bay.

e) It would be appropriate to have an *'entrance to Granite Bay'* sign in keeping with community style, similar to the one placed on Douglas Blvd.

6. Transportation/Circulation

a) It appears inconceivable that the EIR makes no mention of the proposed new *4-lane Folsom Dam bridge*, or offers any mitigation plan that surely would be needed to address the impact the bridge will have in terms of increased traffic volume and on traffic patterns in the Community of Granite Bay and those who live along the Auburn Folsom Road. 24h

b) The EIR makes no mention of the impact of a wider Auburn Folsom Road will have on *traffic patterns* on Folsom Lake Estates, Barton Avenue, Eureka, and East Roseville Parkway if traffic signal, left-turn lane, acceleration & deceleration lane mitigation is not given careful consideration.

It is imperative that we consider that the Auburn Folsom Road project is being funded with $10 million in Granite Bay Community mitigation funds. Those who stand to benefit the most from the expenditure are from outside our community in Folsom and Roseville; and it will be the Community of Granite Bay and the residents of Woodchase who will have to endure possible unsafe conditions for our children, the inconvenience of increased noise & air pollution, and the potential loss of safe and convenient access to our neighborhood.

24h cont.

The Placer County Planning Department should take into consideration all possible solutions to the transportation problem. The Woodchase Home Owners Association and its' Board would like the Planning Department to consider the use of the Power Grid corridor that runs along the Sacramento-Placer county line as an alternative to the Auburn Folsom Road project. This is a much more practical approach (given the Folsom Dam bridge will undoubtedly be built) allowing the funds to actually benefit the intended community.

Sincerely;

Mr. John Meyers
Director & Treasurer – Woodchase HOA
6881 Woodchase Drive

Mr. Don Penkala
Director & President – Woodchase HOA
6860 Woodchase Drive

Mrs. Patricia Meyers
Director & Secretary – Woodchase HOA
6881 Woodchase Drive

Greg & Kimberley Jones
Residents
6759 Woodchase Drive

Jeff & Jennifer Culbertson
Residents
6800 Woodchase Drive

Vic Guidera
Resident
6840 Woodchase Drive

Mr. Tinsley
Property owner
6901 Woodchase Drive

Bill & Zechia Shehadeh
Residents
6841 Woodchase Drive

Tom & Donna Cline
Residents
6861 Woodchase Drive

Nezzie & Tara Tabaie
Residents
6880 Woodchase Drive

Jerry & Donna Krebs
Residents
6900 Woodchase Drive

Response to Letter 24 from Woodchase HOA

Response to Comment 24a: Please see Master Response 10.

Response to Comment 24b: Please see Master Responses 4 and 8.

Response to Comment 24c: Please see Master Response 5.

Response to Comment 24d: Please see Master Response 5.

Response to Comment 24e: Please see Master Response 2.

Response to Comment 24f: Tables 4-3, 4-4, and 4-5 present air quality monitoring data for the project area. These data include peak concentration values for the project area. Of the criteria pollutants of concern, only carbon monoxide is a localized pollutant that is directly emitted from vehicles. Carbon monoxide emissions were modeled for peak-hour conditions assuming construction of the project. The results showed that peak-hour conditions with the project would not exceed the ambient air quality standard. Ozone is a secondary pollutant that forms when nitrogen oxides and volatile organic compounds mix in the atmosphere. Ozone is regulated by the Placer County Air Pollution Control District through regulation and planning activities. The ozone emissions that would be associated with the project were included in RTP and the emission inventory for the district's jurisdictional area.

Response to Comment 24g: Mitigation Measures P7.4a, b, and c, as well as Mitigation Measure P7.5, require that visual and aesthetic impacts be reduced to a less-than-significant level.

Response to Comment 24h: Please see Master Response 1.

FRIENDS OF AUBURN FOLSOM ROAD

6570 Crown Point Vista, Granite Bay, Ca. 95746

April 30, 2003

Lori Lawrence
Placer County Planning Department
11414 B Avenue
Auburn, California 95603

Re: Environmental Impact Report – Auburn-Folsom Road Widening Project

Dear Ms. Lawrence:

Our committee represents a group of Granite Bay Homeowners, all of whom will be greatly impacted by the Auburn-Folsom Road Widening Project.
On April 26th, 2002 we submitted a response to the NOP outlining our issues and concerns that we hoped would be considered in the environmental review.
However, upon review of the draft environmental impact report we are very disappointed with the lack of response to some of our concerns and believe the document to be inadequate in fully identifying and quantifying the issues. Unfortunately, the EIR does not follow the format used by the NOP which makes review and comparison more difficult than it should have to be.

We submit the following concerns that we feel need to be mitigated prior to beginning this project.

1. Safety

a) We believe the speed limit should remain at 45 mph as it is now. There are too many bicyclists, pedestrians and other recreational visitors to this area to support a higher speed limit. 25a

b) In the Granite Bay Community Plan and in the Transportation sub-committee of the Granite Bay MAC, Auburn-Folsom road was not designated as a through truck route. There is no mention of this in the EIR and again, with the amount of recreational traffic, through truck traffic should be prohibited on this route. 25b

c) There is no mitigation for turning into and out of the driveways and roads along Auburn-Folsom Road. It is a safety concern that no acceleration or deceleration merge lanes are included in the plan, which makes this a serious safety issue for the residents, particularly with RV's and/or boat or horse trailers. 25c

d) If the final design does not include a raised center median at appropriate portions of the road but only provides a 14' "suicide lane", we believe this will encourage higher speeds and more accidents with drivers using it as an overtaking lane, left hand turn lane, right hand turn lane or pedestrians attempting to cross to get to the Folsom Lake recreation area. 25c cont.

2. Noise

a) We believe the noise levels determined by the EIR are flawed. They compared only the noise levels in the last 6 months and should have made a comparison over the past 2 years to include the period of time prior to the new bridge being added at Auburn Folsom Road and Greenback. This bridge significantly increased the amount of traffic moving through the Granite Bay area.

b) Even though in our NOP response we specifically mentioned the importance of measuring traffic and noise over a holiday weekend when thousands of Sacramento area residents and vacationers use Auburn-Folsom Road as access to Folsom Lake Recreation Area, we can find no evidence in the EIR that this was considered in determining noise levels.

c) By raising the road and installing a retaining wall on the East side of the project, noise levels will be increased to numerous homes that will now fall below the level of the road and be compounded by reverberation off the retaining wall. It appears in the EIR that the only mitigation for noise is to use a noise reduction road surface. In fact, the noise created by tires on the road is only part of the problem. Engine noise creates a significant noise factor for residents along the project corridor. Additional solutions need to be considered, including sound walls, berms etc. 25d

d) As noted in 1b above, the EIR contains no mitigation for through truck traffic which would significantly impact the noise level for local residents.

3. Air Quality

a) Currently during peak commuter hours there is a significant amount of stopped traffic between Eureka and Oak Hill. The idling engines significantly reduce the air quality and no measurements were taken throughout this stretch of road during this period.

b) As stated in 2b, no measurements were taken during the heaviest traffic period for this stretch of road – the holiday weekends when thousands of additional cars not only travel Auburn-Folsom Road, but use it as overflow parking when the recreational area parking lots are full. 25e

4. Aesthetics

a) The EIR mentions aesthetics being impaired by intruding elements such as utility lines, however there are no recommendations to place the utilities underground.
We request that from an aesthetic and safety point of view, utility poles and wires be buried underground. 25f

b) We strongly request that the removal of the natural vegetation and trees that have taken years to reach their current level be held to the lowest levels possible. Also we require that any trees removed be replaced within the corridor of the project. By providing money into the Placer County Tree Preservation Fund there is no assurance that Granite Bay will benefit from this mitigation.

c) The addition of raised/landscaped medians will provide aesthetic benefits in maintaining the rural ambience of the project area and offset the impact of the widening. This addition would also assist in safely slowing and dividing the traffic. 25f cont.

d) We request the use of unobtrusive sounds walls and berms that blend with the current rural look of the area. (See attached article on new materials being used for sound walls.) We should continue the architectural style incorporated in Douglas Boulevard and East Roseville Parkway in Granite Bay. It is also important to have an entrance to Granite Bay sign in keeping with the community architecture, at the location where travellers from Folsom enter our community.

5. Hydrology and water

a) In our response to the NOP we expressed a strong concern regarding water runoff. Considering the expansive surface area being added to the road, the raising of the road surface, six feet in some areas, and the modification to the landscape at roadside there needs to be dispersal of water away from homes and driveways. The additional road base, additional water runoff, and the slope of the road significantly increases the potential for water to flood lower lying properties. In the EIR it discusses recommended evaluations but no actual mitigating action. We strongly recommend that action be taken before a flood disaster occurs. 25g

6. Transportation/Circulation

a) A fully signalized intersection at Lou Place will help accomplish traffic flow control, slower speeds, allow recreational users (particularly using the existing equestian trail) access to Folsom Lake State Park as well as traffic breaks allowing other residents to exit their roads and driveways safely. 25h

b) It is of significant concern to us that the EIR did not take into consideration any known future traffic impacts. There is no mitigation for the additional traffic that will undoubtedly occur with the building of the new four lane bridge replacing the Folsom Dam Road bridge. We believe that this project is flawed and shortsighted if this already identified future plan is not incorporated in the EIR and mitigated. 25i

c) There is no mention in the EIR of the public school bus turnouts currently in place on Auburn-Folsom Road. We addressed this issue in our response to the NOP but not only is it not addressed in the EIR, a call to the transportation manager of Eureka School District indicates that they have never been contacted regarding this potential problem. 25j

Finally, we have strong concerns regarding the overall project. Although this is being paid for with $10m out of Granite Bay mitigation funds this project does not benefit or convenience 25k

Granite Bay residents. In fact just the opposite. The benefits that we are paying for are going to out of area commuters using our community as a pass through and creating noise, pollution and unsafe conditions. We support the investigation of an alternative route, following the county line along the power grid and creating a connection between Folsom and Roseville that does not degrade the quality of our community. This would be a much better use of our $10m and makes our money benefit our community. 25k cont.

Sincerely

Pat Goody
Chair
Friends of Auburn Folsom Road

The undersigned are available should you have any questions:

Pat Goody 791-4843
Co-President, Crown Point Vista Homeowners Association

Mike Pavik 791-1353
Troy Place

Karen Branson 773-3105
Owner, Ridgeview Mobile Home Park

Don Penkala
President, Woodchase Homeowners Association

Penney Beamer 797-1252
9276 Auburn Folsom Road

Pete Lopez 791-3156
Muir Way

Sandra L. Russell

Sandra Russell 791-4611
9170 Auburn Folsom Road

cc: Rico Oller, Senate District 1
Tim Leslie, Assembly District 4
Placer County Supervisors
Ted Gaines, Placer County Supervisor
Charlie Ebeling, Department of Public Works
Granite Bay MAC

Unique retaining walls fit in with the scenery

J

Back-seat driver

Response to Letter 25, from Sandra Russell, Friends of Auburn-Folsom Road

Response to Comment 25a: Please see Master Response 4.

Response to Comment 25b: Please see Master Response 7.

Response to Comment 25c: Please see Master Responses 5 and 9.

Response to Comment 25d: Please see Master Response 2.

Response to Comment 25e: Tables 4-3, 4-4, and 4-5 present air quality monitoring data for the project area. These data include peak concentration values for the project area. Of the criteria pollutants of concern, only carbon monoxide is a localized pollutant that is directly emitted from vehicles. Carbon monoxide emissions were modeled for peak-hour conditions assuming construction of the project. The results showed that peak-hour conditions with the project would not exceed the ambient air quality standard. Ozone is a secondary pollutant that forms when nitrogen oxides and volatile organic compounds mix in the atmosphere. Ozone is regulated by the Placer County Air Pollution Control District through regulation and planning activities. The ozone emissions that would be associated with the project were included in RTP and the emission inventory for the district's jurisdictional area. The RTP is a Regional Transportation Plan that is prepared by the Sacramento Area Council of Governments in coordination with governments and agencies in the greater Sacramento area. The RTP identifies significant roadway projects in the region and evaluates the impacts associated with these projects. The mobile source emissions from projects in the RTP are included in the air quality attainment demonstration for the region.

Response to Comment 25f: Mitigation Measures P7.4a, b, and c, as well as Mitigation Measure P7.5, require that visual and aesthetic impacts be reduced to a less-than-significant level. This document does not preclude a project involving placing utilities underground. However, this action is not required by this project; it would be conducted a separate project and require a separate environmental analysis.

Response to Comment 25g: Please see Master Response 9. A hydrology study was prepared as part of the environmental analysis. The study was reviewed and approved by the Placer County Water Conservation and Flood Control District. The study found that the increased runoff caused by the widening would be incremental along the corridor and would not significantly contribute to peak flows in Linda Creek or its tributaries.

Response to Comment 25h: The traffic signal and the path between Oak Hill Road and Lou Place are included in the Draft EIR as potential measures that may resolve the trail connectivity issue. Whether included as a mitigation measure or as a project component, the signal may be installed as indicated in the Draft EIR.

The Board of Supervisors will make the final decision on which option will be used during the final design process.

Response to Comment 25i: Please see Master Response 1. As stated in response to comment 5j, these other projects are speculative at this time and, as such, their effects cannot be adequately quantified. Once these projects are included in the General or Community Plan or become separate and distinct projects, they will require individual environmental review.

Response to Comment 25j: Please see Master Response 10.

Response to Comment 25k: Please see Master Responses 1 and 6.

Letter 26

Mr. & Mrs. Sohani
6715 Crown Point Vista
Granite Bay, CA 95746

May, 5 2003

Dear Sir or Madam:

We have read the concerns of the friends of Auburn Folsom Rd. We very much concur with all of the underlying issues and feel especially strong about the speed limit, noise and the air quality.

Margie Sohani

Sincerely,
Mohammad & Margie Sohani

Response to Letter 26, from Mohammad and Margie Sohani

Response to Comment Letter 26: Please see the responses to letter 25.

May 1, 2003

Lori Lawrence
Placer County, Department of Public Works
11444 B Avenue
Auburn, CA 95603

Re: <Environmental Impact Report; Auburn-Folsom Road Widening Project (Volume 2, Alternative 4, Preliminary Design Plans, page 7 of 13)

<Our April 30, Letter providing comments on Environmental Impact Report.

Reference page 7 of 13, Environmental Report, Volume 2, Alternative 4, Preliminary Design Plans; on this design at approximately station 19+75, there is currently a blacktopped entrance to Parcel 050-070-056, (not shown on the design plan). Also in this area Alternative 4 proposes to raise Auburn Folsom road approximately two meters. If Alternative 4 proceeds, how will this entrance be accommodated?

Thank you

Al Pavik
Ann Pavik

Al & Ann Pavik
9371 Troy Way
Granite Bay CA 95746

cc Charles W. Ebeling, P.E.

Response to Letter 27, from Al and Ann Pavik

Response to Comment Letter 27: Please see Master Responses 5 and 9.

Letter 28

April 30, 2003

RECEIVED
MAY 05 2003
PLANNING DEPT.

Lori Lawrence
Placer County, Department of Public Works
11444 B Avenue
Auburn, CA 95603

Re: Environmental Impact Report; Auburn-Folsom Road Widening Project

We have reviewed the Environmental Assessment/Draft Environmental Report, Dated March 2003 and have the following comments,

Reference Chapter 5, Hydrology and Water Quality (Critical Issue)

1. In addition to the Linda Creek/Auburn Folsom road issues, this report needs to (currently does not) address the runoff of water from the areas adjacent to Auburn Folsom and Lou Place. There is currently water runoff on the west side of Auburn Folsom Road that crosses Lou Place (via a two-foot culvert) and water runoff that collects from the east side Auburn Folsom Road (adjacent/north of Beales Point State Park) and crosses Auburn Folsom road via two two-foot culverts just to the north of Lou Place. This runoff subsequently flows north and west crossing Troy Way just to the north of 9380 Troy Way. The existing Troy Way crossing consists of a two-foot culvert and subsequently flows into Linda Creek north of the East-West portion of Purdy Lane. The culvert under Troy Way was installed in the mid 1970s and over the years has been adequate to handle the runoff (the requirement for the culvert across Troy Way in the 1970s was one 12 inch diameter culvert).

28a

Issues:

>The two large culverts to the north of Lou Place that cross Auburn Folsom Road appear to be almost filled with sand/debris limiting the flow of water; the culvert under Lou Place is partially filled.

>Widening Auburn Folsom Road will significantly increase the "Storm" runoff in the area of Auburn Folsom Road/Lou Place and the subsequent downstream areas throughout Granite Bay.

>Placer County Storm Drain procedures limits the storm drain runoff to native flows, thus any modifications which create problems downstream must be defined/implemented to limit the water runoff (i.e. Troy Way) to the current rate of runoff (to include the sand/debris filled culverts). If not there could be serious "downstream" problems throughout Granite Bay due to Linda Creek overflow.

2. There is water runoff from the areas east of Auburn Folsom Road in the vicinity of Station 19+50 (Vol 2, Sheet 7 of 13) from the east side of Auburn Folsom via an 18-inch culvert that flows on to/across Parcel 050-070-056 hence across 9351 Troy Way, hence into Linda Creek in the vicinity of 9237 Purdy Lane. Currently the flow in the culvert under Auburn Folsom Road is minimal, however with the road widening, the flow of water through this culvert must be monitored to assure the rate of water runoff does not increase.

Reference Chapter 6, Noise (Critical Issue)

Alternative 4 proposes to lower the hill just north of Lou Place (Station 17+60) by approximately two meters, but concurrently raises the road approximately two meters (six and one half feet) about 600 feet north of this (Station 19+40). Additionally when the hill north of Lou Place is lowered and widened it is proposed that retaining walls be installed on the east side of Auburn Folsom road. Alternative 4 states that the design speed is reduced to 80 kph (50 mph). While there are noise mitigations reviewed (berms, sound walls, open grade asphalt pavement, raised center mediums, etc etc), the only one that is inferred to be used is the open grade asphalt pavement, which is supposed to reduce noise by a minimal 3 db. However open grade asphalt pavement was not included as a recommended noise mitigation. The open grade asphalt will definitely not counter the noise expected from "extending this hill", reflections from the east side retaining wall(s), noise from the increased traffic which includes large semi-trucks and also does not address the current fact that speeds on Douglas Blvd and Auburn Folsom especially the four lane portion in Sacramento County is realistically in the 60+ mph range. 28b

Issues

What is being planned to address/mitigate the noise in this area as well as that along the entire road-widening project (noise reducing open-grade asphalt pavement will not counter reflections from retaining walls, engine/brake etc etc noises)? As a minimum raised center mediums, berms, sound walls must be considered. Per Project Issue Bulletin No 3, acoustically "soft" (e.g. ground vegetation, scattered trees, etc) improves noise attenuation and should be considered not only for aesthetics but also for noise mitigation.

Reference Chapter 7, Concepts and Terminology for Aesthetics Analysis (Significant Issue)

1. There are a significant number of trees that currently shield (from sight) the road traffic along the entire project corridor. Residents have taken an active role in planting trees/shrubs to "screen" residences and properties within this corridor as well as provide an aesthetic view for travelers on Auburn Folsom road. For example over 150 trees have been planted on Parcel 050-070-056 over the last 20-25 years (latest was 20+ trees planted in 2002) to screen Auburn Folsom road traffic. On this parcel, charts in the Arborist Report show that seven six inch or greater diameter trees are to be removed. It is estimated that there are an additional 50+ trees within the ROW area and it appears most of these will be removed. 28c

>It is critical that the minimum number of trees be removed and the existing trees be maintained. For example there is a large oak (approximately 38 x 46 inch diameter) at about station 19+50, eight feet from the current ROW; while it is not currently identified for removal it may be significantly trimmed to accommodate utility lines.

>That the estimated 10 foot or higher road bank and "ditch" be landscaped to meet current aesthetics.

>That removed trees be replaced with like trees. Per Project Issue Bulletin No 3, acoustically "soft" (e.g. ground vegetation, scattered trees, etc) improves noise

attenuation and should be considered not only for aesthetics but also for noise mitigation.

2. Volume I pages 2-6&7 mentioned "Utility Relocation"; however the Environmental Report stated that the Utility Companies had been notified, but no other information was provided. Questions that arise include:

>Will utility installation be similar to the way they are currently installed; if so will additional trees etc need to be removed and/or trimmed to accommodate these utilities; or will these utilities go underground (which is the recommended approach to minimize impact on tree removal and improved aesthetics). If the above ground utility lines are moved to the "west" to accommodate the road, will trees in addition to those that are proposed to be removed, need to be "trimmed" and when will this information be available? 28c cont.

>Will additional land be required to accommodate the movement of these "utility lines"?

Safety (Critical Issue)

Alternative 4 design speed for the curve north of Lou Place is being done at 80 kph (50 mph-not 55mph as stated on page 2-6), however as previously mentioned, the speeds currently encountered especially on the current 4 lane portions of Auburn Folsom road and Douglas Blvd are closer to 60+ mph. Since this road is being designed to handle traffic for the next 20+ years this seems to be a serious design deficiency and a "very critical safety issue". Installation of raised center mediums, sound walls/berms seems to be the minimum to mitigate these serious safety/noise issues. 28d

There has been an equestrian and pedestrian crossing into the State Park system at Lou Place (as shown in Figure 3-4), however with the increase in traffic on Auburn Folsom road, equestrian and pedestrian traffic crossing Auburn Folsom road has become very unsafe. Prior comments provided discussed putting a traffic light at Lou Place and this is strongly recommended (reference policy 5.C.1 page 3-9). A light at Lou Place would additionally help control the vehicle speeds that are currently seen on Auburn Folsom road and be consistent with paragraph 11-2 in supporting bike and pedestrian trails and crossings. 28e

There are numerous "school bus stops" along Auburn Folsom road to include one at Lou Place. There is no discussion in this report on accommodating this most important and serious safety issue. 28f

General Comments

Significant amounts of data and effort were required to prepare this Environmental Assessment. However each of Chapters 3 through 11, Volume 1, concluded with the statement "There are no recommended mitigation measures". If this road is widened then there needs to be mitigation recommendations for each of the topics covered in the 28g

environmental report and should be in a recommended priority listing (these should not be limited due to cost issues).

Traffic flow on Auburn Folsom from the Dam road north seems to have decreased since the closure of the road across Folsom Dam; however how long this road remains closed is TBD. As is well known, the traffic areas of congestion currently are at Oak Blvd south through Greenback Lane and north from Eureka to Douglas Blvd. 28h

The hill and curve north of Lou Place will remain a critical safety issue as well as generating significant road noise. My very strong recommendation is if the Road Widening Project proceeds, then the road through this area be "lowered" as much as possible to minimize safety and vehicle noise issues, (Alternative 3 included lowering the road in this area over 13 feet). 28i

In reviewing the Analysis of the No-Build Alternative, Volume 1, pages ES-11-14 the impacts to the Granite Bay area are significantly less if Auburn Folsom is not widened. In summary after reviewing the Environmental Report it is our strong recommendation that this project be deferred until current issues are addressed which may result in the No-Build Alternative. 28j

Sincerely,

Al & Ann Pavik
9371 Troy Way
Granite Bay, CA 95746

Additional Properties
Parcel 050-070-056, Granite Bay
Parcel 050-070-055, Granite Bay
Parcel 050-070-053, Granite Bay

cc: Ted Gaines, Supervisor
Charles W. Ebeling, P.E
PCTPA: Attn: Celia McAdams
Granite Bay Community Association
GBAC: Attn: Sandy Harris, Secretary
FRIENDS OF AUBURN FOLSOM ROAD, Attn: Pat Goody
Folsom Lake Homeowners Association, Attn: Jim Phillips.

Jeff Johnson 9351 TROY WAY

[illegible] 9352 Troy Way G.B.

Jean Hunter 9380 Troy Way

Arthur Guy White 9391 Troy Way

Lisa White 9391 Troy Way

K Mitchell [illegible] 9450 TROY WAY

Theresa V. Caruso 6645 Lou Place

Jennie J. Caruso 6645 Lou PLACE

Shaun Morrow 9515 Edward Ct

Robert Morrow 9515 Edward Ct

Shawn Cabello 9465 TROY WAY

[illegible] 9400 TROY WAY.

Ida Podin 9326 PURDY LANE

K Vadath 9342 Purdy LN

[illegible] 9342 Purdy LN

Mark Denny 9390 Purdy Lane

[illegible] 9410 TROY WAY

Joe Dietwiler 9327 PURDY LN.

[illegible] 9327 Purdy Ln.

Jim Mac Donald 9310 Purdy Lane
Chance E Gable 6680 Lou Pl.

Response to Letter 28, from Al and Ann Pavik

Response to Comment 28a: Please see Master Response 9. A hydrology study was prepared as part of the environmental analysis. The study was reviewed and approved by the Placer County Water Conservation and Flood Control District. The study found that the increased runoff caused by the widening would be incremental along the corridor and would not significantly contribute to peak flows in Linda Creek or its tributaries.

Response to Comment 28b: Please see Master Response 2.

Response to Comment 28c: Mitigation Measures P7.4a, b, and c, as well as Mitigation Measure P7.5, require that visual and aesthetic impacts be reduced to a less-than-significant level. Information regarding utility relocation and the specific design features will be included in the final design report.

Response to Comment 28d: Please see Master Response 4 and 9.

Response to Comment 28e: The traffic signal and the path between Oak Hill Road and Lou Place are included in the Draft EIR as potential measures that may resolve the trail connectivity issue. Whether included as a mitigation measure or as a project component, the signal may be installed as indicated in the Draft EIR. The Board of Supervisors will make the final decision on which option will be used during the final design process.

Response to Comment 28f: Please see Master Response 10.

Response to Comment 28g: Please see Master Response 9. Mitigation measures are proposed for all significant impacts. In addition to mitigation measures, there are several design components of the project description that would reduce environmental impacts. In the EIR the County has identified all Mitigation Measures that will be implemented as "proposed" mitigation measures, after these measures, there is a section for "recommended" mitigation measures that other agencies may identify but that are not proposed by the lead agency. There were no recommended mitigation measures that were not accepted by the County and included as proposed mitigation measures.

Response to Comment 28h: Please see Master Response 1.

Response to Comment 28i: Please see Master Responses 2 and 9.

Response to Comment 28j: The comment is noted. Please see Master Response 1.

Letter 29

Richard andMary Longacre
9060 Auburn-Folsom Rd #10
Geranite Bay, CA 95746
916. 797-3194

RECEIVED
MAY 05 2003
BY:

Mr Charles Eberling
Auburn-Folsom Planning Department
Department of Public Works
11414 "B" Avenue
Auburn, CA 95603

May 1, 2003

Dear Sir:

Regarding the entrance/ exit from Ridgeview Mobile Home Park onto Eureka Rd. The Eureka Rd gate needs to be open now because heavy traffic on Auburn-Folsom Rd it endangers residents entering and exiting the park.

Electric gates at the upper end of the park, next to the Fire department parking lot would be the ideal gate to open. The Eureka Street Fire Department agrees.

Cost estimates of the electric gates range from five to six thousand dollars installed. This is a reasonable cost to insure resident safety.

We need the berm on Eureka Road removed so we can get the electric gate installed soon.

Thanks for your consideration in this matter,

Truly,

Richard & Mary Longacre

Richard and Mary Longacre

Response to Letter 29, from Richard and Mary Longacre

Response to Comment Letter 29: Please see Master Response 11.

Mr Charles Eberling
Aburn-Folsom Planning Department
Department of Public Works
11414 "B" Avenue
Auburn,CA 95603

RECEIVED
MAY 05 2003
BY:

May 1, 2003

Dear Sir:

This is in re the entrance and exit from Ridgeview Mobile Home Park onto Eureka Rd.

I feel we need the Eureka Rd gate open now because traffic on Auburn-Folsom Rd is so heavy that it presents great danger.

I feel that electric gates at the upper end of the park, next to the Fire department parking lot would be the ideal place. The Chief at the Eureka Street Fire Department agrees with my opinion.

I have checked into the cost of the electric gates and have received estimates of five to six thousand dollars. This would be the total cost, installed.

I believe the above is a very reasonable cost to insure our safety is a justified expenditure.

We need the berm on Eureka Road removed so we can get the electric gate installed soon.

Thanks for your consideration in this matter,

Truly,
Lenora Moran

Ms. Lenora Moran
#16
9060 Auburn-Folsom Rd.
Granite Bay, CA 95746-6522

Lenora Moran

Response to Letter 30, from Lenora Moran

Response to Comment Letter 30: Please see Master Response 11.

AUBURN FOLSOM ROAD WIDENING PROJECT
DRAFT ENVIRONMENTAL IMPACT REPORT

RECEIVED
MAY 05 2003
PLANNING DEPT.

April 28, 2003

Lori Lawrence, Planning Technician
Placer County Planning Dept.
11414 "B" Avenue
Auburn, CA 95603

Re: Response to EIR Report – Auburn Folsom Rd. Widening

Dear Ms. Lawrence:

It is my understanding from the Draft Environmental Impact Report that approximately 28,300 vehicles drive this two-lane road daily. The road widening will allow for increased traffic with an anticipated estimate of 41,500 vehicles by the year 2020, ease the flow of commuters through Granite Bay, but raises grave safety concerns for those individuals living along this roadway.

Along with my concerns are the issues of my residents, seventy (70) senior citizens who live in our community known as Ridgeview Mobile Home Park. With the front entrance to our establishment being on Auburn Folsom Rd. the safety of these seniors and their ability to enter and exit their community safely is of utmost importance.

Below is a list of the following concerns I feel need to be mitigated prior to beginning this project:

SAFETY:

Raised Median Design Option

The County has identified a raised median design option that consists of the installation of a raised median on Auburn Folsom-Road from Douglas Blvd. to the County line with median openings for left-turns at Boardwalk Dr. Fuller Dr., Eureka Rd., Country Ct, Lou Place and Oak Hill Dr. The raised median design project option is assumed to allow for U-turns only at the signalized intersections on Auburn Folsom Rd.

31a

While these median openings for left-turns are all onto County maintained roads, it is requested that you consider an additional left-turn option into our business establishment. Due to manufactured homes being seventy (70) feet in length, a U-turn at Eureka Rd. would virtually be impossible. Delivery of manufactured homes is critical to my operation.

The elimination of "suicide lanes" as medians should be paramount. While they allow an opportunity to merge into traffic, there have been several instances (me included) wherein individuals have almost been hit head on from people "overtaking" slow vehicles (seniors) entering our community. These are death traps and need to be eliminated. 31a cont.

Eureka Rd.

As presented in The Proposed Improvements section of the EIR, the recommendation and implementation of the sight-distance improvement along Eureka Rd. will greatly help our community. During construction access onto Auburn Folsom Rd. may be restricted, therein the use of Eureka Rd. will be critical. 31b

Your Mitigation Measures for the Temporary Disruption of Traffic Conditions During Construction indicate to prepare a Traffic Management Plan to be implemented during construction. It is requested that this Plan take into consideration the daily business of mobile home living...i.e. 70 residents ingress/egress, Dial A Ride, emergency vehicles, medical equipment delivery, walking to the grocery store, etc. Safe access onto Eureka Rd. during construction is of utmost concern. 31c

The implementation of the site-distance improvement along Eureka Rd. will allow our residents to exit our community safely. The opening of our side gate is critical to be able to access Granite Bay, as according to your plans, we will not be able to turn left onto Auburn Folsom Rd. The EIR report page 2-4 makes additional comment: 31d

This improvement would allow residents of the Ridgeview Mobile Home Park to use the Eureka Road driveway, which is currently gated. Reopening this driveway will allow the residents to enter and exit to Eureka Road, thereby allowing for the extension of the northbound left-turn lane and a raised or painted median on the northbound approach to the Auburn Folsom Road/Eureka Road intersection.

31e

This statement is not accurate. As I mentioned in conversations and in letters to the county, the opening of our Eureka Gate would be for the sole purpose of residents exiting our community. Opening this gate for incoming traffic would be of considerable expense, allow for "cut-through" traffic from the local community through private property, and severely limit our ability to insure the safety of the residents in that corner of our community.

Granite Bay Community Plan – Goal V.A.5. "Through" traffic which must pass through the community shall be accommodated in a manner that will not encourage the use of residential or private roads, paths, or trails. 31f

I ask that you take this into consideration when designing this project, along with the median on Auburn Folsom Rd. and the need for delivery of manufactured homes to our community.

Traffic

Granite Bay is a "bedroom" or residential community with no stated industry. Trucks should be limited to service providers ...not a through truck route. Allowing trucks to use the corridor as a thoroughfare would add to the noise, create congestion and further diminish the currently bad air quality. The Granite Bay MAC plan does not support such option. 31g

The speed limit should be lowered to 45 mph to allow for pedestrians, bicyclists and horse recreating along said corridor. Lowering the speed limit will also diminish the noise impact on the community and allow residents a better opportunity to enter the roadway safely from their driveways. 31h

Reprogramming the light at Eureka Rd. to allow for a "gap" in traffic so that our seniors have a chance to merge into traffic is requested. At the current time it is almost impossible to merge into traffic safely. 31i

A deceleration lane into the mobile home park should be considered, therein allowing our seniors the opportunity of moving out of the way of traffic. Several individuals have nearly been rear-ended before being able to safely exit the thoroughfare. 31i

AIR QUALITY:

I do not believe that the EIR adequately addresses this issue. Studies were not done during peak hours or holiday weekends when air quality is significantly reduced. The NOP designated this "Potentially Significant Unless Mitigation Incorporated", and yet there is no recommendation for mitigation outside of during the time of construction.

Senior citizens are more susceptible to pollutants than most, especially those on oxygen apparatus. As residents along Auburn Folsom Rd and with the anticipated increase of localized carbon monoxide levels at nearby intersections (Eureka Rd) this issue is significant in nature. The effect of the reduced air quality presents a severe hazard for these seniors as well as the families who live and play in Granite Bay. 31k

NOISE:

Table 6-7 Placer County Noise Element – Maximum Allowable Noise Exposure indicates that for an Outdoor Activity Area – Residential Land Use the noise threshold should be 60 dB. The long-term Summary of Noise monitoring at Positions 1, 2 & 3 consistently show noise levels in excess of 60 dB from 5:00 a.m. to 11:00 p.m.

Based on County noise standards and County CEQA practice, the proposed project is considered to result in a significant operational noise impact if...the predicted future noise level with the project is 65 dB-Ldn or higher and the increase in noise compared to future no-project conditions is 1.5 dB or more. Existing levels exceed 65 dB and I see no 31l

comparison studies for anticipated noise levels due to increased traffic flow from 2 lanes to 4 lanes.

Sound studies were not taken during peak commute hours or holiday weekends when traffic and noise are at the highest. We are greatly impacted by outside visitation to this recreation area and this should have been considered when evaluating the data. 31l cont.

By raising the road base and installing retaining walls on the East side of the project, residents below the road will be significantly impacted. Further options need to be considered.

DRAINAGE/FLOODING:

I do not see in this report where these issues are adequately addressed. Slant correction in the roadway to alleviate runoff to low lying areas and curbs to defer water into creek beds or storm drains need to be considered.

Increasing the road surface allows for additional water run off. In addition, the road base is being raised from 2' to 6' in some places with no noted mitigation for low-lying areas. The current drainage at Eureka Rd. and Auburn Folsom Rd. is not adequate. Excessive rains create flooding near the street light. The east side of the roadway is too shallow allowing water to flow over the roadway and onto low-lying property, creating a severe driving hazard during big storms. The fire department has put out barricades on several occasions. 31m

In 1995 Linda Creek exceeded her banks and our mobile home park was flooded well into the community (11 homes). The water flowing through our community then went through to flood several low lying homes on Country Court behind us. The anticipated increased drainage pipe at Linda Creek will allow for more gallons per minute to pass through the culvert, but the creek beds on the west side of the street are shallow and may not be adequate to handle the additional water flow.

Drainage to Corner Parcel – Eureka and Auburn Folsom Rd.

Man made drainage onto this corner parcel has created what appears to be a potential seasonal wetland (W-8-1) according to the EIR. Area designated W-8 and W-8-3 are outside of the projects limits. The report found "ponding" in two separate isolated areas (one within the project limits, one outside of the project limits) and are small in nature. The "trench bed" contains blackberry vines, are common in the area, and do not of themselves establish wetland vegetation. 31n

The area in question is fed by road runoff due to the severe slant in the road base at the corner and a county drainage structure (which is also road runoff) into a low-lying trench. This would not be considered a natural water flow pattern without this drainage structure. This area is not bordering, contiguous with, nor neighboring Linda Creek and should be

considered isolated. It is surrounded on two sides by roadway, not part of a larger wetland complex, not stream or creek fed and is located in a separate closed basin that is not a headwater connected to a larger watershed. Summer months leaves this area dry.

The EIR stated that the area "has been disked" and the ground disturbed. Tall dry grass (two feet tall) is common in this area and the property abuts to two highly traveled roadways. Each year the acreage and blackberries are mowed as a safety precaution due to the high fire hazards in the area. With the close proximity of mobile homes and the speed in which wild fires travel, this is a severe safety hazard. 31n cont.

Engineers have determined that the current culvert at Linda Creek is inadequate to handle the water flow. I have been told that increasing the size of the culvert will raise the road bed an additional two feet. The down hill slope of the road leading north will lead to additional water runoff into this corner parcel, and needs to be mitigated.

Conclusion

The Executive Summary of the Draft Environmental Impact Report spells out the general requirements of the project and the purpose of the EIR. I would like to reiterate those requirements here:

"The purpose of the Draft EIR is to analyze the environmental effects of Placer County's proposed project, to indicate ways <u>to reduce or avoid</u> potential environmental impacts resulting from the proposed project and <u>to identify alternatives</u> to the proposed project that could reduce or avoid those environmental impacts while meeting the objectives of the project." 31o

"CEQA requires all state and local government agencies to consider the environmental consequences of projects over which they have discretionary authority and requires each public agency to mitigate or avoid, to the extent feasible, the significant environmental effects of projects it approves or implements before taking action on those projects."

"NEPA establishes a national environmental policy that..... may assure for all Americans safe, healthful, productive, and aesthetically and culturally pleasing surroundings and attain the widest range of beneficial uses of the environment without degradation, risk to health or safety, or other undesirable and unintended consequences."

The above stated objectives to reduce or avoid and to identify alternatives, along with the federal government's policy to create an environment without risk to health and safety have not been adequately addressed in this report. Recommendations to reduce, avoid or identify alternatives to the:

Increased noise level
Air quality
Speed in which traffic flows

Safe ingress and egress to the roadway from private driveways, and
Drainage/water run off which significantly impacts the community

still need to be mitigated.

31o cont.

I know this is a daunting task. I appreciate your efforts and serious consideration of the above concerns, and expect that the project will not proceed until all issues are mitigated to the satisfaction of the community in which we live.

Thank you for your consideration,

Karen Branson

Karen Branson, Owner
Ridgeview Mobile Home Park
4120 Douglas Blvd. #306-347
Granite Bay, CA 95746

Cc: Ted Gaines, Placer County Supervisor
Charles Ebeling, Dept. of Public Works

Response to Letter 31, from Karen Branson, Owner, Ridgeview HOA

Response to Comment 31a: Please see Master Response 9. All oversize loads require planning and approval before execution. This approval ensures that the load is compatible with the conditions in the area and does not pose a safety hazard. Access to the driveway for oversized loads can be addressed through proper engineering of the driveway access.

Response to Comment 31b: Please see Master Response 11.

Response to Comment 31c: The comment is noted.

Response to Comment 31d: Please see Master Response 11.

Response to Comment 31e: Please see Master Response 11.

Response to Comment 31f: The comment is noted.

Response to Comment 31g: Please see Master Response 7.

Response to Comment 31h: Please see Master Response 4.

Response to Comment 31i: Please see Master Response 8.

Response to Comment 31j: Please see Master Responses 5 and 9.

Response to Comment 31k: Tables 4-3, 4-4, and 4-5 present air quality monitoring data for the project area. These data include peak concentration values for the project area. Of the criteria pollutants of concern, only carbon monoxide is a localized pollutant that is directly emitted from vehicles. Carbon monoxide emissions were modeled for peak-hour conditions assuming construction of the project. The results showed that peak-hour conditions with the project would not exceed the ambient air quality standard. Ozone is a secondary pollutant that forms when nitrogen oxides and volatile organic compounds mix in the atmosphere. Ozone is regulated by the Placer County Air Pollution Control District through regulation and planning activities. The ozone emissions that would be associated with the project were included in RTP and the emission inventory for the district's jurisdictional area.

Response to Comment 31l: Please see Master Response 2.

Response to Comment 31m: Please see Master Response 9. A hydrology study was prepared as part of the environmental analysis. The study was reviewed and approved by the Placer County Water Conservation and Flood Control District. The study found that the increased runoff caused by the widening would be incremental along the corridor and would not significantly contribute to peak flows in Linda Creek or its tributaries.

Response to Comment 31n: The comment is noted. These issues will be addressed in final design plan. Please see Master Response 9.

Response to Comment 31o: The summary is noted.

Lori Lawrence
Senior Planning Technician

Placer County Planning Department
11414 "B" Avenue
Auburn, CA. 95603

RECEIVED
MAY 05 2003
PLANNING DEPT.

May 1, 2003

Comment for Review – Auburn-Folsom Road Widening Project, Draft EIR

Ms. Lawrence,

The Folsom Lake Estates homeowners would like to bring to your attention some flaws found in the Placer County AFR Draft EIR dated March 25, 2003. The noise monitoring, both "short-term" and "long-term" do not accurately represent the traffic activity on AFR, especially related to the southern portion of the project, due to omission of the long-term study.

In reviewing table 6-2 (short-term monitoring – receptors 14 - 18) you will see that the noise monitoring was conducted between 10:39am and 12:46pm on August 14, 2002. This time of the day is usually the quietest time relative to traffic and therefore road noise. To accurately measure the noise that comes from AFR traffic, the study would have to include commute times (6am – 9am and 4pm – 7pm) on weekdays and mid morning through late afternoon on weekends and holidays. 32a

Also identified in table 6-2 is a 10:00 minute maximum duration of monitoring time at any given receptor point. Considering the proximity of the Oak Hill traffic light, and the time of day the study was conducted, 10:00 minutes is certainly not a realistic sampling of noise on Auburn Folsom Road.

According to the draft EIR, the "Long-Term Monitoring" was metered at the south end of the project (long-term position 1), the middle of the project area (long-term position 2) and at the north end of the project area (long-term position 3). In actuality, the addresses and map placement (table 6-1 and figure 6-1c) both show all 3 meters in the north end of the project. To that point, the study omits long-term metering in the middle and south end of the project (incomplete analysis) not to mention the data is wrong. Position 1 is actually at the extreme north end of the project, position 2 is in the true north end of the project, and position 3 is still in the north end of the project! 32b

As you must be aware, the City of Folsom also has a draft EIR, dated June 2002, for their portion of the Folsom-Auburn Road Widening Project. In chapter 3, section 3.7, you will find the results of their noise study. The specific items we would like to bring to your attention include Folsom's findings from their short and long-term noise study, their attention to Federal, State, County and City noise guidelines, and lastly, their mitigation solution. 32c

Response to Letter 32, from Jim Phillips, Folsom Lake Estates HOA

Response to Comment Letter 32a: Please see Master Response 2. Short-term monitoring is used to calibrate the traffic noise model and is not used to characterize worst hour noise levels. Long-term monitoring was used to characterize traffic noise throughout the day and was reported in Table 6-4. The traffic noise modeling was based on the p.m. peak-hour traffic volume.

The sample time use for short-term monitoring was based on methods recommended by Caltrans (California Department of Transportation 1998b). Based on the volume and flow of traffic, 10 minutes is an adequate period of time to develop a stable L_{eq} sound level.

Response to Comment Letter 32b: Regarding long-term monitoring, Figure 6-1 indicates the locations of short-term monitoring only. Long-term monitoring was conducted at the following locations:

- South end: in the Folsom Lake SRA across from noise monitoring position 15.
- Middle: on the southbound side of Auburn-Folsom Road, across from Assessor's Parcel Number (APN) 50-170-048.
- North end: at noise monitoring position 1.

Response to Comment Letter 32c: Many aspects of the noise study conducted by City of Folsom differ from this project because the City is using federal funds for its project, triggering federal noise regulations and policies. The proposed project is funded by the County and thus subject only to county noise standards and policies.

Response to Comment Letter 32d: The circumstances and conditions under which the City of Folsom measurements were taken are not known. However, differences in traffic volumes, distances to the roadway, and local shielding are the likely reasons why the measurements differ. Detailed procedures were used to ensure the accuracy of the measurements, including field calibration of the meter before and after each measurement and repetition of measurements. The comment is noted.

Response to Comment Letter 32e: Long-term measurements were taken at three locations throughout the project area. Refer to the response to comment 32a above.

Response to Comment Letter 32f: The criteria used to determine the significance of traffic noise impacts are described in detail on page 6-7 of the Draft EIR. The County has no criteria or policy that states "the need to mitigate noise is required when levels approach or exceed 60 dB." The criteria used by the City of Folsom come from federal regulation 23 CFR 772. This regulation

does not apply to the proposed project because the County is not seeking federal funds for this project.

Response to Comment 32g: The comment is noted. Please see the responses to the previous comments in this letter.

The short-term noise study conducted in the Folsom EIR shows measured readings at 73 dB Leq during both morning and afternoon commute times (8:55am and 4:00pm). The monitoring point referenced is "Site A" which is located in Placer County across AFR from San Juan Water offices. For comparison, Placer County's short-term measurement at "position 18" (within 50 feet of Folsom's "Site A") shows 63.4 dB Leq and 63.3 dB Leq at 12.33pm and 12.46pm respectively. This is a difference of 10 dB (63 dB vs. 73 dB) is defined in the Placer County EIR (noise terminology, page 6-2) as twice as loud! 32d

The long-term noise study within the Folsom EIR shows data at the south end of the Placer County project (omitted by Placer County) at 10085 Willey Ct., Granite Bay. Folsom defines long-term as "Continuous" (24 hour period), which is the same criteria used in the Placer County EIR. The 24 hour study at this location shows a 71 dB Leq. We have no comparison to Placer County data as no study was done in the mid, or southern portion of AFR. 32e

According to both Placer County and Folsom EIR's, the need to mitigate noise is required when levels approach or exceed 60dB. Folsom's reading in Placer County already shows 73 dB. Apparently, there is a provision that allows noise to be lowered, under certain criteria, that would render this acceptable IF the noise could be reduced a minimum of 5dB AND the new dB level would be 65 dB or lower. 32f

The mitigation solution Folsom is proceeding with (in Placer County, in Granite Bay, in Folsom Lake Estates) is an 8-foot sound wall. According to Folsom's EIR, this mitigation would in fact lower the dB to 65 which is a reduction of 8 dB and therefore meet the Federal, State, Placer County and Granite Bay noise ordinance.

With these significant inaccuracies uncovered we now question the overall integrity of the report which may require further explanation and review of the detail. This further explanation may uncover additional points that impact the need for a sound / safety / privacy wall, as described in the City of Folsom EIR. 32g

Thank you for your attention to these issues,

Sincerely,

Folsom Lake Estates Home Owners Association
AFR Widening Committee Chair
Jim Phillips
9985 Willey Ct.
Granite Bay, CA. 95746
916.773.3042

c.c. Ted Gaines, Bill Santucci, Robert Weygandt, Harriet White, Rex Bloomfield

Geoff & Carla Williams	9905 Willey Ct.	791-2513
Richard & Diane Moyer	9915 Willey Ct.	791-4086
Matthew & Rosa Griggs	9935 Willey Ct.	797-1791
Daniel & Mary White	9945 Willey Ct.	781-3599
Gary & Margie Barron	9965 Willey Ct.	791-5124
Jim & Pam Phillips	9985 Willey Ct.	773-3042
Christopher & Tunde Angelo	10015 Willey Ct.	773-4116
J. Patrick & Gail Geary	10035 Willey Ct.	791-2501
Merrily Ayres	10055 Willey Ct.	791-2495
Fran Leicher	10075 Willey Ct.	791-1575
Jim & Geri Reich	10085 Willey Ct.	791-4107
Eric & Deborah Groth	10095 Willey Ct.	797-8308
Peter Hollingshead	6670 Oak Hill Dr.	797-7675
Kris Johnson	6149 Shadowbrook Dr.	791-0723

April 25, 2003

RECEIVED
MAY 05 2003
PLANNING DEPT.

Lori Lawrence, Planning Technician
Placer County Planning Dept.
11414 "B" Avenue
Auburn, CA 95603

Re: Auburn Folsom Rd. Widening

Dear Ms. Lawrence:

As a resident of Granite Bay, I respectfully urge you to consider the safety and needs of the seniors living on Auburn Folsom Rd. in Granite Bay.

It is my understanding from the Environmental Impact Report that approximately 28,300 vehicles drive this two-lane road daily. The road widening of Auburn Folsom Rd. will increase the traffic to 30,800 vehicles, ease the flow of commuters through Granite Bay, but raises grave safety concerns for me, a resident of this community. I live daily with the congestion, the speed and the noise, which will only increase when the road is widened to four lanes.

I urge you to consider the following:

Reduce the speed limit, therein lowering the noise, reducing the possibility of accidents, and allowing safer access onto the roadway. 33a

Acceleration and Deceleration aprons for easing out of and into traffic. 33b

Reprogramming the light at Eureka Rd. to allow for a "gap" in traffic so that I have a chance to merge into traffic. At the current time it is almost impossible and will only get worse. 33c

Remove the sight-distance impairment along Eureka Rd. allowing for safe access to the roadway. 33d

Thank you for your consideration of my safety.

Sincerely,

Geraldine D. Shipton #22

Ridgeview Mobile Home Park
9060 Auburn Folsom Rd.

Response to Letter 33, from Geraldine ____, Space 33, Ridgeview MHP

Response to Comment 33a: Please see Master Response 4.

Response to Comment 33b: Please see Master Responses 5 and 9.

Response to Comment 33c: Please see Master Response 8.

Response to Comment 33d: Please see Master Response 11.

Letter 34

(Same as Letter 33)

April 25, 2003

Lori Lawrence, Planning Technician
Placer County Planning Dept.
11414 "B" Avenue
Auburn, CA 95603

Re: Auburn Folsom Rd. Widening

Dear Ms. Lawrence:

As a resident of Granite Bay, I respectfully urge you to consider the safety and needs of the seniors living on Auburn Folsom Rd. in Granite Bay.

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Remove the sight-distance impairment along Eureka Rd. allowing for safe access to the roadway.

Thank you for your consideration of my safety.

Sincerely,

Bonnie L. Brooks #12

Ridgeview Mobile Home Park
9060 Auburn Folsom Rd.

Response to Letter 34, from Bonnie Brinker, Space 12, Ridgeview MHP

Response to Comment Letter 34: Please see Master Responses 4, 5, 8, 9, and 11.

Letter 35

(Same as Letter 33)

April 25, 2003

Lori Lawrence, Planning Technician
Placer County Planning Dept.
11414 "B" Avenue
Auburn, CA 95603

Re: Auburn Folsom Rd. Widening

Dear Ms. Lawrence:

As a resident of Granite Bay, I respectfully urge you to consider the safety and needs of the seniors living on Auburn Folsom Rd. in Granite Bay.

It is my understanding from the Environmental Impact Report that approximately 28,300 vehicles drive this two-lane road daily. The road widening of Auburn Folsom Rd. will increase the traffic to 30,800 vehicles, ease the flow of commuters through Granite Bay, but raises grave safety concerns for me, a resident of this community. I live daily with the congestion, the speed and the noise, which will only increase when the road is widened to four lanes.

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Remove the sight-distance impairment along Eureka Rd. allowing for safe access to the roadway.

Thank you for your consideration of my safety.

Sincerely,
Blair R Brinker #12

Ridgeview Mobile Home Park
9060 Auburn Folsom Rd.

Response to Letter 35, from Clair Brinker, Space 12, Ridgeview MHP

Response to Comment Letter 35: Please see Master Responses 4, 5, 8, 9, and 11.

Letter 36

(Same as Letter 33)

April 25, 2003

Lori Lawrence, Planning Technician
Placer County Planning Dept.
11414 "B" Avenue
Auburn, CA 95603

Re: Auburn Folsom Rd. Widening

Dear Ms. Lawrence:

As a resident of Granite Bay, I respectfully urge you to consider the safety and needs of the seniors living on Auburn Folsom Rd. in Granite Bay.

It is my understanding from the Environmental Impact Report that approximately 28,300 vehicles drive this two-lane road daily. The road widening of Auburn Folsom Rd. will increase the traffic to 30,800 vehicles, ease the flow of commuters through Granite Bay, but raises grave safety concerns for me, a resident of this community. I live daily with the congestion, the speed and the noise, which will only increase when the road is widened to four lanes.

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Remove the sight-distance impairment along Eureka Rd. allowing for safe access to the roadway.

Thank you for your consideration of my safety.

Sincerely,

JoAnn Pappen #18

Ridgeview Mobile Home Park
9060 Auburn Folsom Rd.

Response to Letter 36, from JoAnn Pappen, Space 18, Ridgeview MHP

Response to Comment Letter 36: Please see Master Responses 4, 5, 8, 9, and 11.

Letter 37

(Same as Letter 33)

April 25, 2003

Lori Lawrence, Planning Technician
Placer County Planning Dept.
11414 "B" Avenue
Auburn, CA 95603

Re: Auburn Folsom Rd. Widening

Dear Ms. Lawrence:

As a resident of Granite Bay, I respectfully urge you to consider the safety and needs of the seniors living on Auburn Folsom Rd. in Granite Bay.

It is my understanding from the Environmental Impact Report that approximately 28,300 vehicles drive this two-lane road daily. The road widening of Auburn Folsom Rd. will increase the traffic to 30,800 vehicles, ease the flow of commuters through Granite Bay, but raises grave safety concerns for me, a resident of this community. I live daily with the congestion, the speed and the noise, which will only increase when the road is widened to four lanes.

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Remove the sight-distance impairment along Eureka Rd. allowing for safe access to the roadway.

Thank you for your consideration of my safety.

Sincerely,

Joleen J. Adams #2

Ridgeview Mobile Home Park
9060 Auburn Folsom Rd.

Response to Letter 37, from Joleen Adams, Space 2, Ridgeview MHP

Response to Comment Letter 37: Please see Master Responses 4, 5, 8, 9, and 11.

Letter 38

(Same as Letter 33)

April 25, 2003

Lori Lawrence, Planning Technician
Placer County Planning Dept.
11414 "B" Avenue
Auburn, CA 95603

Re: Auburn Folsom Rd. Widening

Dear Ms. Lawrence:

As a resident of Granite Bay, I respectfully urge you to consider the safety and needs of the seniors living on Auburn Folsom Rd. in Granite Bay.

It is my understanding from the Environmental Impact Report that approximately 28,300 vehicles drive this two-lane road daily. The road widening of Auburn Folsom Rd. will increase the traffic to 30,800 vehicles, ease the flow of commuters through Granite Bay, but raises grave safety concerns for me, a resident of this community. I live daily with the congestion, the speed and the noise, which will only increase when the road is widened to four lanes.

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Remove the sight-distance impairment along Eureka Rd. allowing for safe access to the roadway.

Thank you for your consideration of my safety.

Sincerely, Mary Short #13

Ridgeview Mobile Home Park
9060 Auburn Folsom Rd.

Response to Letter 38, from Mary Short, Space 13, Ridgeview MHP

Response to Comment Letter 38: Please see Master Responses 4, 5, 8, 9, and 11.

Letter 39

(Same as Letter 33)

April 25, 2003

Lori Lawrence, Planning Technician
Placer County Planning Dept.
11414 "B" Avenue
Auburn, CA 95603

Re: Auburn Folsom Rd. Widening

Dear Ms. Lawrence:

As a resident of Granite Bay, I respectfully urge you to consider the safety and needs of the seniors living on Auburn Folsom Rd. in Granite Bay.

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Remove the sight-distance impairment along Eureka Rd. allowing for safe access to the roadway.

Thank you for your consideration of my safety.

Sincerely,

Cecil C. Shipton #22

Ridgeview Mobile Home Park
9060 Auburn Folsom Rd.

Response to Letter 39, from Cecil ___, Space 22, Ridgeview MHP

Response to Comment Letter 39: Please see Master Responses 4, 5, 8, 9, and 11.

Letter 40

(Same as Letter 33)

April 25, 2003

Lori Lawrence, Planning Technician
Placer County Planning Dept.
11414 "B" Avenue
Auburn, CA 95603

Re: Auburn Folsom Rd. Widening

Dear Ms. Lawrence:

As a resident of Granite Bay, I respectfully urge you to consider the safety and needs of the seniors living on Auburn Folsom Rd. in Granite Bay.

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- Remove the sight-distance impairment along Eureka Rd. allowing for safe access to the roadway.

Thank you for your consideration of my safety.

Sincerely,

Shirley Roberts

Ridgeview Mobile Home Park
9060 Auburn Folsom Rd. #14

Response to Letter 40, from Shirley Roberts, Space 14, Ridgeview MHP

Response to Comment Letter 40: Please see Master Responses 4, 5, 8, 9, and 11.

Letter 41

(Same as Letter 33)

April 25, 2003

Lori Lawrence, Planning Technician
Placer County Planning Dept.
11414 "B" Avenue
Auburn, CA 95603

Re: Auburn Folsom Rd. Widening

Dear Ms. Lawrence:

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Thank you for your consideration of my safety.

Sincerely,

#23

Ridgeview Mobile Home Park
9060 Auburn Folsom Rd.

Response to Letter 41, from Stella Luskoski, Space 23, Ridgeview MHP

Response to Comment Letter 41: Please see Master Responses 4, 5, 8, 9, and 11.

Letter 42

(Same as Letter 33)

April 25, 2003

Lori Lawrence, Planning Technician
Placer County Planning Dept.
11414 "B" Avenue
Auburn, CA 95603

Re: Auburn Folsom Rd. Widening

Dear Ms. Lawrence:

As a resident of Granite Bay, I respectfully urge you to consider the safety and needs of the seniors living on Auburn Folsom Rd. in Granite Bay.

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Thank you for your consideration of my safety.

Sincerely,

Mrs. Bonnylu Schuh Sp. 17

Ridgeview Mobile Home Park
9060 Auburn Folsom Rd.

Response to Letter 42, from Bonnylu Schuh, Space 17, Ridgeview MHP

Response to Comment Letter 42: Please see Master Responses 4, 5, 8, 9, and 11.

Letter 43

(Same as Letter 33)

April 25, 2003

Lori Lawrence, Planning Technician
Placer County Planning Dept.
11414 "B" Avenue
Auburn, CA 95603

Re: Auburn Folsom Rd. Widening

Dear Ms. Lawrence:

As a resident of Granite Bay, I respectfully urge you to consider the safety and needs of the seniors living on Auburn Folsom Rd. in Granite Bay.

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Remove the sight-distance impairment along Eureka Rd. allowing for safe access to the roadway.

Thank you for your consideration of my safety.

Sincerely,

Dale Roberts

Ridgeview Mobile Home Park
9060 Auburn Folsom Rd. 14

Response to Letter 43, from Dale Roberts, Space 14, Ridgeview MHP

Response to Comment Letter 40: Please see Master Responses 4, 5, 8, 9, and 11.

Letter 44

(Same as Letter 33)

April 25, 2003

Lori Lawrence, Planning Technician
Placer County Planning Dept.
11414 "B" Avenue
Auburn, CA 95603

Re: Auburn Folsom Rd. Widening

Dear Ms. Lawrence:

As a resident of Granite Bay, I respectfully urge you to consider the safety and needs of the seniors living on Auburn Folsom Rd. in Granite Bay.

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Thank you for your consideration of my safety.

Sincerely,

Judith R. Thompson #1

Ridgeview Mobile Home Park
9060 Auburn Folsom Rd.

Response to Letter 44, from Judith Thompson, Space 1, Ridgeview MHP

Response to Comment Letter 44: Please see Master Responses 4, 5, 8, 9, and 11.

Letter 45

(Same as Letter 33)

April 25, 2003

Lori Lawrence, Planning Technician
Placer County Planning Dept.
11414 "B" Avenue
Auburn, CA 95603

Re: Auburn Folsom Rd. Widening

Dear Ms. Lawrence:

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Thank you for your consideration of my safety.

Sincerely,

Timothy O'Leary #45

Ridgeview Mobile Home Park
9060 Auburn Folsom Rd.

Response to Letter 45, from Timothy O'Leary, Space 45, Ridgeview MHP

Response to Comment Letter 45: Please see Master Responses 4, 5, 8, 9, and 11.

Letter 46

(Same as Letter 33)

April 25, 2003

Lori Lawrence, Planning Technician
Placer County Planning Dept.
11414 "B" Avenue
Auburn, CA 95603

Re: Auburn Folsom Rd. Widening

Dear Ms. Lawrence:

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Remove the sight-distance impairment along Eureka Rd. allowing for safe access to the roadway.

Thank you for your consideration of my safety.

Sincerely,

Timothy O'Leary SR. #45

Ridgeview Mobile Home Park
9060 Auburn Folsom Rd.

Response to Letter 46, from Timothy O'Leary Sr., Space 45, Ridgeview MHP

Response to Comment Letter 46: Please see Master Responses 4, 5, 8, 9, and 11.

Letter 47

(Same as Letter 33)

April 25, 2003

Lori Lawrence, Planning Technician
Placer County Planning Dept.
11414 "B" Avenue
Auburn, CA 95603

Re: Auburn Folsom Rd. Widening

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Thank you for your consideration of my safety.

Sincerely,

Shea M. O'Kins #49

Ridgeview Mobile Home Park
9060 Auburn Folsom Rd.

Response to Letter 47, from Rhea O'Kims, Space 49, Ridgeview MHP

Response to Comment Letter 47: Please see Master Responses 4, 5, 8, 9, and 11.

Letter 48

(Same as Letter 33)

April 25, 2003

Lori Lawrence, Planning Technician
Placer County Planning Dept.
11414 "B" Avenue
Auburn, CA 95603

Re: Auburn Folsom Rd. Widening

Dear Ms. Lawrence:

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Thank you for your consideration of my safety.

Sincerely,

P Brown #30

Ridgeview Mobile Home Park
9060 Auburn Folsom Rd.

Response to Letter 48, from P. Brownyork, Space 30, Ridgeview MHP

Response to Comment Letter 48: Please see Master Responses 4, 5, 8, 9, and 11.

Letter 49

(Same as Letter 33)

April 25, 2003

Lori Lawrence, Planning Technician
Placer County Planning Dept.
11414 "B" Avenue
Auburn, CA 95603

Re: Auburn Folsom Rd. Widening

Dear Ms. Lawrence:

As a resident of Granite Bay, I respectfully urge you to consider the safety and needs of the seniors living on Auburn Folsom Rd. in Granite Bay.

It is my understanding from the Environmental Impact Report that approximately 28,300 vehicles drive this two-lane road daily. The road widening of Auburn Folsom Rd. will increase the traffic to 30,800 vehicles, ease the flow of commuters through Granite Bay, but raises grave safety concerns for me, a resident of this community. I live daily with the congestion, the speed and the noise, which will only increase when the road is widened to four lanes.

I urge you to consider the following:

Reduce the speed limit, therein lowering the noise, reducing the possibility of accidents, and allowing safer access onto the roadway.
Acceleration and Deceleration aprons for easing out of and into traffic.
Reprogramming the light at Eureka Rd. to allow for a "gap" in traffic so that I have a chance to merge into traffic. At the current time it is almost impossible and will only get worse.
Remove the sight-distance impairment along Eureka Rd. allowing for safe access to the roadway.

Thank you for your consideration of my safety.

Sincerely,

Barbara Barlow #2

Ridgeview Mobile Home Park
9060 Auburn Folsom Rd.

Response to Letter 49, from Barbara Barton, Space 2, Ridgeview MHP

Response to Comment Letter 49: Please see Master Responses 4, 5, 8, 9, and 11.

Letter 50

(Same as Letter 33)

April 25, 2003

Lori Lawrence, Planning Technician
Placer County Planning Dept.
11414 "B" Avenue
Auburn, CA 95603

Re: Auburn Folsom Rd. Widening

Dear Ms. Lawrence:

As a resident of Granite Bay, I respectfully urge you to consider the safety and needs of the seniors living on Auburn Folsom Rd. in Granite Bay.

It is my understanding from the Environmental Impact Report that approximately 28,300 vehicles drive this two-lane road daily. The road widening of Auburn Folsom Rd. will increase the traffic to 30,800 vehicles, ease the flow of commuters through Granite Bay, but raises grave safety concerns for me, a resident of this community. I live daily with the congestion, the speed and the noise, which will only increase when the road is widened to four lanes.

I urge you to consider the following:

Reduce the speed limit, therein lowering the noise, reducing the possibility of accidents, and allowing safer access onto the roadway.
Reprogramming the light at Eureka Rd. to allow for a "gap" in traffic so that I have a chance to merge into traffic. At the current time it is almost impossible and will only get worse.
Remove the sight-distance impairment along Eureka Rd. allowing for safe access to the roadway.

Thank you for your consideration of my safety.

Sincerely,

Carol L. Wamsher #21

Ridgeview Mobile Home Park
9060 Auburn Folsom Rd.

Response to Letter 50, from Carol Wansher, Space 21, Ridgeview MHP

Response to Comment Letter 50: Please see Master Responses 4, 5, 8, 9, and 11.

Letter 51

(Same as Letter 33)

April 25, 2003

Lori Lawrence, Planning Technician
Placer County Planning Dept.
11414 "B" Avenue
Auburn, CA 95603

Re: Auburn Folsom Rd. Widening

Dear Ms. Lawrence:

As a resident of Granite Bay, I respectfully urge you to consider the safety and needs of the seniors living on Auburn Folsom Rd. in Granite Bay.

It is my understanding from the Environmental Impact Report that approximately 28,300 vehicles drive this two-lane road daily. The road widening of Auburn Folsom Rd. will increase the traffic to 30,800 vehicles, ease the flow of commuters through Granite Bay, but raises grave safety concerns for me, a resident of this community. I live daily with the congestion, the speed and the noise, which will only increase when the road is widened to four lanes.

I urge you to consider the following:

- Reduce the speed limit, therein lowering the noise, reducing the possibility of accidents, and allowing safer access onto the roadway.
- Acceleration and Deceleration aprons for easing out of and into traffic.
- Reprogramming the light at Eureka Rd. to allow for a "gap" in traffic so that I have a chance to merge into traffic. At the current time it is almost impossible and will only get worse.
- Remove the sight-distance impairment along Eureka Rd. allowing for safe access to the roadway.

Thank you for your consideration of my safety.

Sincerely,

George E. Keeler #43

Ridgeview Mobile Home Park
9060 Auburn Folsom Rd.

Response to Letter 51, from George Keeber, Space 43, Ridgeview MHP

Response to Comment Letter 51: Please see Master Responses 4, 5, 8, 9, and 11.

Letter 52

(Same as Letter 33)

April 25, 2003

Lori Lawrence, Planning Technician
Placer County Planning Dept.
11414 "B" Avenue
Auburn, CA 95603

Re: Auburn Folsom Rd. Widening

Dear Ms. Lawrence:

As a resident of Granite Bay, I respectfully urge you to consider the safety and needs of the seniors living on Auburn Folsom Rd. in Granite Bay.

It is my understanding from the Environmental Impact Report that approximately 28,300 vehicles drive this two-lane road daily. The road widening of Auburn Folsom Rd. will increase the traffic to 30,800 vehicles, ease the flow of commuters through Granite Bay, but raises grave safety concerns for me, a resident of this community. I live daily with the congestion, the speed and the noise, which will only increase when the road is widened to four lanes.

I urge you to consider the following:

Reduce the speed limit, therein lowering the noise, reducing the possibility of accidents, and allowing safer access onto the roadway.
Acceleration and Deceleration aprons for easing out of and into traffic.
Reprogramming the light at Eureka Rd. to allow for a "gap" in traffic so that I have a chance to merge into traffic. At the current time it is almost impossible and will only get worse.
Remove the sight-distance impairment along Eureka Rd. allowing for safe access to the roadway.

Thank you for your consideration of my safety.

Sincerely,

#50

Ridgeview Mobile Home Park
9060 Auburn Folsom Rd.

Response to Letter 52, from Alice D., Space 50, Ridgeview MHP

Response to Comment Letter 52: Please see Master Responses 4, 5, 8, 9, and 11.

Letter 53

(Same as Letter 33)

April 25, 2003

Lori Lawrence, Planning Technician
Placer County Planning Dept.
11414 "B" Avenue
Auburn, CA 95603

Re: Auburn Folsom Rd. Widening

Dear Ms. Lawrence:

As a resident of Granite Bay, I respectfully urge you to consider the safety and needs of the seniors living on Auburn Folsom Rd. in Granite Bay.

It is my understanding from the Environmental Impact Report that approximately 28,300 vehicles drive this two-lane road daily. The road widening of Auburn Folsom Rd. will increase the traffic to 30,800 vehicles, ease the flow of commuters through Granite Bay, but raises grave safety concerns for me, a resident of this community. I live daily with the congestion, the speed and the noise, which will only increase when the road is widened to four lanes.

I urge you to consider the following:

Reduce the speed limit, therein lowering the noise, reducing the possibility of accidents, and allowing safer access onto the roadway.
Acceleration and Deceleration aprons for easing out of and into traffic.
Reprogramming the light at Eureka Rd. to allow for a "gap" in traffic so that I have a chance to merge into traffic. At the current time it is almost impossible and will only get worse.
Remove the sight-distance impairment along Eureka Rd. allowing for safe access to the roadway.

Thank you for your consideration of my safety.

Sincerely, #50

Ridgeview Mobile Home Park
9060 Auburn Folsom Rd.

Response to Letter 53, from R. D., Space 50, Ridgeview MHP

Response to Comment Letter 53: Please see Master Responses 4, 5, 8, 9, and 11.

Letter 54

RECEIVED
APR 10 2003
PLANNING DEPT.

AUBURN-FOLSOM ROAD
WIDENING PROJECT

Public Draft – Comments Due by April 28, 2003

Comments:

We, the residents of Ridgeview Mobile Home located at 9060 Auburn-Folsom Road, Granite Bay, California 95746, feel we are in great danger every time we enter and exit from our community onto Auburn-Folsom Road. We are asking that the gate onto Eureka Road be made available to us for entering and exiting our senior community.

Auburn-Folsom Road is currently a 2-lane road from the Sacramento/Placer county line to just above Eureka Road with strategically placed center lanes where warranted for turn lanes. There is a left turn lane in front of the park if you are traveling north. It is this lane we must access in order to turn left as we exit the park to merge into the traffic. This is very dangerous as traffic has now become a nightmare because of the Dam Road closure. To exit right from our community we must wait for the signal to change at Eureka Road.

The entry/exit onto Eureka Road is currently a locked gate unavailable to Ridgeview Mobile Home Park residents. A review of this entry/exit showed that certain shrubbery would have to be removed and the entry/exit widened to allow for vehicles to pass in and out. Eureka Road is currently a 2-lane road with multiple stop signs to help curtail speed. Exiting right or left from the community should not be a problem. It would certainly be safer for the senior citizens to have this advantage. **We are requesting this gate be unlocked and made available to us as quickly as possible as it may save lives!**

Please sign below. Provide your address and phone number so that we may contact you if we have questions. Thank you.

1 Ms. Lenora Moran
9060 Auburn Folsom Rd. Spc 16
Granite Bay, CA 95746

Lenora Moran

2 #9 Clarita Stevens

3 Barbara Barton
Joleen Adams
9060 Auburn-Folsom Rd. #2
Granite Bay, CA 95746

Joleen Adams

4 Barbara Barton

5 Ronald Miller

6 #7 Doris C. Tomasovich

7 #6 Clyde Mourfield

8 Richard W. McDonald Sr

9 N. McDonald

10 Mary Longacre 10

11 Richard Longacre #10

12 Anita Doering

13 Charlotte Gober 41

14 Lester D. Obbards 26

15 Carol Obbards #26

16 17 Lois Fletcher #24

Lois Sarat #29

Mrs. Bonnyla Schuh #17

MR & MRS M.J. DIVER #48

Rhea M. O'Kins #49

Ron Holme #52

Mary Holme #52

James D. Lamb #42

Rena Egner #40

Richard Steve Vicki Krueger

[illegible] #33

#34 Rosie P. Prieto → if gate is locked at night

Barbara Sweeney #11

Elaine V. Triplett #53

Pat Colgate #47

Don Titcomb #4 open 2 hrs 6:30 8:30 PM 10 AM ON ATTACHED

Response to Letter 54, from Residents of Ridgeview MHP

Response to Comment Letter 54: Please see Master Response 5 and Master Response 11.

AUBURN-FOLSOM ROAD
WIDENING PROJECT

Public Draft – Comments Due by April 28, 2003

COMMENTS:

We Are Asking for The gate onto Eureka Be open for us To use. We need new gates in The Middle of our Road leading onto Eureka Bushes cut down a back for a better View.

Please provide your name, address, and phone number so we may contact you if we have questions regarding your comments.

Name: Ms. Lenora Moran

Address: #16 9060 Auburn-Folsom Rd. Granite Bay, CA 95746-6522

Lenora Moran

Phone Number: 916-797-6719

E-mail:

Would you like to receive project newsletters? YES NO

Response to Letter 55, from Lenora Moran

Response to Comment Letter 55: Please see Master Response 11.

AUBURN-FOLSOM ROAD
WIDENING PROJECT
Public Draft – Comments Due by April 28, 2003

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APR 14 2003
PLANNING DEPT.

COMMENTS:

Please include the following:

- Left turn lane from Fallsbrook Ct onto Auburn-Folsom Rd. 56a
- Light sensor on Auburn Folsom Rd south bound at the corner of Fuller and Auburn Folsom. 56b

Please provide your name, address, and phone number so we may contact you if we have questions regarding your comments.

Name: Michael & Wilma Moreno

Address: 6821 Fallsbrook Ct., Granite Bay, CA 95746

Phone Number: (916)791-9492 E-mail:

Would you like to receive project newsletters? YES (NO)

Response to Letter 56, from Michael and Wilma Moreno

Response to Comment 56a: Please see Master Response 5

Response to Comment 56b: Please see Master Responses 8 and 9.

AUBURN-FOLSOM ROAD
WIDENING PROJECT

Public Draft – Comments Due by April 28, 2003

COMMENTS:

THE WIDENING PROJECT SHOULD BE CANCELLED, AND OTHER SOLUTIONS CONSIDERED. THE TRAFFIC "PROBLEM" IS EAST/WEST (Folsom ⟺ Roseville) - NOT NORTH SOUTH. THERE IS SUFFICIENT N-S CAPACITY ON THE NEWLY WIDENED HAZEL AND SUNRISE routes.

THE SOLUTION IS EITHER A) WIDEN OAK TO FLEX TRAFFIC TO/FROM HAZEL AND/OR PUT A 2/3 OR 4 LANE LIMITED (OR ZERO) ACCESS "EXPRESSWAY" IN THE EAST-WEST POWERLINE CORRIDOR.

Please provide your name, address, and phone number so we may contact you if we have questions regarding your comments.

Name: Bruce Sutherland

Address: 9555 EDWARD CT 6B

Phone Number: 916-768-1555 E-mail: bruce@citadel-usa.com

Would you like to receive project newsletters? YES NO

Response to Letter 57, from Bruce Sutherland

Response to Comment Letter 57: Please see Master Response 1.

AUBURN-FOLSOM ROAD WIDENING PROJECT

Public Draft – Comments Due by April 28, 2003

COMMENTS:

BASED UPON MY REVIEW OF THE EIR, BY THE YEAR 2020, THE TRAFFIC COUNT ON DOUGLAS BLVD BETWEEN AUBURN-FOLSOM ROAD AND BARTON ROAD WOULD WORSEN FROM 38,500 (LOS-E) TO 42,800 (LOS-F) AS A RESULT OF THE IMPROVEMENTS CONTEMPLATED FOR AUBURN-FOLSOM ROAD. SHORT OF WIDENING DOUGLAS INTO AN EXPRESSWAY, HOW DO YOU KEEP SOME OF THIS COMMUTER TRAFFIC OUT OF OUR NEIGHBORHOOD?

Please provide your name, address, and phone number so we may contact you if we have questions regarding your comments.

Name: Gary Mitchell

Address: 7646 Stonewood Court, Granite Bay, CA 95746

Phone Number: 791-2179 E-mail:

Would you like to receive project newsletters? YES NO

RECEIVED
APR 10 2003
PLANNING DEPT.

Response to Letter 58, from Gary Mitchell

Response to Comment Letter 58: The circulation element of the current Granite Bay Community Plan requires the Auburn-Folsom Road/Douglas Boulevard intersection level of service to be maintained at LOS C. Granite Bay Traffic Mitigation Fee District funds will be used to fund improvements to this intersection as part of Mitigation Measure P3.2, "Implement Strategies to Alleviate the Need to Widen Douglas Boulevard to Six Lanes." The proposed updated circulation element of the Granite Bay Community Plan, if adopted by the Board of Supervisors, recommends that the acceptable level of service standard for this intersection should be LOS E; no further improvements to this intersection would be necessary under the proposed designation. Please see Master Response 1.

AUBURN-FOLSOM ROAD
WIDENING PROJECT

Public Draft – Comments Due by April 28, 2003

COMMENTS: Thank you for the informative meetings regarding the Auburn - Folsom Road Widening Project. The property that I own is located at 9095 Auburn Folsom Rd. The property is a boarding and training Stable. This business is over 30 years old. Started in 1972. I spoke with Charles W. Ebeling PE. We discussed the access that I could recieve for egress and regress. There is a strong possibility that my entrance would line up with Country Court which is located right accross from the subject property. This would allow the stable patrons to enter and leave the property at the stable location. This entrance would allow Fire Trucks to have quick access to the tall grass that grows in this area, it has caught Fire in the past. This access would be Convenient for those who live Near and down from me.

Please provide your name, address, and phone number so we may contact you if we have questions regarding your comments.

Name: Marvin Ray + Beatrice May Harrison

Address: 5208 Campcreek Loop Roseville Ca 95747

Phone Number: 773 4412 E-mail: Beeh 33 @ AOL.Com

Would you like to receive project newsletters? YES ✓ NO

Warm Regards
Mr + Harrison

Response to Letter 59, from M. Ray Harrison

Response to Comment Letter 59: The comment is noted.

Letter 60

AUBURN-FOLSOM ROAD WIDENING PROJECT

Public Draft – Comments Due by April 28, 2003

COMMENTS:

Thank you for the excellent presentations
Ed + Rich gave good explanation
We will be discuss @ next FLEHA mtg.
I believe Alt 4 is a good "happy medium"

Please provide your name, address, and phone number so we may contact you if we have questions regarding your comments.

Name: KRIS JOHNSON

Address: 6149 Shadowbrook Dr

Phone Number: 791-0723 E-mail: kmjohnson@surewest.net

Would you like to receive project newsletters? YES NO

Response to Letter 60, from Kris Johnson

Response to Comment Letter 60: The comment is noted.

Letter 61

AUBURN-FOLSOM ROAD WIDENING PROJECT

Public Draft – Comments Due by April 28, 2003

COMMENTS:

(1) MY FAMILY IS VERY CONCERNED ABOUT THE NOISE FROM INCREASED TRAFFIC FLOW. WILL AN ADEQUATE SOUND WALL BE INSTALLED, LIKE ON DOUGLAS? 61a

(2) WE ARE CONCERNED ABOUT MAKING A LEFT TURN FROM COUNTRY COURT TO AUBURN-FOLSOM. 2-WAY LEFT TURN LANE ON A-F AT THAT INTERSECTION? 61b

(3) WILL AUBURN-FOLSOM BE STRAIGHTENED JUST SOUTH OF COUNTRY COURT. 61c

Please provide your name, address, and phone number so we may contact you if we have questions regarding your comments.

Name: STEVE & DEBBIE URIBE

Address: 6925 COUNTRY COURT, G.B. 95746

Phone Number: 791-2525 E-mail: URIBE@SURFWEST.NET

Would you like to receive project newsletters? YES NO.

Response to Letter 61, from Steve and Debbie Uribe

Response to Comment 61a: Please see Master Response 2.

Response to Comment 61b: Please see Master Response 5.

Response to Comment 61c: Please see Master Response 9.

AUBURN-FOLSOM ROAD WIDENING PROJECT

Public Draft – Comments Due by April 28, 2003

COMMENTS: LIKE ALT. 4 VERY MUCH. PLEASE ENSURE THERE IS A CENTER TURN LANE TO ALLOW HOMEOWNERS SAFE EXIT + ENTRY TO THEIR DRIVEWAYS

Please provide your name, address, and phone number so we may contact you if we have questions regarding your comments.

Name: MARY TERRELL

Address: 9230 AUBURN-FOLSOM RD.

Phone Number: 916-797-4520 E-mail: APETPAL@ATT.NET

Would you like to receive project newsletters? YES NO

Response to Letter 62, from Mary Terrell

Response to Comment Letter 62: Please see Master Responses 5 and 9.

Letter 63

AUBURN-FOLSOM ROAD WIDENING PROJECT

Public Draft – Comments Due by April 28, 2003

COMMENTS:

Please consider two-way left turn lane at Fallsbrook Ct at Aub/Folsom Road.

Please provide your name, address, and phone number so we may contact you if we have questions regarding your comments.

Name: Steve & Julie Jensen

Address: 6907 Green Leaf Court

Phone Number: 791-4298 E-mail: Skippy3719@surewest.net

Would you like to receive project newsletters? YES NO

Response to Letter 63, from Steve and Julie Jensen

Response to Comment Letter 63: Please see Master Responses 5 and 9.

AUBURN-FOLSOM ROAD WIDENING PROJECT

Public Draft – Comments Due by April 28, 2003

COMMENTS:

(We would like to have ~~a~~ specific language to insure that the project corridor be maintained + patched (when needed) with open grade asphalt ~~for~~ or better (as technology improves) for noise reduction maintenance.

Please provide your name, address, and phone number so we may contact you if we have questions regarding your comments.

Name: Gretchen Dwyer

Address: 7240 Sierra Dr., Gretchen Dwyer

Phone Number: 791-8183 E-mail:

Would you like to receive project newsletters? (YES) NO

Response to Letter 64, from Gretchen Dwyer

Response to Comment Letter 64: The comment is noted.

AUBURN-FOLSOM ROAD WIDENING PROJECT

Public Draft – Comments Due by April 28, 2003

COMMENTS:

Thank you for putting on the 3/22/03 Public Forum. Please consider halting the project. The projected changes for traffic on Douglas ~~Blvd are~~ (category D to F) in volume of traffic and traffic flow are unacceptable. The thought of Douglas becoming 6 lanes to accomodate this is scary re noise, pollution, safety etc.

Please provide your name, address, and phone number so we may contact you if we have questions regarding your comments.

Name: Tom Merchant

Address: 6100 Rose Ct GR 95746

Phone Number: 7916081 E-mail: merchant@wink.net

Would you like to receive project newsletters? (YES) NO

Via email only Thanks

Response to Letter 65, from Tom Merchant

Response to Comment Letter 65: The circulation element of the current Granite Bay Community Plan requires the Auburn-Folsom Road/Douglas Boulevard intersection level of service to be maintained at LOS C. Granite Bay Traffic Mitigation Fee District funds will be used to fund improvements to this intersection as part of Mitigation Measure P3.2, "Implement Strategies to Alleviate the Need to Widen Douglas Boulevard to Six Lanes." The proposed updated circulation element of the Granite Bay Community Plan, if adopted by the Board of Supervisors, recommends that the acceptable level of service standard for this intersection should be LOS E; no further improvements to this intersection would be necessary under the proposed designation. Please see Master Response 1.

Letter 66

AUBURN-FOLSOM ROAD WIDENING PROJECT

Public Draft – Comments Due by April 28, 2003

COMMENTS:

Please have traffic number studies re-done now that the Damn Road has closed. Traffic is significantly lighter since that road closed on Auburn-Folsom Rd

Please provide your name, address, and phone number so we may contact you if we have questions regarding your comments.

Name: Heidi Best

Address: 6960 Green Leaf Ct

Phone Number: 791-7062 E-mail: jrbest@surewest.net

Would you like to receive project newsletters? YES NO

Response to Letter 66, from Heidi Best

Response to Comment Letter 66: Please see Master Response 1.

AUBURN-FOLSOM ROAD WIDENING PROJECT

Public Draft – Comments Due by April 28, 2003

COMMENTS:

- Regarding raised median please allow for left-hand turn out of Fallsbrook onto Auburn-Folsom.
- Please prohibit truck traffic on Auburn-Folsom
- If they are using "sound-absorbing" paving, cover all four lanes of Auburn-Folsom.

Please provide your name, address, and phone number so we may contact you if we have questions regarding your comments.

Name: Herb Best

Address: 6960 Green Leaf Ct

Phone Number: 791-7062 E-mail: jrbest@surewest.net

Would you like to receive project newsletters? YES NO

Response to Letter 67, from Heidi Best

Response to Comment Letter 67: Please see Master Responses 5, 7, and 9.

AUBURN-FOLSOM ROAD
WIDENING PROJECT

Public Draft – Comments Due by April 28, 2003

COMMENTS:

What about funding? (Mitigation fee)
How much in fund available now?
How much projected in 5 yrs?
What is back-up if funds don't materialize and loans need to be paid? How will loans be paid?

Please provide your name, address, and phone number so we may contact you if we have questions regarding your comments.

Name: Heidi Best
Address: 6960 Green Leaf Ct
Phone Number: 791-7062 E-mail: jrbest@sunset.net

Would you like to receive project newsletters? YES NO

Response to Letter 68, from Heidi Best

Response to Comment Letter 68: Please see Master Response 6.

Letter 69

AUBURN-FOLSOM ROAD WIDENING PROJECT

Public Draft – Comments Due by April 28, 2003

COMMENTS:

I LIVE AT 8430 DOVER DR. GRANITE BAY, RIGHT OFF DOUGLAS BLVD. WHEN DOUGLAS WAS WIDENED, SOUND INCREASE WAS NOT ADDRESSED AT THE EXISTING HOMES. SPEED HAS BEEN INCREASED TO 50 & 55 & ACTUAL TRAFFIC IS 5 TO 10 MILES AN HOUR FASTER. MY CONCERN IS THAT AN ALMOST IMPOSSIBLE SOUND LEVEL WILL BE MADE COMPLETELY IMPOSSIBLE WITH NO MITIGATION OR CONCERN IN THE PLAN FOR SOUND ON DOUGLAS, JUST MOVING TRAFFIC EVEN FASTER. I FEEL THIS MUST BE ADDRESSED AS APART OF THE PROJECT.

Please provide your name, address, and phone number so we may contact you if we have questions regarding your comments.

Name: KATHLEEN DUNKLIN

Address: 8430 DOVER DRIVE GRANITE BAY

Phone Number: 289-7454 E-mail: lkdunklin@aol.net

Would you like to receive project newsletters? (YES) NO

Response to Letter 69, from Kathleen Dunklin

Response to Comment Letter 69: Please see Master Response 2.

AUBURN-FOLSOM ROAD WIDENING PROJECT

Public Draft – Comments Due by April 28, 2003

COMMENTS:

Auburn Folsom Road

Eureka

Lake Trail Ct

consider building a connection to Lake Trail Court from intersection w/ Eureka.

Please provide your name, address, and phone number so we may contact you if we have questions regarding your comments.

Name: Guentert Erika Halwachs

Address: 7097 Laketrail Ct. 6B

Phone Number: 791-2795 E-mail:

Would you like to receive project newsletters? YES NO

Response to Letter 70, from Guentert Erika Halwachs

Response to Comment Letter 70: Please see the response to comment letter 2 and Master Responses 5 and 9.

Letter 71

AUBURN-FOLSOM ROAD WIDENING PROJECT

Public Draft – Comments Due by April 28, 2003

COMMENTS:

DO NOT WANT STOP LITES AT Lou pl. (NOISEY 71a
Problems with Culvert. AT Lou Pl and AF ROAD
EXISTING Redwood Trees(95) ACT AS Sound BARRIER 71b
Need Center Lane for access From Lou Place
IF AUBURN-Folsom IS RAISED AT Lou place, 71c
A retaining WALL should be CONSIDERED
SPEED LIMITS MIGHT BE CONSIDERD 71d

Please provide your name, address, and phone number so we may contact you if we have questions regarding your comments.

Name: Chance E. GABLE

Address: 6680 Lou place

Phone Number: 791-7296 E-mail: —

Would you like to receive project newsletters? (YES) NO

Response to Letter 71, from Chance E. Gable

Response to Comment 71a: The comment is noted. The stoplight is required to provide a safe crossing and access to the trail network.

Response to Comment 71b: The redwood trees at Lou Place and Auburn-Folsom Road are not dense or wide enough to provide meaningful noise attenuation. The comment is noted; no change to the Draft EIR is necessary.

Response to Comment 71c: Please see Master Response 9.

Response to Comment 71d: Please see Master Response 4.

AUBURN-FOLSOM ROAD WIDENING PROJECT

Public Draft – Comments Due by April 28, 2003

COMMENTS:

1) Light at Fuller - we request this be installed as soon as possible. If possible, prior to widening commencement. 72a

2) Fallsbrook - request a "trigger plate" for the light at Fuller & left turn egress onto Auburn Folsom 72b

3) Request a light trigger on the west side of Auburn Folsom for Fuller light with crosswalk across Auburn Folsom to Fuller. 72c

Please provide your name, address, and phone number so we may contact you if we have questions regarding your comments.

Name: Jane Gagnier

Address: 6900 Green Leaf Ct GB 95746

Phone Number: 797-9313 E-mail:

Would you like to receive project newsletters? YES NO

Response to Letter 72, from Jane Gagnier

Response to Comment Letter 72: Please see Master Responses 8 and 9.

Letter 73

AUBURN-FOLSOM ROAD WIDENING PROJECT

Public Draft – Comments Due by April 28, 2003

COMMENTS:

I would ~~[illegible]~~ Like To see The Two-way Left-Right Turn Lanes exstended from country CT To my home

Please provide your name, address, and phone number so we may contact you if we have questions regarding your comments.

Name: Michael Russell

Address: 9170 Auburn Folsom Rd Granite Bay

Phone Number: (916) 791-1899 E-mail:

Would you like to receive project newsletters? YES NO

Response to Letter 73, from Michael Russell

Response to Comment Letter 73: Please see Master Responses 5 and 9.

AUBURN-FOLSOM ROAD WIDENING PROJECT

Public Draft – Comments Due by April 28, 2003

COMMENTS: We would like to insure a lane that would allow us to access Aub.-Folsom a 2way left turn lane

Please provide your name, address, and phone number so we may contact you if we have questions regarding your comments.

Name: Frank & Hope Ruiz

Address: 9390 Auburn Folsom Rd

Phone Number: 291-2589 E-mail: h.g.ruiz@att.net

Would you like to receive project newsletters? YES NO

Response to Letter 74, from Frank and Hope Ruiz

Response to Comment Letter 74: Please see Master Responses 5 and 9.

Chapter 3

List of Preparers

Placer County

- **Charlie Ebeling, P.E.** Project Manager. Associate Engineer, Placer County Department of Public Works. B.S., 1996, Civil Engineering, California State University, Chico. California licensed Traffic Engineer TR 2149. Six years of experience in civil and traffic engineering specializing in design and project management of highway and bridge transportation projects.
- **Edward G. McCarthy, P.E.** Senior Civil Engineer, Transportation Division, Placer County Department of Public Works. B.S., 1977, Transportation Engineering, California Polytechnic State University, San Luis Obispo. California licensed Civil Engineer C 31046. Twenty-five years of experience in civil engineer and public works program management.

Jones & Stokes

- **Lynn Finley.** Project Manager. B.S., 1995, Environmental Engineering, Montana Tech, University of Montana, Butte. Seven years of experience in analysis and management of environmental studies, with a focus on air quality, hazardous materials, energy, and industrial projects; environmental regulatory analysis and compliance audits and assistance; and point-, area-, and mobile-source air quality impact studies.
- **Shannon Hatcher.** Air Quality and Noise Specialist. B.S., 2000, environmental science, Oregon State University, Corvallis. B.S., 2000, environmental health and safety, Oregon State University, Corvallis. Experience in environmental impact analysis, report preparation, and environmental noise monitoring.
- **Heather Ogston.** Editor. B.A., 1998, archaeology and philosophy, Kenyon College, Gambier, Ohio. Three years of experience reviewing and editing environmental documents.

Chapter 4

References Cited

American Association of State Highway and Transportation Officials. 2000. *Policy on geometric design of highways and streets.*

California Department of Transportation. 1995. *Highway design manual.*

———. 1996a. *Traffic manual.*

———. 1996b. *Signal and lighting design guidelines.*

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Finding of No Significant Impact

Auburn-Folsom Road Widening Project
in Placer County, California

U.S. Department of the Interior
Bureau of Reclamation
Central California Area Office
Folsom, California

January 2005

U.S. Department of the Interior

Bureau of Reclamation

Central California Area Office
Folsom, California

Finding of No Significant Impact

Auburn-Folsom Road Widening Project
in Placer County, California

Recommended:	Environmental Specialist	**Date:** 1/3/05
Recommended:	CCAO Resource Manager	**Date:** 1/11/05
Approved:	CCAO Area Office Manager	**Date:** 1/11/05
FONSI No.	CCAO-FONSI-05-1	

Proposed Action

The Reclamation proposed action for the Auburn-Folsom Road Widening Project (Project) is to consider granting an encroachment easement for project construction on lands of the Folsom Lake State Recreation Area.

Placer County has developed the Project for the purposes of upgrading Auburn-Folsom Road from the Placer/Sacramento County line to Douglas Boulevard. The Project has been divided into three phases: Phase 1 (south of Douglas Blvd. to approximately 1500' south of Eureka Road), Phase 2 (County Line to approximately 1500' north of Oak Hill Drive) and Phase 3 (1500' south of Eureka Road to 1500' north of Oak Hill Drive). Phase 1 is broken into two sub-phases Phase 1A (Traffic Signal at Fuller Drive) and Phase 1B (Douglas Blvd. to south of Eureka Road). Phase 1 includes right-of-way acquisition for the entire Project.

Placer County's recommended alignment is a combination of alternatives studied in the Auburn-Folsom Road Widening Project Environmental Assessment/Draft Environmental Impact Report (EA/DEIR; Placer County Department of Public Works 2003a) and the project's Final Environmental Impact Report (FEIR; Placer County Department of Public Works 2003b). The proposed alignment was selected as the preferred alternative due to its compliance with specific Project objectives while minimizing the social and environmental impacts. The primary objectives of the Project are to provide additional roadway capacity to handle increasing traffic levels along Auburn Folsom Road and to provide needed safety, pedestrian and bicycle improvements.

A majority of the right-of-way acquisition in the recommended alignment will be from Reclamation and the California Department of Parks and Recreation.

Findings

Reclamation participated with Placer County in preparing an EA/DEIR in 2002-2003, which is incorporated by reference (Placer County Department of Public Works 2003a). Reclamation has determined that the proposed action, granting an encroachment easement for project construction on lands of the Folsom Lake State Recreation Area, is not a major Federal action that would significantly affect the quality of the human environment. Therefore, an environmental impact statement is not required for carrying out the proposed action.

The following factors support this determination:

1. Placer County will adopt a mitigation and monitoring program that, when implemented, will reduce environmental effects below a level of significance. The mitigation measures will be implemented by agencies and entities other than Reclamation. These agencies and entities have the authority and capacity to implement the mitigation.
2. The proposed action will not result in significant adverse impacts to unique

environmental resources including wildlife habitat and/or wetlands. Oak trees that need to be removed from Reclamation land will be replaced by Placer County on an inch-for-inch basis (for each inch of tree diameter lost, an equal amount of tree diameter would be planted on Reclamation property). Placer County is responsible for obtaining permits and mitigating for loss of wetlands on Reclamation land.

3. According to Biological Opinion 1-1-05-I-0219 issued December 14, 2004 by the Fish and Wildlife Service (Sacramento, CA), the proposed action is not likely to jeopardize the continued existence of any species listed or proposed for listing under the Endangered Species Act. This action will not result in destruction or adverse modification of the critical habitat, as none is present in the action area. However, Placer County, on the behalf of the Reclamation, will transplant and mitigate for elderberry shrubs that cannot be avoided as a result of this project. Placer County will follow the requirements as set forward in Biological Opinion 1-1-05-I-0219 Terms and Conditions.

4. The proposed action will not affect cultural resources.

5. The proposed action will not affect Indian Trust Assets.

6. Reclamation finds that the proposed action, once the Terms and Conditions of the Biological Opinion have been fulfilled, would not result in a significant effect on the human environment. Placer County's proposed mitigation and monitoring program, including the replanting of shrubs in an approved conservation bank or conservation area, will avoid any significant adverse effects.

Auburn-Folsom Road
Widening Project

Mitigation Monitoring and Reporting Program

State Clearinghouse Number 2002042036

Federal Lead Agency:

U.S. Department of the Interior Bureau of Reclamation
7794 Folsom Dam Road
Folsom, CA 95630
Contact: Sandi Richerson
916/989-7174

State Lead Agency:

Placer County
Department of Public Works 11444 B Avenue
DeWitt Center
Auburn, CA 95603
Contact: Edward G. McCarthy, PE.
530/886-7586

Environmental Consultant:

Dokken Engineering
2365 Iron Point Road, Suite 200
Folsom, CA 95630
Contact: Namat Hosseinion
916/858-0642

March 2004

Mitigation Measure	Timing	Implementing Party	M P

Mitigation Monitoring and Reporting Program

Placer County, as the lead agency under the California Environmental Quality Act (CEQA), has developed a mitigation monitoring and reporting program (MMRP) for the Auburn-Folsom Road Widening Project. This MMRP is designed to ensure that the mitigation measures identified in the Environmental Assessment/Environmental Impact Report for the project are implemented.

Table I represents the MMRP. For each mitigation measure, Table I identifies:

- Mitigation Measure,
- Timing of Implementation,
- Implementing Party,
- Monitoring Party, and
- Verification Date and Signature

Placer County is responsible for implementing the measures listed in the MMRP.

Mitigation Measure	Timing	Implementing Party	Monitoring Party	Verification Date and Signature
Mitigation Measure P3.1: Prepare a Traffic Management Plan to Be Implemented during Construction: To avoid temporary disruption of traffic conditions during construction, the Placer County DPW shall develop and implement a traffic control plan for the project. The plan shall be designed to reduce the effects of construction on the roadway system throughout the construction period. The plan shall include provisions to discourage "cut-through" traffic on local streets. The plan shall also discourage the use of Barton Road as a parallel north-south street and detour traffic to Sierra College Boulevard. As feasible, at least one lane of traffic shall be maintained at all times. Proposed lane closures during the a.m. and p.m. commuting hours (6-9 a.m. and 3-6 p.m.) shall be minimized to the extent feasible. As feasible, pedestrian, equestrian, and bicycle access shall be maintained during construction. Construction areas shall be secured to prevent pedestrians, equestrians and bicyclists from entering the work area. This mitigation measure is common to all alternatives.	**Before construction**: Prepare traffic management plan. During construction: Implement traffic management plan, including measures to traffic and secure pedestrian areas.	Placer County Department of Public Works (DPW)	Placer County DPW	X_____
Mitigation Measure P3.2: Implement Strategies to Alleviate the Need to Widen Douglas Blvd to Six Lanes To address increased roadway capacity and increased traffic volumes at Douglas Boulevard - Auburn-Folsom Road to Barton Road (LOS E), Placer County DPW will implement strategies as part of the regular transportation planning and traffic engineering functions and alleviate the need to widen Douglas Boulevard to six lanes. The Southeast Placer County Transportation Study recommended alternative strategies to be implemented rather than widening Douglas Boulevard to six lanes. These strategies, endorsed by the Board of Supervisors in December 2000, included: • Work with PCTPA, SACOG, and neighboring jurisdictions to address a regional solution to the amount of through traffic in Granite Bay. • Add turn lanes at major intersections along Douglas Boulevard to provide LOS D. ▪ Potentially close some median openings along Douglas Boulevard to maintain its ability to carry traffic at higher levels of service. This mitigation measure is common to all alternatives.	**After construction**: Implement strategies: 1. Work with PCTPA, SACOG, and neighboring jurisdictions to address regional solution to amount of traffic in Granite Bay 2. Add turn lanes at major intersections along Douglas Boulevard. 3. Potentially close some median openings along Douglas Boulevard	Placer County DPW	Placer County DPW	X_____

Mitigation Measure	Timing	Implementing Party	Monitoring Party	Verification Date and Signature
Mitigation Measure P3.3a: Increase the Capacity at the Auburn-Folsom Road/Douglas Boulevard Intersection to Operate at an Acceptable LOS in 2020 : To address increased the cumulative affects of increased traffic volumes, the County will continue to monitor the LOS at the Auburn-Folsom Road/Douglas Boulevard intersection and construct new improvements as needed. The Board of Supervisors will approve intersection improvements at the Auburn-Folsom Road/Douglas Boulevard intersection that are included in the Capital Improvement Program that is funded by traffic mitigation fees in the Granite Bay area when funds are available and the need exists. The intersection improvements include provision of additional turn lanes as follows: ▪ a free right-turn lane on the eastbound approach ▪ two exclusive left-turn and two exclusive through lanes on the northbound approach two exclusive left-turn lanes on the eastbound approach	**After construction**: Monitor level of service (LOS) at Auburn-Folsom/Douglas Boulevard intersection; implement intersection improvements as needed.	Placer County DPW	Placer County Board of Supervisors	X_____
Mitigation Measure P3.3b: Implement Strategies to Alleviate the Need to Widen Douglas Boulevard to Six Lanes To address increased the cumulative affects of increased traffic volumes, Placer County DPW will implement strategies as part of the regular transportation planning and traffic engineering functions and alleviate the need to widen Douglas Boulevard to six lanes. *The Southeast Placer County Transportation Study* recommended alternative strategies to be implemented rather than widening Douglas Boulevard to six lanes. These strategies, endorsed by the Board of Supervisors in December 2000, included: ▪ Work with PCTPA, SACOG, and neighboring jurisdictions to address a regional solution to the amount of through traffic in Granite Bay ▪ Add turn lanes at major intersections along Douglas Boulevard to provide LOS D. ▪ Potentially close some median openings along Douglas Boulevard to maintain its ability to carry traffic at higher levels of service This mitigation measure is common to all alternatives	**After construction**: Implement strategies: 1. Work with PCTPA, SACOG, and neighboring jurisdictions to address regional solution to amount of traffic in Granite Bay. 2. Add turn lanes at major intersections along Douglas Boulevard 3. Potentially close some median openings along Douglas Boulevard.	Placer County DPW	Placer County DPW	X_____

Mitigation Measure	Timing	Implementing Party	Monitoring Party	Verification Date and Signature
Mitigation Measure P3.4: Install a Signal at the Auburn-Folsom Road/Lou Place Intersection to Allow Pedestrian/Equestrian Crossing To reconcile potential inconsistency with equestrian system policies in the Placer County General Plan and the Granite Bay Community Plan, the Placer County DPW will install a signal at the Auburn-Folsom Road/Lou Place intersection to facilitate pedestrian and equestrian movements across Auburn-Folsom Road into Folsom State Recreational Area. In the event that the Granite Bay Community Plan is modified to remove an equestrian trail along Lou Place and a crossing at Auburn-Folsom Road, the Placer County DPW has the option of installing a signal a crossing at Auburn-Folsom Road, the Placer County DPW has the option of installing a signal or not, at its discretion This mitigation measure is common to all alternatives.	**After construction:** Install traffic signal.	Placer County DPW	Placer County DPW	X_____
Mitigation Measure P3.5: Provide Class II Bikeways To reconcile potential inconsistency with pedestrian and bicycle system policies contained in the Placer County General Plan and the Granite Bay Community Plan, Placer County DPW shall provide Class II bikeways along Auburn-Folsom Road pursuant to the Placer County Bikeways Master Plan. The location, width, alignment, and surfacing of the bikeways shall be in accordance with the bikeway design standards listed in the Placer County General Plan.	**After construction**: Provide Class II bikeways along Auburn-Folsom Road	Placer County DPW	Placer County DPW	X_____
Mitigation Measure P4.1: Implement Best Available Mitigation Measures for Construction Activities To address temporary increases in ROG, NOx, and PM10 emissions during grading and construction activities, Placer County DPW will ensure the following: 1. Construction equipment exhaust emissions shall not exceed PCAPCD Rule 202 Visible Emission limitations. 2 Placer County DPW shall submit to PCAPCD, and receive approval of, a Construction Emission/Dust Control Plan before groundbreaking. 3. The prime contractor shall submit to PCAPCD a comprehensive inventory (listing make, model, year, emission rating) of all the heavy-duty off-road equipment (50 horsepower [hp] or greater) that will be used an aggregate of 40 or more hours for the project. PCAPCD personnel, with assistance from ARE, shall conduct initial Visible Emission Evaluations (VEEs) of all heavy-duty equipment on the inventory list. 4. Placer County DPW shall establish an enforcement plan to evaluate, on a weekly basis, project-related on- and-off-road heavy-duty vehicle engine emission opacities, using standards defined in 13 CCR 2180-2194. An Environmental Coordinator, ARB-certified to perform VEEs, shall routinely	**Before and during construction:** Implement best management practices (BMPs), including: 1. Ensure construction equipment exhaust emissions do not exceed Placer County Air Pollution Control District (PCAPCD) Rule 202 Visible Emission limitations. 2. Submit Construction Emission/Dust Control Plan to PCAPCD. 3. Submit comprehensive inventory listing of all heavy-duty on-road duty off-road equipment to PCAPCD.	Placer County DPW	Placer County DPW	X_____

Mitigation Measure	Timing	Implementing Party	Monitoring Party	Verification Date and Signature
evaluate project-related off-road and heavy duty on road equipment emissions for compliance with this requirement. Operators of vehicles and equipment found to exceed opacity limits shall be notified, and the equipment must be repaired within 72 hours of notification. 5. Construction contracts shall stipulate that at least 20% of the heavy-duty off-road equipment included in the inventory be powered by ARB-certified off-road engines, as follows: 175 hp—750 hp 1996 and newer engines 100 hp—174 hp 1997 and newer engines 50 hp—99 hp 1998 and newer engines In lieu of or in addition to this requirement, Placer County DPW can use other measures to reduce PM 10 and NO emissions from its project through the use of emulsified diesel fuel and/or particulate matter traps. PCAPCD shall be contacted to discuss this measure. 6. Placer County DPW shall conduct no open burning of removed vegetation during construction. Vegetative material shall be chipped or delivered to waste-to-energy facilities. 7. Placer County DPW shall ensure that earthmoving construction equipment is cleaned with water once per day 8. Placer County DPW shall ensure that soil binders are spread on unpaved roads and on employee/equipment parking areas. 9. Placer County DPW shall ensure that approved chemical soil stabilizers are applied, according to manufacturers' specifications, to all inactive construction areas (previously graded areas that remain inactive for 96 hours). 10. Placer County DPW shall ensure that ground cover is reestablished on the construction site as soon as possible through seeding and watering.	4. Establish enforcement plan to evaluate emission opacities. 5. Stipulate that at least 20% of heavy-duty off-road equipment be powered by ARB-certified off-road engines 6. Do not conduct open burning of removed vegetation. 7. Clean earthmoving equipment once a day. 8. Ensure that soil binders are spread on unpaved roads and parking areas. 9. Apply approved chemical soil stabilizers to all inactive construction areas. 10. Ensure reestablishment of ground cover on construction site.			

Mitigation Measure	Timing	Implementing Party	Monitoring Party	Verification Date and Signature
Mitigation Measure P5.1: Obtain a Section 402 NPDES Permit and Prepare an Erosion and Sediment Control Plan To address temporary degradation of surface water quality during construction, as required by the NPDES General Permit for Discharges of Storm Water Associated with Construction Activities, Placer County DPW shall prepare an erosion and sediment control plan. The plan shall be prepared and approved before construction activities begin. The following measures shall be addressed in the plan. 1. I. All graded areas shall be covered with protective materials, such as mulch, or reseeded with adaptive plant species. The plan shall include details regarding seed material, fertilizer, and mulching. 2. Protocols for the handling of construction and maintenance materials, such as sanitary wastes and petroleum products, shall be developed to minimize the chance of spill and to provide prompt corrective action should spill occur. 3. All graded areas and soil piles shall be mounded to minimize erosion potential. 4. Drainage outfalls shall be designed and positioned to avoid erosion. Energy dissipaters shall be installed where necessary. 5. Erosion control measures shall include best management practices (BMPs) to minimize water quality impacts; BMPs include filter berm, sandbag, or straw-bale barriers; siltation retention fences; vegetated buffer strips; vegetated swales; and spill containment provisions. 6. Temporary sediment catchment basins shall be constructed where necessary to prevent sediment from being transported to permanent detention basins and drainages. The locations and size of the temporary basins shall be shown in the erosion and sediment control plan. 7. Grading shall not be permitted after October 15 or before May 1. Grading may be permitted outside of these dates if the Director of DPW determines that such work can be completed before the onset of weather conditions that would prevent the work from being adequately winterized or completed. 8. Revegetation shall begin when the graded area has attained finished grade, but not later than October 1 (to ensure germination by October 30).	**Before construction**: Prepare and Erosion and Sediment Control Plan. **During construction**: Implement Erosion and Sediment Control Plan: 1. Cover all graded areas with protective materials. 2. Develop protocols for handling construction and maintenance materials 3. Mound all graded areas and soil piles 4. Design and position drainage outfalls to minimize erosion. 5. Adopt erosion control BMPs. 6. Construct temporary sediment catchments where necessary. 7. Do not grade after October 15 or before May 1. 8. Begin revegetation when graded area has attained finished grade, but no later than October 1.	Placer County DPW	Placer County DPW	X_____ X_____

Mitigation Measure	Timing	Implementing Party	Monitoring Party	Verification Date and Signature
Mitigation Measure P5.2: Prepare a Drainage Report To address the change in soil absorption rates, drainage patterns, and the rate and amount of runoff, Placer County DPW shall prepare a drainage report in conformance with the requirements of Section 5 of the Land Development Manual (LDM) and the Placer County Storm Water Management Manual that are in effect at the time of submittal. The drainage report shall be submitted to the DPW for review and approval. The report shall be prepared by a Registered Civil Engineer and shall, at a minimum, include a written text addressing existing conditions, the effects of the improvements, all appropriate calculations, a watershed map increases in downstream flows, and proposed onsite and offsite improvements and drainage easements to accommodate flows from the project. The report shall address storm drainage during construction and thereafter, and shall propose BMPs to reduce erosion and water quality degradation. The existing culvert at Linda Creek shall be evaluated in the drainage report for condition and capacity and shall be upgraded, replaced, or mitigated as specified by DPW. All stormwater drainage facilities shall be designed in accordance with the requirements of the County Storm Water Management Manual that are in effect at the time of submittal, and to the satisfaction of DPW. These facilities shall be constructed with project improvements and easements provided as required by DPW. Maintenance of these facilities shall be the responsibility of Placer County. PCFCWCD recommends using a minimum design peak flow rate of 510 cfs for the sizing of any proposed culverts at Auburn-Folsom Road. it is PCFCWCD's opinion that increasing the size of the existing culvert to prevent overtopping of the roadway during 100-year storm events would be beneficial to the area. The 1992 Dry Creek Watershed Flood Control Plan based its bridge/culvert replacement recommendations on passing the 100-year peak flow with no freeboard. Based on this, PCFCWCD would accept a culvert design that passes the future 100-year peak flow rate of 510 cfs with minimal freeboard below the proposed roadway. The drainage report will analyze the pre- and post development water surface elevations for 2-, 10-, *25*-, and 100-year storm events for future culvert proposals.	**Before construction**: Prepare drainage report. **During construction:** Implement identified BMPs.	Registered Civil Engineer Placer County DPW	Placer County DPW Placer County DPW	X_____ X_____

Mitigation Measure	Timing	Implementing Party	Monitoring Party	Verification Date and Signature
Mitigation Measure P5.3: Prepare a Postconstruction Storm Water Pollution Prevention Placer County Placer County Plan To address postconstruction degradation of surface water quality; Placer County DPW shall prepare a Storm Water Pollution Prevention Plan (SWPPP). The plan must include BMPs. Proposed BMPs are listed below. 1. Vegetate swales to minimize and decelerate flows and collect pollutants and suspended sediments. 2. Establish and maintain vegetation in swales and drainage ways to achieve an optimal balance of conveyance and water quality protection characteristics. 3. Install velocity dissipaters, rip-rap, and/or other appropriate devices to slow runoff, promote deposition of waterborne particles, and reduces the erosion potential of storm flows.	**Before construction**: Prepare Storm Water Pollution Prevention Plan (SWPPP). **During construction**: Implement BMPs: 1. Vegetate swales. 2. Establish and maintain vegetation in swales and drainageways. 3. Install velocity dissipaters, rip-rap, and/or other devices to slow runoff.	Placer County DPW Placer County DPW	Placer County DPW Placer County DPW	X_____ X_____

Mitigation Measure	Timing	Implementing Party	Monitoring Party	Verification Date and Signature
Mitigation Measure P6.la: Implement Sound Control Requirements To address the exposure of noise-sensitive land uses (residences and campgrounds) to construction noise, sound control shall conform to the provisions in Section 7-1.011, "Sound Control Requirements," of the Placer County Standard Specifications. The noise level from the contractor's operations and all construction activities, between the hours of 9:00 p.m. and 6:00 am., shall not exceed 86 cIBA at a distance of 15 meters (50 feet) from the construction area. This requirement is no way relieves the contractor from responsibility for complying with local ordinances regulating noise level. For blasting and drilling operations, Placer County DPW and its contractors shall limit operations to the period between 6:00 a.m. and 8:00 p.m. Monday through Friday and between 8:00 am. and 6:00 p.m. on Saturdays. No blasting or drilling shall be conducted on Sundays or on federal holidays All equipment shall have sound-control devices no less effective than those provided on the original equipment. No equipment shall have an unmuffled exhaust. As directed by the engineer, the contractor shall implement appropriate additional noise mitigation measures including, but not limited to, shutting off idling equipment and sending additional notifications of adjacent residents. Said noise level requirements shall apply to all equipment on the job or related to the project, including, but not limited to, trucks, transit mixers, and transient equipment that may or may not be owned by the contractor. The use of loud sound signals shall be avoided in favor of light warnings, excepting those required by safety laws for the protection of personnel.	**During construction:** Implement sound control procedures.	Construction Team	Placer County DPW	X_____
Mitigation Measure P6.lb: Locate Equipment as Far from Noise-Sensitive Receivers as Practicable To address the exposure of noise-sensitive land uses (residences and campgrounds) to construction noise, Placer County DPW shall locate all stationary noise-generating equipment, such as pumps and generators, as far as possible from nearby noise-sensitive receivers. Where practicable, nearby noise-sensitive receivers shall be shielded from noise-generating equipment using noise-attenuating buffers, such as structures or haul-truck trailers. Stationary noise sources located less than 91 meters (300 feet) from noise-sensitive receivers shall be equipped with noise-reducing engine housings. Portable acoustical barriers shall be placed around noise- generating equipment located within 61 meters (200 feet) of residences. Water tanks and equipment storage, staging, and warm-up areas shall be located as far from noise-sensitive receivers as possible.	**During construction**: Locate equipment far from noise-sensitive receivers.	Construction Team	Placer County DPW	X_____

Mitigation Measure	Timing	Implementing Party	Monitoring Party	Verification Date and Signature
Mitigation Measure P6.1c: Use Sound-Control Devices on Combustion-Powered Equipment To address the exposure of noise-sensitive land uses (residences and campgrounds) to construction noise, Placer County DPW shall ensure that all construction equipment powered by gasoline or diesel engines have sound-control devices at least as effective as those originally provided by the manufacturer. All equipment shall be operated and maintained to minimize noise generation. No equipment shall be permitted to have an unmuffled exhaust	**During construction**: Ensure use of sound-control devices for equipment	Placer County DPW	Placer County DPW	X_____
Mitigation Measure P6.1d: Shield/Shroud Any Impact Tools To address the exposure of noise-sensitive land uses (residences and campgrounds) to construction noise, any impact tools used during demolition of existing infrastructure shall be shrouded or shielded.	**During construction**: Shield or shroud impact tools.	Construction Team	Placer County DPW	X_____
Mitigation Measure P6.1e: Shut Off Machinery when Not in Use To address the exposure of noise-sensitive land uses (residences and campgrounds) to mobile noise-generating equipment and machinery shall be shut off when not in use.	**During construction**: Turn off mobile noise generating equipment when not in use.	Construction Team	Placer County DPW	X_____
Mitigation Measure P6.1f: Use Shortest Traveling Routes, when Practicable To address the exposure of noise-sensitive land uses (residences and campgrounds) to construction noise, Placer County DPW shall require that construction vehicles accessing the project area use the shortest route possible to and from local freeways provided that the routes do not expose additional receivers to noise.	**During construction:** Use shortest traveling routes.	Construction Team	Placer County DPW	X_____
Mitigation Measure P6.lg: Disseminate Essential Information to Residences and Implement a Complaint Response/Tracking Program To address the exposure of noise-sensitive land uses (residences and campgrounds) to construction noise, Placer County DPW shall send a notification of the construction schedule to people with residences and the operators of Beals Point Campground within 152 meters (500 feet) of the construction area. The notification shall be in writing and shall be delivered before construction. Placer County DPW and the construction contractor shall designate a noise disturbance coordinator, who shall be responsible for responding to complaints about construction noise. The coordinator shall determine the cause of each complaint and shall ensure that reasonable measures are implemented to correct the problem. A contact telephone number for the noise disturbance coordinator shall be posted conspicuously on construction site fences and shall be included in the written notification of the construction schedule sent to nearby residents.	**Before construction**: Deliver construction schedule to area residents **During construction**: Provide contact telephone number for complaints, research problems and ensure reasonable measures to correct problems.	Placer County DPW	Placer County DPW	X_____

Mitigation Measure	Timing	Implementing Party	Monitoring Party	Verification Date and Signature
Mitigation measure P6.1h: Implement Additional Mitigation Measures , as Needed and/or Required To address the exposure of noise-sensitive land uses (residences and campgrounds) to construction noise, throughout the construction period, the construction contractor shall implement additional noise mitigation measures at the request of Pacer County DPW. Additional measures may include changing the location of stationary noise-generation equipment, shutting off idling equipment, rescheduling construction activities, installing acoustical barriers around stationary sources of construction noise, temporarily relocating residents where feasible, using alternative equipment or construction methods that produce less noise, or other site-specific measures as appropriate.	**During construction:** Implement additional noise mitigation measurements.	Construction Team	Placer County DPW	X_____
Mitigation Measure P6.2: Employ Measures to Reduce Airblast and Vibration from Blasting To address the exposure of residences and campgrounds to airblast and vibration from blasting, the project contractor shall retain a qualified blasting specialist to develop a site-specific blasting program report to assess, control, and monitor airblast and ground vibration from blasting. The report shall be reviewed and approved by Placer County DPW before issuance of a blasting permit. The report shall include, at minimum following measures. 1. The contractor shall use current state-of-the-art technology to keep blast-related vibration at offsite residential and other occupied structures as low as possible, consistent with blasting safety. In no instance shall blast vibration, measured on the ground adjacent to a residential or other occupied structure, be allowed to exceed the frequency-dependent limits specified in the Alternative Blasting Level Criteria contained in U.S. Bureau of Mines (USBM) Report of Investigations 8507. 2. The project contractor shall use current state-of-the-art technology to keep airblast at offsite residential and other occupied structures as low as possible. In no instance shall airblast, measured at a residence or other occupied structure, be allowed to exceed the 0.013-pounds per square inch (psi) (133-dB) Limit recommended in USBM Report of Investigations 8485. 3. The project contractor shall monitor and record airblast and vibration for blasts within 305 meters (1,000 feet) of residences and other occupied structures to verify that measured levels are within the recommended limits at those locations. The contractor shall use blasting seismographs containing three channels that record in thee mutually perpendicular axes and which have a fourth channel for recording airblast. The frequency response of the instrumentation shall be from 2 to 250 Hertz (Hz), with a minimum sampling rate of 1,000 samples per second	**Before construction:** Develop blasting program report. **During construction:** Implement measures recommended by the report.	Blasting Specialist Construction Team	Placer County DPW Placer County DPW	X_____ X_____

Mitigation Measure	Timing	Implementing Party	Monitoring Party	Verification Date and Signature
per channel. The recorded data must be such that the frequency of the vibrations can be determined readily. if blasting is found to exceed specified levels, blasting shall cease, and alternative blasting or excavation methods shall be employed that result in the specified levels not being exceeded. Airblast and vibration monitoring shall take place at the nearest offsite residential or other occupied structure. If vibration levels are expected to be lower than those required to trigger the seismograph at that location, or if permission cannot be obtained to record at that location, recording shall be accomplished at some closer site in line with the structure. Specific locations and distances where airblast and vibration are measured shall be documented in detail along with measured airblasts and vibration amplitudes.				
Mitigation Measure P6.3: Use Noise-Reducing Pavement To address exposure of noise-sensitive land uses (residences and campgrounds) to increased traffic noise levels, Placer County DPW shall place noise-reducing open-graded asphalt pavement or equivalent throughout the project area. Placer County DPW shall consult staff from Sacramento County and Caltrans to identify the formulation specifications for the open-graded asphalt that are most effective in reducing traffic noise. The pavement type selected shall have a minimum sound reduction capacity of 3 dB, based on long-term weathered conditions.	**During construction**: Place noise-reducing open-graded asphalt pavement throughout project area	Placer County DPW	Placer County DPW	X_____
Mitigation Measure P7.la: Preserve Existing Trail Access Points in Project Design To reconcile potential inconstancies with local goals and policies, Placer County DPW shall ensure that any existing trailheads within the construction corridor are preserved or reconstructed after the project is complete.	**During construction**: Preserve existing trailheads. **After construction:** Reconstruct trailheads as needed	Placer County DPW	Placer County DPW	X_____
Mitigation Measure P7.lb: Provide Class II Bikeway To reconcile potential inconstancies with local goals and policies, Placer County DPW shall provide a Class II bikeway along Auburn-Folsom Road pursuant to the Placer County Bikeways Master Plan. The location, width, alignment, and surfacing of the bikeway shall be in accordance with the bikeway design standards listed in the Placer County General Plan.	**After construction:** Provide a Class II bikeway along the Auburn-Folsom Road.	Placer County DPW	Placer County DPW	X_____

Mitigation Measure	Timing	Implementing Party	Monitoring Party	Verification Date and Signature
Mitigation Measure P7.lc: Revegetate All Disturbed Areas To reconcile potential inconstancies with local goals and policies, Placer County DPW or an approved contractor shall revegetate all disturbed areas. Revegetation undertaken between April 1 and October 1 shall include regular watering to ensure adequate growth. A winterization plan shall be provided with project improvement Plans. It is Placer County DPW's responsibility to ensure proper installation and maintenance of erosion control/winterization during project construction. Placer County DPW shall provide for erosion control where roadside drainage is off of the pavement. Placer County DPW shall maintain a letter of credit, surety bond, or cash deposit in the amount of 100% of an approved engineer's estimate for winterization and permanent erosion control work before Improvement Plan approval to guarantee protection against erosion and improper grading practices.	**After construction**: Revegetate disturbed areas.	Placer County DPW	Placer County DPW	X_____
Mitigation Measure P7.3a: Select Street Lights to Minimize Exposure to Glare and Light To address increases in glare, streetlight(s), designed in accordance with the *American National Standard Practice for Roadway Lighting Manual,* shall be provided and installed to the satisfaction of Placer County DPW and PG&E at intersections along the project corridor, as needed. Streetlights shall be of a type, height, and design to direct lighting downward, shielding, to the greatest extent practical, light exposure beyond that needed for proper intersection lighting.	**During construction**: Provide and use streetlights designed to minimize excess glare/nighttime lighting	Construction team	Placer County PWD	X_____
Mitigation Measure P7.3b: Construct Fence between Affected Residences and Roadway To address potential degradation of views and increases in glare, Placer County DPW shall construct a solid fence between the new roadway and the two affected residences. The fence shall be constructed of a solid, opaque material that is visually cohesive with the surrounding structures and landscape. The fence shall be high enough to block direct headlight glare.	**During construction:** Construct a solid fence between the new roadway and affected residences.	Construction team	Placer County PWD	X_____
Mitigation Measure P7.4a: Obtain a Tree Permit To address the potential degradation of visual quality resulting from tree removal, before any construction activity, including grading or other site disturbance, Placer County DPW shall acquire a Tree Permit for the removal of trees 15 centimeters (6 inches) dbh or larger and multitrunked d trees with an aggregate diameter of 30 centimeters (10 inches) dbh or more.	**Before construction:** Acquire Tree Permit.	Placer County DPW	Placer County DPW	X_____

Mitigation Measure	Timing	Implementing Party	Monitoring Party	Verification Date and Signature
Mitigation Measure P7.4b: Mitigate Tree Removal To address the potential degradation of visual quality resulting from tree removal, trees identified for removal and trees with disturbance within their driplines shall be replaced along the corridor as feasible Trees removed from Reclamation property shall be replaced on Reclamation property on an inch-by-inch basis. For example, if 254 centimeters (100 inches) of tree diameter are proposed to be removed, the replacement trees shall be equal to 254 centimeters (100 inches) in diameter (aggregate). If feasible, seedlings should be from acorns collected within 30 miles of the project location in Placer or Sacramento Counties in the American River watershed and between the elevations of 100 and 800 feet. A 3-year monitoring and maintenance plan for the trees and any irrigation shall be required. The expectation is that there will be 100% survival for the replacement trees at the end of 3 years. In lieu of 50% of the mitigation for tree removal that is not on Reclamation property, a contribution to the Placer County Tree Preservation Fund shall be required. The value is based on 50% of the overall replacement estimate, which shall be submitted to the Placer County Development Review Committee (DRC) for review and approval. The trees shall be installed by the contractor and inspected and approved by Placer County DPW before completion of the project. At its discretion, the DRC may establish an alternate deadline for installation of replacement trees if weather or other circumstances prevent the completion of this requirement before completion of the project. For native trees removed from private lands, Placer County DPW may either replace the trees on the private lands with one 15-gallon native tree for each tree removed or contribute money into the Placer County Tree Preservation Fund.	**After construction:** Replace trees removed or disturbed during construction	Placer County DPW	Placer County DPW	X_____
Mitigation Measure P7.4c: Revegetate and Restore All Disturbed Areas to Minimize Visual Quality Impacts and Provide Screening To address the potential degradation of visual quality resulting from tree removal, Placer County DPW or an approved contractor shall revegetate and restore all disturbed areas, Revegetation undertaken between April 1 and October 1 shall include regular watering to ensure adequate growth. Restoration of trees and shrubs shall provide the screening for affected properties Revegetation of disturbed areas shall be consistent with the surrounding area. The County DPW shall prepare a restoration and revegetation plan for the trees and vegetation removed from Reclamation property. This plan shall address the	**Before construction:** Prepare a restoration and revegetation plan. **After construction**: Revegetate and restore disturbed areas.	Placer County DPW	Placer County DPW	X_____

Mitigation Measure	Timing	Implementing Party	Monitoring Party	Verification Date and Signature
mitigation of the removal of oaks and other trees from Reclamation property. The plan shall be prepared in consultation with Reclamation and shall provide screening to mitigate the increased visibility of the roadway from recreation facilities (campgrounds and trails).				
Mitigation Measure P7.5: Enhance Aesthetics of Retaining Walls, Soundwalls, and Other - Structural Elements To address the potential degradation of visual quality resulting from cuts) grading, and other changes in topography, Placer County DPW shall design and construct the visible surfaces of vertical, linear structural elements, including all retaining walls and sound walls, to maximize aesthetic appearance and1to achieve visual unity with the existing landscape character. The design shall be unified with the existing landscape in terms of color, proportion, texture, and material types and finishes. Design features that may be used to achieve enhanced aesthetics include: I. horizontal and vertical articulation of linear features to visually break up large masses (e.g., terracing sections of retaining walls or offsetting sections of soundwalls); 2. use of rough-textured surfaces to minimize glare, reduce potential for graffiti, and blend with the rugged appearance of the natural vegetation and rock outcrops; 3. use of native vegetation incorporated into retaining walls and as a screen for other structural elements; 4. use of warm, earthy hues; and 5. consistent architectural detailing among all structural elements to unify the roadway corridor.	**Before construction**: Design all visible surfaces of vertical and linear elements to be aesthetically pleasing. **During construction**: Implement design strategies.	Placer County DPW Placer County DPW	Placer County DPW Placer County DPW	X_____ X_____
MitigationMeasureP8.la: Obtain a Section 404 Permit from the Corps To address potential disturbance or loss of waters of the United States, Placer County DPW will obtain a Clean Water Act Section 404 permit from the Corps before beginning any grading, clearing, or excavation. The project is subject to review and approval by the Corps.	**Before construction**: Obtain a Clean Water Action Section 404 permit.	Placer County DPW	Corps	X_____
Mitigation Measure P8.lb: Obtain a Section 401 Water Quality Certification or Waiver from the Central Valley RWQCB To address potential disturbance or loss of waters of the United States, Placer County DPW will obtain a Clean Water Act Section 401 certificate or waiver from the RWQCB before beginning any grading, clearing, or excavation. As a condition of the Section 404 permit, the project is subject to review and approval by the Central Valley RWQCB.	**Before construction**: Obtain a Clean Water Act Section 401 certification or waiver.	Placer County DPW	Corps	X_____

Mitigation Measure	Timing	Implementing Party	Monitoring Party	Verification Date and Signature
Mitigation Measure P8.lc: Obtain a Section 1602 Streambed Alteration Agreement from DFG To address potential disturbance or loss of waters of the United States, Placer County DPW will obtain a streambed alteration agreement from DFG before beginning any grading, clearing, or excavation. The project is subject to review by DFG.	**Before construction**: Obtain a streambed alteration agreement from the California Department of Fish and Game (DFG).	Placer County DPW	DFG	X_____
Mitigation Measure P8.ld: Pay Appropriate Environmental Document Review Fee To address potential disturbance or loss of waters of the United States, Placer County DPW will pay the appropriate environmental document fees to DFG. Pursuant to Section 21089(b) of the California Public Resources Code and Section 711.4 et seq. of the California Fish and Game Code, the approval of this project shall not be considered final unless the specified fees are paid to DFG. The fees currently required are $880 for projects with environmental impact reports and $1,280 for projects with negative declarations; however, the actual fee paid will be that in effect at the time payment occurs. Without the appropriate fee, the Notice of Determination (which the County is required to file within 5 days of project approval) is not operative, vested, or final, and shall not be accepted by the County Clerk.	**Before construction:** Pay appropriate environmental document review fee to DFG.	Placer County DPW	DFG	X_____
Mitigation Measure P8.le: Install Temporary Construction Fencing to Protect Wetlands To address potential disturbance or loss of waters of the United States, Placer County DPW shall install a 1.2-meter-tall (4-foot-tall), brightly colored (usually yellow or orange), synthetic mesh-material fence (or an equivalent approved by the Development Review Committee [DRC]) at the following location before allowing any construction equipment to be moved onto the site and before any construction activities take place. I. Adjacent to any and all wetlands, drainages, and creeks that are within 15.2 meters (50 feet) of any proposed construction activity No construction activities, including grading, shall be allowed until this condition is satisfied. Any encroachment within wetland areas must first be approved by the DRC. No grading, clearing, or storage of equipment or machinery, or similar activity, may occur until a representative of the DRC has inspected and approved all temporary construction fencing. This restriction applies to both onsite and offsite improvements. The temporary fencing shall be maintained until all construction activities are complete. No grading, trenching, or movement of construction equipment shall be allowed within fenced areas.	**Before construction:** Install temporary construction fencing to protect wetlands.	Placer County DPW	Placer County DPW	X_____

Mitigation Measure	Timing	Implementing Party	Monitoring Party	Verification Date and Signature
Mitigation Measure P8.1f: Avoid and Minimize Disturbance of Waters of the United States, Including Wetlands To address potential disturbance or loss of waters of the United States, to the extent possible, Placer County DPW shall avoid and minimize impacts on waters of the United States (including wetlands) by implementing the following measures. 1. Redesign or modify the project to avoid direct and indirect impacts on wetlands and streams, if feasible. 2. Avoid construction activities in saturated or ponded wetlands and streams during the wet season (spring and winter) to the maximum extent possible. Where such activities are unavoidable, protective practices, such as use of padding or vehicles with balloon tires, shall be employed. 3. Where determined necessary by resource specialists, use geotextile cushions and other materials (e.g., timber pads, prefabricated equipment pads, geotextile fabric) in saturated conditions to minimize damage to the substrate and vegetation. 4. Stabilize exposed slopes and streambanks immediately upon completion of construction activities. Other waters of the United States shall be restored in a manner that encourages vegetation to reestablish to its preproject condition and reduces the effects of erosion on the drainage system. 5. In highly erodible stream systems, stabilize banks using a nonvegetative material that will bind the soil initially and break down within a few years. If the project engineers determine that more aggressive erosion control treatments are needed, use geotextile mats, excelsior blankets, or other soil stabilization products. 6. During construction, remove trees, shrubs, debris, or soils that are inadvertently deposited below the ordinary high-water mark of streams in a manner that minimizes disturbance of the drainage bed and bank. 7. In-stream construction within the ordinary high-water mark of Linda Creek shall be restricted to the low-flow period of April through October. 8. All activities shall be completed promptly to minimize their duration and resultant impacts. These measures shall be incorporated into contract specifications and implemented by the construction contractor.	**During construction:** Minimize disturbance of waters of the United States by implementing BMPs.	Construction Team	Placer County DPW	X_____
Mitigation Measure P8.lg: Confine Construction Equipment and Associated Activities to the Designated Work Zone in Areas That Support Wetland Resources To address potential disturbance or loss of waters of the United States, construction equipment shall be confined to a designated work zone (that	**During construction:** Confine construction equipment and associated activities to designated work zones	Construction team	Placer Count DPW	X_____

Mitigation Measure	Timing	Implementing Party	Monitoring Party	Verification Date and Signature
includes access roads) along the project corridor. Before construction begins, the work zone shall be clearly staked and flagged. During construction, construction monitors and resource monitors shall ensure that construction equipment and associated activities avoid disturbing sensitive resources outside the designated work zones.				
Mitigation Measure P8.lh: Compensate for the Loss of Waters of the United States To address potential disturbance or loss of waters of the United States, if waters of the United States (including wetlands) are filled as part of the project, Placer County DPW shall compensate for permanent impacts to ensure no net loss of habitat functions and values. The compensation shall be provided at a minimum ratio of 2:1 (2 acres restored or created for every 1 acre filled) and may be a combination of onsite restoration/creation, offsite restoration, or mitigation credits. Compensation ratios shall be based on site-specific information and determined through coordination with state and federal agencies, as part of the permitting process for the project. Compensation options are presented below; however, any wetlands affected on Reclamation land must be restored on Reclamation land. 1. Purchase mitigation bank credits at a USE WS-approved ecosystem preservation bank. Wildland's Sheridan Ranch Conservation Bank in Placer County ranges from $44,000/acre for wetland mitigation. Before approval of the Improvement Plans, Placer County DPW shall provide written evidence to the DRC that compensatory habitat has been established through the purchase of mitigation credits. The amount to be paid shall be the fee that is in effect at the time the fee is paid. The estimated fee per alternative is as follows. Alternative 1: Widen Roadway to the West $7,392 Alternative 2: Widen Roadway to the East $8,360 Alternative 3: Widen Roadway Equally on Both Sides S6,600 Alternative 4: County DPW—Preferred Alternative $8,800 OR 2. Contribute funds, equal to the amount needed to purchase mitigation bank credits, to restoration of wetlands and other waters in the Folsom Lake SRA, American River corridor, or other nearby lands that are publicly managed and will be protected in perpetuity. Placer County DPW shall coordinate with appropriate individuals to determine whether there is a potential to create, restore,	**After construction**: Compensate for loss of waters of the United States.	Placer County DPW	Placer County DPW	X_____

Mitigation Measure	Timing	Implementing Party	Monitoring Party	Verification Date and Signature
or enhance waters of the United States at nearby preserved lands. OR 3. Develop a wetland restoration plan that involves creating or enhancing wetland habitat on site or next to the project area. Potential creation and enhancement sites shall be evaluated by the County and Reclamation to determine whether this is a feasible option. If Placer County DPW determines that onsite or offsite restoration is possible, a restoration plan will be developed that describes where and when restoration will occur and who will be responsible for developing, implementing, and monitoring the restoration plan. When this option is selected, restoration will be selected in an appropriate area in close proximity to the project area.				

Mitigation Measure	Timing	Implementing Party	Monitoring Party	Verification Date and Signature
Mitigation Measure P8.2a: Install Temporary Construction Fencing to Protect Trees To address the potential loss or disturbance of valley foothill riparian forest, Placer County DPW shall install a 1.2-meter-tall (4-foot-tall), brightly colored (usually yellow or orange), synthetic mesh—material fence (or an equivalent approved by the DRC) at the following location before allowing any construction equipment to be moved onto the site and before any construction activities take place. 1. At the limits of construction, outside the dripline of all trees that are 15.2 centimeters (6 inches) dbh (diameter at breast height), or 25.4 centimeters (10 inches) dbh aggregate for multitrunk trees, within 15.2 meters (50 feet) of any grading, road improvements, underground utilities, or other development activity, or as otherwise shown on the site plan. All trees that are to be saved shall be fenced. No construction activity, including grading, shall be allowed until this condition is satisfied. Any encroachment within these areas, such as within the driplines of trees to be saved, must first be approved by the DRC. No grading, clearing, or storage of equipment or machinery, or similar activity, may occur until a representative of the ORC has inspected and approved all temporary construction fencing. The temporary fencing shall be maintained until all construction activities are complete. No grading, trenching, or movement of construction equipment shall be allowed within fenced areas. Protection for native trees on slopes shall include installation of a silt fence. A silt fence shall be installed at the upslope base of the protective fence to prevent soil from drifting down over the root zone. Efforts shall be made to save trees where feasible. These efforts may include the use of retaining walls or other techniques commonly associated with tree preservation. The temporary construction fencing and a note reflecting this condition shall be shown on the Improvement Plans.	**Before construction**: Install temporary construction fencing to protect trees.	Construction team	Placer County PWD	X_____

Mitigation Measure	Timing	Implementing Party	Monitoring Party	Verification Date and Signature
Mitigation Measure P8.2b: Compensate for Permanent Impacts on Riparian Communities To address the potential loss or disturbance of valley foothill riparian forest, Placer County DPW shall compensate for permanent impacts on riparian communities by implementing one or a combination of the following options. The compensation shall be provided at a minimum ratio of 2:1 (2 acres restored or created for every 1 acre filled) and may be a combination of onsite restoration/creation, offsite restoration, or mitigation credits. Compensation ratios shall be based on site-specific information and determined through coordination with state and federal agencies, as part of the permitting process for the project. Compensation options are presented below; however, any riparian communities affected on Reclamation land must be restored on Reclamation land. 1. Purchase mitigation bank credits at a locally approved bank. Wildland' s Sheridan Ranch Conservation Bank in Placer County ranges from $49,000/acre for riparian mitigation. Before approval of the Improvement Plans, Placer County DPW shall provide written evidence to the DRC that compensatory habitat has been established through the purchase of mitigation credits. The amount to be paid shall be the fee that is in effect at the time the fee is paid. The estimated fee per alternative is as follows. Alternative 1: Widen Roadway to the West $4,900 Alternative 2: Widen Roadway to the East $10,780 Alternative 3: Widen Roadway Equally on Both Sides $6,860 Alternative 4: County DPW—Preferred Alternative $9,800 OR 2. Contribute funds for riparian restoration activities in the Folsom Lake SRA, American River corridor, or other public lands. Placer County DPW shall contact appropriate individuals to determine whether there is a potential to create, restore, or enhance riparian habitat within these preserves. OR 3. Develop a riparian restoration plan that involves creating or enhancing riparian habitat in the project area. Potential creation and enhancement sites shall be evaluated by the County and Reclamation to determine whether this is a feasible option. If Placer County DPW determines that onsite or offsite restoration is possible, a restoration plan will be developed that describes where and when restoration will occur and who will be responsible for developing, implementing, and monitoring the restoration plan.	**After construction**: Compensate for permanent impacts by implementing one or more of the following options: 1. Purchase mitigation bank credits. 2. Contribute thuds for riparian restoration activities 3. Develop a riparian restoration plan.	Placer County DPW	Placer County DPW	X_____

Mitigation Measure	Timing	Implementing Party	Monitoring Party	Verification Date and Signature
Mitigation Measure P8.2c: Update the Tree Survey Report for the Selected Alternative To address the potential loss or disturbance of valley foothill riparian forest, Placer County shall provide the DRC with an updated tree survey report (by an International Society of Arboriculture- [ISA-] Certified Arborist) depicting the exact locations of the following: 1. trees that are 15.2 centimeters (6 inches) dbh (diameter at breast height) or larger and that grow within 15.2 nters (50 feet) of any grading, road improvements, underground utilities, or other activities; 2. multitrunk trees that are 25.4 centimeters (10 inches) dbh or more (aggregate) and that grow within 15.2 meters (50 feet) of any grading, road improvements, underground utilities, or other activities; 3. trees that are 45.7 centimeters (18 inches) dbh or larger and that are located along the roadway corridor; and 4. tees that would be disturbed by offsite improvements (e.g., road improvements, underground utilities). The tree survey report shall list the sizes (diameter at 1.2 meters [4 feet] above the ground), species of trees, spot elevations, and approximate driplines. The report also shall identify the trees to be saved, without disturbance, and those to be removed. The locations of trees to be saved and those to be removed shall be shown on the survey map and superimposed over the grading plan. This map also shall show all proposed improvements, including any underground utilities. The survey report shall be reviewed and approved by the DRC before any construction activity, including preliminary clearing or grading.	**Before construction**: Provide the DPW Design Review Committee (DRC) with an updated tree survey report. **During construction**: Implement the recommendations of the tree survey report	Certified arborist Construction team or contractor	Placer County DPW Placer County DPW	X_____ X_____

Mitigation Measure	Timing	Implementing Party	Monitoring Party	Verification Date and Signature
Mitigation Measure P8.2d: Avoid and Minimize Disturbance of Riparian Communities To address the potential loss or disturbance of valley foothill riparian forest, to the extent possible, Placer County DPW shall avoid impacts on riparian communities by implementing the following measures. 1. Redesign or modify the project to avoid direct and indirect impacts on riparian habitats, if feasible. 2. Protect riparian habitats that are located near the project area by installing temporary construction fencing to protect the riparian vegetation. Depending on site-specific conditions, this buffer may be narrower or wider than 6 meters (20 feet). The locations of the fencing shall be marked in the field with stakes and flagging and shown on the construction drawings. The construction specifications shall contain clear language that prohibits construction-related activities, vehicle operation, material and equipment storage, and other surface-disturbing activities within the fenced environmentally sensitive areas. 3. Minimize the potential for long-term loss of riparian vegetation by trimming vegetation rather than removing the entire shrub. Shrubs that need to be trimmed shall be cut at least 0.3 meter (1 foot) above ground level to leave the root systems intact and allow for more rapid regeneration. Cutting shall be limited to the minimum area necessary within the construction zone. Cutting shall be allowed only for shrubs (all trees shall be avoided) in areas that do not provide habitat for sensitive species. To protect nesting birds, Reclamation does not allow pruning or removal of woody riparian vegetation from March 15 to July 31. 4. Require the contractor to perform any necessary pruning, including pruning for utility line clearance, using the "Pruning Guidelines" adopted by the California Department of Forestry and Fire Protection. 5. Inspect the areas that undergo vegetative pruning and tree removal immediately before construction, immediately after construction, and 1 year after construction to determine the amount of existing vegetative cover, cover that has been removed, and cover that resprouts. If, after 1 year, these areas have not resprouted sufficiently to return the cover to the preproject level, the contractor will be responsible for replanting the areas with the same species to reestablish the cover to the preproject condition.	**Before construction:** inspect areas that will undergo pruning. **During construction**: 1. Redesign or modify the project to avoid impacts. 2. Install construction fencing around habitat. 3. Trim vegetation rather than remove entire shrub. 4. Use "Pruning Guidelines" adopted by California Department of Forest and Fire Protection. Immediately after construction: Inspect areas that underwent vegetative pruning and tree removal. **1 year after construction:** Inspect area that underwent vegetative pruning and tree removal; replant areas with same species if sufficient cover has not grown back.	Construction team or contractor Placer County DPW or identified contractor	Placer County DPW Placer County DPW	X_____ X_____

Mitigation Measure	Timing	Implementing Party	Monitoring Party	Verification Date and Signature
Mitigation Measure P8.3a: Obtain a Tree Permit To address the loss or disturbance of blue oak-digger pine woodland and native trees, Placer County DPW shall acquire a Tree Permit for the removal of trees 15 centimeters (6 inches) dbh or larger and multi-trunked trees with an aggregate diameter of 30 centimeters (10 inches) dbh or more.	**Before construction:** Require a Tree Permit before the removal of any trees 15 centimeters in diameter at breast height or larger.	Placer County DPW	Placer County DPW	X_____
Mitigation Measure P8.3b: Mitigate Tree Removal To address the loss or disturbance of blue oak-digger pine woodland and native trees, trees identified for removal and trees with disturbance within their driplines shall be replaced along the corridor as feasible. 1. Trees removed from Reclamation property shall be replaced on Reclamation property on an inch-by-inch basis. For example, if 254 centimeters (100 inches) of tree diameter are proposed to be removed, the replacement trees shall be equal to 254 centimeters (100 inches) in diameter (aggregate). if feasible, seedlings should be from acorns collected within 30 miles of the project location in Placer or Sacramento Counties in the American River watershed and between the elevations of 100 and 800 feet. A 3-year monitoring and maintenance plan for the trees and any irrigation shall be required. The expectation is that there will be 100% survival for the replacement trees at the end of 3 years. Tree replacement on Reclamation property shall take place in close proximity to the project corridor. 2. In lieu of 50% of the mitigation for tree removal that is not on Reclamation property, a contribution to the Placer County Tree Preservation Fund shall be required. The value is based on 50% of the overall replacement estimate, which shall be submitted to the Placer County Development Review Committee (DRC) for review and approval. 3. The trees shall be installed by the contractor and inspected and approved by Placer County DPW before completion of the project. At its discretion, the DRC may establish an alternate deadline for installation of replacement trees if weather or other circumstances prevent the completion of this requirement before completion of the project. 4. For native trees removed from private lands, Placer County DPW may either: o replace the trees on the private lands with one 15-gallon native tree for each tree removed or o contribute money into the Placer County Tree Preservation Fund Mitigation	**After construction**: Mitigate tree removal by: 1. Replacing trees removed during construction. 2. Contributing to the Placer County Tree Preservation Fund. 3. Inspecting tree replacement.	Construction team or contractor	Placer County DPW	X_____

Mitigation Measure	Timing	Implementing Party	Monitoring Party	Verification Date and Signature
Measure P8.3c: Revegetate All Disturbed Areas To address the loss or disturbance of blue oak-digger pine woodland and native trees, Placer DPW DPW County DPW or an approved contractor shall revegetate all disturbed areas. Revegetation undertaken between April 1 and October 1 shall include regular watering to ensure adequate growth, A winterization plan shall be provided with project Improvement Plans. It is Placer County DPW's responsibility to ensure proper installation and maintenance of erosion control/winterization during project construction. Placer County DPW shall provide for erosion control where roadside drainage is off of the pavement. Placer County DPW shall maintain a letter of credit, surety bond, or cash deposit in the amount of 100% of an approved engineer's estimate for winterization and permanent erosion control work before Improvement Plan approval to guarantee protection against erosion and improper grading practices.	**After construction**: Revegetate all disturbed areas	Placer County DPW	Placer County DPW	X_____
Mitigation Measure P8.3d: Install Temporary Construction Fencing to Protect Trees To address the loss or disturbance of blue oak-digger pine woodland and native trees, Placer DPW shall install a 1.2-meter-tall (4-foot-tall), brightly colored (usually yellow or orange), synthetic mesh—material fence (or an equivalent approved by the DRC) at the following location before allowing any construction equipment to be moved onto the site and before any construction activities take place. 1. At the limits of construction, outside the dripline of all trees that are 15.2 centimeters (6 inches) dbh (diameter at breast height), or 25.4 centimeters (10 inches) dbh aggregate for multitrunk trees, within 15.2 meters (50 feet) of any grading, road improvements, underground utilities, or other development activity, or as otherwise shown on the site plan. All trees that are to be saved shall be fenced. No construction activity, including grading, shall be allowed until this condition is satisfied. Any encroachment within these areas, such as within the driplines of trees to he saved, must first be approved by the DRC No grading, clearing, or storage of equipment or machinery, or similar activity, may occur until a representative of the DRC has inspected and approved all temporary construction fencing. The temporary fencing shall be maintained until all construction activities are complete. No grading, trenching, or movement of construction equipment shall be allowed within fenced areas. Protection for native trees on slopes shall include installation of a silt fence. A silt	**Before construction**; Install temporary construction fencing	Construction Team	Placer county DPW	X_____

Mitigation Measure	Timing	Implementing Party	Monitoring Party	Verification Date and Signature
fence shall be installed at the upslope base of the protective fence to prevent soil from drifting down over the root zone. Efforts shall be made to save trees where feasible. These efforts may include the use of retaining walls or other techniques commonly associated with tree preservation. The temporary construction fencing and a note reflecting this condition shall be shown on the Improvement Plans.				
Mitigation Measure P8.3e: Update the Tree Survey Report for the Selected Alternative To address the loss or disturbance of blue oak-digger pine woodland and native trees, Placer County DPW shall provide the DRC with an updated tree survey report (by an ISA-Certified Arborist) depicting the exact locations of the following: 1. trees that are 15.2 centimeters (6 inches) dbh (diameter at breast height) or larger and that grow within 15.2 meters (50 feet) of any grading, road improvements, underground utilities, or other activities; 2. multitrunk trees that are 25.4 centimeters (10 inches) dbh or more (aggregate) and that grow within 112 meters (50 feet) of any grading, road improvements, underground utilities, or other activities; 3. trees that are 45.7 centimeters (18 inches) dbh or larger and that are located along the roadway corridor; and 4. trees that would be disturbed by offsite improvements (e.g., road improvements, underground utilities). The tree survey report shall list the sizes (diameter at 1.2 meters [4 feet] above the ground), species of trees, spot elevations, and approximate driplines. The report also shall identify the trees to be saved, without disturbance, and those to be removed. The locations of trees to be saved and those to be removed shall be shown on the survey map and superimposed over the grading plan. This map also shall show all proposed improvements, including any underground utilities. The survey report shall be reviewed and approved by the DRC before any development activity on site, including preliminary clearing or grading.	**Before construction**: Complete a Placer County tree survey report identifying DPW trees to be saved, undisturbed, and removed. **During construction:** Follow guidelines of the survey report.	Placer County DPW Construction team or contractor	Placer County DPW Placer County DPW	X_____ X_____

Mitigation Measure	Timing	Implementing Party	Monitoring Party	Verification Date and Signature
Mitigation Measure P8.4a: Complete Section 7 ESA Consultation with USFWS for Potential Impacts on VELB To address the potential mortality of individual elderberry valley longhorn beetles or disturbance of habitat, Placer County DPW will obtain approval from USEWS before beginning any grading, clearing, or excavation. The project is subject to review and approval by USFWS.	**Before construction**: Complete Section 7 Endangered Species Act (ESA) consultation with the U.S. Fish and Wildlife Service (USFWS).	Placer County DPW	USFWS	X_____
Mitigation Measure P8.4b: Establish a Minimum 6-Meter-Wide (20-Foot-Wide) Buffer around All Elderberry Shrubs That Will Not Be Removed To address the potential mortality of individual elderberry valley longhorn beetles or disturbance of habitat, Placer County DPW shall ensure that a minimum 1.2-meter-tall (4-foot-tall) temporary, plastic mesh—type construction fence (Tensor Polygrid or equivalent) is installed at least 6 meters (20 feet) around the driplines of elderberry shrubs that are within 30.5 meters (100 feet) of the construction area but that will not be removed. This fencing is intended to prevent encroachment by construction vehicles and personnel. The exact location of the fencing shall be determined by a qualified biologist, with the goal of protecting sensitive biological resources (i.e., habitat for VELD). The fencing shall be strung tightly on posts set at a maximum interval of 3 meters (10 feet). The fencing shall be installed in a way that prevents equipment from enlarging the work area beyond the area necessary to complete the work. The fencing shall be checked and maintained weekly until all construction is completed. This buffer zone shall be marked by a sign stating, “This is habitat of the valley elderberry longhorn beetle, a threatened species, and must not be disturbed. This species is protected by the Endangered Species Act of 1973, as amended. Violators are subject to prosecution, fines, and imprisonment.” No construction activity, including grading, shall be allowed until this condition is satisfied. No grading, clearing, storage of equipment or machinery, or other disturbance or activity may occur until a representative of Reclamation has inspected and approved all temporary construction fencing. The fencing and a note reflecting this condition shall be shown on the Improvement Plans.	**Before construction**: Establish a minimum 6-meter-wide (20-foot- wide) buffer around all elderberry shrubs.	Placer County DPW	Placer County DPW	X_____
Mitigation Measure P8.4e Implement Dust Control Measures To address the potential mortality of individual elderberry valley longhorn beetles or disturbance of habitat, Placer County DPW shall ensure that dust control measures are implemented for all ground-disturbing activities in the project area. These measures may include application of water to graded and disturbed areas that are unvegetated. To avoid attracting Argentine ants, at no time shall water be sprayed within the driplines of elderberry plants.	**During construction**: Implement dust control measures	Construction team	Placer County DPW	X_____

Mitigation Measure	Timing	Implementing Party	Monitoring Party	Verification Date and Signature
Mitigation Measure P8.4d: Transplant Elderberry Shrubs That Cannot Be Avoided To address the potential mortality of individual elderberry valley longhorn beetles or disturbance of habitat, Placer County OPW shall ensure that all elderberry shrubs with one or more sterns measuring 2.5 centimeters (1.0 inch) or more in diameter, and that cannot be avoided during construction, shall be transplanted to a conservation area in accordance with USFWS's Conservation Guidelines for Valley Elderberry Longhorn Beetle (U.S. Fish and Wildlife Service 1999). In the event that an elderberry shrub is unlikely to survive transplantation because of poor condition or location, the shrub may be exempted from transplantation at the discretion of USFWS. Implementation of Alternative 1 would require transplanting three elderberry shrubs, and implementation of Alternative 2, 3, or 4 would require transplanting five elderberry shrubs.	**Before or During construction:** Transplant elderberry shrubs that cannot be avoided.	Placer County DPW	Placer County DPW	X_____

Mitigation Measure	Timing	Implementing Party	Monitoring Party	Verification Date and Signature
Mitigation Measures P8.4e: Compensate for the Removal or Destruction of Valley Elderberry Longhorn Beetle Habitat To address the potential mortality of individual elderberry valley longhorn beetles or disturbance of habitat, Placer County DPW shall compensate for the removal or destruction of all elderberry stems that measure 2.5 centimeters (1 inch) or more at ground level (VELB habitat) and that are located within 6 meters (20 feet) of construction activities. Compensation shall include planting replacement elderberry seedlings or cuttings and associated native plantings within a USFWS approved conservation area at a ratio between 1:1 and 8:1 (new plantings to affected stems), depending on the diameter of the stern at ground level (see Table 8-6), the presence or absence of exit holes, and whether the shrub is located in riparian habitat as indicated in the USFWS guidelines for VELB. Placer County DPW shall compensate for all shrubs that are directly affected (i.e., removed/transplanted or destroyed) by the project. Placer County DPW shall compensate for direct effects on VELB habitat as described below. All calculations for compensation of VELE habitat are provided in the BA (Appendix 3). Purchase credits at the Wildland's Sheridan Ranch Conservation Bank in Placer County, a USFWS-approved mitigation bank. The cost to establish a conservation area for VELB at this bank is estimated to be $1,500 per unit; each unit includes five elderberry seedlings and five associated riparian plantings. Only whole units can be purchased using compensation ratios identified in the USFWS guidelines for VELB and based on stem counts listed in Table 8-6. Alternative 1 would require the purchase of two mitigation credits (nine elderberry seedlings and seven native plantings), for an approximate cost of $3,000, and Alternatives 2, 3, and 4 would require the purchase of three mitigation credits (14 elderberry seedlings and 11 native plantings) for an approximate cost of $4,500. The exact cost to purchase mitigation credits for project- related impacts would be determined during formal consultation with USFWS.	**After construction:** Compensate for the removal of beetle habitat; compensation includes replacing removed shrubs with elderberry seedlings or cuttings, planted with associated native plants	Placer County DPW	Placer County DPW	X_____
Mitigation Measure PS.4f: Conduct Mandatory Contractor/Worker Awareness Training for Construction Personnel To address the potential mortality of individual elderberry valley longhorn beetles or disturbance of habitat, a USFWS-approved biologist shall conduct mandatory contractor/worker awareness training for construction personnel. If new construction personnel are added to the project, the contractor shall ensure that the personnel receive the mandatory training before starting work. This measure is also specified in the BA for the proposed project.	**Before construction:** Conduct mandatory contractor/worker awareness training for construction personnel.	Approved biologist	USFWS	X_____

Mitigation Measure	Timing	Implementing Party	Monitoring Party	Verification Date and Signature
Mitigation Measure P8.5: Conduct a Preconstruction Survey for Northwestern Pond Turtle at the Baldwin Reservoir Canal To address the potential mortality of northwestern pond turtles, Placer County DPW shall retain a qualified wildlife biologist to conduct a preconstruction northwestern pond turtle survey at the Baldwin Reservoir canal. The preconstruction survey shall be conducted at most 24 hours before the start of construction activities at the canal, If a northwestem pond turtle is located in the construction area, the biologist shall relocate the turtle downstream of the project area, toward Baldwin Reservoir, and an exclusion fence shall be installed to prevent the movement of turtles back into the construction area.	**Before construction**: Conduct a northwestern pond turtle survey at most 24 hours before the start of construction.	Wildlife biologist	Placer County DPW	X_____
Mitigation Measure P8.6a: Conduct a Focused Preconstruction Survey for Raptor Nests and Nesting Birds To address the potential disturbance of nesting loggerhead shrike, oak titmouse, white-tailed kite, and non-special-status nesting migratory birds and raptors, before grading and during the raptor nesting season (March through July), a qualified raptor biologist shall conduct a focused survey for raptor nests in areas potentially affected by project implementation. If construction is proposed to take place during the raptor breeding season, no construction activity shall take place within 152.4 meters (500 feet) of an active nest until the young have fledged (as determined by a qualified raptor biologist). ‘íA note to this effect shall be placed on the Improvement Plans. A copy of the survey shall be provided to the Placer County DPW, Reclamation, and DFG. If an active raptor nest is identified on site, appropriate mitigation measures shall be developed and implemented in consultation with DFG.	**Before construction**: Conduct a focused survey for raptor nests. **During construction**: Limit construction to 152.4 meters (500 feet) from occupied nests.	Qualified biologist Construction team	Placer County DPW Placer County DPW	X_____ X_____
Mitigation Measure P8.6b: Avoid Disturbance of Nesting Special-Status and Non-Special- Status Migratory Birds and Raptors To avoid impacts on nesting loggerhead shrike, oak titmouse, white-tailed kite, or other non special-status migratory birds and raptors, Placer County DPW shall implement the following avoidance and minimization measures. 1. To the extent possible, shrub, and tree removal activities associated with the project shall be conducted outside the breeding season (which generally occurs between March 1 and August 15) for migratory birds and raptors. 2. If shrub and tree removal activities are to take place during the breeding season for these species, a qualified wildlife biologist shall be hired to conduct focused nest surveys for active loggerhead shrike, oak titmouse, white-tailed kite, and non-special-status migratory bird and raptor nests. 3. If active loggerhead shrike, white-tailed kite, or other non-special-status raptor	**During construction**: Implement the following measures: 1. Conduct shrub and tree removal activities outside breeding season. 2. Conduct focused nest surveys if construction will take place during breeding season. 3. Implement “no-disturbance” buffers around occupied nest sites.	Placer County DPW	Placer County DPW	X_____

Mitigation Measure	Timing	Implementing Party	Monitoring Party	Verification Date and Signature
nests are found in the project area, and if construction activities must occur during the nesting period, Placer County DPW shall consult DFG to determine and implement appropriate “no- disturbance” buffers around the nest sites until the young have fledged (as determined by a qualified biologist), 4. if active oak titmouse or other non-special-status migratory bird nests are found in the project area, and if construction activities must occur during the nesting period, Placer County DPW shall consult USFWS to develop and implement a memorandum of understanding (MOU) to promote the conservation of migratory bird populations.	4. Consult USFWS to develop and implement a memorandum of understanding (MOU) to promote conservation.			
Mitigation Measure P8.7: Avoid Disturbance of Nesting Swallows To avoid impacts on nesting swallows, Placer County DPW shall implement the following avoidance and minimization measures. 1. To the extent possible, construction activities that could disturb nesting swallows shall be conducted outside the breeding season (which generally occurs between March 1 and September 1) for these species. 2. If construction activities are to take place during the swallows’ breeding season, Placer County DPW shall hire a qualified biologist to inspect the concrete box culvert at the Baldwin Reservoir canal during the swallows’ nonbreeding season. If nests are found and are abandoned, they may be removed. To avoid damaging active nests, nests must be removed before the breeding season begins (March 1). A permit from DFG and USFWS is required if active nests must be removed. 3. After nests are removed, the underside of the concrete box culvert at the Baldwin Reservoir canal shall be covered with 13- to 1.9-centimeter (0.5- to 0.75-inch) mesh net or poultry wire. All net installation shall occur before March 1. The netting shall be anchored so swallows cannot attach their nests to the bridge though gaps in the net. 4. If netting of the concrete box culvert at the Baldwin Reservoir canal does not occur by March 1 and swallows colonize the bridge, modifications to this structure shall not begin before September 1 of that year or until the young have fledged and all nest use has been completed. 5. If appropriate steps are taken to prevent swallows from constructing new nests, work can proceed at any time of the year.	**During construction:** Implement the following measures: 1. To the extent possible, conduct construction activities outside breeding season. 2. If construction takes place during breeding season, a biologist shall inspect concrete box culvert at Baldwin Reservoir. 3. Remove inactive nests 4. Cover box culvert with mesh wire to prevent reentry of swallows.	Qualified Biologist	Placer County DPW	X_____

Mitigation Measure	Timing	Implementing Party	Monitoring Party	Verification Date and Signature
Mitigation Measure P9.la: Prepare and Implement Improvement Plans, Specifications, and Cost Estimates To address potential construction-related soil erosion and sedimentation, Placer County DPW shall prepare Improvement Plans, specifications, and cost estimates (per the requirements of Section II of the LDM. The plans shall show all conditions for the project as well as pertinent topographical features both on site and off site. All existing and proposed utilities and easements, on site and adjacent to the project, that may be affected by planned construction, shall be shown on the plans. All landscaping and irrigation facilities in the public right-of-way (or public easements), or landscaping within sight-distance areas at intersections, shall be included in the Improvement Plans. If the Design/Site Review process and/or DRC review is required as a condition of project approval, said review process shall be completed before submittal of Improvement Plans. Record drawings shall be prepared and signed by a California Registered Civil Engineer at Placer County DPW's expense before acceptance by the County of site improvements. All proposed grading, drainage improvements, and vegetation and tree removal shall be shown on the Improvement Plans, and all work shall conform to provisions of the County Grading Ordinance (Chapter 29, Placer County Code) that are in effect at the time of submittal. No grading, clearing, or tree disturbance shall occur until the improvement Plans are approved and all temporary construction fencing has been installed and inspected by a member of the DRC. All cut/fill slopes shall be at 2:1 (horizontal: vertical) unless a soils report supports a steeper slope and Placer County DPW concurs with said recommendation.	**Before construction**; Prepare Placer County Placer County Improvement Plans, DPW DPW specifications, and cost estimates.	Placer County DPW	Placer County DPW	X_____

Mitigation Measure	Timing	Implementing Party	Monitoring Party	Verification Date and Signature
Mitigation Measure P9.lb: Prepare and Implement an Erosion and Sediment at Control Plan To address potential construction-related soil erosion and sedimentation, Placer County DPW or a certified contractor working on behalf of Placer County shall prepare an erosion and sediment control plan before construction activities begin. The plan shall be prepared and approved before construction activities begin. The following measures shall be addressed in the plan. 1. All graded areas shall be covered with protective materials, such as mulch, or reseeded with adaptive plant species. The plan shall include details regarding seed material, fertilizer, and mulching. 2. Protocols for the handling of construction and maintenance materials, such as sanitary wastes and petroleum products, shall be developed to minimize the chance of spill and to provide prompt corrective action should spill occur 3. All graded areas and soil piles shall be mounded to minimize erosion potential 4. Drainage outfalls shall be designed and positioned to avoid erosion. Energy dissipaters shall be installed where necessary.. 5. Erosion control measures shall include best management practices (BMPs) to minimize water quality impacts; BMPs include filter berm, sandbag, or straw-bale barriers; siltation retention fences; vegetated buffer strips; vegetated swales; and spill containment provisions 6. Temporary sediment catchment basins shall be constructed where necessary to prevent sediment from being transported to permanent detention basins and drainages. The locations and size of the temporary basins shall be shown in the erosion and sediment control plan. 7. Grading shall not be permitted after October 15 or before May I. Grading may be permitted outside of these dates if the Director of DPW determines that such work can be completed before the onset of weather conditions that would prevent the work from being adequately winterized or completed. 8. Revegetation shall begin when the graded area has attained finished grade, but not later than October 1 (to ensure germination by October 30).	**Before construction:** Prepare an erosion and sediment control plan, including provisions and protocols for: 1. Covering all graded areas with protective materials. 2. Handling construction and maintenance materials. 3. Mounding graded areas and soil piles. 4. Designing and positioning drainage outfalls to minimize erosion. 5. Implementing soil erosion BMPs. 6. Constructing temporary catchment basins when necessary. 7. Prohibiting grading after October 15 or before May 1. 8. Revegetating graded areas once grading is complete but no later than October 1 **During and after construction:** Implement erosion and sediment control plan.	Placer County DPW Placer County DPW	Placer County DPW Placer County DPW	X_____ X_____

Mitigation Measure	Timing	Implementing Party	Monitoring Party	Verification Date and Signature
Mitigation Measure P9.lc: Revegetate All Disturbed Areas To address potential construction-related soil erosion and sedimentation, Placer County DPW or an approved contractor shall revegetate all disturbed areas. Revegetation undertaken between April 1 and October 1 shall include regular watering to ensure adequate growth. A winterization plan shall be provided with project Improvement Plans. It is Placer County DPW's responsibility to ensure proper installation and maintenance of erosion control/winterization during project construction. Placer County DPW shall provide for erosion control where roadside drainage is off of the pavement. Placer County DPW shall maintain a letter of credit, surety bond, or cash deposit in the amount of 100% of an approved engineer's estimate for winterization and permanent erosion control work before Improvement Plan approval to guarantee protection against erosion and improper grading practices.	**After construction**: Revegetate areas disturbed during construction.	Placer County DPW	Placer County DPW	X_____
Mitigation Measure P9.ld: Review Proposed Grading Plans To address potential construction-related soil erosion and sedimentation, if at any time during construction, a field review by County personnel indicates a significant deviation from the proposed grading shown on the Improvement Plans, specifically with regard to slope heights, slope ratios, erosion control, winterization, tree disturbance, and/or pad elevations and configurations, the plans shall be reviewed by the DRC and DPW for a determination of substantial conformance to the project approval conditions before any further work proceeds Failure of the DRC and DPW to make a determination of substantial conformance may serve as. grounds for the revocation/modification of the project approval by the appropriate hearing body.	**During construction**: Review proposed grading plans.	Placer County DPW or DRC	Placer County DPW or DRC	X_____
Mitigation Measure P9.le: Remove Unsuitable Fill Material or Debris To address potential construction-related soil erosion and sedimentation, any unsuitable fill or debris identified in the Geotechnical Engineering Report(s) (to be prepared and submitted with the Improvement Plans) or discovered during construction shall be hauled off site to an appropriately permitted facility. The applicant may propose to treat unsuitable soils to make them suitable.	**During construction**: Remove unsuitable fill material or debris.	Placer County DPW	Placer County DPW	X_____

Mitigation Measure	Timing	Implementing Party	Monitoring Party	Verification Date and Signature
Mitigation Measure P10.1: Stop Work if Cultural Deposits Are Discovered during Ground- Disturbing Activities To address potential damage to previously unidentified buried archaeological resources, if any archaeological artifacts, such as stone tools, or unusual amounts of shell or bone are uncovered during any construction activities, all work must stop immediately in the area (within 30.5 meters [100 feet] of the find) and a qualified archaeologist retained to evaluate the deposit. The Placer County Planning Department and Placer County Department of Museums must also be contacted for review of the archaeological find(s). Placer County DPW shall implement the recommended treatment the measures, which typically include avoiding the site, capping the site with fill material, or imi1menting data recovery programs, such as excavation or detailed documentation. If cultural resources are discovered during construction activities, the construction contractor, Placer County DPW, Placer County Department of Museums, and Reclamation (if on Reclamation property) shall verify that work has been halted until appropriate treatment measures are implemented. Concurrence shall be obtained from the applicable federal and/or county agency on any measures to be implemented before construction activities resume in the area of the find.	**During construction**: Stop work if cultural deposits are discovered, Evaluate the cultural deposit and recommend treatment measures. Implement recommended treatment measures.	Construction team Qualified archeologist Construction team	Placer County DPW	X_____

Mitigation Measure	Timing	Implementing Party	Monitoring Party	Verification Date and Signature
Mitigation Measure P10.2; Comply with State/Federal Laws Pertaining to the Discovery of Human Remains To address potential damage to previously identified human remains, if human remains are discovered on private property during construction, the Placer County Coroner and NAHC must also be contacted. Work in the area may only proceed after authorization is granted by the Placer County Planning Department. A note to this effect shall be provided on the Improvement Plans for the project. If human remains are discovered on Reclamation property during construction, the Reclamation archaeologist, the Placer County Coroner, and NAHC shall be contacted. Work in the area may proceed only after authorization is granted by Reclamation. All activity at such a site on Reclamation property must comply with the federal Native American Grave Protection and Repatriation Act (NAGPRA) (43 CFR Part 10). If discovered human remains are of Native American origin, Placer County DPW and its contractors shall comply with state and federal laws relating to the disposition of Native American burials, which falls within the jurisdiction of NAHC (Public Resources Code, Section 5097). If human remains are discovered or recognized in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until ▪ the coroner of Placer County has been informed and has determined that no investigation of the cause of death is required and, ▪ if the remains are of Native American origin, o the descendants of the deceased Native Americans have made a recommendation to the landowner or the person responsible for the excavation work for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods, as provided in Public Resources Code, Section 5097.98, or o NAHC is unable to identify a descendant or the descendant fails to make a recommendation within 24 hours after being notified by NAHC. According to California Health and Safety Code, six or more human burials at one location constitute a cemetery (Section 8100), and disturbance of Native American cemeteries is a felony (Section 7052. Section 7050.5 requires that excavation be stopped in the vicinity of discovered human remains until the coroner can determine whether the remains are those of a Native American. If the remains are determined to be Native American, the coroner must contact NAHC.	**During construction:** Comply with state/federal laws pertaining to the discovery of human remains.	Placer County DPW	Placer County DPW	X_____

Mitigation Measure	Timing	Implementing Party	Monitoring Party	Verification Date and Signature
Mitigation Measure P11.la: Provide Class II Bikeways To reconcile inconsistency with Local plans related to the development of bikeways and trails, Placer County DPW shall provide Class II bikeways along Auburn-Folsom Road pursuant to the Placer County Bikeways Master Plan. The location, width, alignment, and surfacing of the bikeways shall be in accordance with the bikeway design standards listed in the Placer County General Plan.	**During construction**: Provide Class II bikeways along Auburn- Folsom Road.	Placer County DPW	Placer County DPW	X_____
Mitigation Measure P11.lb: Improve Equestrian Trail in Accordance with Standard County Design Conditions To reconcile inconsistency with local plans related to the development of bikeways and tails, Placer County DPW shall install a multiple-use (equestrian/pedestrian) trail as part of the project improvement, as described below. 1. Placer County DPW shall construct/improve a 4.6-meter-wide (15-foot-wide) (or as otherwise approved by the Parks Division) meandering public trail easement along the western side of Auburn-Folsom Road, from the County line to Oak Hill Drive and within the landscape buffer. 2. The trail shall be constructed of decomposed granite, unless otherwise approved by the Parks Division. A trail tread and drainage appurtenances shall be installed and clearing, seeding, and planting shall be implemented as necessary for erosion control. 3. The trail tread shall be located as far from the edge of pavement of the adjoining street right- of-way as possible.	**During construction**: Install a multiple-use trail as part of project improvement.	Placer County DPW	Placer County DPW	X_____
Mitigation Measure P11.2: Install a Traffic Signal at the Auburn-Folsom Road/Lou Place Intersection Placer County DPW shall install a traffic signal at the Auburn-Folsom Road/Lou Place intersection or shall provide equal or better means of tail connectivity at other locations. In the event that the Circulation Element of the Granite Bay Community Plan is revised and the equestrian trail at Lou Place is eliminated, this mitigation measure would no longer be necessary.	**During construction**: Install a traffic signal at the Auburn-Folsom Road/Lou Place intersection.	Placer County DPW	Placer County DPW	X_____

Board Summary Action, June 22, 2004

Bill Santucci, District 1	Jan Christofferson, County Executive
Robert Weygandt, District 2	Robert Bendorf, Assistant County Executive
Harriet White, District 3, Chairman	Anthony J. La Bouff, County Counsel
Edward "Ted" M. Gaines, District 4	John Marin, Administrative Officer
Rex Bloomfield, District 5	Ann Holman, Clerk of the Board

FLAG SALUTE - Led by Supervisor Weygandt.

STATEMENT OF MEETING PROCEDURES - Read by Clerk.

PUBLIC COMMENT - Margie Spalding, representing Community Unification for Better Education (C.U.B.E.) discussed studying the California Education System. Dan Sokol, League of Placer County Tax Payers, supported putting an advisory measure on the ballot to study reorganization of the Placer Union High School District and smaller surrounding schools. Rick Ward, Commander of the Auburn-Newcastle California Highway Patrol, presented the Board members with a certificate from the Auburn-Newcastle California Highway Patrol Office in appreciation of their dedication to traffic safety. Joanne Neft, Placer County Agricultural Marketing Program, announced the first mandarin orchard tour will be held December 4th and 5th, 2004.

SUPERVISOR'S COMMITTEE REPORTS - None given.

CONSENT AGENDA - Items #6 a. and 6 c. were moved for discussion. Consent Agenda approved as amended with action as indicated. The Board convened as the Redevelopment Agency Board for Item #13. MOTION Santucci/Weygandt/Unanimous

1. ORDINANCES - Second reading:

a. Personnel/Civil Service - Ordinance 5306-B adopted amending Chapter 3, Section 03.12.010, Appendix 1, Allocation of Positions, regarding the Public Works, Sheriff and County-Clerk Recorder departments.

2. WARRANT REGISTER - Weeks ending May 7, 14, 21, 2004.

3. BOARD OF SUPERVISORS:

a. Resolution 2004-140 adopted commemorating Howard Nakae as a member of the Placer County Agriculture Commission for 39 years.

b. Resolution 2004-141 adopted commending Captain Brad Marenger, Sheriff, upon his retirement after 25 years of public service.

c. Resolution 2004-143 adopted commending Kay Dukes, Executive Secretary, Health & Human Services, upon her retirement after her retirement after more than 20 years of public service.

d. Resolution 2004-142 adopted supporting naming a local Squaw Valley Mountain Peak, "Poulsen Peak", in memory of ski pioneer and Squaw Valley Ski Corporation Founder, Wayne E. Poulsen.

e. Approved a six-month contract with Steve Kastan for the position of Tahoe Field Deputy representing District 5, in the amount of $17,110.

f. Approved minutes of May 11, May 18 and May 25, 2004.

4. CLAIMS AGAINST THE COUNTY - Rejected the following claims as recommended by County Counsel:

a. 05-055,Countryman, Monte, Exceeds $25,000 (Property Damage & Bodily Injury).

5. COMMITTEES & COMMISSIONS:

a. Cemetery District #1, Lincoln - Approved reappointment of Joe Vigil, III to Seat 1, and Barbara Vineyard to Seat 4, as requested by Supervisor Weygandt.

b. Meadow Vista Municipal Advisory Council - Approved reappointment of William Vogel to Seat 7 (Representing District 5), as requested by Supervisor Bloomfield.

c. Newcastle/Ophir Municipal Advisory Council - Approved reappointment of Sam Moore to Seat 5, as requested by Supervisor White.

d. North Tahoe Regional Municipal Advisory Council - Accepted resignation from

Sabrina V. Strauss, Seat 1, as submitted by Supervisor Bloomfield.

e. Squaw Valley Municipal Advisory Council - Approved reappointments of Kevin Strange to Seat 1 (At Large); Pamela A. Rocca to Seat 4 (At Large), and Russell Poulsen to Seat 6 (At Large), as requested by Supervisor Bloomfield.

6. COUNTY EXECUTIVE:

a. ITEM MOVED FOR DISCUSSION/Salary Ordinance Amendments - Ordinance amending Chapter 3, Section 3.12.020, Schedule of Classification and Salary Ranges Classified Services and Section 3.08.070, Unclassified Defined Salaries, for selected management positions to offset salary compaction resulting from negotiations with the Placer Public Employee Organization.

b. City of Rocklin/Sunset Ranchos & Sierra College Annexations - Resolution 2004-144 adopted approving an agreement with the City of Rocklin to provide a mechanism for sales tax payments to the County for sales taxes generated, pursuant to the tax-sharing agreement.

c. ITEM MOVED FOR DISCUSSION/City of Roseville/West Roseville Specific Plan - Resolution authorizing the Chairman to sign property and sales tax sharing agreements and authorizing the County Executive to sign a memorandum of understanding with the City of Roseville for the plan.

d. Approved a merit increase for Tom Christofk, Air Pollution Control District Officer, from Step C to Step D, retroactive to April 3, 2004.

e. Approved a merit increase for Bekki Riggan, Principal Management Analyst, County Executive Office, from Step D to Step E, retroactive to November 15, 2003.

7. DISTRICT ATTORNEY/SPOUSAL ABUSER VERTICAL PROSECUTION PROGRAM - Resolution 2004-146 adopted authorizing Bradford R. Fenocchio, District Attorney, to sign FY 2004/05 documentation for grant funds from the Department of Justice.

8. FACILITY SERVICES:

a. Capital Improvements/Burton Creek Fire Suppression Systems, Project #4700 - Resolution 2004-147 adopted accepting the project as complete and authorizing the Director of Facility Services to execute and record the Notice of Completion.

b. Capital Improvements/Eastern Regional Landfill Site, Project #4625B - Resolution

2004-148 adopted approving an agreement with Sierra Pacific Power Company, in the amount not to exceed $75,000, for the extension of electrical utilities and other services necessary for facilities planned at the Cabin Creek site; approved the grant of a utility easement to Sierra Pacific Power Company to enable construction, repair and maintenance of the utility services and delegated authority to the Director of Facility Services to execute the agreement and documents necessary to grant the easement.

c. Capital Improvements/MIS/IT Maintenance Services - Approved an agreement with Sapphire Inc., in an amount not to exceed $73,000, and authorized the Director of Facility Services to execute the agreement upon approval by County Counsel.

d. Capital Improvements/Telecommunications - Approved a lease agreement with Garrett Carlson, for rental of the facility located at 2929 Lake Forest Road, Bay 9, Tahoe City.

e. Parks/Dutch Flat Swimming Pool - Approved a budget revision appropriating funding, in the amount of $2,100, from Revenue Sharing to the Dutch Flat Recreation County Service Area #28, Zone of Benefit #9, for improvements to the pool.

f. Parks/Tahoe Park Maintenance Services - Approved a two-year agreement with North Tahoe Public Utility District, for FY 2004/05 and 2005/06, to provide maintenance services to four County-owned beaches, the Kings Beach Library, the Griff Creek Erosion Control Area and maintenance of streetlights in Lake Tahoe. The cost for FY 2004/05 will be $66,013. The agreement allows for a cost of living adjustment for FY 2005/06.

g. Special Districts/County Service Area #28, Zone #23 (Blue Canyon Sewer) - Approved a budget revision canceling reserves and appropriating $21,147 for unanticipated maintenance work.

h. Special Districts/Sub-Regional Wastewater Project - Resolution 2004-149 adopted authorizing the Director of Facility Services to execute an agreement and associated documents with the Environmental Protection Agency for grant funding for the project.

9. HEALTH & HUMAN SERVICES:

a. Children's System of Care - Amended Contract #11715 with Child Abuse Prevention Council of Placer County, increasing the amount of the contract by $20,000, for a new revised total of $137,000, to increase service levels to pilot the Child Welfare Services redesign framework.

b. Human Services - Approved a budget revision, in the amount of $76,478, to purchase a HP 9000 Server.

10. LIBRARY - Approved the closure of the Rocklin Library on Saturday, June 26, 2004 due to the Rocklin Jubilee event.

11. PROCUREMENT SERVICES - Authorized the Purchasing Manager to sign the following:

a. Bid #9229, Mobile Tire Service/Fleet Services - Renewed bid with Schultz Tire Service, in the maximum aggregate amount of $33,000.

b. Bid #9339, Aluminum Sign Blanks & Metal Sign Posts/Public Works - Awarded to Safeway Sign Co., in the maximum amount of $30,000 and to Interstate Sales, in the maximum amount of $13,500.

c. Purchase Order, Computer & Printer Maintenance/Health & Human Services - Awarded to EDS Corporation, in the amount of $54,207.82.

d. Purchase Order, Aircraft Maintenance/Sheriff - Awarded blanket purchase order to Big Valley Aviation, Inc., in the amount of $55,000.

e. Purchase Order, Annual Software License Fees & Support/Revenue Services - Awarded blanket purchase order to Columbia Ultimate Business Systems, in the amount of $90,000.

f. Request for Qualifications #9337, Financial Consulting Services/Redevelopment Agency - Adopted a list of qualified consultants on an as-needed basis for a three-year period.

12. PUBLIC WORKS:

a. Bridge & Roadway Engineering/Abandonment of a Portion of a Public Utility Easement/Squaw Valley Estates - Resolution 2004-150 adopted abandoning a portion of an easement on Lot 11, Subdivision #4.

b. Bridge & Roadway Engineering/Abandonment of Portions of Public Utility Easements/ Sugar Bowl Ski Resort (Tahoe) - Resolution 2004-151 adopted abandoning portions of easements.

c. Bridge & Roadway Engineering/Auburn Ravine/Lincoln Way Right Turn Lane Project - Approved the project plans and specifications, authorized the Chairman to sign the cover sheet, and authorized the Department to advertise for bids.

d. Land Development/Bella Terra, Tract #913 - Accepted the improvements as complete,

reduced the faithful performance to 25% upon and reduced labor and material to 50%, holding for six months or longer if claims exist.

e. Land Development/Signals Project for Auburn Folsom Road at Horseshoe Bar Road & Baseline Road at Watt Avenue, Contract #73147 - Resolution 2004-152 adopted accepting the subject project as complete authorizing the Director of Public Works to execute the Notice of Completion.

f. Land Development/The Vineyard (A.K.A. River Oaks), Tract #910 - Accepted improvements as complete, reduced sureties and Resolution 2004-153 adopted accepting Vineyard Drive, Vista Del Sol, Villa-Nella Court, Edgewood Place and Edgewood Road into the County Maintained Mileage System.

13. REDEVELOPMENT AGENCY BOARD/BROOK AVENUE PUBLIC PARKING LOT - Authorized the Deputy County Executive Officer/Redevelopment Director to execute an Operations and Maintenance Agreement with the North Tahoe Public Utility District.

14. REVENUE SHARING:

a. Approved appropriation of $500 in Revenue Sharing monies to the Roseville Sugarbears Aquatics Team, a non-profit organization offering competitive swimming opportunities for the children in Roseville, as requested by Supervisor Santucci.

b. Approved appropriation of $1,200 in Revenue Sharing monies to the Roseville Historical Society, to assist in the cost of erecting a monument at the Roseville Amtrack Depot, in memory of railroad employees who lost their lives in a train accident on April 8, 1935, as requested by Supervisor Santucci ($1,000), Supervisor Weygandt ($100) and Supervisor Gaines ($100).

c. Approved appropriation of $350 in Revenue Sharing monies to the Roseville Chamber of Commerce for the Roseville All-American 4th of July Celebration, as requested by Supervisor Santucci ($250) and Supervisor Gaines ($100).

d. Approved appropriation of $650 in Revenue Sharing monies to Placer SPCA, for the 15th Annual BBQ & Blues event on July 10, 2004, aiding homeless and neglected animals, as requested by Supervisor Santucci ($150), Supervisor Weygandt ($250) and Supervisor White ($250).

e. Approved appropriation of $1,000 in Revenue Sharing monies to the Auburn Chamber of Commerce for Auburn Family 4th of July celebration, as requested by Supervisor White.

f. Approved appropriation of $1,650 in Revenue Sharing monies to the Placer County Farm Bureau, to provide education, outreach and administration of the water waiver regulation imposed by the Central Valley Regional Water Quality Control Board, as requested by Supervisor Weygandt.

15. SHERIFF:

a. Unclaimed Property - Ordinance introduced, first reading waived, amending Chapter 2, Article 108, allowing a direct transfer of unclaimed property in the Sheriff's custody to an on-line internet auctioneer and authorized the Sheriff or his designee to negotiate and execute a contract with Property Bureau, to conduct web-based electronic auctions.

b. Auburn Shooting Range - Approved a memorandum of understanding with the State of California Parks and Recreation and regional law enforcement agencies to establish a cooperative framework to develop, manage, maintain and use the range. The proportionate costs for Phase 1 for the Sheriff and Probation Departments is $46,364 and $10,452 respectively. Approved the Sheriff-Coroner-Marshal and Chief Probation Officer, or his designee, to execute the agreement.

16. TREASURER - TAX COLLECTOR/TAX DEFAULTED LAND SALE - Resolution 2004-154 adopted authorizing the Tax Collector to distribute the September 27, 2002 excess proceeds.

*** End of Consent Agenda***

The following items were moved from the Consent Agenda for discussion:

6. COUNTY EXECUTIVE:

a. Salary Ordinance Amendments - Introduction of an ordinance, amending Chapter 3, Section 3.12.020, Schedule of Classification and Salary Ranges Classified Services and Section 3.08.070, Unclassified Defined Salaries, for selected management positions to offset salary compaction resulting from negotiations with the Placer Public Employee Organization.

MOTION Weygandt/Bloomfield/Unanimous to bring this item back for consideration at the next Board meeting (July 13, 2004) and include information on salaries of mentioned positions, the dollar amount of fiscal impact, and position comparisons.

c. City of Roseville/West Roseville Specific Plan - Resolution 2004-145 adopted authorizing the Chairman to sign property and sales tax sharing agreements and

authorizing the County Executive to sign a memorandum of understanding with the City of Roseville for the plan.

MOTION Weygandt/Santucci/Unanimous

DEPARTMENT ITEMS:

17. ADMINISTRATIVE SERVICES/PROCUREMENT:

a. Bid #9225, Bulk Gas & Diesel Fuel/Public Works - Renewed bid with Hunt & Sons, Inc., in the maximum aggregate amount of $1,008,000. MOTION Bloomfield/Weygandt/ Unanimous

b. Bid #9231, Voice & Data Cabling Services/Telecommunications - Renewed bid with Communications Connections Corporation, from July 1, 2004 through June 30, 2005, in the not to exceed amount of $120,000, for an increase of $8,000.

MOTION Weygandt/Bloomfield/Unanimous

c. Bid #9344, Telecommunication Cable & Supplies/Telecommunications - Awarded to Graybar of Roseville, in the not-to-exceed amount of $120,000.

MOTION Bloomfield/Weygandt/Unanimous

d. Purchase, Self-Contained Breathing Apparatus & Respiratory Protection Equipment/ Emergency Services - Awarded to Special "T" Fire Equipment, in the total amount of $135,076.55, for the Sunset Station 77 Fire Station and the Placer County Haz Mat Team.

MOTION Bloomfield/Weygandt/Unanimous

e. Purchase Order, Liquid Coagulant Polymer//Facility Services - Renewed blanket purchase with Jenchem, Inc., from July 1, 2004 through June 30, 2005, in the maximum of $127,000 for the Sewer Maintenance District Treatment Plant #1. MOTION Bloomfield/Weygandt/Unanimous

f. Purchase Order, Fuel Credit Cards/Public Works & Sheriff - Awarded blanket purchase orders with Voyager Fleet Systems, Inc., in the maximum aggregate amount of $255,000.

MOTION Bloomfield/Weygandt/Unanimous

g. Purchase Order, Crisis Resolution Center/Probation - Renewed blanket purchase order

with Koinonia Foster Homes, Inc., for the maximum amount of $400,000.

MOTION Santucci/Weygandt/Unanimous

h. Request for Proposal #9311, Alternative Dispute Resolution Services/County Executive - Awarded to Placer Dispute Resolution Services, in the maximum amount of $130,000.

MOTION Santucci/Gaines/Unanimous

i. University HealthSystem Consortium - Approved the use of Cardinal Healthcare as the pharmaceutical prime vendor and authorize participation in the consortium for pharmaceutical buying and execution of related contracts, in the maximum amount of $700,000.

MOTION Bloomfield/Weygandt/Unanimous

18. COUNTY EXECUTIVE/REDEVELOPMENT - Resolution 2004-158 adopted authorizing the loaning of monies from the County of Placer to the Placer County Redevelopment Agency and execution of an agreement, in the amount of $4,396,804, to repay the loan and reimburse the County for costs incurred on behalf of the Redevelopment Agency's efforts for projects in North Tahoe, North Auburn and the Sunset Industrial Areas. MOTION Bloomfield/Weygandt/Unanimous

18.1COUNTY EXECUTIVE - Approved a Memorandum of Understanding with the Deputy Sheriff's Association, for the period from January 1, 2003 through December 31, 2006; ordinance introduced, first reading waived, amending Chapter 3 and authorized the County Executive Office to sign a Consolidated Memorandum of Understanding and other related documents.

MOTION Weygandt/Santucci VOTE 4:1 (Bloomfield No)

19. DISTRICT ATTORNEY/VALLEY TOXICOLOGY CONTRACT - Approved a one-year contract extension with Valley Toxicology Service, Inc., in the amount of $325,000.00, for drug and alcohol analyses and phlebotomy services, and authorized the Purchasing Manager to sign.

MOTION Bloomfield/Weygandt/Unanimous

20. FACILITY SERVICES:

a. Parks/North Fork American River Trail - Approve a budget revision appropriating

$200,000 from the County's Regional Trail Fund, established in support of the Placer Legacy Program, for construction of the trail. The requested $200,000 will serve as a dollar for dollar match to a grant obtained by the California Conservation Corps, equating to a total of $400,000.

Item continued to a future date.

b. Parks/North Fork American River Trail Plan - Adopt the plan and Mitigated Negative Declaration for the project.

The Board tentatively approved the plan and directed staff to bring back detailed findings on the Consent Agenda at the July 13, 2004 Board meeting.

MOTION Bloomfield/Weygandt/Unanimous

c. Solid Waste/Eastern Regional Landfill - Approved a contract with Kleinfelder, Inc., in an amount not to exceed $130,484, to install four monitoring wells and abandon three existing monitoring wells and made a finding that this action is exempt from the California Environmental Quality Act. MOTION Bloomfield/Weygandt/Unanimous

21. HEALTH & HUMAN SERVICES:

a. Children's System of Care - Approved an agreement with Whole Person Learning for FY2004/05, in the amount of $233,967 (plus Emancipated Youth Stipend Funds), to provide independent living skills to eligible foster children. MOTION Bloomfield/ Weygandt/Unanimous

b. Children's System of Care - Approved a memorandum of understanding with the Placer County Office of Education for FY2003/04, to provide funding, in an amount not to exceed $989,957, for the current FY 2003/04 expenditure of Individualized Education Plan mental health services.

MOTION Santucci/Weygandt/Unanimous

c. Community Health - Approved a contract with Sutter Medical Foundation, from July 1, 2004 through June 30, 2005, in the amount of $120,000, for Professional Medical Coverage Hospitalist services for Hospitalized Placer County Community Clinic Patients. MOTION White/Bloomfield/Unanimous

22. PUBLIC WORKS/ENGINEERING TAHOE/TIMBERLAND EROSION CONTROL PROJECT - Resolution 2004-159 adopted awarding Contract #73071 to the low bidder White Rock Construction, in the amount of $872,758, for construction of the project;

authorized the Director of Public Works to approve and sign future contract amendments up to $131,000, with approval of the County Executive Office and County Counsel. MOTION Bloomfield/Weygandt/Unanimous

ADJOURNED AS THE BOARD OF SUPERVISORS AND CONVENED

AS THE REDEVELOPMENT AGENCY BOARD

23. REDEVELOPMENT AGENCY BOARD/2004/05 PROPOSED BUDGET - Approved the proposed budget, in the amount of $9,590,054 and adopted Resolution 2004-160 approving the loan agreement, in the amount of $4,376,864 with the County of Placer.

MOTION Bloomfield/Weygandt/Unanimous

ADJOURNED AS THE REDEVELOPMENT AGENCY BOARD AND

RECONVENED AS THE BOARD OF SUPERVISORS

24. SHERIFF/SURPLUS PROPERTY - Declared two department helicopters as surplus, approved the sale and authorized the department to bid on a used helicopter for sale by Ventura County, for an amount not-to-exceed $425,000.

MOTION Weygandt/Gaines/Unanimous VOTE 4:0 (Bloomfield temporarily absent).

25. COUNTY COUNSEL/CLOSED SESSION REPORT:

(A) §54956.9 - CONFERENCE WITH LEGAL COUNSEL

(1) Existing Litigation:

(a) Dianne Nelson vs. County of Placer, et al., Placer County Superior Court Case No.: SCV-16060 - The Board authorized the retention of Dennis Keller as Counsel for that matter.

(b) Laurence Fletcher vs. County of Placer, et al., Placer County Superior Court Case No.: TCV877 - The Board authorized County Counsel Office to provide defense for the County and the named employees as required.

(c) Turhan Irge, vs. Placer County, Allen Breuch, and DOES 1-10, inclusive, Placer County Superior Court Case No.: SCV-16759 - The Board authorized County Counsel

Office to provide defense for the County and the named employees as required.

(d) Sierra Club vs. Placer County, et al., Placer County Superior Court Case No.: SCV12789 - The Board took no action and there was no discussion of the matter.

(e) Bickford Ranch Heritage Coalition vs. County of Placer, et al., Placer County Superior Court Case No.: SCV12793 - The Board took no action and there was no discussion of the matter.

(B) §54957.6 - CONFERENCE WITH LABOR NEGOTIATOR - There was no discussion.

Agency negotiator: CEO/Personnel Director

Employee organization: DSA/PPEO.

ADJOURNED AS THE BOARD OF SUPERVISORS AND CONVENED AS

THE IN-HOME SUPPORTIVE SERVICES PUBLIC AUTHORITY

(C) §54957.6 - CONFERENCE WITH LABOR NEGOTIATOR - The Board had discussion with its Labor Negotiators.

(a) Authority negotiator: Executive Director, Employee organization: United Domestic Workers of America.

ADJOURNED AS THE IN-HOME SUPPORTIVE SERVICES PUBLIC AUTHORITY

AND RECONVENED AS THE BOARD OF SUPERVISORS

9:05 a.m.

26. BOARD OF SUPERVISORS - Presentation of Resolution 2004-140 commemorating Howard Nakae as a member of the Placer County Agriculture Commission for 39 years.

9:30 a.m.

27. BOARD OF SUPERVISORS - Presentation of Resolution 2004-141 commending Captain Brad Marenger, Sheriff Department, upon his retirement after 25 years of public service.

9:45 a.m.

28. ADMINISTRATIVE SERVICES/COMMUNICATIONS - Public hearing closed. Ordinance 5307-B adopted granting a (15) year non-exclusive cable television franchise to SureWest TeleVideo, dba SureWest Broadband to serve the unincorporated communities of West Roseville, Granite Bay, Livoti, The Vineyards and Morgan Creek areas. MOTION Santucci/Weygandt/Unanimous

10:00 a.m.

29. PLANNING/REZONING -"WESTLAKE ESTATES SUBDIVISION PROFESSIONAL OFFICE"- (REA-910) CATEGORICALLY EXEMPT - CLASS 5 [Minor Alterations in Land Use Limitation] - Public hearing closed. Ordinance 5308-B adopted approving a proposed rezoning of approximately 20,000 square feet. The current zoning of RM-DL-10-Dc, was updated in 1995 with the Zoning Ordinance update. That rezone limited the ability to construct offices on these parcels (the original zoning R-2, allowed for Professional Office). The new proposed zoning of OP-UP-Dc would correct the inconsistency while remaining consistent with the Granite Bay Community Plan. The subject parcel AP# 048-590-032 is located on Auburn Folsom Road and Fallsbrook in the Granite Bay area.

MOTION Gaines/Weygandt/Unanimous

10:15 a.m.

30. FACILITY SERVICES/COUNTY SERVICE AREA ASSESSMENT AND FEE REPORT/2004/05 - Public hearing closed. Resolution 2004-155 adopted confirming the report for FY 2004/05 and authorizing the collection of assessments on the 2004/05 Tax Roll.

MOTION Bloomfield/Weygandt/Unanimous VOTE 4:0 (Gaines temporarily absent)

10:20 a.m.

31. FACILITY SERVICES/COUNTY SERVICES AREA 28, ZONE 173 - Public hearing closed. Resolution 2004-156 adopted annexing property owned by the Tang Fat Enterprises Company, Inc., property, APN 023-260-023 and 024, into the boundaries of the service area. Property is located on the southwest corner of PFE Road and Cook Riolo Road in West Placer County.

MOTION Santucci/Weygandt/Unanimous

10:30 a.m.

32. FACILITY SERVICES/GRANITE BAY PARKS, TRAILS & OPEN SPACE ASSESSMENT DISTRICT - Public hearing closed. Resolution 2004-157 adopted approving the Engineer's Report confirming diagram and assessment and ordering levy of assessment for FY 2004/05.

MOTION Gaines/Bloomfield/Unanimous

10:45 a.m.

33. FACILITY SERVICES/CONTRACT FOR GARBAGE COLLECTION SERVICES/ TRANSFER STATION OPERATIONS & RATE ADJUSTMENTS IN FRANCHISE AREAS 1 & 4 - Public hearing closed to received input on the proposed adjustments to garbage collection/transfer station rates for Franchise Area 1 and Area 4, which includes all parts of unincorporated Placer County west of Colfax, including the Foresthill and Iowa Hill Divides for FY 2004/05; approved a new contract with Auburn Placer Disposal Service for garbage collection services and transfer station operations and made a finding pursuant to Section 21080(b)(8) of the Public Resources Code that the adjusted rates are derived directly from the cost of providing service and are necessary to meet operating expenses required for maintenance of service and are, therefore, exempt from environmental review.

MOTION Santucci/Weygandt/Unanimous

11:00 a.m.

34. COUNTY EXECUTIVE/BUDGET:

a. Adopted the FY 2004/05 Proposed Budget, directed staff to prepare copies for distribution and public access, scheduled budget workshops and received a report from County Executive Office staff.

b. Authorized the Department of Health and Human Services (HHS) to make the following continuing, temporary closures required to meet budget and staffing constraints:

1. Closure of most HHS offices to the public for two weeks during the Christmas and New Year Holidays with offices re-opening on January 3, 2005.

2. Closure of Kings Beach Community Clinic to the public every Monday with services available from 7:00 a.m. to 5:00 p.m. on Tuesday through Friday.

3. Closure of all Adult System of Care offices (excluding residential facilities) to the public from 1:00 p.m. to 5:00 p.m. each Friday.

4. Authorized HHS to make service hour exceptions, as necessary, for other County holidays.

MOTION Santucci/Gaines/Unanimous VOTE 4:0 (Bloomfield temporarily absent)

c. Adopted the FY 2004/05 Proposed budgets for Lighting Districts, County Service Area Zones and Sewer Maintenance Districts governed by the Board, in the total amount of $15,580,175.

MOTION Santucci/Gaines/Unanimous VOTE 4:0 (Bloomfield temporarily absent)

d. Approved a letter in support of the Support-in-Concept, contingent upon constitutional protection of the County's revenues, of Governor Schwarzenegger's Local Government Package, as outlined in the May budget revision. MOTION Weygandt/Gaines/Unanimous

12:00 NOON

35. LUNCH - Chevy's Fresh Mex Restaurant, 2100 Grass Valley Highway, Auburn - Agenda Scheduling.

1:30 p.m.

36. PUBLIC WORKS/TRANSPORTATION/AUBURN FOLSOM ROAD WIDENING PROJECT - Public hearing closed. Approved certifying the Final Environmental Impact Report (corrected report date to September 2003) with findings as amended; approved the project alignment, components as amended and phasing to allow the final design on Phase 1 to proceed and to purchase Right-of-Way for all phases of the project and authorized advertisement for construction bids of Phase 1A (Traffic Signal at Fuller Drive). MOTION Gaines/Weygandt/Unanimous

ITEMS FOR INFORMATION:

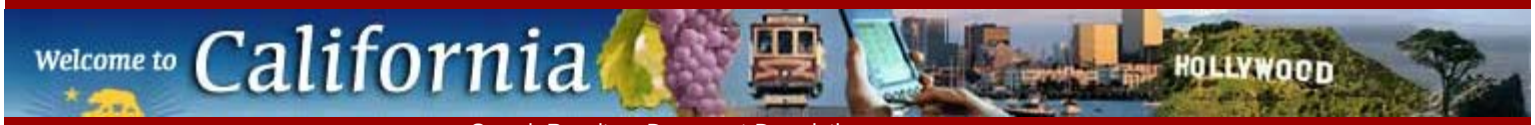
37. AUDITOR-CONTROLLER - Statement of Condition of Cash in the Treasury for month ending May 28, 2004.

38. ROCKLIN UNIFIED SCHOOL DISTRICT:

a. Intention to Annex Territory to Existing Community Facilities District #3.

b. Intention to Change the types of Authorized Public Facilities to be financed by Community Facilities District #3.

39. TREASURER-TAX COLLECTOR - Treasurer's statement for the month of May 2004.



Auburn-Folsom Road Four-Lane Widening Project

SCH Number: 2002042036

Document Type: NOD - Notice of Determination

Project Lead Agency: Placer County

Project Description

Widening of Auburn Folsom Road from Fuller Road to the Placer County line.

Contact Information

Primary Contact:
Gina Langford
Placer County
530-886-3000
11414 B Avenue
Auburn, CA 95603

Project Location

County: Placer
City: Auburn
Region:
Cross Streets: Auburn-Folsom Road from just south of Douglas Blvd. south to the the county line
Latitude/Longitude:
Parcel No: varies
Township:
Range:
Section:
Base:
Other Location Info:

Determinations

This is to advise that the ☒ Lead Agency ☐ Responsible Agency Placer County has approved the project described above on 6/22/2004 and has made the following determinations regarding the project described above.

1. The project ☒ will ☐ will not have a significant effect on the environment.

2. ☒ An Environmental Impact Report was prepared for this project pursuant to the provisions of CEQA.

   ☐ A Negative Declaration was prepared for this project pursuant to the provisions of CEQA.

3. Mitigation measures ☒ were ☐ were not made a condition of the approval of the project.

4. A Statement of Overriding Considerations ☐ was ☒ was not adopted for this project.

5. Findings ☒ were ☐ were not made pursuant to the provisions of CEQA.

Final EIR Available at: 11414 B Avenue Auburn, CA 95603

Date Received: 7/6/2004

Click Project Title link to display all related documents. Document Type link will display full document description.

Records Found: 5

[First] [Next] [Previous] [Last]

Page: 1

Query Parameters:			Date Range:		
SCH#	**Lead Agency**	**Project Title**	**Description**	**Document Type**	**Date Received**
2002042036	Placer County	Auburn-Folsom Road Four-Lane Widening Project	The California Department of Fish and Game is executing Lake or Streambed Alteration Agreement number 1600-2012-0160-R2, pursuant to Section 1602 of the Fish and Game to the project applicant, County of Placer Department of Public Works.	NOD	12/6/2012
2002042036	Placer County	Auburn-Folsom Road Four-Lane Widening Project	The California Dept. of Fish and Game is executing Lake or Streambed Alteration Agreement number 1600-2007-0088-R2, pursuant to Section 1602 of the Fish and Game Code to the project applicant, Placer County Dept. of Public Works. The proposed widening includes expanding the road to provide four 12-foot lanes (two in each direction) and 6-foot paved shoulders to accommodate Class II bike lanes on each side.	NOD	4/26/2007
2002042036	Placer County	Auburn-Folsom Road Four-Lane Widening Project	Widening of Auburn Folsom Road from Fuller Road to the Placer County line.	NOD	7/6/2004
2002042036	Placer County	Auburn-Folsom Road Four-Lane Widening Project	Widen Auburn-Folsom Road from two to four lanes.	EIR	3/19/2003
2002042036	Placer County	Auburn-Folsom Road Four-Lane Widening Project	The proposed project would widen Auburn-Folsom Road from two lanes to four lanes from the Placer/Sacramento County line to a location just south of Douglas Boulevard. Improvements proposed include adding an additional lane in each direction, center turn lane, and/or turn pockets, sufficient paved shoulders for Class II bicycle lanes, curb and gutter at certain locations, a new traffic signal at Auburn-Folsom Road and Fuller Road, and traffic signal improvements at the intersections with the Eureka Road and Oak Hill Drive. In addition, the landscaping of shoulders and medians will be considered. The road widening would generally follow the existing alignment. Placer County has taken a four-step approach to implementing the proposed project: preliminary design, environmental review, final design and construction.	NOP	4/8/2002

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Auburn Folsom Road Widening Project

Placer County, California

Revegetation and Restoration Plan

Prepared For:
Placer County Department of Public Works
Auburn, California

Prepared by:
Dokken Engineering

March 2007

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Revegetation Plan Sheets, RV-1 thru RV-7

Summary

This is the revegetation plan for construction impacts to trees associated with the Auburn Folsom Road Widening South Phase Project, Placer County, California. Figure 1 shows the regional and project location. This revegetation plan addresses Mitigation Monitoring and Reporting Program (State Clearinghouse Number 2002042036) items:

- Mitigation Measure P7.4b: Mitigate Tree Removal
- Mitigation Measure P8.3b: Mitigate Tree Removal

Figure 1: Project Location

This plan describes the scope of work, the specifications, the schedule and the performance standards for the revegetation for tree loss from the impacts associates with the proposed project.

Project Description

Project Location and Summary

The Auburn Folsom Road (AF Road) Widening Project South Phase is located on AF Road from the Placer/Sacramento County line north to Lou Place. The Placer County Department of Public Works (DPW) recommended project is a combination of alignment alternatives studied in the Environmental Impact Report (EIR)/ FONSI. The proposed alignment was selected as the preferred alternative due to its compliance with specific project goals, such as improvement of safety, capacity and design speed, while minimizing environmental and social impacts by selecting the best right of way and roadway profile combinations for specific portions of the project.

Construction of the South Phase will begin in 2007.

The proposed widening includes widening AF Road to provide four 12-foot lanes (two in each direction) and 6-foot paved shoulders to accommodate Class II bike lanes on each side. Generally, a 16-foot painted and/or raised median will also be incorporated, with a section (approximately 600 linear feet) of raised landscaped median at the south end of the project. A granite monument with an inscription welcoming people to Granite Bay will be placed in the southerly end of the landscaped median.

The proposed project will also incorporate a meandering multi-purpose trail from Oak Hill Drive south to the County line. The meandering trail will cross the canal and connect to the Baldwin Reservoir trail using the existing box culvert.

The existing signalized intersection (AF Road/Oak Hill Drive) will be modified. An 8-ft high concrete block wall is proposed for continuity on the west side of the project from Oak Hill Drive south to connect to the existing wall that was constructed by the City of Folsom.

Access to streets and driveways, specifically left turn movements, will be maintained either through two way left turn lanes, left turn pockets, or U-turn capabilities located in close proximity.

On-Site Revegetation

This plan describes the revegetation of areas impacted by the proposed project by planting native trees in upland habitat areas. Also included in this plan is a schedule for installation, monitoring guidelines and specifications for tree installation and maintenance.

Responsible Party

The Placer County Department of Public Works is responsible for implementation of this plan. The contact person for the County is

Ms. Sherri Berexa, Project Manager
Placer County Department of Public Works
3091 County Center Drive, Suite 220
Auburn, CA 95603

Environmental Mitigation Monitoring and Reporting Requirements

The Mitigation Monitoring and Reporting Program Mitigation Measure P7.4b and P8.3b: outlines the method to mitigate for the trees removed.

1. Trees removed from Reclamation property shall be replaced on Reclamation property on an inch-by-inch basis. For example, if 254 centimeters (100 inches) of tree diameter are proposed to be removed, the replacement trees shall be equal to 254 centimeters (100 inches) in diameter (aggregate). If feasible, seedlings should be from acorns collected within 30 miles of the project location in Placer or Sacramento Counties in the American River watershed and between the elevations of 100 and 800 feet. A 3-year monitoring and maintenance plan for the trees and any irrigation shall be required. The expectation is that there will be 100% survival for the replacement trees at the end of 3 years. Tree replacement on Reclamation property shall take place in close proximity to the project corridor.
2. In lieu of 50% of the mitigation for tree removal that is not on Reclamation property, a contribution to the Placer County Tree Preservation Fund shall be required. The value is based on 50% of the overall replacement estimate, which shall be submitted to the Placer County Development Review Committee (DRC) for review and approval.
3. The trees shall be installed by the contractor and inspected and approved by Placer County DPW before completion of the project. At its discretion, the DRC may establish an alternate deadline for installation of replacement trees if weather or other circumstances prevent the completion of this requirement before completion of the project.
4. For native trees removed from private lands, Placer County DPW may either:
    a. replace the trees on the private lands with one 15-gallon native tree for each tree removed or
    b. contribute money into the Placer County Tree Preservation Fund Mitigation

The trees shall be planted in the fall of each year.

Restoration Contractor

Qualifications of Restoration Contractor

The restoration contractor performing the site preparation, installation and maintenance shall have successfully completed (to the satisfaction of the County) a minimum of three restoration projects (installation and long term maintenance) involving the establishment of native plant communities in areas of size comparable to (or larger then) this project. The restoration contractor shall provide at least one English speaking person who is thoroughly familiar with all aspects of the project, including equipment and materials being utilized or installed and the best methods for their installation and application. Such person shall be present at all times during execution of this work and shall direct and supervise all work performed as specified herein.

Scope of Work

The restoration contractor shall furnish all labor and materials (including water) to execute this work, as indicated below and as necessary to complete the contract, including but not limited to the following:

- Site preparation and installation (and eventual removal) of temporary irrigation system.
- Installation of 624 new wire pin flags to mark the planting locations. The locations are subject to adjustment at the discretion of the project engineer. This task shall include the removal of the pin flags when directed by the engineer.
- Installation of 624 15 gallon native species oak trees obtained from nurseries that have grown the trees from locally collected seed stock as per Mitigation Measure (MM) P7.4b and MM P8.3a.
- Furnishing and installing the materials for a temporary irrigation system.
- Maintain the revegetated area for three years, per MM P7.4b and MM P8.3a.

Habitat to be Restored

The habitat to be restored by implementation of this plan will replace the native trees removed due to construction of the Auburn Folsom Road Widening Project South Phase. The revegetation will be in the form of trees in the woodland areas by the restoration contractor.

Site Preparation

Upland Areas

The project engineer and restoration contractor shall coordinate to ensure that the areas marked for tree planting areas are outside of the cut/fill slopes of the roadway, not impacting jurisdictional waters/wetlands, and conform to the Environmental Document for the project.

Plant Material

Table 1, below, lists the trees to be installed in the upland habitat restoration areas.

Location	Number of 15 gallon trees to be planted
County Right of Way (West of Auburn Folsom Road)	**160**
Bureua of Reclamation property (East of Auburn Folsom Road)	**464**
Total	**624**

Table 1: Trees to be planted

The tree planting areas are shown on the attached sheets RV-1 thru RV-7.

Temporary Irrigation System

The restoration contractor is responsible for survival and establishment of the installed plant material. It is the responsibility of the restoration contractor to install a temporary irrigation system to the revegetation areas. Any proposed design shall conform to the Special provisions of the Project and is subject to review and approval by the project engineer. It is the responsibility of the restoration contractor to remove the system when there is agreement between the County and the restoration contractor that supplemental watering is no longer necessary to ensure plant survival.

Installation Methods/Planting Methods

All trees shall be installed in the locations shown on the revegetation plans.

Trees

The plantings shall be spaced in a natural looking pattern with considerations for surround conditions.

- All planting holes shall conform to the details established in the project plans.
- Initial watering and back fill requirements shall conform to those outlined in the project plans and project specifications.

Maintenance

Revegetation Areas

The restoration contractor is responsible for the overall performance of the revegetation areas and is required to maintain the areas in accordance with the project specifications until the performance standards have been achieved. Normal maintenance will include herbivore control, repairs to the temporary irrigation system and replanting as necessary. The restoration contractor shall furnish and install any supplemental materials.

Maintenance shall commence immediately upon the accepted installation of the plant material. During this time, the revegetation areas shall be diligently maintained to ensure successful establishment. In addition, the restoration contractor is responsible for 100 percent survival of the trees for three years following the accepted installation. At the end of the three year establishment period, a thorough inspection shall be conducted by the County and the restoration contractor during which an inventory of all surviving trees will be prepared. The restoration contractor shall replace all dead or missing trees during the approved planting season, as directed by the project engineer.

Pest Control

The restoration contractor is responsible for protecting the trees from damage due to herbivory or trampling by wildlife. Protective measures such as fencing and cages shall be employed if necessary, subject to approval of the project engineer. The project engineer shall recommend control measures if necessary to protect the planting from damage. Any control devices shall be removed at the direction of the project engineer at such time that the trees can survive browsing and wildlife movement.

Irrigation

The restoration contractor is responsible for ensuring that the performance standards for survival are achieved. The goal of the revegetation efforts prescribed in this plan is to create a self-sufficient natural plant community; however, establishment of healthy native trees often requires supplemental irrigation. The source and costs of water shall be the responsibility of the restoration contractor. All water used for irrigation shall be pure of impurities, excess chlorine, nitrogen and salts.

Remedial Measures

Remedial measures may be necessary to repair any unsuccessful restoration efforts identified by the project engineer. These measures could include, but are not limited to, replacement of trees and modifications of maintenance methodology. The restoration contractor is responsible for implementing remedial measures required to meet the project specifications.

Acceptance of Work

All task performed by the restoration contractor shall be subject to approval by the County. The County will determine if the work for each task has been conducted in compliance with the project specifications.

Supplemental Watering

Supplemental watering by the temporary irrigation systems is the responsibility of the restoration contractor. All costs associated with the supplemental watering necessary for the establishment of the trees should be included in the restoration contractor's costs for installation and maintenance.

Herbivore Control

Control of damage to trees from herbivory are the responsibility of the restoration contractor. Costs associated with these measures shall be included in the restoration contractor's costs for installation and maintenance.

Maintenance

During the course of regularly scheduled monitoring visits, the project engineer shall inspect the condition of the site to determine whether the maintenance is being conducted in compliance with the project specifications. The results of these inspections will be in the form of a field memo.

Performance

If the restoration site does not meet the performance standards after five years due to the negligence of maintenance by the restoration contractor, any further work required for the project to meet the project standards will be at the restoration contractor's expense. If the restoration sites do not meet project specifications because of circumstances beyond control of the restoration contractor, a new contract will be negotiated for work necessary to meet the project specifications.

REVISION #	DATE:	DESCRIPTION AND SHEET NO.:	APPROVED BY:	DATE:

REGISTERED PROFESSIONAL ENGINEER
BRIAN R. STEPHENSON
No. 65313
Exp. 9/30/07
CIVIL
STATE OF CALIFORNIA

THE COUNTY OF PLACER OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF ELECTRONIC COPIES OF THIS PLAN SHEET.

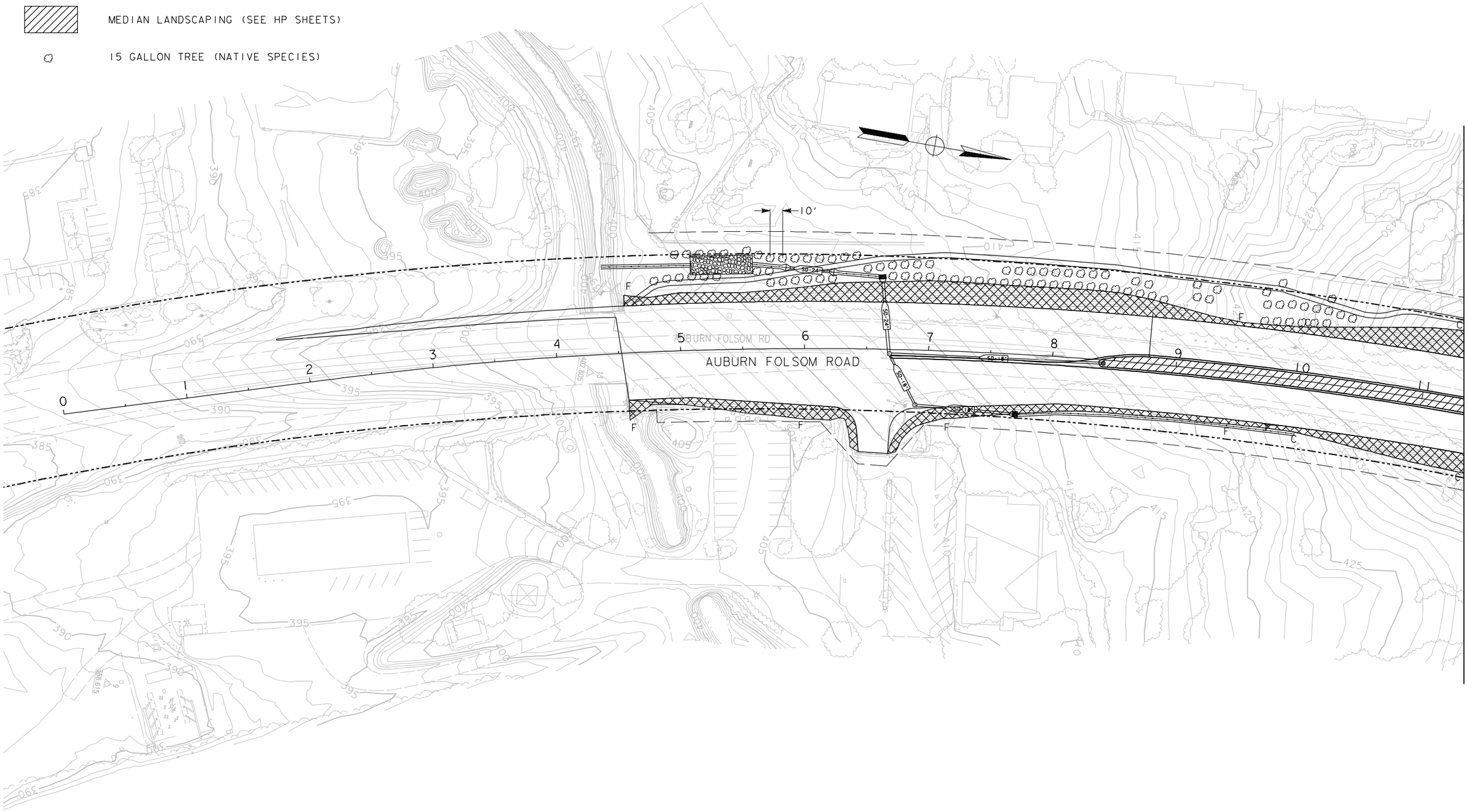
PLAN SCALE: 1"=40'
PROFILE SCALE:
HORIZ: N/A
VERT: N/A

LEGEND

- R/W
- EROSION CONTROL APPROVED NATIVE SEED MIX
- MEDIAN LANDSCAPING (SEE HP SHEETS)
- 15 GALLON TREE (NATIVE SPECIES)

NOTE

1. TREE SPACING IS 10' ON CENTER



PLAN

THIS SHEET ACCURATE FOR RE-VEGETATION AND RESTORATION WORK ONLY

FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES 0 1 2 3

ALL DIMENSIONS SHOWN IN FEET UNLESS OTHERWISE NOTED

RECORD DRAWINGS

INITIALS DATE

RV-1

CONTRACT NO. 1001

DESIGNED: B. STEPHENSON 01/23/07
DRAWN: B. STEPHENSON 01/23/07
CHECKED: J. OSTDIEK 01/23/07
RECORD DRAWINGS:

DOKKEN ENGINEERING
2365 IRON POINT ROAD, SUITE 200
FOLSOM, CA 95630
PH: 916-858-0642 FAX: 916-858-0643

COUNTY OF PLACER DEPARTMENT OF PUBLIC WORKS
AUBURN FOLSOM ROAD WIDENING PROJECT - SOUTH PHASE

REVEGETATION PLAN

01/23/07

REVISION #	DATE:	DESCRIPTION AND SHEET NO.:	APPROVED BY:	DATE:

REGISTERED PROFESSIONAL ENGINEER
BRIAN R. STEPHENSON
No. 65313
Exp. 9/30/07
CIVIL
STATE OF CALIFORNIA

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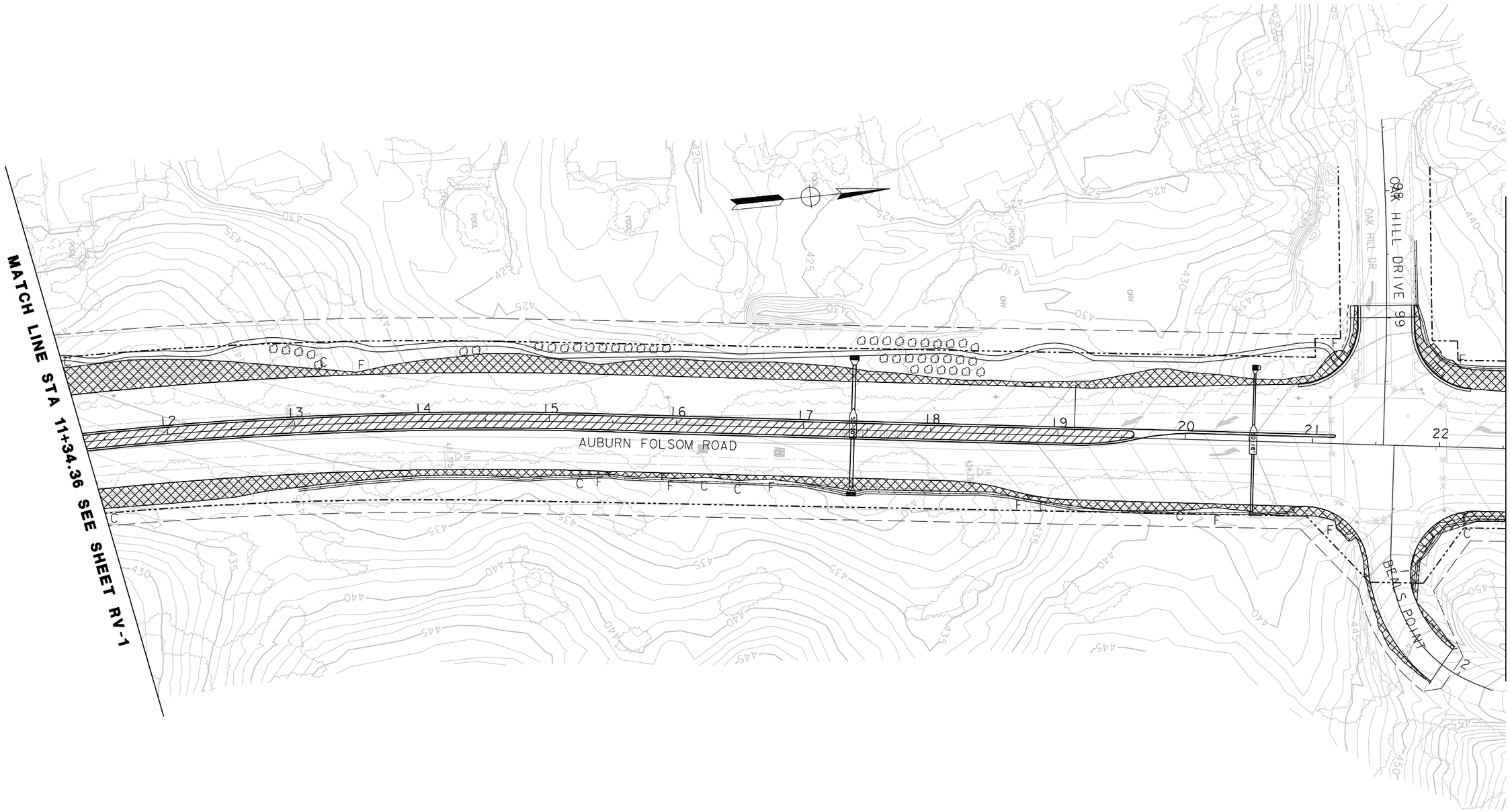

PLAN

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ALL DIMENSIONS SHOWN IN FEET UNLESS OTHERWISE NOTED

RECORD DRAWINGS

INITIALS DATE

RV-2

01/23/07

PLAN SCALE: 1" = 40'
PROFILE SCALE:
HORIZ: N/A
VERT: N/A

CONTRACT NO. 1001

DESIGNED: B. STEPHENSON 01/23/07
DRAWN: B. STEPHENSON 01/23/07
CHECKED: J. OSTDIEK 01/23/07
RECORD DRAWINGS:

DOKKEN ENGINEERING
2363 MARIPOSA AVENUE, SUITE 200
FOLSOM, CA 95630
PH: 916-858-0642 FAX: 916-858-0643

COUNTY OF PLACER DEPARTMENT OF PUBLIC WORKS
AUBURN FOLSOM ROAD WIDENING PROJECT - SOUTH PHASE

REVEGETATION PLAN

SHEET NO. 80 OF 95

REVISION #	DATE:	DESCRIPTION AND SHEET NO.:	APPROVED BY:	DATE:

REGISTERED PROFESSIONAL ENGINEER
BRIAN R. STEPHENSON
No. 65313
Exp. 9/30/07
CIVIL
STATE OF CALIFORNIA

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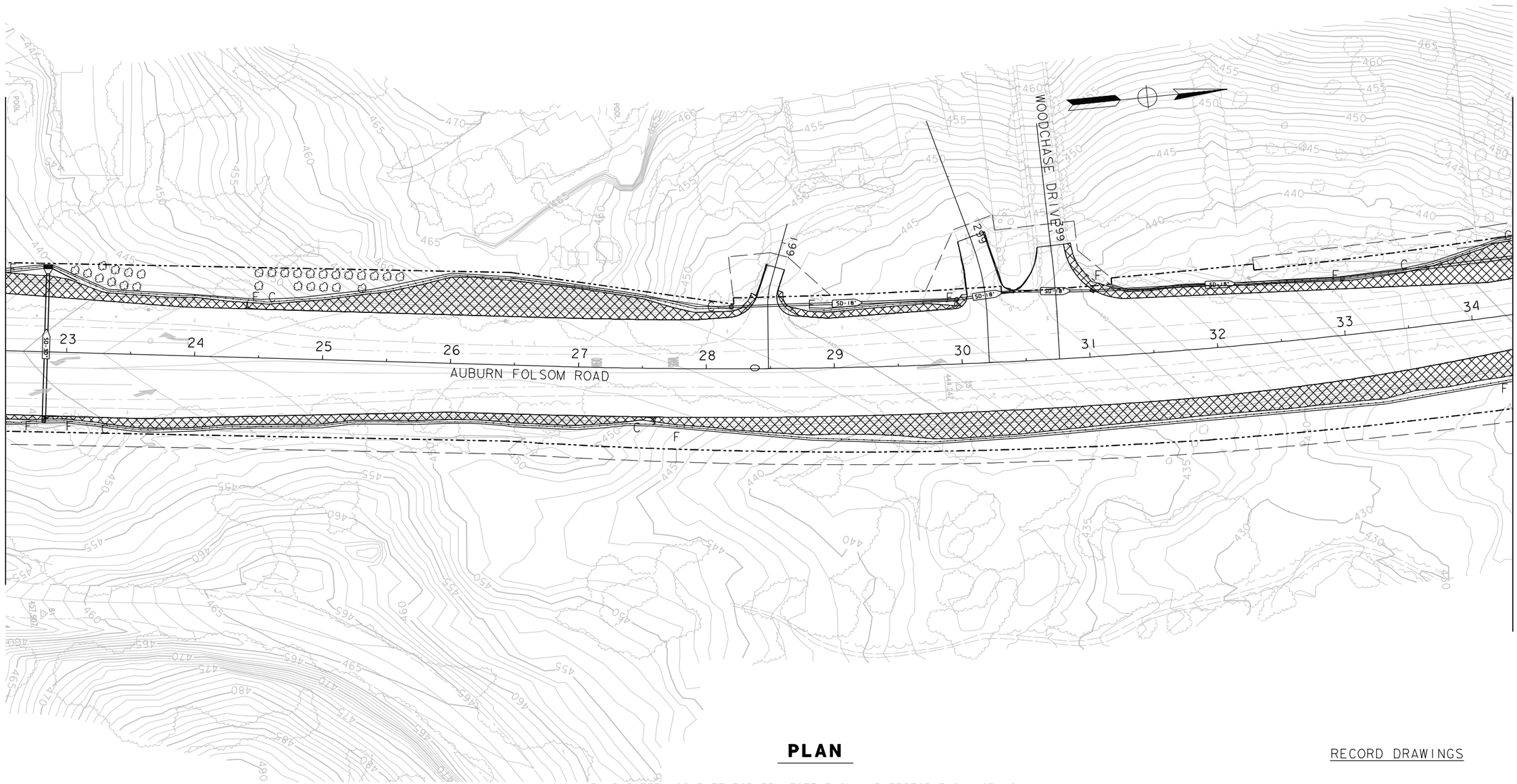

PLAN

THIS SHEET ACCURATE FOR RE-VEGETATION AND RESTORATION WORK ONLY

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ALL DIMENSIONS SHOWN IN FEET UNLESS OTHERWISE NOTED

RECORD DRAWINGS

INITIALS DATE

RV-3

01/23/07

PLAN SCALE: 1" = 40'
PROFILE SCALE: N/A
HORIZ: N/A
VERT: N/A

DESIGNED: B. STEPHENSON 01/23/07
DRAWN: B. STEPHENSON 01/23/07
CHECKED: J. OSTDIEK 01/23/07
RECORD DRAWINGS:

CONTRACT NO. 1001

DOKKEN ENGINEERING
2363 MARIPOSA AVENUE, SUITE 200
FOLSOM, CA 95630
PH: 916-858-0642 FAX: 916-858-0643

COUNTY OF PLACER DEPARTMENT OF PUBLIC WORKS
AUBURN FOLSOM ROAD WIDENING PROJECT - SOUTH PHASE

REVEGETATION PLAN

SHEET NO. 81 OF 95

REVISION #	DATE:	DESCRIPTION AND SHEET NO.:	APPROVED BY:	DATE:

REGISTERED PROFESSIONAL ENGINEER
BRIAN R. STEPHENSON
No. 65313
Exp. 9/30/07
CIVIL
STATE OF CALIFORNIA

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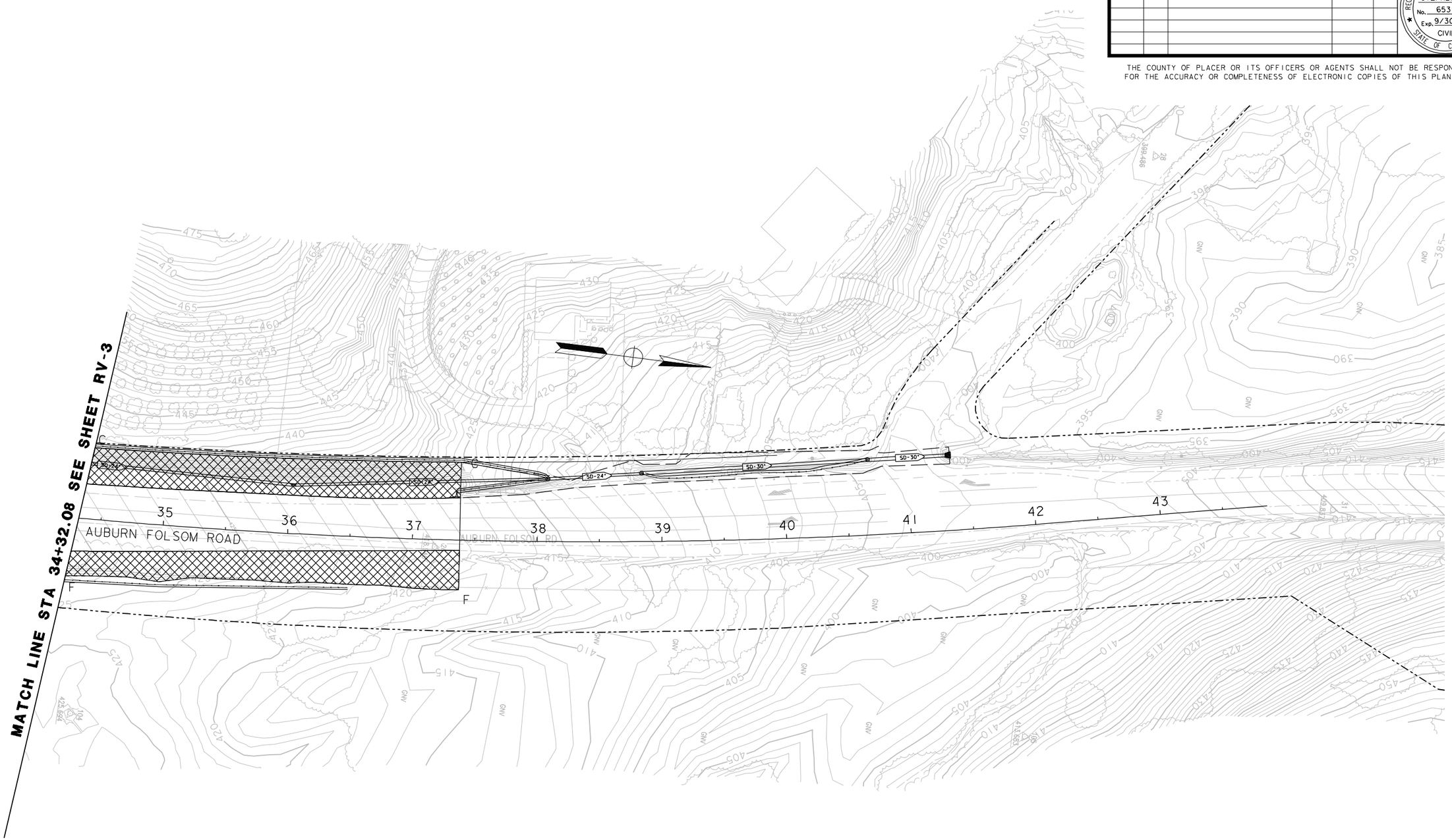

PLAN

THIS SHEET ACCURATE FOR RE-VEGETATION AND RESTORATION WORK ONLY

FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES 0 1 2 3

ALL DIMENSIONS SHOWN IN FEET UNLESS OTHERWISE NOTED

RECORD DRAWINGS

INITIALS DATE

RV-4

01/23/07

PLAN SCALE: 1" = 40'
PROFILE SCALE:
HORIZ: N/A
VERT: N/A

CONTRACT NO. 1001

DESIGNED: B. STEPHENSON 01/23/07
DRAWN: B. STEPHENSON 01/23/07
CHECKED: J. OSTDIEK 01/23/07
RECORD DRAWINGS:

DOKKEN ENGINEERING
2363 MARIPOSA AVENUE, SUITE 200
FOLSOM, CA 95630
PH: 916-858-0642 FAX: 916-858-0643

COUNTY OF PLACER DEPARTMENT OF PUBLIC WORKS
AUBURN FOLSOM ROAD WIDENING PROJECT - SOUTH PHASE

REVEGETATION PLAN

SHEET NO. 82 OF 95

LEGEND

R/W

15 GALLON TREE (NATIVE SPECIES)

NOTE

1. TREE SPACING IS 10' ON CENTER
2. TREES TO BE PLANTED ON RECLAMATION PROPERTY

REVISION #	DATE:	DESCRIPTION AND SHEET NO.:	APPROVED BY:	DATE:

REGISTERED PROFESSIONAL ENGINEER
BRIAN R. STEPHENSON
No. 65313
Exp. 9/30/07
CIVIL
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PLAN

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RECORD DRAWINGS

INITIALS DATE

RV-5

PLAN SCALE: 1"=40'
PROFILE SCALE:
HORIZ: N/A
VERT: N/A

DESIGNED: B. STEPHENSON 01/23/07
DRAWN: B. STEPHENSON 01/23/07
CHECKED: J. OSTDIEK 01/23/07
RECORD DRAWING:

CONTRACT NO. 1001

DOKKEN ENGINEERING
2365 IRON POINT ROAD, SUITE 200
FOLSOM, CA 95630
PH: 916-858-0642 FAX: 916-858-0643

COUNTY OF PLACER DEPARTMENT OF PUBLIC WORKS
AUBURN FOLSOM ROAD WIDENING PROJECT - SOUTH PHASE

REVEGETATION PLAN

SHEET NO. 83 OF 95

01/23/07

REVISION #	DATE:	DESCRIPTION AND SHEET NO.:	APPROVED BY:	DATE:

REGISTERED PROFESSIONAL ENGINEER
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RECORD DRAWINGS

INITIALS DATE

RV-6

01/23/07

PLAN SCALE: 1"=40'
PROFILE SCALE:
HORIZ: N/A
VERT: N/A

DESIGNED: B. STEPHENSON DATE: 01/23/07
DRAWN: B. STEPHENSON 01/23/07
CHECKED: J. OSTDIEK 01/23/07
RECORD DRAWINGS:

CONTRACT NO. 1001

DOKKEN ENGINEERING
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FOLSOM, CA 95630
PH: 916-858-0642 FAX: 916-858-0643

COUNTY OF PLACER DEPARTMENT OF PUBLIC WORKS
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REVEGETATION PLAN

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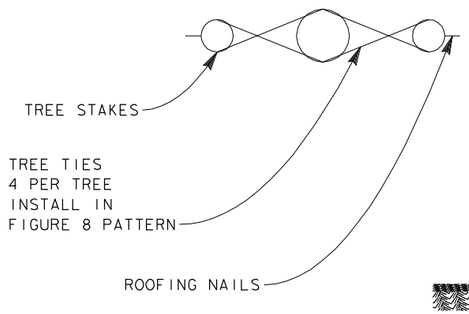
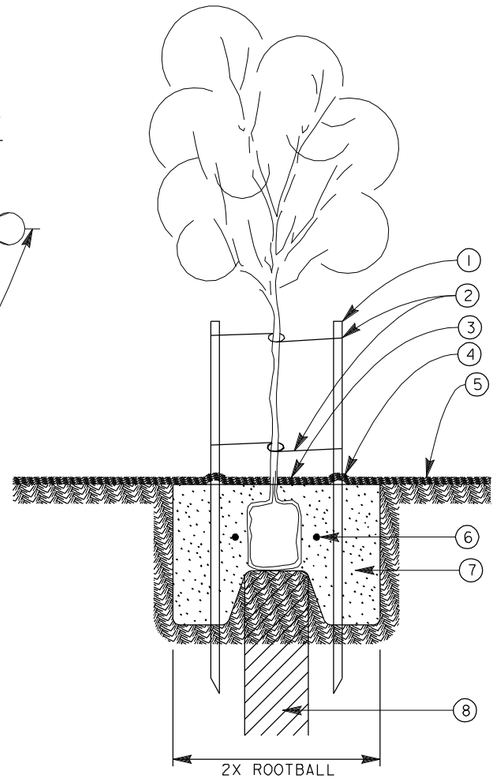
PLAN VIEW





PLANTING AND TREE STAKING DETAIL

1. TREE STAKES: 2 PER #15 TREE. DO NOT ALLOW STAKES TO RUB TRUNK OR LIMBS.
2. TREE TIES: 2 PER STAKE.
3. MULCH.
4. EARTH MOUND.
5. FINISH GRADE. INSTALL CROWN 1" ABOVE FINISH GRADE.
6. PLANT TABS, SEE PLANT LIST.
7. PREPARED BACKFILL, SEE PLANT LIST.
8. EACH TREE PIT TO HAVE 10" DIA. X 10 FT. DEEP SOIL BORE. BACKFIELD BORE MATERIAL.
9. SEE CALTRANS STANDARD AND SPECIAL PROVISIONS SPECIFICATION FOR ADDITIONAL INFORMATION.

EROSION CONTROL (TYPE D)

LOCATION	(SQYD)
'A' 4+50.68 LT TO 'OH' 98+90.19 RT	2122
'OH' 98+90.19 LT TO 'PD-1' 199+20.00 RT	1083
'PD-1' 199+20.00 LT TO 'LV' 299+00.21 RT	97
'LV' 299+00.21 LT TO 'WC' 399+11.18 RT	20
'WC' 399+11.18 LT TO 'A' 37+37.92 LT	1430
'A' 4+56.53 RT TO 'A' 6+44.21 RT	198
'A' 6+68.62 RT TO 'BP' 1+85.97 RT	1235
'BP' 1+83.90 LT TO 'A' 37+37.92 RT	2670
TOTAL=	8855

HIGHWAY PLANTING (MEDIAN)

LOCATION	SQFT
'A' 8+37.68 TO 'A' 19+59.72	12168
TOTAL=	12168

15 GALLON TREES

SHEET	COUNTY R/W	B.O.R.
HP-1	90	
HP-2	42	
HP-3	28	
HP-4		
HP-5		342
HP-6		124
TOTAL=	160	466

THIS SHEET ACCURATE FOR RE-VEGETATION AND RESTORATION WORK ONLY

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ALL DIMENSIONS SHOWN IN FEET UNLESS OTHERWISE NOTED

RECORD DRAWINGS

INITIALS DATE

RV-7

01/23/07

PLAN SCALE: N/A
PROFILE SCALE: N/A
HORIZ: N/A
VERT: N/A

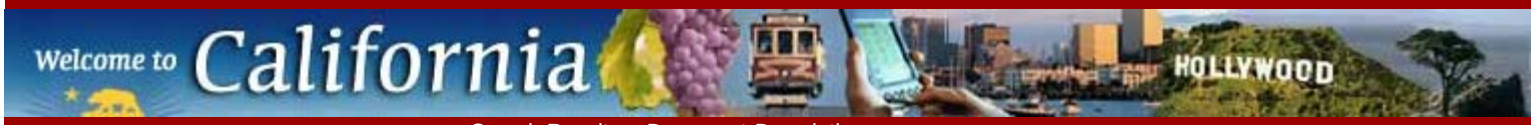
DESIGNED: B. STEPHENSON DATE: 01/23/07
DRAWN: B. STEPHENSON 01/23/07
CHECKED: J. OSTDIEK 01/23/07
RECORD DRAWINGS:

CONTRACT NO. 1001

DOKKEN ENGINEERING
2363 MONTROSE BLVD. SUITE 200
FOLSOM, CA 95630
PH: 916-858-0642 FAX: 916-858-0643

COUNTY OF PLACER DEPARTMENT OF PUBLIC WORKS
AUBURN FOLSOM ROAD WIDENING PROJECT - SOUTH PHASE
REVEGETATION PLAN

SHEET NO. 86 OF 95



Auburn-Folsom Road Four-Lane Widening Project

SCH Number: 2002042036

Document Type: NOD - Notice of Determination

Project Lead Agency: Placer County

Project Description

Widening of Auburn Folsom Road from Fuller Road to the Placer County line.

Contact Information

Primary Contact:
Gina Langford
Placer County
530-886-3000
11414 B Avenue
Auburn, CA 95603

Project Location

County: Placer
City: Auburn
Region:
Cross Streets: Auburn-Folsom Road from just south of Douglas Blvd. south to the the county line
Latitude/Longitude:
Parcel No: varies
Township:
Range:
Section:
Base:
Other Location Info:

Determinations

This is to advise that the ☒ Lead Agency ☐ Responsible Agency Placer County has approved the project described above on 6/22/2004 and has made the following determinations regarding the project described above.

1. The project ☒ will ☐ will not have a significant effect on the environment.

2. ☒ An Environmental Impact Report was prepared for this project pursuant to the provisions of CEQA.

   ☐ A Negative Declaration was prepared for this project pursuant to the provisions of CEQA.

3. Mitigation measures ☒ were ☐ were not made a condition of the approval of the project.

4. A Statement of Overriding Considerations ☐ was ☒ was not adopted for this project.

5. Findings ☒ were ☐ were not made pursuant to the provisions of CEQA.

Final EIR Available at: 11414 B Avenue Auburn, CA 95603

Date Received: 7/6/2004