SOUTHPARK PLANNED DEVELOPMENT

Final Environmental Impact Report

State Clearinghouse Number:

94071013

Prepared for:

City of Dixon

Prepared by:

Raney Planning and Management, Inc.

April 2002

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APPENDICES

1. INTRODUCTION AND LIST OF COMMENTORS

1. INTRODUCTION AND LIST OF COMMENTORS

Introduction

This Final Subsequent Environmental Impact Report (FSEIR) contains public and agency comments received during the public review period on the Southpark Draft Subsequent Environmental Impact Report (DSEIR). This document has been prepared by the City of Dixon in accordance with the California Environmental Quality Act (CEQA).

Background

This Environmental Impact Report (EIR) is an informational document intended to disclose the environmental consequences of approving and implementing the Southpark Project (proposed project). All written comments received during the 45-day public review period regarding the project are addressed in this FSEIR.

Summary of Text Changes

Chapter 3, Revisions to the DSEIR text, identifies all changes to the DSEIR. These changes are the result of either staff-initiated changes or in response to comments on the DSEIR made by the public during the public review period. The staff-initiated changes for the Southpark DSEIR primarily resulted in the refinement of the wording of mitigation measures and more detailed analysis of the intersection of First and A Streets.

Responses to Comments

Responses to comments received on the DSEIR are presented in Chapter 4, Comments and Responses. Each comment letter is numbered sequentially, and brackets indicate how the letter has been divided into individual comments. Each comment is given a number with the letter number appearing first, followed by the comment number. For example, comments in Letter 4 are numbered 4-1, 4-2, 4-3, and so on. The bracketed letter precedes responses to the letter's comments.

Some comments on the DSEIR do not pertain to physical environmental issues; or, do not relate to the proposed project. CEQA does not require responses to such comments. However, each of these comments are identified and are responded to in order to provide the reader information about why the comment is not germane to the project and/or this EIR.

List of Commentors

2. UPDATED TRAFFIC ANALYSIS

2. UPDATED TRAFFIC ANALYSIS

Introduction

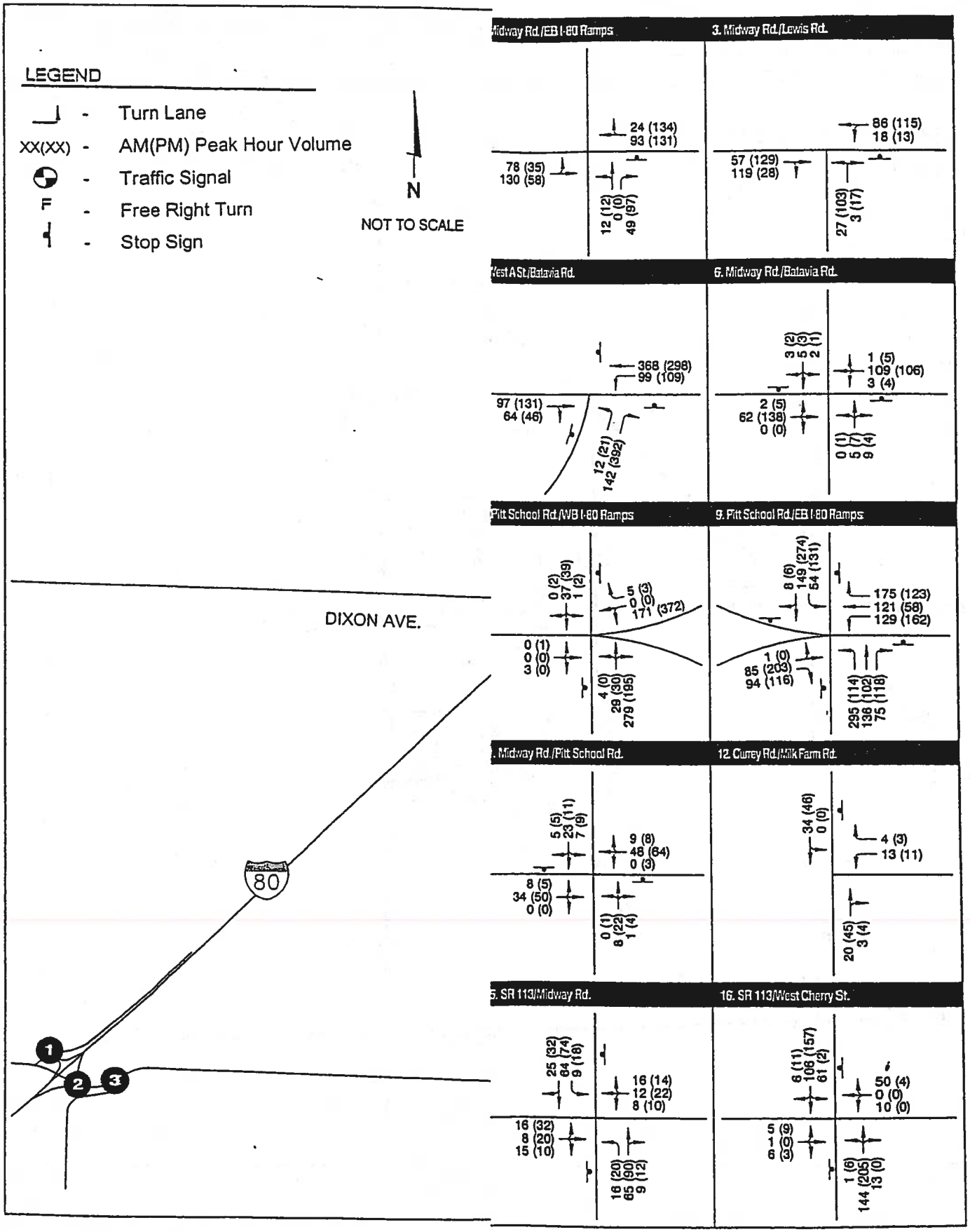
This chapter updates traffic data related to the proposed Southpark project. This updated traffic information was developed based on concerns raised in comments on the Southpark Draft Subsequent EIR (DSEIR), and ongoing traffic analyses being prepared by the City of Dixon. Any text revision generated by the analysis in this chapter is included in Chapter 3.

Additional Traffic Analysis related to Solano County Roads

In several comments responding to the Southpark DSEIR, transportation and circulation issues were raised regarding the project's impact on county roads. Fehr & Peers Associates was retained by the City of Dixon to provide additional analysis regarding county roadway level-of-service effects caused by the development of the proposed project. The following information is drawn from the Fehr & Peers information and is intended to supplement responses to comments in Letter 1 provided in Chapter 4. The traffic analysis performed by Fehr & Peers is available for review at City Hall.

> Intersection analysis provides a detailed and accurate indication of overall roadway operations because intersections represent the "bottlenecks" or constraint points of the roadway system. To conduct the intersection analysis, traffic counts and existing traffic operations data were collected during December 2000 for each intersection. Figure 2-1 displays the peak hour traffic volumes, lane configurations, and traffic control for each intersection.
>
> To develop existing plus project traffic volumes, project trips were added to the existing volumes based on an expanded trip distribution pattern from the DSEIR. The expanded trip distribution, which is shown in Figure 2-2, was developed using the City of Dixon Travel Demand Forecasting Model and existing traffic counts. The existing plus project traffic volumes for each intersection are displayed in Figure 2-3.
>
> The traffic operations data contained in Figures 2-1 and 2-3 were used to calculate a.m. and p.m. peak hour levels of service for the study intersections (technical calculations are contained in Fehr & Peers traffic study). The results of this analysis are shown in Table 2-1.
>
> The results show that the selected study intersections would operate at LOS C or better. According to the thresholds of significance (significance criteria) established in the DSEIR, a significant impact would occur if implementation of the project caused the existing traffic operations to deteriorate from LOS A, B, or C to D, E, or F. Based on the significance criteria, no new significant impacts would occur to the identified County roadways.

FIGURE 2-1
RP&M



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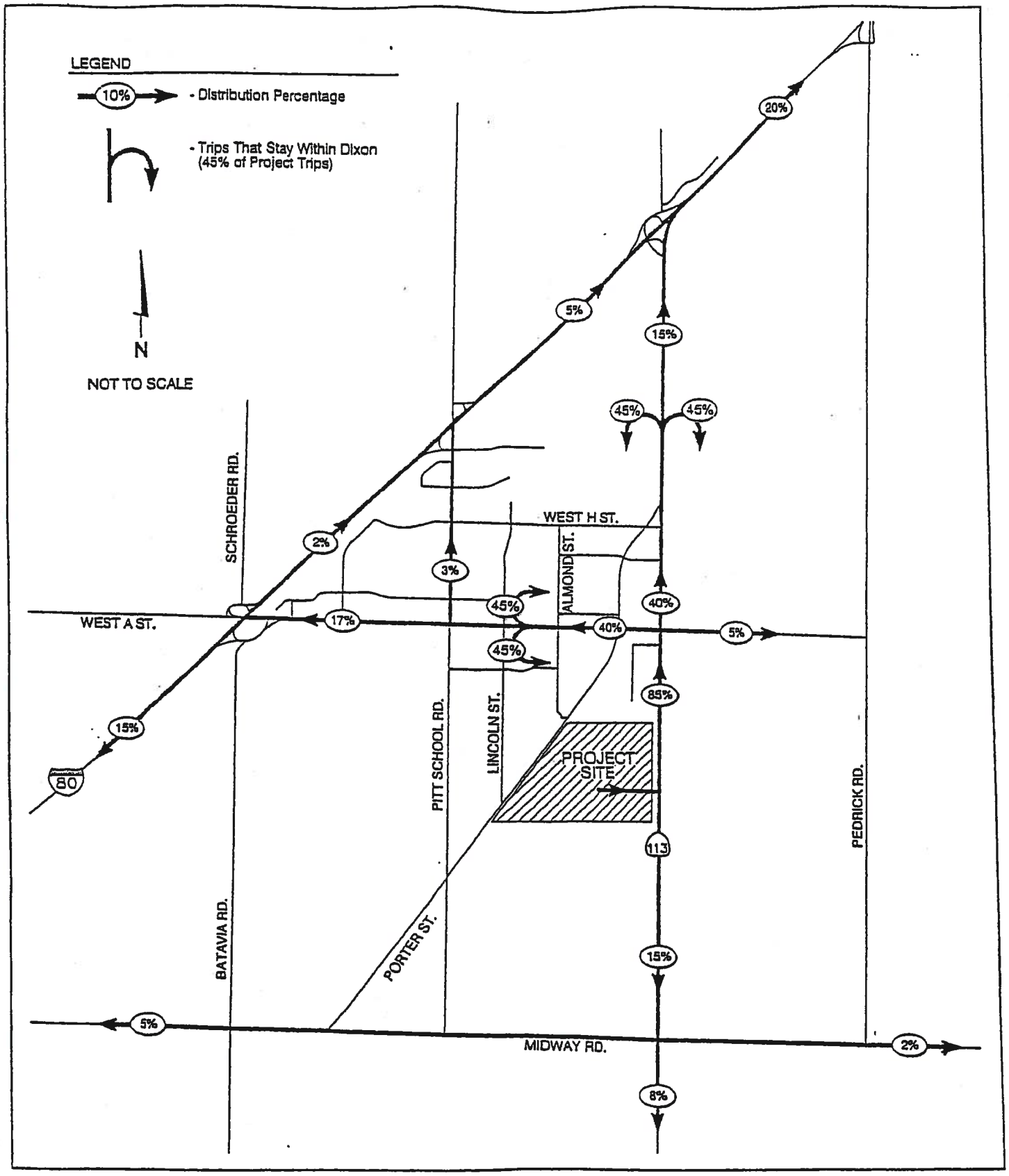
PEAK HOUR TRAFFIC VOLUMES AND LANE CONFIGURATIONS-EXISTING CONDITIONS

FIGURE 2-2
RP&M



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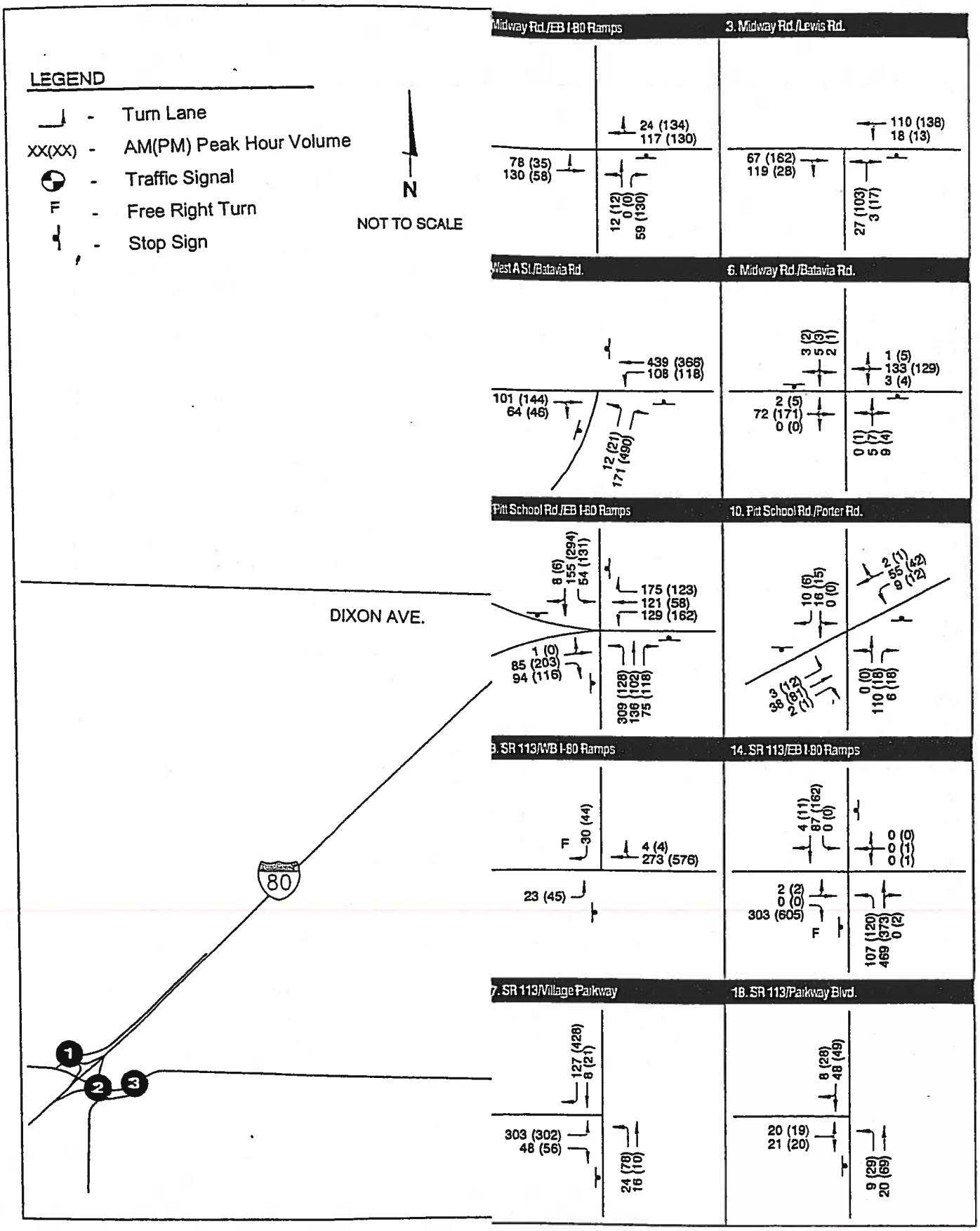
PROJECT TRIP DISTRIBUTION

FIGURE 2-3
RP&M



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PEAK HOUR TRAFFIC VOLUMES AND LANE CONFIGURATIONS- EXISTING PLUS PROJECT CONDITIONS

Table 2-1

Supplemental Traffic Operations Analysis Summary

Intersection	Traffic Control	Level of Service			
		Existing Conditions		Existing Plus Project Conditions	
		A.M. Peak Hour	P.M. Peak Hour	A.M. Peak Hour	P.M. Peak Hour
SR 113/Midway Road	Stop Sign	A	A	A	A
Midway Road/Pitt School Road	Stop Sign	A	A	A	A
Midway Road/Porter Road	Stop Sign	A	A	A	A
Midway Road/Batavia Road	Stop Sign	A	A	A	A
Midway Road/Lewis Road	Stop Sign	A	A	A	A
Midway Road/I-80 Eastbound Ramps	Stop Sign	A	A	A	A
O'Day Road/I-80 Westbound Ramps	Stop Sign	A	A	A	A
Pitt School Road/Porter Road	Stop Sign	A	A	A	A
West A Street/Batavia Road	Stop Sign	A	B	A	B
West A Street/Schroeder Road	Stop Sign	A	A	B	B
Pitt School Road/I-80 Eastbound Ramps	Stop Sign	B	C	B	C
Pitt School Road/I-80 Westbound Ramps	Stop Sign	A	B	A	B
SR 113/I-80 Eastbound Ramps	Stop Sign	A	A	A	A
SR 113/I-80 Westbound Ramps	Stop Sign	A	B	A	B
Milk Farm Road/Currey Road	Stop Sign	A	A	A	A
SR 113/W. Cherry Street	Stop Sign	A	A	A	A
SR 113/Village Parkway (project only)	Stop Sign	—	—	A	A
SR 113/Parkway Boulevard (project only)	Stop Sign	—	—	A	A

Notes:
LOS is based on intersection delay, which was calculated using the procedures and methodology contained in the *Highway Capacity Manual, Special Report 209*, Transportation Research Board, 1994.

As shown in Table 2-1, the level of service remains at acceptable levels throughout the county roadways with buildout of the project. Therefore, the project is not anticipated to add a significant level of new vehicle trips to the county roadway system, and the project would not result in any new or increased safety and structural integrity issues.

It should be noted that accepted traffic engineering assumptions state that the addition of traffic to roadways is not expected to increase existing accident rates. To the contrary, the *Traffic and*

Engineering Handbook (Institute of Transportation Engineers, Fourth Edition, 1992) presents information showing that the rate of one-vehicle and multi-vehicle accidents on two-lane roads decrease as the average daily traffic volume increases. The handbook provides a figure (see Chapter 4, Figure 4-4) showing that a reduction in accident rates of up to approximately 50 percent can be expected as the average daily traffic volume increases from 1,000 vehicles per day to 5,000 vehicles per day.

It should also be noted that the County of Solano has constructed and continues to maintain jurisdictional responsibility over the structural and safety integrity of the County roadways. The county met the minimum design standards for these roadways at the time of the roadway construction and the Southpark traffic analysis considered the design minimums in the analysis. In addition, the county has not identified roadways near the project site, particularly areas along State Route 113, as traffic safety hazards based on quantitative data. The Solano Transportation Authority (STA) has prepared a Travel Safety Program in 1998 to address roadway safety issues on a countywide basis. The plan identified the 40 local intersections with the highest accident rates. Based on the Travel Safety Projects map provided by the STA, none of the projects is in the Dixon area.

Because the development of the Southpark project would not add a significant number of vehicle trips to county roadways that were designed based upon minimum safety and structural integrity standards, the additional traffic generated by the proposed project would not have a significant impact on the county roadways.

Additional Traffic Analysis related to First Street/A Street Intersection

The City of Dixon has continued to consider design options for the ultimate operation of the intersection of First Street and A Street. In addition, the city has raised ongoing concerns with the impacts of Southpark, and other development projects, at this intersection. Fehr & Peers has conducted further analysis of designing the intersection with dedicated left-turn lanes, which deviates from the dedicated right-turn lane identified in the previous Southpark DSEIR. In their revised analysis, Fehr & Peers reconsidered the phasing of impacts and mitigation measures associated with the Southpark development. The following assessment is drawn from information in the report, and serves to contribute to the responses to comments in Chapter 4.

Option 1: Install a traffic signal and provide exclusive eastbound and westbound right-turn lanes. The eastbound and westbound approaches would have a shared through/left-turn lane with split phasing. This option was originally included in the *Southpark Planned Development, Draft Subsequent Environmental Impact Report* (DSEIR), City of Dixon, August 2000.

Option 2: Install a traffic signal and provide exclusive eastbound and westbound left-turn lanes. The eastbound and westbound approaches would have a shared through/right-turn lane with protected left-turn phasing.

In addition to these mitigation options, we determined the minimum required intersection lane configurations to provide level of service (LOS) C operations during the AM and PM peak hours under existing conditions with buildout (i.e., existing conditions plus phases 1-5) of Southpark.

Analysis Results

The analysis results for the two options described above are compared in Table 4.2-9 (technical calculations are contained in Attachment A).

Table 4.2-9
West A Street/North First Street Intersection
Alternative Mitigation Analysis Comparison

Option/Phase	AM Peak Hour		PM Peak Hour	
	Delay (1)	LOS (2)	Delay (1)	LOS (2)
Option 1: Installation of a traffic signal and exclusive eastbound and westbound right-turn lanes				
Existing conditions plus Phase 1	17.0	C	18.8	C
Existing conditions plus Phases 1-2	17.8	C	21.1	C
Existing conditions plus Phases 1-3	19.2	C	23.5	C
Existing conditions plus Phases 1-4	19.6	C	24.9	C
Existing conditions plus Buildout	20.3	C	34.7	D
Option 2: Installation of a traffic signal and exclusive eastbound and westbound left-turn lanes				
Existing conditions plus Phase 1	13.9	B	15.6	C
Existing conditions plus Phases 1-2	14.1	B	18.5	C
Existing conditions plus Phases 1-3	14.7	B	22.7	C
Existing conditions plus Phases 1-4	15.3	C	27.4	D
Existing conditions plus Buildout	16.0	C	48.8	E

Notes:
(1) Delay = Average delay in seconds per vehicle.
(2) LOS = Level of Service
Source: Fehr & Peers Associates, Inc. 2002

For the first three phases, Option 2 provides delay and LOS results that are slightly better than Option 1. However, with the addition of Phase 4, Option 2 would result in operations that are worse than LOS C during the p.m. peak hour. The heavy traffic volumes in the northbound left-turn and eastbound right-turn movements (i.e., vehicles traveling to and from I-80 and using West A Street) significantly impact the LOS at the study intersection.

The following lane configurations would provide LOS C operations at the A Street/First Street intersection under existing conditions with buildout of Southpark:

- Northbound: Dual left-turn lanes and a shared through/right-turn lane;
- Southbound: Exclusive left-turn lane and a shared through/right-turn lane;
- Eastbound: Exclusive left-turn lane, exclusive through lane, and exclusive right-turn lane; and
- Westbound: Exclusive left-turn lane and a shared through/right-turn lane.

This configuration provides LOS B in the AM peak hour and LOS C in the PM peak hour with buildout of Southpark under existing conditions. Please note that the northbound dual left-turn lanes would require dual westbound receiving lanes. This leg of the intersection has a cross section of 40 feet with permanent structures located on both sides of the roadway, which may reduce the feasibility of providing this improvement.

The City of Dixon has determined that due to the existing permanent structures along 1st and A Streets, the improvements needed to reach LOS C are not feasible. The City of Dixon determined that dedicated left-turn lanes are the preferred configuration for the intersection of A Street and First Street and has selected Option 2 as the preferred mitigation alternative. Based upon this conclusion, the Project-Specific Impacts and Mitigation Measures in the Southpark DSEIR, Chapter 4.2, pages 4.2-13 through 4.2-14, are revised as indicated in Chapter 3.

The prior information is also referenced in response to comments 1-3, 1-4, 1-5, 3-1, 3-2, 3-3, 5-1, 5-2, 5-3, 5-4, 6-1, 6-2, 6-3, 6-4, 6-5, 6-7.

3. REVISIONS TO THE DSEIR TEXT

3. REVISIONS TO THE DSEIR TEXT

Introduction

This chapter presents all of the revisions made to the DSEIR as a result of either staff initiated changes or in response to comments received. New text is underlined and deleted text is struck through. Text changes are presented in the page order in which they appear in the DSEIR.

TEXT CHANGES

NOTE: New text is double underlined; deleted text is ~~struck through~~.

Chapter 2, Executive Summary

Table 2-2, Summary of Impacts and Mitigation Measures is revised and is included at the end of this chapter.

Chapter 4.2, Transportation and Circulation

The first sentence in the seventh paragraph on page 4.2-3 is revised to read:

Table 4.2-3 also indicated if the intersection met the peak hour volume warrant for signalization as defined in the *Traffic Manual*, Caltrans, July 1 [~~1995~~] 1996.

Pages 4.2-13 to 4.2-14 are revised to read:

4.2-1 *The project applicant shall be responsible to fund a fair share portion of the cost of ~~to install~~ a traffic signal installation at the First Street/A Street intersection to be constructed by the City and the installation of the conceptual configuration selected by the City for dedicated left-turn lanes to be constructed by the City. ~~and to widen the eastbound and westbound approaches to include the addition of exclusive right-turn lanes.~~ These improvements require coordination with the City of Dixon and approval of an encroachment permit by the California Department of Transportation. The signal and turn-lane improvements shall be completed prior to occupancy ~~the issuance of building permits. Implementation of this mitigation measure would provide LOS C operations during the a.m. and p.m. peak hour under existing plus proposed project Phase 1 conditions.~~*

4.2-2 Development ~~of Phases 1~~ through Phase 4 of the proposed project would cause an increase in peak hour traffic volumes at the First Street/West A Street intersection.

As shown in ~~Table 4.2-7~~ Table 4.2-9 in the FEIR, development ~~of Phases 1~~ through Phase 4 of the proposed project would cause the unsignalized First Street/A Street intersection to operate at LOS F during the a.m. and the p.m. peak hours. This is considered to be a ***significant impact.***

Mitigation Measure

Implementation of the following mitigation measure would reduce the magnitude of the impact to a *less-than-significant* level.

4.2-2(a) *Implement Mitigation Measure 4.2-1.*

4.2-2(b) *Prior to construction of Phase 4, the project applicant shall be required to fund a fair-share portion of the cost to construct a new roadway between First Street and Pitt School Road and the extension of Pitt School Road to the subdivision "A" street. These new roadways are intended to be consistent with the planned minor arterial (grade-separated railroad crossing) identified in the 1993 City of Dixon General Plan.*

~~It should be noted that Mitigation Measure 4.2-1 must be completed prior to the construction of Phase 1 to ensure that the operation of the intersection is at LOS C.~~

4.2-3 Implementation of the full project (~~Phases 1~~ through Phase 5) would cause an increase in peak hour traffic volumes at the First Street/A Street intersection.

As shown in ~~Table 4.2-7~~ Table 4.2-9 in the FEIR, full buildout (~~Phases 1~~ through Phase 5) of the Southpark Planned Development would cause the unsignalized First Street/A Street intersection to operate at LOS F during the a.m. and the p.m. peak hours. This is considered to be a ***significant impact.***

Mitigation Measures

Implementation of the following mitigation measure would reduce the magnitude of the impact to a *less-than-significant level*.

~~4.2-3(a) *Implement Mitigation Measure 4.2-1.*~~

~~Implementation of Mitigation Measure 4.2-1 would improve the a.m. peak hour level of services to LOS C, but the p.m. peak hour level of service would be LOS D. Because LOS~~

~~D is not acceptable under the City's General Plan, the impact would be significant and requires additional mitigation. Implementation of the following mitigation measures would reduce the impact to a *less-than-significant* level.~~

~~4.2-3(b)~~ ~~*The project applicant shall be responsible to fund a fair share portion of the cost to widen the eastbound and westbound approaches to include exclusive left-turn lanes and widen the northbound approach to include an exclusive right-turn lane. These improvements shall be constructed prior to the development of Phase 5 to provide LOS C or better operations during the a.m. and p.m. peak hours.*~~

~~OR~~

The project applicant shall be required to fund a fair-share portion of the cost to construct a new roadway between First Street and Pitt School Road. This new roadway is intended to be consistent with the planned minor arterial (grade separated railroad crossing) identified in the 1993 City of Dixon General Plan. This improvement shall be constructed prior to the development of Phase 5 to provide LOS C or better operations during the a.m. and p.m. peak hours. ~~*Implementation of this improvement in conjunction with the signalization and turn lane improvements of Mitigation Measure 4.2-1 would provide LOS C at the First Street/A Street intersection during the a.m. and p.m. peak hours under existing plus full project conditions. This improvement shall be constructed prior to the development of Phase 5.*~~

~~4.2-3(c)~~ ~~*It should be noted that the construction of exclusive left-turn lanes on A Street at the intersection with First Street may be difficult due to the location of existing buildings and the available roadway width. The traffic consultant for this EIR has indicated that the east and westbound improvements can be constructed if the full design standards are relaxed and an encroachment permit is granted by Caltrans. If these improvements are determined to be impossible, then the City of Dixon shall require the construction of the railroad crossing connecting First Street and Pitt School Road.*~~

~~*The City of Dixon shall program and identify the funding mechanism for the implementation of Mitigation Measure 4.2-3(b).*~~

Note that the text on page 4.2-14 after Cumulative Impacts and Mitigation Measures are not changed.

Chapter 4.3, Biological Resources

Page 4.3-4, second paragraph, second sentence is revised to read:

> Burrowing owls were not observed on the project site during the June 2, 1993 survey. However, there are active burrows located approximately 0.25 miles east of where Pitt School Road crosses the Union Pacific Railroad tracks. In addition, burrowing owls were observed along SR 113 approximately one mile south of the project site. Burrowing owls are also known to occur at Hall Park in the City of Dixon, the United States Naval Transmitter Facility off of Radio Station Road, and along a number of other roadways and levees in the agricultural areas located south and east of the City of Dixon.

Pages 4.3-7 to 4.3-8, starting with the fifth paragraph, is revised to read:

4.3-1(a) ~~*Prior to issuance of a grading permit, a DFG-approved raptor biologist shall survey all potential burrowing owl habitat and record the presence of individual burrowing owls, sign of burrowing owls (i.e., fecal whitewash at the entrance to burrows, etc.) and all burrows that are in use by individuals.*~~
The project site shall be surveyed for burrowing owls during the peak of the breeding season (April 15 to July 15) and nesting (February 1 through August 31) season, unless burrowing owls are detected during the first survey. Surveys shall be conducted one hour before sunrise to two hours after, or two hours before sunset to one hour after.

4.3-1(b) ~~*If a nest is found, no grading shall be allowed during the nesting season (April-July) within 125 feet of any nest burrow identified by the DFG-approved raptor biologist.*~~
If owls are detected on the site, mitigation measures to minimize the impacts to this species would be required, as follows:

- *Occupied burrows shall not be disturbed during the nesting season (February 1 through August 31) unless approved by DFG;*
- *To offset the loss of foraging and burrow habitat on the project site, a minimum of 6.5 acres of foraging habitat per pair or unpaired resident shall be acquired and permanently protected. The protected lands should be adjacent to occupied burrowing owl habitat and acceptable to DFG;*
- *When destruction of burrows is unavoidable, existing unsuitable burrows shall be enhanced, or new burrows created, at a 2:1 ratio on the protected lands site;*

- *If owls must be moved off the project site, passive relocation techniques, such as excluder devices, shall be used rather than trapping; and*

- *The project sponsor shall provide funding for long-term management and monitoring of the protected lands. Monitoring should include success criteria, remedial measures, and an annual report submitted to DFG.*

4.3-1(c) ~~*Prior to grading within burrowing owl habitat in which individual owls have been identified by the DFG-approved raptor biologist, all individual burrowing owls will be trapped or carefully excavated and relocated to a DFG-approved location. All trapping shall be supervised by the DFG-approved raptor biologist.*~~

All mitigation shall be conducted generally between September 1 and January 31, as determined by DFG.

4.3-1(d) *Following implementation of mitigation measures, preconstruction surveys shall be conducted within 30 days of the start of construction to ensure no additional burrowing owls have established territories on the project site.*

Impact 4.3-3 on page 4.3-9, is revised to read:

The 1994 Southpark EIR provided the following mitigation measures to reduce the cumulative impact to a less-than-significant level.

No disturbance, construction or other project-related activities which may cause abandonment or forced fledgling shall occur within ½ mile of the active Swainson's hawk nest located immediately to the south of the Southpark site during March 1 - August 15 or until the fledglings are no longer dependent upon the nest tree.

Alternatively, the applicant shall fund an intensive monitoring program of the nest site by a California Department of Fish and Game-approved raptor biologist to determine if construction or project-related activities are affecting the behavior of the adults or fledglings in such a way that nest abandonment or forced fledgling may occur. Should behaviors be observed that are recognized as preceding nest shall cease.

The applicant shall also participate in one of the following mitigation programs to reduce the impacts from the loss of Swainson's hawk foraging habitat to less than significant.

- The applicant shall prepare a Swainson's Hawk Habitat Management Plan (HMP) as a condition of approval for a California Fish and Game Code Section 2081 Management Agreement that will allow for "incidental take" Swainson's Hawk habitat.

- Alternatively, the applicant shall join the City of Dixon as a participant in a countywide effort to prepare a Swainson's hawk HMP for a California Fish and Game Code Section 2081 Management Agreement that will comprehensively address the "incidental take" of all Swainson's hawk that would occur as a consequence of the City's project approvals.[1]

Since the preparation of the 1994 Southpark EIR, several changes have occurred with regard to the status of the Swainson's hawk and the potential to develop a county-wide Swainson's hawk habitat plan~~, and the CEQA definition of cumulative impacts.~~ The loss of potential foraging habitat no longer requires an "incidental take" permit. Therefore, the development of a Solano County habitat management plan for Swainson's Hawk habitat is not currently required, has not been funded by any of the local jurisdictions, and does not appear likely. Therefore, implementation of the previously approved mitigation measure would no longer fully reduce cumulative impacts to Swainson's hawk foraging habitat. To address these changes, the previously adopted mitigation measure is refined to reflect the new guidelines put forth by the DFG. This refinement of the previously adopted mitigation measure does not change the original intent of the mitigation to reduce this cumulative impact to a less-than-significant level. The previously adopted mitigation measures is revised as follows:

> No disturbance, construction or other project-related activities which may cause abandonment or forced fledgling shall occur within ½ mile of the active Swainson's hawk nest located immediately to the south of the Southpark site during March 1 - August 15 or until the fledglings are no longer dependent upon the nest tree.
>
> Because at least one active nest is located within one mile of the project site, the project applicant would be required to provide replacement habitat at a 1:1 ratio, consistent with CDFG requirements. To mitigate for the loss of 211 acres of Swainson's hawk foraging habitat, the project applicant must provide 211 acres of Habitat Management lands to CDFG. Habitat Management lands protected under this requirement may be protected through fee title acquisition or a conservation easement (acceptable to CDFG) on agricultural or other suitable land that provides foraging habitat for Swainson's hawk. Should the City establish a fee program to fund the purchase of Habitat Management lands to compensate for the loss of Swainson's hawk foraging habitat, the project applicant may participate in the fee program in lieu of the provision of 211 acres of land required by this measure.
>
> ~~Alternatively, the applicant shall fund an intensive monitoring program of the nest site by a California Department of Fish and Game-approved raptor biologist to determine if construction or project-related activities are affecting the behavior of the adults or fledglings in such a way that nest abandonment or forced fledgling may occur. Should behaviors be observed that are recognized as preceding nest shall cease.~~
>
> ~~The applicant shall also participate in one of the following mitigation programs to reduce the impacts from the loss of Swainson's hawk foraging habitat to less than significant.~~
>
> - ~~The applicant shall prepare a Swainson's Hawk Habitat Management Plan (HMP) as a condition of approval for a California Fish and Game Code Section 2081 Management Agreement that will allow for "incidental take" Swainson's Hawk habitat.~~
>
> - ~~Alternatively, the applicant shall join the City of Dixon as a participant in a county wide effort to prepare a Swainson's hawk HMP for a California Fish and Game Code Section 2081 Management Agreement that will comprehensively address the "incidental take" of all Swainson's hawk that would occur as a consequence of the City's project approvals.~~[2]
>
> ~~Finally, under the recently updated CEQA Guidelines, a cumulative impact is significant if the project's incremental contribution to the impact is "cumulatively considerable", which is defined as follows:~~

~~"Cumulatively considerable" means that the incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects. (CEQA Guidelines, Section 15065(c))~~

Incorporation of the refined previously adopted 1994 mitigation measure as part of the proposed project would reduce impacts associated with the cumulative loss of foraging habitat to a less-than-significant level and no additional mitigation is required. ~~Development of the project site was not determined to be a significant loss of foraging habitat at a project-specific level, the incremental loss of foraging habitat on the project site when viewed in connection with the effects of all other projects would not meet the definition of cumulatively considerable.~~ Therefore, the cumulative impact is considered *less than significant.*

Chapter 4.5, Public Infrastructure and Utilities

Page 4.5-6, Mitigation Measure 4.5-1(b) is revised to read:

> *4.5-1(b) Prior to construction, the project applicant shall fund a fair share, per the AB1600 fee program, of the drainage facilities improvements identified by the City of Dixon in the 1999 Storm~~water~~ Drain~~age~~ Report ~~for Detention Basin A~~ and the current AB1600 Facilities and Equipment study. In addition, the City of Dixon shall establish a maintenance district to pay a fair share of the maintenance costs.*

Page 4.5-7, Impact 4.5-2 is revised to read:

> **4.5-2 Development of the proposed project would generate an additional need for wastewater collection infrastructure, ~~and~~ treatment, and disposal.**

Page 4.5-8, fourth paragraph is revised to read:

> *4.5-3 ~~None required.~~ Prior to the approval of a final map, the project applicant shall provide confirmation that adequate fire flow exists throughout the development to meet the current DSMWS standards for fire flow and meets the approval of the City Engineer, DSMWS Engineering Staff, and Fire Chief.*

Chapter 4.6, Public Services

Pages 4.6-7 and 4.6-8, Mitigation Measure 4.6-2(b) is revised to read:

> *4.6-2(b) Prior to issuance of building permits, the applicant shall coordinate with the Dixon Fire Chief to review the development plans and identify any units that may not have a response time consistent with the City's ISO rating. For any unit identified with an inadequate fire response time, the applicant shall incorporate building design components to enhance fire safety. These measure may include the ~~addition~~ use of eave vents, fire sprinklers, or other design features required by the Fire Chief.*

Page 4.6-8 and 4.6-9, Mitigation Measure 4.6-3 is revised to read:

> *4.6-3 Prior to issuance of building permits, the project applicant shall pay the calculated school impact fee. Under SB50, a school district can levy Level 2 fees to projected development when it satisfies the criteria set for under that statute. ~~Based on the total costs projected and the student yield rates, the development fee for schools is $3.26 per square foot of residential development.~~*

Appendix C, Initial Study and Environmental Checklist

Appendix C, Initial Study, pages 13 and 14 is hereby amended to read:

The 1994 South Park EIR (page 3.3-5) identified the following mitigation measure to reduce impacts from increased runoff to a less-than-significant level:

> *The project applicant, in coordination with the City of Dixon Public Works Department, shall prepare a site drainage plan which incorporates storm drains, lateral and trunk drainage lines, and other facilities as necessary to ensure adequate drainage of surface runoff at the Southpark site. This plan shall be reviewed and approved by the City of Dixon Public Works Department prior to issuance of a grading permit.*
>
> *As a condition of the issuance of the grading permit, the project applicant shall contribute a fair share of the costs of design~~, siting,~~ and construction of ~~Detention Basin C~~ Pond A. A fair share of the total costs (i.e., percentage of total cost) shall be based upon the percentage of the developed portion of Area C that is represented by the developed portion of the Southpark site. ~~Detention Basin C shall be designed to have sufficient capacity to allow the City to meet its obligation to discharge no more than 77 cfs to the DRCD drainage system.~~*

Compliance with the 1994 Southpark EIR mitigation measure, as amended below, would ensure that the proposed project would result in no new impacts and no further mitigation is required.

> *The project applicant, in coordination with the City of Dixon Public Works Department, shall prepare a site drainage plan which incorporates storm drains, lateral and trunk drainage lines, and other facilities as necessary to ensure adequate drainage of surface runoff at the Southpark site. This plan shall be reviewed and approved by the City of Dixon Public Works Department prior to issuance of a grading permit.*
>
> *The project applicant shall pay their fair share towards Citywide drainage improvements, as identified in the City's AB1600 fee program.*

Appendix C, Initial Study, page 16 is hereby amended to read:

a,b) The proposed project is located within the Sacramento Valley Air Basin, and the City of Dixon is located within the jurisdiction of the Yolo-Solano Air ~~Pollution Control~~ Quality Management District. According to the City of Dixon 1993 General Plan, the District has been named an attainment area for all pollutants measured except ozone. The 1994/95 EIR stated that the City of Dixon is

considered an attainment area for national PM_{10} and non-attainment for state air quality standards for PM_{10}.

Appendix C, Initial Study, page 26 is hereby amended to read:

Compliance with the 1994 Southpark EIR mitigation measure, as amended below, would ensure that the proposed project would result in no new impacts and no further mitigation is required.

> *Prior to the approval of a tentative map in the project area for the any residential uses, the project proponent shall submit an acoustical analysis which identifies mitigation measures to reduce the noise level to 65 dB. The mitigation measures shall be incorporated into the project design. The mitigation measures may include:*

~~The 1994 Southpark EIR (page 3.8-8) contained the following mitigation measure to reduce First Street traffic noise impacts to a less-than-significant level:~~

> ~~*Sound attenuation in the form of a wall can reduce the estimated noise level to 65 dB at the multi-family residential uses. Based on preliminary assumptions regarding the type of multi-family housing unit and location of the wall, the attenuation would be accomplished with the following geometric description:*~~
>
> - *~~4 foot s~~Sound attenuation wall, berm or combination that equals the required height;*
> - *Roadway and building pads are at the same elevation;*
> - *Wall or berm is located ~~25 feet~~ at an appropriate distance from the First Street centerline; and*
> - *Housing units are located ~~a minimum of 50 feet~~ at an appropriate distance from First Street centerline*
>
> ~~*Prior to issuance of a building permit, the project proponent shall comply with the sound attenuation provisions listed above or provide additional sound analysis based on further refinement of the project description.*~~

Appendix C, Initial Study, page 27 is revised to read:

> - *Railroad track based is six feet above building pad elevation;*

Mitigation Measures identified in the 1994 Southpark EIR are summarized in the attached Table 2-2. Modifications are indicated in the Table to reflect discussions in this Final Subsequent EIR.

TABLE 2-2
SUMMARY OF IMPACTS AND MITIGATION MEASURES

	Impact	Level of Significance Prior to Mitigation		Mitigation Measure(s)	Level of Significance After Mitigation
	4.2 Transportation and Circulation				
4.2-1	Development of Phase 1 of the proposed project would cause an increase in peak hour traffic volumes at the First Street/A Street intersection.	S	4.2-1	The project applicant shall be responsible to fund a fair share portion of the cost of ~~to install~~ a traffic signal installation at the First Street/A Street intersection to be constructed by the City and the installation of the conceptual configuration selected by the City for dedicated left-turn lanes to be constructed by the City. ~~and to widen the eastbound and westbound approaches to include the addition of exclusive right-turn lanes.~~ These improvements require coordination with the City of Dixon and approval of an encroachment permit by the California Department of Transportation. The signal and turn-lane improvements shall be completed prior to occupancy ~~the issuance of building permits. Implementation of this mitigation measure would provide LOS C operations during the a.m. and p.m. peak hour under existing plus proposed project Phase 1 conditions.~~	LS
4.2-2	Development ~~of Phases 1~~ through Phase 4 of the proposed project would cause an increase in peak hour traffic volumes at the First Street/A Street intersection.	S	4.2-2(a)	Implement Mitigation Measure 4.2-1.	LS
			(b)	Prior to construction of Phase 4, the project applicant shall be required to fund a fair-share portion of the cost to construct a new roadway between First Street and Pitt School Road and the extension of Pitt School Road to the subdivision "A" street. These new roadways are intended to be consistent with the planned minor arterial (grade-separated railroad crossing) identified in the 1993 City of Dixon General Plan.	
4.2-3	Buildout of the proposed project (~~Phases 1~~ through Phase 5) would cause an increase in peak hour traffic volumes at the First Street/A Street intersection.	S	4.2-3~~(a)~~	~~Implement Mitigation Measure 4.2-1.~~	LS

TABLE 2-2
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
		~~(b) The project applicant shall be responsible to fund a fair share portion of the cost to widen the eastbound and westbound approaches to include exclusive left-turn lanes and widen the northbound approach to include an exclusive right-turn lane. These improvements shall be constructed prior to the development of Phase 5 to provide LOS C or better operations during the a.m. and p.m. peak hours.~~ ~~OR~~ The project applicant shall be required to fund a fair-share portion of the cost to construct a new roadway between First Street and Pitt School Road. This new roadway is intended to be consistent with the planned minor arterial (grade separated railroad crossing) identified in the 1993 City of Dixon General Plan. This improvement shall be constructed prior to the development of Phase 5 to provide LOS C or better operations during the a.m. and p.m. peak hours. ~~Implementation of this improvement in conjunction with the signalization and turn lane improvements of Mitigation Measure 4.2-1 would provide LOS C at the First Street/A Street intersection during the a.m. and p.m. peak hours under existing plus full project conditions. This improvement shall be constructed prior to the development of Phase 5.~~ ~~(c) It should be noted that the construction of exclusive left-turn lanes on A Street at the intersection with First Street may be difficult due to the location of existing buildings and the available roadway width. The traffic consultant for this EIR has indicated that the east and westbound improvements can be constructed if the full design standards are relaxed and an encroachment permit is granted by Caltrans. If these improvements are determined to be impossible, then the City of Dixon shall require the construction of the railroad crossing connecting First Street and Pitt School Road.~~ ~~The City of Dixon shall program and identify the funding mechanism for the implementation of Mitigation Measure 4.2-3(b).~~	

TABLE 2-2
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
4.2-4 **Implementation of the proposed project, in combination with the projected buildout of the City of Dixon, would cause an increase in a.m. and p.m. peak hour traffic volumes at the First Street/A Street intersection.**	S	4.2-4(a) The City of Dixon shall require the implementation and completion of Mitigation Measure 4.2-1 prior to the issuance of the first building permit for the proposed project. (b) The project applicant shall fund a fair share portion of a city-wide transportation plan and subsequent projects that address the First Street/A Street intersection.	SU
4.3 Biological Resources			
4.3-1 **Implementation of the proposed project would result in the potential loss of burrowing owls and burrowing owl habitat.**	S	4.3-1(a) ~~Prior to issuance of a grading permit, a DFG-approved raptor biologist shall survey all potential burrowing owl habitat and record the presence of individual burrowing owls, sign of burrowing owls (i.e., fecal whitewash at the entrance to burrows, etc.) and all burrows that are in use by individuals.~~ The project site shall be surveyed for burrowing owls during the peak of the breeding season (April 15 to July 15) and nesting (February 1 through August 31) season, unless burrowing owls are detected during the first survey. Surveys shall be conducted one hour before sunrise to two hours after, or two hours before sunset to one hour after.	LS

TABLE 2-2
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
		4.3-1(b) ~~If a nest is found, no grading shall be allowed during the nesting season (April-July) within 125 feet of any nest burrow identified by the DFG-approved raptor biologist.~~ If owls are detected on the site, mitigation measures to minimize the impacts to this species would be required, as follows: • Occupied burrows shall not be disturbed during the nesting season (February 1 through August 31) unless approved by DFG; • To offset the loss of foraging and burrow habitat on the project site, a minimum of 6.5 acres of foraging habitat per pair or unpaired resident shall be acquired and permanently protected. The protected lands should be adjacent to occupied burrowing owl habitat and acceptable to DFG; • When destruction of burrows is unavoidable, existing unsuitable burrows shall be enhanced, or new burrows created, at a 2:1 ratio on the protected lands site; • If owls must be moved off the project site, passive relocation techniques, such as excluder devices, shall be used rather than trapping; and • The project sponsor shall provide funding for long-term management and monitoring of the protected lands. Monitoring should include success criteria, remedial measures, and an annual report submitted to DFG. 4.3-1(c) ~~Prior to grading within burrowing owl habitat in which individual owls have been identified by the DFG-approved raptor biologist, all individual burrowing owls will be trapped or carefully excavated and relocated to a DFG-approved location. All trapping shall be supervised by the DFG-approved raptor biologist.~~ All mitigation shall be conducted generally between September 1 and January 31, as determined by DFG.	

TABLE 2-2 SUMMARY OF IMPACTS AND MITIGATION MEASURES					
	Impact	Level of Significance Prior to Mitigation		Mitigation Measure(s)	Level of Significance After Mitigation
			4.3-1(d)	Following implementation of mitigation measures, preconstruction surveys shall be conducted within 30 days of the start of construction to ensure no additional burrowing owls have established territories on the project site.	
4.3-2	The development of the proposed project would result in the loss of wildlife habitat provided by agricultural land	LS	4.3-2	None required.	N/A
4.3-3	Development of the project site would result in an incremental loss of wildlife habitat, including Swainson's hawk foraging habitat, when considered in combination with buildout of the region.	S	4.3-3	~~None required~~ No disturbance, construction or other project-related activities which may cause abandonment or forced fledgling shall occur within ½ mile of the active Swainson's hawk nest located immediately to the south of the Southpark site during March 1 - August 15 or until the fledglings are no longer dependent upon the nest tree. Because at least one active nest is located within one mile of the project site, the project applicant would be required to provide replacement habitat at a 1:1 ratio, consistent with CDFG requirements. To mitigate for the loss of 211 acres of Swainson's hawk foraging habitat, the project applicant must provide 211 acres of Habitat Management lands to CDFG. Habitat Management lands protected under this requirement may be protected through fee title acquisition or a conservation easement (acceptable to CDFG) on agricultural or other suitable land that provides foraging habitat for Swainson's hawk. Should the City establish a fee program to fund the purchase of Habitat Management lands to compensate for the loss of Swainson's hawk foraging habitat, the project applicant may participate in the fee program in lieu of the provision of 211 acres of land required by this measure.	LS
	4.4 Groundwater Resources				
4.4-1	Development of the proposed project would result in additional domestic water consumption that may affect groundwater levels.	LS	4.4-1	None required.	N/A
4.4-2	Development of the proposed project in conjunction with the buildout of Solano County would result in a reduction of groundwater resources.	LS	4.4-2	None required.	N/A

TABLE 2-2
SUMMARY OF IMPACTS AND MITIGATION MEASURES

	Impact	Level of Significance Prior to Mitigation		Mitigation Measure(s)	Level of Significance After Mitigation
	4.5 Public Infrastructure and Utilities				
4.5-1	**The proposed project would create impervious surfaces and associated stormwater runoff which would affect the capacity of stormwater facilities in Detention Basin A.**	S	4.5-1(a)	The City of Dixon shall ensure that adequate stormwater drainage capacity is available prior to the recording of any final maps for the project site.	LS
			(b)	Prior to construction, the project applicant shall fund a fair share, per the AB1600 fee program, of the drainage facilities improvements identified by the City of Dixon in the 1999 Stormwater Drainage Report ~~for Detention Basin A~~ and the current AB1600 Facilities and Equipment study. In addition, the City of Dixon shall establish a maintenance district to pay a fair share of the maintenance costs.	
4.5-2	**Development of the proposed project would generate an additional need for wastewater collection infrastructure, ~~and~~ treatment and disposal.**	S	4.5-2(a)	Prior to approval of final map, the City of Dixon shall ensure that adequate sewer capacity is available in the conveyance system and at the treatment plant.	LS
			(b)	Prior to approval of any final map in which wastewater generated from development would exceed treatment or conveyance capacity, the City shall identify the program for plant capacity expansion and the project applicant shall agree to pay their fair share, per the AB 1600 fee program, of the wastewater treatment and collection facilities improvements identified by the City of Dixon.	
4.5-3	**Development of the proposed project would generate an increased demand for domestic water and require the construction of additional water production and conveyance facilities.**	S	4.5-3	~~None required.~~ Prior to the approval of a final map, the project applicant shall provide confirmation that adequate fire flow exists throughout the development to meet the current DSMWS standards for fire flow and meets the approval of the City Engineer, DSMWS Engineering Staff, and Fire Chief.	LS
4.5-4	**Development of the proposed project would interfere with existing utilities and other facilities.**	S	4.5-4	The project applicant shall identify any existing underground utilities prior to construction and avoid these utilities if possible. If interfering with the utility is not feasible, the project applicant shall coordinate with the utility in question to alleviate the interference.	LS

TABLE 2-2 SUMMARY OF IMPACTS AND MITIGATION MEASURES					
	Impact	Level of Significance Prior to Mitigation		Mitigation Measure(s)	Level of Significance After Mitigation
4.5-5	**Implementation of the proposed project, in conjunction with buildout of the City of Dixon, would generate increased demand on the existing city infrastructure beyond its current capacity.**	S	4.5-5	The City of Dixon shall implement its Capital Improvement Program and collect appropriate AB1600 fees from new development to ensure the provision of adequate facilities.	LS
	4.6 Public Services				
4.6-1	**Implementation of the proposed project would generate the need for additional police protection services.**	S	4.6-1	Prior to the issuance of building permits, the project applicant shall pay the required impact fees to the city, per AB1600 to ensure the adequate provision of law enforcement services in the City of Dixon.	LS
4.6-2	**Implementation of the proposed project would generate a need for additional fire protection services.**	S	4.6-2(a)	Prior to the issuance of building permits, the project applicant shall pay the required impact fees to the City, per AB1600 to ensure that adequate fire protection levels are provided to the city.	LS
			4.6-2(b)	Prior to issuance of building permits, the applicant shall coordinate with the Dixon Fire Chief to review the development plans and identify any units that may not have a response time consistent with the City's ISO rating. For any unit identified with an inadequate fire response time, the applicant shall incorporate building design components to enhance fire safety. These measures may include the ~~addition~~ use of eave vents, fire sprinklers, or other design features required by the Fire Chief.	
4.6-3	**The proposed project would add additional students beyond the Dixon Unified School District capacity.**	S	4.6-3	Prior to issuance of building permits, the project applicant shall pay the calculated school impact fee. Under SB50, a school district can levy Level 2 fees to projected development when it satisfies the criteria set for under that statute. ~~Based on the total costs projected and the student yield rates, the development fee for schools is $3.26 per square foot of residential development.~~	LS
4.6-4	**Implementation of the proposed project would generate the need for additional parks and recreation services.**	S	4.6-4	Prior to the issuance of building permits, and on a per unit basis, the project applicant shall pay the appropriate parkland fee and AB 1600 impact fee to the City of Dixon to ensure the adequate provision of parks and recreation services.	LS

TABLE 2-2
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
4.6-5 Implementation of the proposed project, in conjunction with the buildout of the City of Dixon, would increase the total student population beyond the capacity of the current school system.	S	4.6-5 Prior to the issuance of building permits, and on a per unit basis, the city shall require all development applicants to pay the school impact fees collected by DUSD, on a per unit basis, to be used for new school facilities.	LS

TABLE 2-2
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
Impacts and Mitigation Measures Identified in the Initial Study (see Appendix C).			
Erosion, changes in topography or unstable soil conditions from excavation, grading, or fill?	S	The 1994 Southpark EIR (page 3.2-6) identified the following mitigation measure to reduce erosion impacts to a less-than-significant level: • Prior to the issuance of a grading permit, the City Public Works Department shall approve drainage and stormwater runoff control systems and their component facilities to insure that they are non-erosive in design; • During construction, the applicant shall not leave disturbed areas exposed during the rainy season or for more than seven continuous days if not actively under construction; • Areas disturbed by construction activity shall be revegetated immediately following construction to reduce the hazard of erosion; • Construction machinery shall be operated and stored only within construction areas and one designated parking area; and • Existing vegetation shall be retained in all other parts of the project area.	LS
Expansive soils?	S	The 1994 Southpark EIR (page 3.2-6) identified the following mitigation measure to reduce shrink/swell impacts to a less-than-significant level: For each development phase, the project applicant shall provide a site-specific geologic assessment that identifies the shrink/swell potential for that portion of the site. If shrink/swell potential is detected, appropriate measures shall be identified by a registered geologist or geotechnical engineer and incorporated into the design of the development. These design features shall be a condition of issuance of the grading permit. Implementation of these design features would reduce shrink-swell impacts to a level that is less than significant.	LS
Changes in absorption rates, drainage patterns, or the rate and amount of surface runoff?	S	The 1994 Southpark EIR (page 3.3-5) identified the following mitigation measure to reduce impacts from increased runoff to a less-than-significant level:	LS

TABLE 2-2
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
		The project applicant, in coordination with the City of Dixon Public Works Department, shall prepare a site drainage plan which incorporates storm drains, lateral and trunk drainage lines, and other facilities as necessary to ensure adequate drainage of surface runoff at the Southpark site. This plan shall be reviewed and approved by the City of Dixon Public Works Department prior to issuance of a grading permit. The project applicant shall pay their fair share towards Citywide drainage improvements, as identified in the City's AB1600 fee program. ~~As a condition of the issuance of the grading permit, the project applicant shall contribute a fair share of the costs of design, siting, and construction of Detention Basin G. A fair share of the total costs (i.e., percentage of total cost) shall be based upon the percentage of the developed portion of Area G that is represented by the developed portion of the Southpark site. Detention Basin G shall be designed to have sufficient capacity to allow the City to meet its obligation to discharge no more than 77 cfs to the DRCD drainage system.~~	
Violate any air quality standard or contribute to an existing or projected air quality violation? Exposure sensitive receptors to pollutants?	S	The 1994 Southpark EIR (page 3.7-5) identified the following mitigation measures to reduce emissions during construction to a less-than-significant level: • Dust emission shall be controlled by application of water. Water shall be applied using watering trucks, or sprinklers, as often as is necessary to keep the exposed soils damp; • Construction equipment shall be maintained and tuned at the interval recommended by the manufacturers to minimize exhaust emissions; • Equipment idling shall be kept to a minimum when equipment is not in use; • Areas exposed by construction activities shall be paved or covered to prevent erosion as soon as practical within the needs of the construction project; and • The construction contractor shall post a publicly visible sign on the project site during construction operations which specifies the telephone number and person/agency to contact for complaints and/or inquiries on dust generation and other air quality problems resulting from project construction.	LS

TABLE 2-2 SUMMARY OF IMPACTS AND MITIGATION MEASURES			
Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
		The 1994 Southpark EIR (page 3.7-6) identified the following mitigation measures to reduce the long-term PM_{10} emissions impact to a less-than-significant level: • Require alternative means of residential heating other than wood burning units lacking catalytic converters; and • Implement the circulation improvements contained in the General Plan Environmental Assessment to provide adequate traffic circulation in order to reduce congestion and therefore air emissions. The EIR (page 3.7-7) identified the following mitigation measure to reduce the ozone precursor emissions impact: As part of project development, Southpark shall include on-site amenities that promote use of forms of transportation that are alternatives to the use of the automobile. Such amenities include bicycle parking spaces at the multi-family and commercial sites, and adequate road width for on-street bicycle lanes and off-street bike paths. The City of Dixon shall implement the Circulation Plan contained in the 1993 City of Dixon General Plan to provide adequate traffic circulation in order to reduce congestion and air emissions. Prior to recording of any tract of a parcel map, the project proponent shall dedicate the necessary right-of-way for a future bus turn out southbound on the First Street project frontage. The City of Dixon shall coordinate with the project proponent regarding the specific location and design requirements.	

TABLE 2-2
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
Increases in existing noise levels?	S	Compliance with the 1994 Southpark EIR mitigation measure, as amended below, would ensure that the proposed project would result in no new impacts and no further mitigation is required. *Prior to the approval of a tentative map in the project area for the any residential uses, the project proponent shall submit an acoustical analysis which identifies mitigation measures to reduce the noise level to 65 dB. The mitigation measures shall be incorporated into the multi-family project design. The mitigation measures may include:* ~~The 1994 Southpark EIR (page 3.8-8) contained the following mitigation measure to reduce First Street traffic noise impacts to a less-than-significant level:~~ ~~*Sound attenuation in the form of a wall can reduce the estimated noise level to 65 dB at the multi-family residential uses. Based on preliminary assumptions regarding the type of multi-family housing unit and location of the wall, the attenuation would be accomplished with the following geometric description:*~~ • ~~*4 foot s*~~*Sound attenuation wall, berm or combination that equals the required height;* • *Roadway and building pads are at the same elevation;* • *Wall or berm is located ~~25 feet~~ at an appropriate distance from the First Street centerline; and* • *Housing units are located ~~a minimum of 50 feet~~ at an appropriate distance from First Street centerline* ~~*Prior to issuance of a building permit, the project proponent shall comply with the sound attenuation provisions listed above or provide additional sound analysis based on further refinement of the project description.*~~	LS

TABLE 2-2
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
		Adherence with the Uniform Building Code during project construction would reduce interior noise an additional 20 dB. The resultant interior noise level of 45 dB would meet the standard for interior noise per state regulations (State Office of Noise Control). Prior to issuance of a building permit, the project proponent shall comply with the sound attenuation provisions listed above or provide additional sound analysis based on further refinement of the project description.	
Have a demonstrable negative aesthetic effect?	S	The 1994 Southpark EIR (page 3.13-3) included the following mitigation measure to reduce visual impacts to a less-than-significant level: Project plans shall provide for the undergrounding of all utilities that are visible from public rights-of-way. A landscaping program designed with an emphasis toward the South First Street (Highway 113) entrance to the City of Dixon shall be included in these plans. Prior to the issuance of any building permits, the project proponent shall submit these plans to the City Planning Department for approval. The Planning Department will make a determination as to whether project landscaping conforms to the City of Dixon's landscaping requirement as found in the Zoning Ordinance (Section 12.26).	LS
Create light or glare?	S	The 1994 Southpark EIR (page 3.13-4) identified the following mitigation measure to reduce impacts from new light sources to a less-than-significant level: As lighting plans are formulated, design of lighting for specific building projects shall be guided by the following principles: • avoid interference with reasonable use of adjoining properties; • minimize on-site glare; provide adequate on-site lighting; • limit height of pole lighting to avoid excessive illumination; • provide lighting structures which are compatible with landscape design along roadways and commercial structures; • use trees to screen lighting;	LS

TABLE 2-2
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
		• outdoor lighting shall be hooded and directed downward to minimize direct light and glare impacts on public rights-of-way; • driveway lights shall be of a height which minimizes light and glare impacts; • indirect "box" lights shall be used for driveways and parking lot lighting; and • prior to the issuance of occupancy permits, the project proponent shall submit a lighting plan to the City Planning Department for a conformance determination. In addition, building materials that reflect minimal light and glare shall be used on all on-site structures. Prior to issuance of building permits, the project proponent shall be subject to the City Planning Department's regular design review.	
Disturb paleontological resources? Disturb archaeological resources? Affect historical resources?	S	The 1994 Southpark EIR (page 3.14-5) identified the following mitigation measure to ensure that impacts to cultural resources would be reduced to a less-than-significant level: All trenching and excavation associated with the project shall be monitored by an archaeologist. If any buried archaeological resources are discovered during construction activities, all work will be halted in the vicinity of the find in order for the monitoring archaeologist to determine whether the find is an isolated example or part of a more complex resource. Upon determining the significance of the resource, the consulting archaeologist, in coordination with the City, shall determine the appropriate actions to be taken. The appropriate measures may include as little as recording the resource with the California Archaeological Inventory database or as much as excavation, recording, and preservation of sites that have outstanding cultural or historic significance.	LS

TABLE 2-2 SUMMARY OF IMPACTS AND MITIGATION MEASURES			
Impact	**Level of Significance Prior to Mitigation**	**Mitigation Measure(s)**	**Level of Significance After Mitigation**
		Archaeological resources include artifacts of stone, shell, bone, or other natural materials associated with artifacts are hearths, house floors, and dumps. Historic artifacts include all byproducts of human use greater than 50 years old. Human burials, if encountered, require notification of the county coroner.	
Impacts and Mitigation Measures Identified in the 1994/95 Southpark EIR Which Were Not Addressed in the SEIR (It should be noted that all other 1994/95 Southpark EIR mitigation measures are either superceded or modified by the SEIR.)			
Hydrology and Drainage	PS	The following mitigation measures are adapted from the Master Drainage Plan EIR to reduce the significance of urban pollutants in the surface drainage system. However, because surface water quality data are unavailable and no water quality monitoring has been implemented by the City, the effect of urban pollutants to surface water resources cannot be quantitatively analyzed. Therefore, this impact remains potentially significant after mitigation. An Erosion and Sediment Control Plan, using Best Management Practices, shall be prepared by the project applicant and approved by the City of Dixon Public Works Department prior to the issuance of a grading permit. The plan shall detail the specific measures necessary to reduce the potential for soil erosion during grading and construction activities. These measures may include: • Limiting the amount of motorized traffic on the project site during construction to minimize loss of existing protective vegetation and reduce soil disturbance; • Performing construction activities in the late spring and early summer to allow maximum revegetation prior to heavy runoff; • Landscaping with selected native or non-native plants conducive to erosion protection; and • Application of mulches or other surface protection materials to minimize the exposed soil surface.	PS

TABLE 2-2
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
		As a condition of the grading permit, the project applicant shall obtain a NPDES (National Pollutant Discharge Elimination System) construction stormwater permit from the Regional Water Quality Control Board. The City of Dixon shall design and construct ~~Detention Basin C~~ Pond A to include an intake basin for the purpose of reducing scour. This design will increase the ability of the detention facility to retain urban runoff pollutants. As a condition of issuance of the grading permit, the project applicant shall contribute a fair share of the costs for the on-going maintenance of ~~Detention Basin C~~ Pond A to the Dixon Enterprise Fund when that fund is formed. A fair share of the on-going costs shall be based upon the percentage of the developed portion of Area C that is represented by the developed portion of the Southpark site. Maintenance shall include periodic monitoring of the sediments in the detention facility. If the sediments are found to contain hazardous materials, the sediments shall be dredged and disposed of at an appropriate hazardous waste facility.	
Hydrology and Drainage	PS	The following mitigation measures has (sic) been adapted from the Draft Environmental Impact Report for the Dixon Master Drainage Plan (Brown and Caldwell, 1989) to reduce the potential for groundwater contamination to a level that is less than significant. The City of Dixon Public Works Department shall expand Pond A to allow it to accommodate additional drainage from the project site. ~~site Detention Basin C in a location where groundwater will be sufficiently separated from the lowest point of excavation in the basin. This siting would minimize the possibility of groundwater surfacing in the basin and coming into direct contact with basin sediments that may contain hazardous constituents.~~	LS

TABLE 2-2
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
Hydrology and Drainage	S	The City of Dixon shall implement the water quality monitoring program as detailed in the Final Environmental Impact Report prepared for the Dixon Master Drainage Plan. Surface water quality monitoring data may be used to assess cumulative water quality impacts and develop appropriate stormwater discharge controls. The project applicant shall contribute a fair share toward the implementation of the City of Dixon water quality monitoring program. This fair share shall be based on the runoff calculations of the Southpark site relative to the total runoff calculations for the City of Dixon. Implementation of these measures would reduce the impact to a level that is less than significant.	LS
Hazards	S	All structures shall be engineered to meet the Uniform Building Code construction standards for Seismic Zone 4. Implementation of this measure would reduce the impacts to a level that is less than significant.	L
Hazards	PS	If an Area Plan has not been adopted prior to issuance of building permits, the applicant, in coordination with the City of Dixon, shall develop an evacuation plan that addresses a potential hazardous wastes or materials spill on the SPTCo railroad line. Implementation of this measure would reduce the impacts to a level that is less than significant.	L
Hazards	PS	Drainage facilities for the proposed project shall be designed such that all new development within the Southpark Planned Development is constructed at a minimum of one foot above the 100-year base flood elevation. Implementation of this measure would reduce the impacts to a level that is less than significant.	L
Public Services	S	~~The project applicant shall alter the design of the area under question. In order to provide a physical separation between the proposed northern park site, alternate designs would include a roadway, a landscaped walking path and/or bike path, a wall or fence with breaks to allow for ingress and egress to and from the school sites. Implementation of this measure would reduce the impacts to a level that is less than significant.~~	L
Land Use	PS	The City shall ensure that all property buyers are informed of Chapter 2A of the County Code and its provisions prior to the final sale of any property within the Southpark project site. This measure would reduce the impact to a level that is less than significant.	L

TABLE 2-2
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
Public Utilities	PS	The project applicant shall consult with the Solano Irrigation District prior to the siting and construction of all buildings, roads, parks and other facilities which intersect or lie adjacent to the existing SID easement to ensure that the project does not conflict with the terms and conditions of the SID easement. This measure would reduce the impact to a level that is less than significant.	L
Public Services	PS	The City of Dixon shall negotiate an agreement with the B&J Landfill, or another appropriate solid waste disposal facility, to ensure capacity for solid waste disposal is adequate for the development of urban land uses in the Dixon Planning Area through the year 2010. The project applicant shall contribute a fair share toward any expansion costs that may occur. This fair share shall be based on the percentage of additional solid waste generated by the developed portion of the Southpark relative to the total amount of solid waste generated by new development.	L
Energy and Mineral Resources	PS	The City of Dixon shall require the preparation of a noise analysis prior to the approval of a natural gas extraction facility on either of the mineral rights easements located within the Southpark site. This noise analysis shall quantify projected noise levels from all proposed natural gas extraction facilities. The analysis shall then propose mitigation such as a compressor housing, to reduce noise impacts in surrounding residential areas to a level that is less than significant.	L
Energy and Mineral Resources	PS	The property owner must provide evidence to the State Oil and Gas Supervisor that the test well was ~~property~~ properly plugged and abandoned prior to development over the abandoned well site. If the well was not properly plugged and abandoned, the State Oil and Gas Supervisor may order the reabandonment of the well (at the property owners expense) if it is determined that construction over, or in the proximity of the well could result in a public hazard.	L

4. COMMENTS AND RESPONSES

Letter 1

SOLANO COUNTY
TRANSPORTATION DEPARTMENT

333 Sunset Avenue, Suite 230
Suisun City, California 94585

Telephone (707) 421-6060
Fax (707) 429-2894

John Gray, Director

Melba I. Delfino
Administration
(707) 421-6064

Paul Wiese
Engineering
(707) 421-6072

Eben Stevens, Operations
(707) 421-6055

September 15, 2000

RECEIVED
SEP 20 2000
CITY OF DIXON

Warren Salmons, City Manager
City of Dixon
600 East A Street
Dixon, CA 95620

Dear Mr. Salmons:

SUBJECT: Southpark Environmental Impact Report

I recently received a copy of the Subsequent Environmental Impact Report for the proposed Southpark development in Dixon. The Solano County Transportation Department has a number of concerns about this project.

Traffic generated by the City of Dixon has a significant impact on a number of Solano County roads. Midway Road, Porter Road, and Pitt School Road are all heavily used by Dixon residents as a "back door" from Interstate 80 to the easterly portion of the City. With this as background, the Solano County Transportation Department offers the following comments.

1. We believe Southpark may cause a significant traffic impact to several Solano County roads, including Midway Road, Porter Road and Pitt School Road. The impact of traffic generated by Southpark on these three roads, and on the following intersections, should be studied: 1-1

Midway Road - SR113
Midway Road - Pitt School Road
Midway Road - Porter Road
Midway Road - Batavia Road
Midway Road - Lewis Road
Midway Road - I-80 ramps (and O'Day Road)
Pitt School Road - Porter Road
West A Street - I-80 ramps (and Schroeder Road)
Pitt School Road - I-80 ramps
First Street (SR113) - I-80 ramps (and Milk Farm Road)

The study should evaluate not only level of service impacts to those roads and intersections, but also their ability to support the added traffic from a safety viewpoint (with reference to the pavement and shoulder width) and their structural capacity (considering the existing pavement structural section and condition). Measures should be recommended to mitigate the level of service, safety and structural capacity impacts of Southpark on those roads and intersections. Estimates of the costs to implement those measures should be developed, and a funding mechanism identified by which development will pay for the cost of mitigating the project impacts. These mitigation measures and the associated funding mechanism should be adopted as part of the approval process for the Southpark SEIR. 1-2

2. The SEIR (page 4.2-1) states that "Mitigation was identified (in the 1994 Southpark EIR) to reduce all of the transportation impacts to a less than significant level." This is not correct. The Southpark FEIR called for the preparation of a City/County master traffic improvement plan which was intended to identify the traffic impacts of the project, and to recommend mitigation measures. This master traffic improvement plan has not yet been prepared, so the traffic impacts have not yet been identified, nor have the mitigation measures been recommended and adopted. Therefore, the transportation impacts of the Southpark project have not yet been mitigated. 1-3

A master traffic improvement plan should be prepared which identifies the traffic impacts of the Southpark project, recommends measures to mitigate those impacts, estimates the costs to implement those measures, and identifies a funding mechanism by which development will pay for the cost of mitigating the project impacts. These mitigation measures and the associated funding mechanism should be adopted as part of the approval process for the Southpark SEIR. 1-4

3. The SEIR (page 4.2-7) mentions an arterial to be constructed between South First Street and Pitt School Road, but states that it is not analyzed because it is not fully funded. This appears to be the road identified as the "future overcrossing" in Figure 3-4.

This arterial could have a significant impact on the County road system. The EIR does not show where the arterial will be tied in on the westerly side, but it appears that the road could significantly impact traffic patterns on Pitt School Road and other County roads. It is also not shown if the arterial would tie in to Porter Road, and if so where and how. It is also not clear whether it is intended for a portion of the arterial to be located in the unincorporated area, and if so whether this portion of the road would be a County road, or a County-maintained road. This issue should be addressed. 1-5

This proposed arterial should be analyzed as part of the master traffic improvement plan discussed in (2) above, and measures should be recommended which will mitigate any identified impacts. These mitigation measures should be adopted as part of the approval process for the Southpark SEIR.

Thank you for considering my comments. Feel free to call me at (707) 421-6072 if you have any questions.

Sincerely,

Paul Wiese
Engineering Manager

cc. Mayor Don Erickson
Ron Tribbett, Public Works Director
Cathleen Spence-Wells, City Planner

00178.doc

LETTER 1 ..... SOLANO COUNTY TRANSPORTATION DEPARTMENT

Response to Comment 1-1

The comment raised concerns about traffic impacts to several Solano County roadways and intersections and requested additional analysis. To address concerns about potential traffic operational impacts on County roadways, supplemental intersection analysis was conducted under existing and existing plus project conditions for the following locations:

- SR113/Midway Road;
- Midway Road/Pitt School Road;
- Midway Road/Porter Road;
- Midway Road/ Batavia Road;
- Midway Road/Lewis Road;
- Midway Road/I-80 Eastbound Ramps;
- O-Day Road/I-80 Westbound Ramps;
- Pitt School Road/Porter Road;
- West A Street/Batavia Road;
- West A Street/Schroeder Road;
- Pitt School Road/I-80 Eastbound Ramps
- Pitt School Road/I-80 Westbound Ramps;
- SR 113/I-80 Westbound Ramps;
- SR 113/I-80 Eastbound Ramps;
- Currey Road/Milk Farm Road;
- SR 113/W. Cherry Street;
- SR 113/Village Parkway (with project only); and
- SR 113/Parkway Boulevard (with project only).

The results of this additional traffic analysis are presented in Chapter 2 of this Final EIR. The additional traffic analysis found that the proposed Southpark project would result in a less-than-significant effect on County roadways.

Response to Comment 1-2

The comment raises concerns regarding the safety and structural integrity of the County roadways to support the project's traffic. The comment also states that mitigation measures should be provided for these issues and that the costs and associated funding mechanism should be identified.

As shown in Table 2-1, provided in Chapter 2, the level of service remains at acceptable levels throughout the county roadways with buildout of the project. Therefore, the project is not anticipated to add a significant level of new vehicle trips to the county roadway system, and the project would not result in any new or increased safety and structural integrity issues.

It should be noted that accepted traffic engineering assumptions state that the addition of traffic to roadways is not expected to increase existing accident rates. To the contrary, the *Traffic and Engineering Handbook* (Institute of Transportation Engineers, Fourth Edition, 1992) presents information showing that the rate of one-vehicle and multi-vehicle accidents on two-lane roads decrease as the average daily traffic volume increases. The handbook provides a figure (see Figure 4-4) showing that a reduction in accident rates of up to approximately 50 percent can be expected as the average daily traffic volume increases from 1,000 vehicles per day to 5,000 vehicles per day.

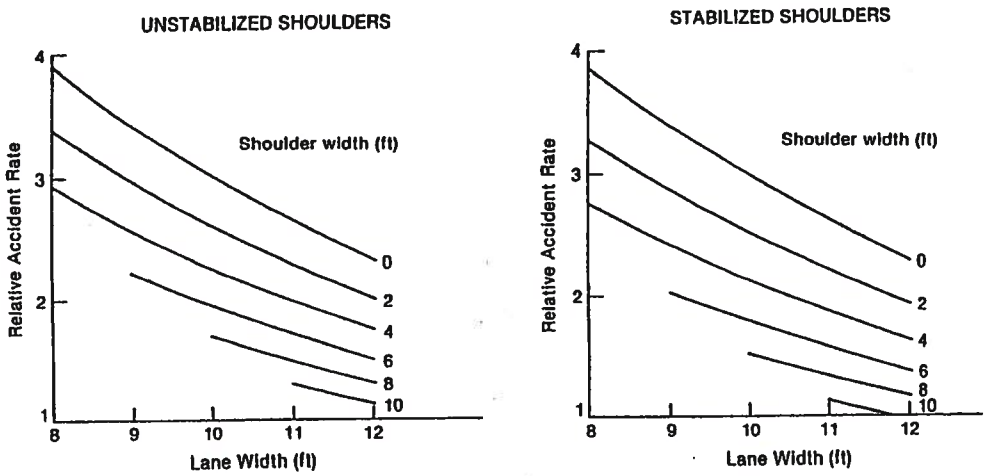
It should also be noted that the County of Solano has constructed and continues to maintain jurisdictional responsibility over the structural and safety integrity of the County roadways. The county met the minimum design standards for these roadways at the time of the roadway construction and the Southpark traffic analysis considered the design minimums in the analysis. In addition, the county has not identified roadways near the project site, particularly areas along State Route 113, as traffic safety hazards based on quantitative data. The Solano Transportation Authority (STA) has prepared a Travel Safety Program in 1998 to address roadway safety issues on a countywide basis. The plan identified the 40 local intersections with the highest accident rates. Based on the Travel Safety Projects map provided by the STA, none of the projects is in the Dixon area.

Because the development of the Southpark project would not add a significant number of vehicle trips to county roadways that were designed based upon minimum safety and structural integrity standards, the additional traffic generated by the proposed project would not have a significant impact on the county roadways.

Response to Comment 1-3

The comment indicates that the Southpark Draft Subsequent EIR incorrectly stated that, "mitigation was identified (in the 1994 Southpark EIR) to reduce all of the transportation impacts to a less than significant level." The comment continues by raising concerns that the mitigation in the 1994 EIR required a master traffic improvement plan which would identify impacts and recommend mitigation measures. The comment states that the master traffic improvement plan has not been prepared; therefore, the project impacts and mitigation measures have not been identified.

The Draft Subsequent EIR *correctly* stated that the traffic related impacts identified in the 1994 Southpark EIR were all mitigated to a less-than-significant level. The 1994 Southpark EIR and the Statement of Overrides and Finding of Facts for the project approval in 1995 did not identify any significant and unavoidable impacts related to traffic; therefore, all significant traffic impacts were found to be less-than-significant with the implementation of reasonable and feasible mitigation measures. In addition, neither the 1994 Draft EIR, the 1995 Final EIR, or the Mitigation Monitoring Plan specifically required the preparation of a City/County master traffic improvement plan. However, a City/County Master TIP was referred to in Response to

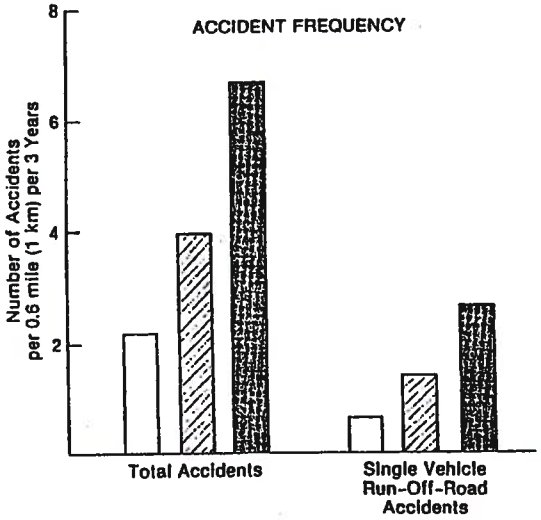


Notes: Accident relationship covers single-vehicle, sideswipe, and opposite-direction accidents on two-lane rural highways. Relative accident rate is defined as a multiple of the accidents per million vehicle rates for 12-ft lanes and 10-ft stabilized shoulders

Normalized Relationship between Accidents and Lane and Shoulder Conditions

Reference:

FHWA research report FHWA/RD-87-008, Safety Effects of Cross-Section Design for Two-lane Roads, Volume 1, Final Report.



△ Accident Rate = 0.056 D_c

Key

Tangent Segments (250 Segments)

Curve Segments (3304 Segments)

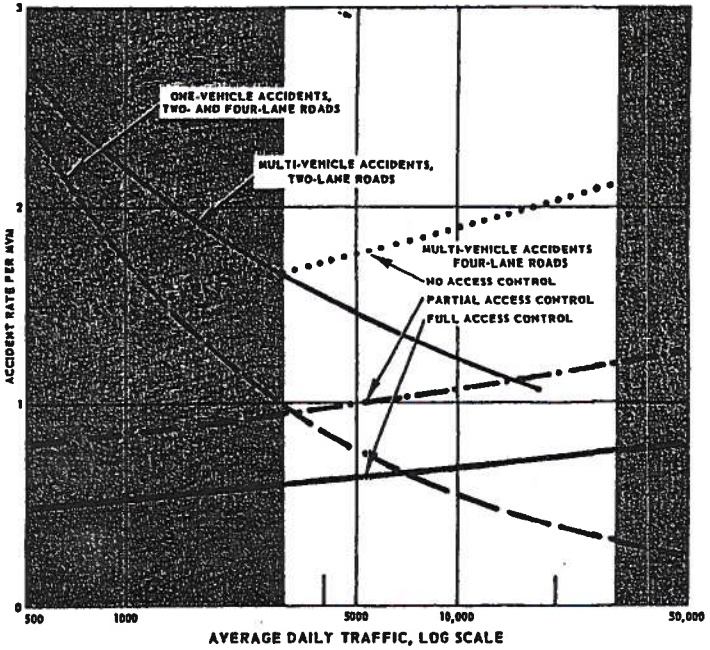
*Alignment Influenced by Curve

Reference:

Safety and Operational Considerations for Design of Rural Highway Curves, Report No. FHWA/RD-83/103, 1983, J.C. Glennon, T.R. Neuman, J.E. Leisch

*Normalized Rate for Alignment Consisting of Average Curve and Two Transitions

Relationship between Accidents and Horizontal Curvature



Relationship between Accident Types and Traffic Volumes
Reference:
Accident Rates as Related to
Design Elements of Rural Highways,
National Cooperative Highway
Research Program Report 47, 1963

FIGURE 4-4
RP&M

Figure 6-2. Key geometric safety relationships (*cont.*).

Comment F-6 of the 1995 Southpark FEIR. This reference should not be construed as being a mitigation measure required for the proposed project.

It should be noted that the Southpark Draft Subsequent EIR identified cumulative buildout of the City of Dixon would result in a significant and unavoidable impact at the intersection of First Street and A Street in the City of Dixion and included a mitigation that the proposed project would be required to fund a fair share portion of a city-wide transportation plan to address this impact and fund a fair share portion of the improvements at First and A Streets. In addition, the City of Dixon has retained Fehr & Peers to prepare a Street Master Plan (SMP) and Transportation Improvement Program (TIP). The SMP will identify needed long-term improvements and their associated cost to maintain LOS C as required by the City of Dixon General Plan Policy VI.E.1 for roadways within Dixon and the surrounding unincorporated area. The TIP will identify a funding mechanism(s) to provide sufficient funding to construct the needed improvements within a timely manner. The Southpark project will be required to contribute their fair share cost of needed roadway improvements by participating in the TIP.

Finally, the Southpark Subsequent EIR, including the information contained in the Final EIR, has fully analyzed the traffic impacts of the proposed project. Appropriate and feasible mitigation measures have been identified, and a fair share funding requirement has been required as well as the initiation of a TIP to ensure the funding and funding mechanism of the improvements.

Response to Comment 1-4

The comment states that a master traffic improvement plan should be prepared which identifies the impacts of the Southpark project. The City of Dixon is currently preparing a Street Master Plan (SMP) and Transportation Improvement Program (TIP) to address this issue citywide. Please see Response to Comment 1-3.

Response to Comment 1-5

The comment raised a concern regarding the analysis of the "future overcrossing" and requested that the overcrossing be studied as part of a master traffic improvement plan.

A future crossing of the existing railroad tracks was previously identified in the 1993 City of Dixon General Plan (see the City of Dixon General Plan Map). The proposed Southpark Development project identified this crossing as "future overcrossing" in the project application map provided as Figure 3-4 in the Draft Subsequent EIR. In addition, the Draft Subsequent EIR identified the crossing as a potential mitigation measure for the project's traffic impact and the cumulative buildout traffic impact at First and A Streets. However, at this time, the design plans for the railroad crossing have not been completed and potential effects on county roadways cannot be determined.

In the citywide Street Master Plan currently being prepared by Fehr & Peers, the design and potential funding sources for the crossing will be considered. This plan is anticipated to also indicate a timeline for the development of the ultimate railcrossing design. It should be noted that once the design is complete and the city contemplates processing the crossing as a project, further environmental analysis and CEQA documentation will be conducted to assess the impact of the project on the county roads.

Letter 2

E OF CALIFORNIA - THE RESOURCES AGENCY

GRAY DAVIS, Governor

EPARTMENT OF FISH AND GAME
IAMENTO VALLEY AND CENTRAL SIERRA
NIMBUS ROAD, SUITE A
..CHO CORDOVA, CALIFORNIA 95670
ephone (916) 358-2900

September 26, 2000

Mr. Warren Salmon, City Manager
City of Dixon
600 East A Street
Dixon, California 95620-3697

Dear Mr. Salmon:

The Department of Fish and Game (DFG) has reviewed the Draft Subsequent Environmental Impact Report (DSEIR) for the proposed Southpark Planned Development (SCH # 94071013). The project proposes to develop approximately 211 acres to very low, low, medium-low, and high density residential, park, school, and commercial uses in the southwest portion of the City of Dixon, Solano County.

Section 4.3 (pages 4.3-1 to 4.3-11) of the DSEIR describes the biological setting, impacts to wildlife species utilizing the site, and mitigation measures proposed to reduce the project's impact to a less than significant level. Particular attention is given to four raptor species: Black-shouldered Kite (*Elanus leucurus*), Swainson's Hawk (*Buteo swainsoni*), Northern Harrier (*Circus cyaneus*), and Burrowing Owl (*Athene cunicularia*). Although the site contains habitats used or potentially used by these species, these comments will focus on impacts to the Swainson's hawk and burrowing owl. Specific mitigation guidelines for each of these species have been established by the DFG and are the basis of the following comments.

Burrowing owl

The DSEIR correctly concludes that the project could result in the potential take of burrowing owl and loss of burrowing owl habitat. The nearest location identified in the document is approximately one mile south of the project site, along State Route 113. Recent surveys in the same general area show that active burrows exist much closer, located approximately 0.25 miles east of where Pitt School Road crosses the Union Pacific Railroad. This supports the conclusion that the project site is likely utilized as foraging habitat by burrowing owls. Several mitigation measures are provide in the DSEIR to address the project's impacts to burrowing owls. Specific comments on these measures are as follows: 2-1

1. 4.3-1(a). Protocols for acceptable burrowing owl survey techniques are detailed in the burrowing owl guidelines. The methodology to be used should be described in the DSEIR.

2. 4.3-1(b). The period April 15-July 15 is identified as the peak of breeding for burrowing owls, but the breeding season is defined as from between February 1 through August 31. No grading or other disturbance should be allowed within 250 (not 125 as described in the DSEIR) feet of any occupied burrow sites during this period. 2-2

3. 4.3-1(c). Passive relocation techniques would be the preferred option if it is determined that owls need to be moved. Alternative burrow sites, either natural or artificial, which could be occupied by displaced owls should be provided prior to relocation efforts.

While the DSEIR discusses the loss of burrows, no reference is made regarding the loss of foraging habitat. Due to the nature of the current land use on the project site and the proximity of known occupied borrows, impacts resulting from loss of foraging habitat should be addressed in the DSEIR. 2-3

Swainson's hawk

DFG records of Swainson's hawk nest locations show that there is a minimum of one nest site within a one-mile radius of the project location. Thirteen nest locations occur within a five-mile radius of the project site, with over 60 nest locations within a ten-mile radius of the project site. Because of the high concentration of nest locations in this area, and the associated demand on existing foraging locations, the 1994 Southpark EIR contained language requiring mitigation for loss of foraging habitat to reduce project impacts to less than significant. Mitigation options in this document included preparing a project-specific Habitat Management Plan (HMP) to obtain an "Incidental Take" permit under section 2081 of the California Fish and Game Code, or joining the City of Dixon in a similar action to address Swainson's hawk impacts as a consequence of the City's overall project approval process. 2-4

The DSEIR now concludes that mitigation for lost foraging habitat is no longer required to reduce project impacts to a less than significant level. This conclusion is based in part on changes to section 2081 which no longer require an "incidental take" permit for lost foraging habitat. Even though a HMP and "Incidental Take" permit are not required as part of project approval, this does not release the project sponsor from providing mitigation for impacts to listed species. Recent changes in the California Endangered Species Act (Chapter 1.5 of the California

Fish and Game Code) require that project impacts to these species be "fully mitigated." Additionally, the California Environmental Quality Act Guidelines Section 15065 provides a mandatory finding of significance for cumulative impacts to fish and wildlife. Options to meet mitigation requirements other than those listed in the 1994 project document include: 1) the purchase of fee title or a conservation easement on suitable foraging habitat using the ratios provided in the Swainson's hawk guidelines, or 2) to purchase Swanson's hawk credits in a DFG approved mitigation bank. 2-4 Cont.

The DSEIR states that, "Because the development of the project site was not determined to be a significant loss of foraging habitat at a project-specific level, the incremental loss of foraging habitat on the project site when viewed in connection with the effects of all other projects would not meet the definition of cumulatively considerable. Therefore, the cumulative impacts are considered less than significant." The original finding was based on a project containing suitable mitigation measures for the impact; if the original project did not contain these provisions that finding could not have been substantiated. The project as currently proposed will have a significant impact to Swainson's hawks, especially in light of other projects (e.g., the Dixon horse racing facility) proposed in the project area. The project will result in significant cumulative impacts to Swanson's hawk habitat in Solano County.

Because this project will have an impact on wildlife species and their associated habitat, assessment of fees under Public Resources Code Section 21089, and as defined by Fish and Game Code Section 711.4 is necessary. Fees are payable by the project applicant upon filing of the Notice of Determination by the lead agency. 2-5

Pursuant to Public Resources Code Sections 21092 and 21092.2, the DFG requests written notification of proposed actions and pending decisions regarding this project. Written notifications should be directed to this office. 2-6

Thank you for the opportunity to review this project. If the DFG can be of further assistance, please contact Mr. Craig Stowers, Associate Wildlife Biologist, at (916) 691-2122 or, Ms. Terry Roscoe, Environmental Services Supervisor, at (916) 358-2883.

Sincerely,

for Larry L. Eng, Ph.D.
Assistant Regional Manager
Wildlife, Fisheries and Environmental Programs

cc. State Clearinghouse
1400 Tenth Street
Post Office Box 3044
Sacramento, California 95812-3044

Mr. Craig Stowers
Ms Terry Roscoe
Department of Fish and Game
1701 Nimbus Road, Suite A
Rancho Cordova, California 95670

LETTER 2 ..... STATE OF CALIFORNIA DEPARTMENT OF FISH AND GAME

Response to Comment 2-1

The comment confirms that the project site is likely used as foraging habitat by burrowing owls. Based on information provided by the commentor, page 4.3-4 of the DSEIR, second paragraph, second sentence is revised to read:

> Burrowing owls were not observed on the project site during the June 2, 1993 survey. <u>However, there are active burrows located approximately 0.25 miles east of where Pitt School Road crosses the Union Pacific Railroad tracks. In addition,</u> burrowing owls were observed along SR 113 approximately one mile south of the project site. Burrowing owls are also known to occur at Hall Park in the City of Dixon, the United States Naval Transmitter Facility off of Radio Station Road, and along a number of other roadways and levees in the agricultural areas located south and east of the City of Dixon.

Response to Comment 2-2

The comment updates Mitigation Measure 4.3-1(a) through (c) based on current DFG protocol. A copy of the *Staff Report on Burrowing Owl Mitigation* developed by the DFG is included as Appendix A in this Final SEIR. This staff report provides guidance and outlines specific mitigation measures, including specific survey protocols, regarding direct and indirect loss of burrowing owls and their habitat. The objective of the mitigation guidelines is to minimize impacts to burrowing owls and the resources that support viable owl populations.

In order to mitigate the loss of burrowing owls, the DFG requires that either the mitigation measures in the staff report shall be used or project specific mitigation measures developed. Alternative project specific measures proposed by the project applicant would be considered. However, if the project applicant proposed their own mitigation measures, they must be submitted to DFG's Environmental Services to determine if the proposed mitigation measures are consistent with the Fish and Game Commission, and legislative policy and laws regarding raptor species.

Mitigation Measure 4.3-1(a) through (c) on page 4.3-7 and 4.3-8 of the DSEIR is replaced with updated language from the DFG's staff report on Burrowing Owl Mitigation. This modification does not change the intent of the original mitigation measure.

> *4.3-1(a)* ~~*Prior to issuance of a grading permit, a DFG-approved raptor biologist shall survey all potential burrowing owl habitat and record the presence of individual burrowing owls, sign of burrowing owls (i.e., fecal whitewash at the entrance to burrows, etc.) and all burrows that are in use by individuals.*~~

The project site shall be surveyed for burrowing owls during the peak of the breeding season (April 15 to July 15) and nesting (February 1 through August 31) season, unless burrowing owls are detected during the first survey. Surveys shall be conducted one hour before sunrise to two hours after, or two hours before sunset to one hour after.

4.3-1(b) ~~*If a nest is found, no grading shall be allowed during the nesting season (April-July) within 125 feet of any nest burrow identified by the DFG-approved raptor biologist.*~~
If owls are detected on the site, mitigation measures to minimize the impacts to this species would be required, as follows:

- *Occupied burrows shall not be disturbed during the nesting season (February 1 through August 31) unless approved by DFG;*
- *To offset the loss of foraging and burrow habitat on the project site, a minimum of 6.5 acres of foraging habitat per pair or unpaired resident shall be acquired and permanently protected. The protected lands should be adjacent to occupied burrowing owl habitat and acceptable to DFG;*
- *When destruction of burrows is unavoidable, existing unsuitable burrows shall be enhanced, or new burrows created, at a 2:1 ratio on the protected lands site;*
- *If owls must be moved off the project site, passive relocation techniques, such as excluder devices, shall be used rather than trapping; and*
- *The project sponsor shall provide funding for long-term management and monitoring of the protected lands. Monitoring should include success criteria, remedial measures, and an annual report submitted to DFG.*

4.3-1(c) ~~*Prior to grading within burrowing owl habitat in which individual owls have been identified by the DFG-approved raptor biologist, all individual burrowing owls will be trapped or carefully excavated and relocated to a DFG-approved location. All trapping shall be supervised by the DFG-approved raptor biologist.*~~
All mitigation shall be conducted generally between September 1 and January 31, as determined by DFG.

4.3-1(d) *Following implementation of mitigation measures, preconstruction surveys shall be conducted within 30 days of the start of construction to ensure no additional burrowing owls have established territories on the project site.*

Response to Comment 2-3

The comment states that while the DSEIR discusses the loss of burrows, no reference is made regarding the loss of burrowing owl foraging habitat. Please see Response to Comment 2-2. Mitigation Measure 4.3-1(b) has been updated to require a minimum of 6.5 acres of foraging habitat per pair to be acquired and permanently protected.

Response to Comment 2-4

This comment addresses the Swainson's hawk and the appropriate mitigation required. Included in Appendix B in this Final SEIR, is a copy of the *Staff Report Regarding Mitigation for Impacts to Swainson's Hawks (Buteo swainsoni) in the Central Valley*, developed by the Fish and Game Commission. This staff report outlines and provides guidance in regards to the direct and indirect loss of Swainson's hawks and their habitat.

In order to mitigate the loss of Swainson's hawks either the mitigation measures in the Swainson's hawk staff report shall be used or project specific mitigation measures may be developed by the project applicant. In addition, options to meet mitigation requirements other than those listed in the Staff Report include: 1) to purchase Swainson's hawk mitigation credits in a DFG approved mitigation bank; or 2) the purchase of fee title or a conservation easement on suitable foraging habitat using the ratios provided in the Swainson's hawk staff report. Loss of foraging habitat within one mile of an active nest requires a 1:1 habitat replacement ratio, within five miles of an active nest requires a 0.75:1 ratio, and within ten miles of an active nest requires 0.5:1 ratio.

Under Impact 4.3-3 on page 4.3-9 of the DSEIR, the discussion is revised to read:

> The 1994 Southpark EIR provided the following mitigation measures to reduce the cumulative impact to a less-than-significant level.
>
> > No disturbance, construction or other project-related activities which may cause abandonment or forced fledgling shall occur within ½ mile of the active Swainson's hawk nest located immediately to the south of the Southpark site during March 1 - August 15 or until the fledglings are no longer dependent upon the nest tree.
> >
> > Alternatively, the applicant shall fund an intensive monitoring program of the nest site by a California Department of Fish and Game-approved raptor biologist to determine if construction or project-related activities are affecting the behavior of the adults or fledglings in such a way that nest abandonment or forced fledgling may occur. Should behaviors be observed that are recognized as preceding nest shall cease.
> >
> > The applicant shall also participate in one of the following mitigation programs to reduce the impacts from the loss of Swainson's hawk foraging habitat to less than significant.
> >
> > - The applicant shall prepare a Swainson's Hawk Habitat Management Plan (HMP) as a condition of approval for a California Fish and Game Code Section

2081 Management Agreement that will allow for "incidental take" Swainson's Hawk habitat.

- Alternatively, the applicant shall join the City of Dixon as a participant in a countywide effort to prepare a Swainson's hawk HMP for a California Fish and Game Code Section 2081 Management Agreement that will comprehensively address the "incidental take" of all Swainson's hawk that would occur as a consequence of the City's project approvals.[1]

Since the preparation of the 1994 Southpark EIR, several changes have occurred with regard to the status of the Swainson's hawk and the potential to develop a county-wide Swainson's hawk habitat plan~~, and the CEQA definition of cumulative impacts.~~ The loss of potential foraging habitat no longer requires an "incidental take" permit. Therefore, the development of a Solano County habitat management plan for Swainson's Hawk habitat is not currently required, has not been funded by any of the local jurisdictions, and does not appear likely. Therefore, implementation of the previously approved mitigation measure would no longer fully reduce cumulative impacts to Swainson's hawk foraging habitat. To address these changes, the previously adopted mitigation measure is refined to reflect the new guidelines put forth by the DFG. This refinement of the previously adopted mitigation measure does not change the original intent of the mitigation to reduce this cumulative impact to a less-than-significant level. The previously adopted mitigation measures is revised as follows:

No disturbance, construction or other project-related activities which may cause abandonment or forced fledgling shall occur within ½ mile of the active Swainson's hawk nest located immediately to the south of the Southpark site during March 1 - August 15 or until the fledglings are no longer dependent upon the nest tree.

Because at least one active nest is located within one mile of the project site, the project applicant would be required to provide replacement habitat at a 1:1 ratio, consistent with CDFG requirements. To mitigate for the loss of 211 acres of Swainson's hawk foraging habitat, the project applicant must provide 211 acres of Habitat Management lands to CDFG. Habitat Management lands protected under this requirement may be protected through fee title acquisition or a conservation easement (acceptable to CDFG) on agricultural or other suitable land that provides foraging habitat for Swainson's hawk. Should the City establish a fee program to fund the purchase of Habitat Management lands to compensate for the loss of Swainson's hawk foraging habitat, the project applicant may participate in the fee program in lieu of the provision of 211 acres of land required by this measure.

~~Alternatively, the applicant shall fund an intensive monitoring program of the nest site by a California Department of Fish and Game-approved raptor biologist to determine if construction or project-related activities are affecting the behavior of the adults or fledglings in such a way that nest abandonment or forced fledgling may occur. Should behaviors be observed that are recognized as preceding nest shall cease.~~

~~The applicant shall also participate in one of the following mitigation programs to reduce the impacts from the loss of Swainson's hawk foraging habitat to less than significant.~~

- ~~The applicant shall prepare a Swainson's Hawk Habitat Management Plan (HMP) as a condition of approval for a California Fish and Game Code Section 2081 Management Agreement that will allow for "incidental take" Swainson's Hawk habitat.~~

- ~~Alternatively, the applicant shall join the City of Dixon as a participant in a countywide effort to prepare a Swainson's hawk HMP for a California Fish and Game Code Section 2081 Management Agreement that will comprehensively address the "incidental take" of all Swainson's hawk that would occur as a consequence of the City's project approvals.~~[2]

~~Finally, under the recently updated CEQA Guidelines, a cumulative impact is significant if the project's incremental contribution to the impact is "cumulatively considerable", which is defined as follows:~~

> ~~"Cumulatively considerable" means that the incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects. (CEQA Guidelines, Section 15065(c))~~

Incorporation of the refined previously adopted 1994 mitigation measure as part of the proposed project would reduce impacts associated with the cumulative loss of foraging habitat to a less-than-significant level and no additional mitigation is required. ~~Development of the project site was not determined to be a significant loss of foraging habitat at a project-specific level, the incremental loss of foraging habitat on the project site when viewed in connection with the effects of all other projects would not meet the definition of cumulatively considerable.~~ Therefore, the cumulative impact is considered *less than significant.*

Response to Comment 2-5

The comment requests that fees as defined by Fish and Game Code Section 21089, be paid at the time of filing the Notice of Determination. The comment is noted and will be forwarded to the Dixon City Council for their consideration in the decision-making process. All applicable fees will be paid at the appropriate time.

Response to Comment 2-6

The comment requests DFG be provided written notification of pending decisions. The comment is noted and will be forwarded to the Dixon City Council for their consideration in the decision-making process. DFG will be provided a copy of all notices pursuant to State requirements.

Letter 3

Dixon Unified School District

School Facilities and Planning

180 South First Street, #1
Dixon, CA 95620
(707) 678-4541
Fax (707) 678-4157
email: eeusebio@dixonusd.org

Ed Eusebio
Director

September 28, 2000

VIA FACSIMILE and US Mail
Warren Salmons, City Manager
City of Dixon
600 East A Street
Dixon, CA 95620

SUBJECT: Southpark Environmental Impact Report

Dear Mr. Salmons:

The Dixon Unified School District (DUSD) is writing to provide comments on the Southpark Planned Development Draft EIR.

The increase in single and multiple family residences proposed by this project and other currently proposed projects within the city will bring additional students into a system that is already operating above capacity. The generation of new students expected from the Southpark project depends on the number of units built, as described in the August 2000 EIR 606 single family residences and 131 multi family residences will generate approximately 500 students.

DUSD is in the process of evaluating four potential sites for new high school construction. Three of these sites are adjacent to or in the immediate vicinity of the Southpark project, yet the EIR does not evaluate impacts, particularly traffic, with any regard towards these potential school sites. One of the potential school sites is located at the southwestern corner of the intersection of the proposed Parkway Boulevard with First Street. Parkway Boulevard would serve as a primary access street for a school at this location. Additionally, two of the other sites, located in southwest and southeast Dixon, would likely be served by this roadway. 3-1

Parkway Boulevard will be a major arterial for the residents of the Southpark project and for future circulation within the city and the county area adjacent to the city. The EIR provides little discussion of Parkway Boulevard and no analysis of the traffic it is expected to support. The EIR recognizes that, "project trips would access First Street using West Cherry Street and a new access road named Village Parkway,"(page 4.2-8) but does not provide any data or analysis for these intersections nor the new intersection of Parkway Boulevard and First Street. These intersections, particularly Parkway Boulevard and First Street, will be impacted by the proposed project. The analysis of those impacts will be crucial for assisting the DUSD in locating new schools. 3-2

The school district feels it is important for the Southpark DEIR to address the circulation issues related to this new southern transportation route within the city. To address these issues, the traffic impacts analysis in the EIR should be revised to include the expected traffic patterns and volume for Parkway Boulevard, and the impacts at its intersection with First Street. Funding mechanisms for the construction of this roadway, the crossing of the railroad track and the connection to the existing county roadway, Porter Road, must also be discussed within the traffic impacts analysis. 3-3

Thank you for considering my comments. Please call me at (707) 678-4541 if you have any questions.

Sincerely,

Ed Eusebio
Director of School Facilities and Planning
Dixon Unified School District

LETTER 3 ..... DIXON UNIFIED SCHOOL DISTRICT SCHOOL FACILITIES AND PLANNING

Response to Comment 3-1

The comment identifies that the Dixon Unified School District (DUSD) is in the process of evaluating four sites for a new high school and notes that the DSEIR does not evaluate traffic impacts associated with the potential new school sites. The construction of a new high school is not part of the Southpark project and is a separate development action, which would require an independent environmental review. To the extent possible, the City will include a new high school site in the traffic analysis for the Street Master Plan (SMP) and Transportation Improvement Program (TIP) that are underway (refer to Response to Comment 1-3). The inclusion of a new high school site as part of the SMP and TIP would provide the cumulative traffic analysis for the high school's independent environmental review assuming the final selected site is the one assumed in the SMP and TIP.

Response to Comment 3-2

The comment states that the DSEIR provides little discussion of Parkway Boulevard and the traffic it is expected to support. The SR 113/West Cherry Street, SR 113/Village Parkway, and SR 113/Parkway Boulevard intersections were analyzed in Responses to Letter 1 (please see Response to Comment 1-1). These intersections are projected to operate at LOS C or better with the addition of project traffic compared to existing conditions. Please refer to Response to Comment 1-1 for more information.

Response to Comment 3-3

The comment states that the DSEIR should address circulation issues and traffic impacts associated with the future Parkway Boulevard, as well as funding mechanisms. Please refer to Responses to Comments 1-1, 1-3, and 3-2.

Letter 4

DIXON FIRE DEPARTMENT

205 Ford Way, Dixon, California (707) 678-7060

MEMORANDUM

TO: Warren Salmons, City Manager

FROM: Ric Dorris, Fire Chief

DATE: October 2, 2000

SUBJECT: Southpark Subsequent EIR Comments

Previously, the developers of the Southpark Subdivision submitted an environmental impact report for review and comment. The project consisted of a 210 acre community located in the southern edge of the City in the newly annexed and undeveloped area, which is currently in agricultural use. The project will consist of approximately 807 housing units and would include an elementary school and a small commercial center.

The EIR was reviewed by the Fire Department for consistency with General Plan Requirements, which included response times, staffing levels, ISO standards and water supply. The EIR further identified potential impacts of the project on existing fire services and suggested mitigation measures to offset the impacts. The Fire Department analysis of the EIR resulted in a set of conditions and recommended mitigation measures. 4-1

Following receipt of these recommendations, a subsequent EIR was developed and submitted for further review. This review found that the following issues have yet to be adequately addressed, they include:

1. Response time and fire station location;
2. Water supply for fire flow to the area; and
3. The presence of an underground, high-pressure pipeline.

Proposed Mitigation Measures

The subsequent EIR recommended the following mitigation measures to reduce the magnitude of the impact to a less than significant level. They are as follows: 4-2

1. Section 4.6-2(a) *Prior to the issuance of building permits, the project applicant shall pay the required impact fees to the city, per AB1600, to ensure that adequate fire protection levels are provided to the city.*
2. Section 4.6-2(b) *Prior to issuance of building permits, the applicant shall coordinate with the Dixon Fire Chief to review the development plans and identify any units that may not have*

a response time consistent with the City's ISO rating. For any unit identified with an inadequate fire response time, the applicant shall incorporate building design components to enhance fire safety. These measures may include the addition of eave vents, fire sprinklers, or other design features required by the Fire Chief. 4-2 Cont.

Recommended Conditions and Mitigation

1. The EIR recommends the use of built in fire protection features to offset the impact of extended response time due to the location of the park from the current fire station. This is considered to be insufficient. The recommended use of built-in fire protection was suggested as an interim measure until a southern station could be built and staffed. 4-3

2. The addition of a graded crossing to provide immediate access to the project site, between Southpark and the future Southwest Subdivision fire station, is a necessary component of the fire station requirement, and there is no mention of the crossing in the EIR. 4-4

3. The proposed mitigations regarding fire flow still do not adequately state the fire flow capability. This needs to be stated in what the fire flow capability would be for the project site. 4-5

4. There is no mention within the project of a mitigation measure relative to the high-pressure underground pipeline that runs parallel to the railroad tracks. It is recommended that a setback of a minimum of 50 feet exist between the project and the pipeline as a minimum level of protection from the potential threat, such as fire spill or derailment. 4-6

LETTER 4 ..... DIXON FIRE DEPARTMENT

Response to Comment 4-1

The comment states that response time and fire station location, water supply for fire flow to the area, and the presence of an underground, high-pressure pipeline were not adequately addressed. Please refer to Responses to Comments 4-3 through 4-6, below.

Response to Comment 4-2

The comment restates Mitigation Measure 4.6-2 (a) and (b) in the DSEIR related to impacts on fire service. No further response is required.

Response to Comment 4-3

The comment states that Mitigation Measure 4.6-2(b), requiring built-in fire protection, is not adequate to offset the impact of increased response times and was only intended to be interim until a southern station could be built and staffed. Mitigation Measures 4.6-2(a) and 4.6-2(b) address the impact of providing adequate fire protection. The first mitigation measure requires payment of AB1600 fees, which address the financing of the southern fire station and provides for the project's fair share funding of fire station improvements. The second mitigation measure requires that until adequate response times can be achieved, built-in fire protection measures must be included in each building design. This is intended to be an interim measure until the southern station is constructed. The fair share funding of the fire station, in combination with interim construction measures, ensure that adequate fire protection services would be provided.

Response to Comment 4-4

The comment states that the addition of a graded crossing is necessary to provide access between the project site and the future southern fire station. The discussion of a grade separated crossing is addressed in Chapter 4.2, Transportation and Circulation. The analysis determined that in order to reduce the traffic impacts at the intersection of SR 113 and A Streets, either exclusive turn lanes on both streets or a new roadway connecting SR 113 and Pitt School Road needs to be constructed prior to the development of Phase 4 of the project (see Mitigation Measures 4.2-2). In addition, Mitigation Measure 4.6-2(b) identified in Chapter 4.6, Public Services, requires that interim fire suppression design features must be designed into the project until an adequate response time can be achieved through the construction of the fire station and the railroad crossing. These two mitigation measures, in combination, ensure that adequate fire protection services would be provided to the project site.

Response to Comment 4-5

The comment requests clarification of the fire flow capability. Chapter 4.5, Public Utilities and Infrastructure, of the DSEIR addresses the provision of public infrastructure and utilities. The Dixon-Solano Municipal Water Service (DSMWS) Master Plan (discussed on page 4.5-3 of the DSEIR) outlines the improvements planned to serve the area and includes a statement from the California Water Service that capacity exists in their system to serve the project. The DSEIR found the increased demand for water production and conveyance facilities to be a less-than-significant impact. The current DSMWS standards for fire flow are 20 pounds per second (psi) for a 3 hour period with a minimum flow requirement of 1,000 gallons per minute (gpm) for single family development, 2,500 gpm for multiple family development, and 3,500 gpm for non-residential development. To address this concern, the following mitigation measure will be added to Impact 4.5-3 to further reduce the magnitude of the impact.

> *4.5-3* ~~*None required.*~~ *Prior to the approval of a final map, the project applicant shall provide confirmation that adequate fire flow exists throughout the development to meet the current DSMWS standards for fire flow and meets the approval of the City Engineer, DSMWS Engineering Staff, and Fire Chief.*

Response to Comment 4-6

The comment states that no mitigation is included addressing the high pressure underground pipeline that exists parallel to the railroad tracks. The pipeline was discussed on pages 4.5-4 and 4.5-8 of the DSEIR. As discussed in the Project Description (DSEIR, page 3-5), Orchard Lots are proposed along the railroad tracks which include a minimum 125-foot setback from the railroad right-of-way. The high pressure underground pipeline is within the existing railroad right-of-way. This exceeds the 50-foot minimum set back requirement recommended by the Fire Department. In addition, Mitigation Measure 4.5-4 requires the project applicant to identify any existing underground utilities prior to construction and to avoid these utilities if possible. This mitigation measure further requires that if interfering with the utility is not feasible, the project applicant shall coordinate with the utility in question to alleviate the interference.

Letter 5

TATE OF CALIFORNIA- BUSINESS, TRANSPORTATION AND HOUSING AGENCY
GRAY DAVIS, Governor

EPARTMENT OF TRANSPORTATION
OX 23660
AKLAND, CA 94623-0660
10) 286-4444
OD (510) 286-4454

September 25, 2000

SOL-113-18.950
SOL113141
SCH # 1994071013

Mr. Warren Salmons, City Manager
City of Dixon
600 East A Street
Dixon, CA 95620

Dear Mr. Salmons:

Southpark Planned Development Draft Subsequent Environmental Impact Report

Thank you for including the California Department of Transportation (Caltrans) in the environmental review process for the above referenced project. We have the following comments regarding this project:

1. As this project includes substantial development, overall impacts of this project would likely include other intersections in addition to the intersection of First Street/A Street. Have any other intersections been analyzed to determine if they will be significantly impacted by this project? If so have any mitigation measures been identified to address potential significant impacts at these intersections? **5-1**

2. Page 4.2-1, "Introduction" states, "The transportation impact analysis in the 1994 Southpark EIR identified significant impacts to existing roadways and intersections. Mitigation was identified to reduce all of the transportation impacts to a less than significant level." Our previous letter dated, May 27, 1999 (attached for your information), recommended a traffic study and requested information on proposed mitigation measures for the intersections of State Route 113 (SR 113) with Parkway Boulevard, Village Parkway Boulevard and West Cherry Street. Please respond to the questions posed in this letter so that we might be informed of the overall impacts, if any, this project will have on SR 113 at the intersections identified above. **5-2**

3. Page 4.2-3 states that Caltrans' Traffic Manual dated July 1, 1995 was used to calculate the peak hour volume warrant for signalization. Reference should be made to our most current traffic Manual dated July 1, 1996. **5-3**

4. Pages 4.2-14 and 15, "Mitigation Measure 4.2-4" states that, "...because the City of Dixon has not currently identified any long range transportation improvement projects to address the First Street/A Street intersection, the impact remain significant and unavoidable." Is this impact truly unavoidable? The citywide transportation plan and subsequent projects that address the First Street/A Street Intersection, noted in Mitigated Measure 4.2-4(b), should be addressed in more detail. 5-4

An encroachment permit will be needed for work done within State right-of-way. To apply for a Caltrans permit, the applicant should submit a completed application, environmental documentation and five sets of plans to:

Caltrans, District 4
Office of Permits
P. O. Box 23660
Oakland, CA 94623-0660 5-5

We appreciate the opportunity to work with you on this project. Should you require additional information or have any questions regarding this letter, please call Bonnit Braxton of my staff at (510) 622-1645.

Sincerely,

HARRY Y. YAHATA
District Director

By Jean CR Finney

JEAN C. R. FINNEY
District Branch Chief
IGR/CEQA

Enclosure

c: State Clearinghouse

LETTER 5 . . . . . STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION

Response to Comment 5-1

The comment states that additional intersections need to be analyzed and mitigation identified. Additional traffic analysis has been conducted. Please refer to Chapter 2 of the Final EIR and the responses to the comments in Letter 1.

Response to Comment 5-2

The comment states that impacts and mitigation measures for the intersection of SR 113 with Parkway Boulevard, Village Parkway Boulevard and West Cherry Street need to be identified. Additional traffic analysis has been conducted. Please refer to Chapter 2 of the Final EIR and the responses to the comments in Letter 1.

Response to Comment 5-3

The comment states that the Caltrans Traffic Manual (July 1, 1995) reference is not the most current manual. This comment is correct and the reference to the Caltrans Traffic Manual has been revised to include the correct publication date of July 1, 1996.

The first sentence in the seventh paragraph on page 4.2-3 is revised to read:

> Table 4.2-3 also indicates if the intersection met the peak hour volume warrant for signalization as defined in the *Traffic Manual*, Calrans, July 1, [~~1995~~] 1996.

Response to Comment 5-4

The comment questions whether impacts at SR 113 and A Street are truly unavoidable and that a citywide transportation plan should address impacts in more detail. The City has currently contracted with Fehr & Peers to prepare a Street Master Plan (SMP) and Transportation Improvement Program (TIP) to address this issue. Please refer to Chapter 2 of the Final EIR and the responses to the comments in Letter 1.

Response to Comment 5-5

The commentor states that an encroachment permit from Caltrans is required for the proposed project. The requirement for an encroachment permit is acknowledged and will be the responsibility of the project applicant prior to construction. It should also be noted that Mitigation Measure 4.2-1 on page 4.2-13 of the DSEIR requires an encroachment permit for the construction of the improvements at First Street and A Street.

Letter 6

NOLTE

BEYOND ENGINEERING

October 5, 2000
SA 1260

Mr. Warren Salmons
City Manager
City of Dixon
600 East A Street
Dixon, CA 95620-3697

SUBJECT: Southpark DEIR Comments

Dear Mr. Salmons:

Nolte Associates is representing the Southwest Dixon Land Owners Group. Our client has requested that we review the Draft Supplemental Environmental Impact Report that has been prepared for the Southpark Planned Development project, and comment on issues that may have potential impacts on the continuing development process for the Southwest Dixon Specific Plan.

We believe there are only two issues with the potential to significantly impact our clients projects. These two issues relate to the traffic analysis and the sanitary sewer analysis.

In review of the Transportation and Circulation section, chapter 4.2, we note on page 4.2-7, under Project Assumptions, the document correctly recognizes that the Dixon 1993 General Plan shows a potential new minor arterial roadway with grade separated crossing, connecting First Street with Pitt School Road. The location of this minor arterial roadway crosses the Southpark project along its southerly boundary. 6-1

The document states that a conservative approach is taken in the project analysis, assuming that all the project traffic would use First Street. This assumption does produce a worst case scenario for predicted traffic on First Street, producing unacceptable Level of Service (LOS) D at the First Street/A Street intersection. 6-2

Mitigation measures proposed include intersection widening. The original EIR dated August 1995 states (on page 3.6-18, Signalized Intersection Level of Service Less than D), that the addition of separate right turn lanes at the east and west approaches to the intersection would result in a loss of on-street parking along A street, and this impact would be considered significant. This document identifies Mitigation Measure 4.2-3(b) which is similar to the original mitigation measure, but does not identify the loss of parking. Mitigation measure 4.2-3(c) recognizes the significant constraints to implementation of the required mitigation measures, but still does not discuss the loss of parking. 6-3

NOLTE ASSOCIATES, INC.
1750 CREEKSIDE OAKS DRIVE, SUITE 200
SACRAMENTO, CA 95833
916.641.1500 TEL 916.641.9222 FAX
WWW.NOLTE.COM

Mitigation measure 4.2-3 is written as an either/or mitigation measure. As such, it does not adequately address the cumulative impact situation. Impact 4.2-4 recognizes this, but ignores the OR portion of mitigation measure 4.2-3(b) which states that construction of the new minor arterial roadway would reduce impacts to less than significant. The concern here is that the either/or composition of the mitigation measure ignores the cumulative plus project conditions. 6-4

Mitigation measure (4.2-3) requires fare share funding of the proposed improvement. This indicates that other projects will also contribute their fare share portion. The either/or construct of this mitigation measure allows the Southpark project to pay a fare share portion of one mitigation measure, but could exempt this project from paying a fare share portion of necessary cumulative mitigation measures (4.2-4).

The cumulative impacts section describes impact 4.2-4, but does not clearly state whether the situation results from cumulative development with the installation of mitigation measure 4.2-3(b) or without it. The OR portion of mitigation measure 4.2-3(b) should be identified as the correct mitigation measure for impact 4.2-4, rather than drawing a conclusion that the impact is significant and unavoidable. Failure to do this will create a potential scenario where the Southpark project is not conditioned to participate in a fare share portion of the planning and construction of this new minor arterial roadway. This scenario would result in leaving that responsibility solely to future development projects within the City. These projects will have less of an impact on, or need for the facility, than the Southpark project. 6-5

Chapter 4.5 of this document discusses impacts on Wastewater facilities. Impact 4.5-2 identifies the project's impact on wastewater collection infrastructure. Reference is made to a second sewer trunk line to serve Dixon. We believe this reference is the Dixon South Trunk project, which identifies the need for construction of a second north-south sewer trunk line. As part of the master plan prepared for this project, an additional east-west sewer trunk line is also identified. It is our understanding that funding for the north-south line is anticipated, but funding for the east-west line is not yet identified. 6-6

A letter written by City staff to the Southwest Dixon property owners on November 3, 1999 specifically states that "..the East-West interceptor shall be designed to carry sewage from both Southwest and Southpark, along the southern boundary of Southpark within the right-of-way of the southerly arterial, to the existing 27" sewer on the east side of South First Street". Further, that letter states that "The portion running through Southpark may be constructed by others or a reimbursement to Southwest developers will be required." 6-7

The trunk sewer master plan identifies a need to intercept upstream sewage flows from the existing Pitt School pump station, located at A Street, and serving existing residents and businesses in the area. These existing sewer flows will be conveyed in the newly proposed east/west sewer trunk line. It is our understanding that the Southpark project, the Southwest Dixon Specific Plan project, and the City must jointly fund this line.

Mitigation measures proposed require the City to perform, but do not place any conditions on the Southpark project. We believe that additional mitigation measures addressing the funding and construction of the east-west trunk sewer through the project boundaries are necessary. 6-7 Cont.

We appreciate the opportunity to comment on this Draft SEIR, and stand ready to answer any questions you may have concerning these comments.

Sincerely,

Nolte Associates, Inc.

Les Clark, PE, Associate

cc: Southwest Dixon Land Owners, Tim Lien

LETTER 6 ..... NOLTE ASSOCIATES, INC.

Response to Comment 6-1

The comment confirms the project assumptions regarding the grade separated crossing connecting First Street with Pitt School Road. The comment is noted and will be forwarded to the Dixon City Council for consideration during the decision-making process.

Response to Comment 6-2

The comment confirms that the traffic assumptions produce a worst-case scenario for the predicted traffic on First Street. The comment is noted and will be forwarded to the Dixon City Council for consideration during the decision-making process.

Response to Comment 6-3

The comment raises the issue of the loss of parking should improvements be constructed at the intersection of First and A Streets. Loss of on-street parking is an important issue to the City of Dixon. A study conducted for the proposed theater at the southeast corner of the North First Street/West A Street intersection determined that adequate parking was available to serve existing businesses in this area even with a potential loss due to improvement of the North First Street/West A Street intersection. However, the City of Dixon will review the intersection improvements in order to minimize the reduction in parking downtown. In addition, the City of Dixon is implementing the Downtown Revitalization Plan by constructing the first phase of the multi-modal station which provides additional parking for the downtown area. Please also see Response to Comment 6-4 for further clarification of the traffic mitigation measures identified for First and A Streets.

Response to Comment 6-4

The commentor is concerned that a fair share contribution towards all the roadway improvements will not be provided and that the cumulative impact is not addressed. The DSEIR addresses cumulative impacts in Mitigation Measures 4.2-4(a) and 4.2-4(b). Mitigation Measure 4.2-4(b) requires the project applicant to fund a fair share portion of cumulative impacts of a city-wide transportation plan and subsequent projects that address the First Street/A Street intersection. The SEIR identifies cumulative traffic impacts as significant and unavoidable because the City of Dixon has not currently identified any long range transportation improvement projects to address the First Street/A Street intersection. It should be noted that the City of Dixon has initiated the process to prepare a Street Master Plan for the City's circulation system and will further address issues related to First and A Streets. Please refer to Chapter 2 of the Final EIR and the responses to the comments in Letter 1.

Response to Comment 6-5

The comment questions whether or not the identification of Impact 4.2-4 as significant and unavoidable includes the implementation of Mitigation Measure 4.2-3(b), which requires the construction of a new roadway between First Street and Pitt School Road.

It should be noted that Impacts 4.2-1 to 4.2-3 and mitigation measures 4.2-1 to 4.2-3 have been modified to reflect the findings of the additional traffic analysis as shown in Chapter 2. The text changes to the traffic section are provided in Chapter 3 of this Final EIR.

The traffic consultant's modeling of the cumulative conditions did not assume the implementation of the new roadway identified in Mitigation Measure 4.2-3. This mitigation measure was identified to reduce the project-specific impacts of the Southpark development. The cumulative development, which assumes build out of the General Plan, is projected to adversely affect the intersection at First Street and A Street with or without construction of the new roadway connection. Mitigation Measure 4.2-4(b) identified for the cumulative impact requires the fair share funding of the preparation of a citywide transportation plan that would specifically address the impacts to the First and A Street intersection. It is anticipated that this study would further address the ability of a new roadway to reduce the magnitude of local intersection impacts in the City of Dixon. The citywide study would be the basis for requiring fair share funding for local transportation improvements from future development, including funding for the new roadway construction. Because feasible improvements have not been identified that reduce the impact at First Street and A Street to less than significant, the impact is identified as significant and unavoidable.

The comment further raises concern regarding Southpark paying their fair share. The City of Dixon is currently preparing a Street Master Plan (SMP) and Transportation Improvement Program (TIP). The TIP will identify a funding mechanism(s) to provide sufficient funding to construct the needed improvements within a timely manner. The Southpark project will be required to contribute their fair share cost of needed roadway improvements by participating in the TIP. Please see Response to Comment 1-3.

Response to Comment 6-6

This comment identifies the improvements being constructed as part of the South Dixon Sewer Trunk Line Project. The commentor also questions the funding for the east-west connector. The sewer trunk line discussed in the DSEIR refers to the South Dixon Trunk line, approved in March 2001. CEQA only requires the discussion of funding to determine the feasibility of alternatives and mitigation measures. Therefore, a discussion of the funding of the sewer improvements is not required by CEQA for the EIR. It should be noted that the City of Dixon has identified that funding for the east-west connector will be shared on a pro-rata basis by the Southwest Dixon area, Southpark area, and the City. The City of Dixon has identified its share of the improvements in the City's Capital Improvement Program. Mitigation Measure 4.5-2(a)

and 4.5-2(b) require that prior to final map approval adequate capacity must be available both in the conveyance system and at the wastewater treatment plant. If treatment or conveyance capacity is exceeded, the applicant is required to pay their fair share of the improvements required to increase the wastewater treatment plant capacity.

Response to Comment 6-7

This comment further addresses the east-west connector for the sewer trunk line, stating that a reimbursement agreement should be required. This is a project specific tentative map requirement, not an environmental impact. The comment will be forwarded to the City Council for consideration in the decision-making process.

Letter 7

7 Galileo Court, Suite 103 : Davis, California 95616

(530) 757-3650 · (800) 287-3650 · Fax (530) 757-3670

October 4, 2000

Mr. Warren Salmons, City Manager
City of Dixon
600 East A Street
Dixon, CA 95620

Subject: Draft SEIR for the Southpark Planned Development

Dear Mr. Salmons,

The Yolo-Solano Air Quality Management District (YSAQMD) staff has reviewed the Draft SEIR for the Southpark Planned Development. The air quality assessment in this document is deficient in critical areas. We believe the document's shortcomings could be reconciled through interagency coordination, current characterization of air quality conditions, comprehensive qualitative and quantitative evaluation of construction, operation and cumulative impacts, and the identification and implementation of all feasible mitigation measures.

The YSAQMD encourages lead agencies to establish early informal consultation with project proponents whose projects require CEQA review. We are available to assist the lead agency during the early consultation process by identifying issues such as off-road engine emissions, air toxic emissions, and the land use – air quality linkages. The early consultation process is intended to help both the lead agency and the project proponents to make changes in design or project construction procedures that could substantially reduce potential air quality impacts or avoid significant environmental impacts before the environmental process begins. However, this opportunity has past with the publication of the Draft SEIR. There were also lost opportunities to consult us on the April 1999 NOP and April 2000 Initial Study, as required under Pub. Resources Code. §21080.3, subd. (a) and CEQA Guidelines, §15063, subd. (g). Our records and this document do not show any solicitation for comments from the YSAQMD. 7-1

The incompleteness of the Draft SEIR severely limits our ability to provide substantive comments regarding the project. This is because the Initial Study, not the Draft SEIR, references the impacts documented in the 1994 EIR, and as discussed on page 2-4 of the Draft SEIR, air quality significant and unavoidable impacts will be addressed under a new Findings of Fact and Statement of Overriding Considerations. The Summary of Impacts and Mitigation Measures Table 2-2 shows all air quality impacts mitigated to less than significant level. We disagree with this statement. We believe the Draft SEIR should document the significant and unavoidable air quality impacts in our region. 7-2

As we review the Initial Study, the 1994 EIR recognized that the project would generate significant increases in vehicular trips, which in turn produces PM_{10} emissions. The mitigation requires the project proponent provide for adequate traffic circulation to reduce congestion and therefore air emissions. For light duty vehicles, the re-suspension of roadway dust is a major 7-3

source of PM_{10} emissions. Improving traffic circulation will do little to reduce PM_{10} emissions. An effective mitigation strategy includes measures that will curtail the number of vehicle trips and reduce vehicle miles traveled. The YSAQMD promotes land use patterns that discourage the use of single occupancy vehicles, while increasing the use of alternative modes of transportation. The planned development is located a half mile from the future multi-modal transportation center and adjacent to the City's core area. We encourage the project proponent to consider a higher density than the proposed 4.15 dwelling units per acre. 7-3 Cont.

The mitigation measure that requires the project to include on-site amenities such as bicycle lanes, paths and parking spaces to reduce ozone precursor emissions to less than significant is overly optimistic and unsupported by documentation. These mitigation measures have limited benefits. We therefore, question the Draft SEIR's mitigation effectiveness to reduce this impact significantly. The Draft SEIR should show its effectiveness quantitatively, which requires project impacts to be quantified. 7-4

The Initial Study's discussion 5a,b - "According to City of Dixon 1993 General Plan, the District has been named an attainment area for all pollutants measured except ozone" is not correct. For a number of years, the YSAQMD has been designated as a nonattainment area for state ambient air quality standards for PM_{10}. PM_{10} has been correlated to increase mortality rates as well as cause high incidences of chronic respiratory illness. 7-5

If the project impacts cannot be reduced to a level of less than significant, alternatives should be identified that would not result in significant air quality impacts. Conclusive statements unsupported by factual information will not suffice to support mitigation efforts. I believe that through better cooperation we can provide the decision-makers and public current, accurate, and complete environmental information about air quality for the Southpark Planned Development. If you have any questions or need additional information regarding these comments, please call Dan O'Brien, my Associate Planner at (530) 757-3677. 7-6

Sincerely,

Larry Greene
Air Pollution Control Officer

cc: YSAQMD Board Member Don Erickson
Deputy County Council Tom Geiger

LETTER 7 ..... YOLO-SOLANO AIR QUALITY MANAGEMENT DISTRICT

Response to Comment 7-1

This comment notes that consultation with the YSAQMD did not occur for this project. The YSAQMD is on the mailing list for this project and has been provided copies of all notices as required by CEQA. The YSAQMD provided comments on the Notice of Preparation for the 1994/95 Southpark EIR; however, no further comments were provided by the district on the Draft EIR. The YSAQMD was mailed a copy of the Notice of Preparation for the Subsequent EIR on April 28, 1999, along with the other required agencies. Comments on the Notice of Preparation were not received from YSAQMD.

Response to Comment 7-2

The comment states that the air quality impacts are not adequately addressed in the EIR and that significant and unavoidable air quality impacts in the region should be addressed. The Southpark Prezoning and Annexation was approved by the Dixon City Council in 1995 (DSEIR July 1994, FEIR August 1995). An Environmental Impact Report (SCH# 94071013) was prepared and certified along with the project approval. The current application includes minor modifications to the General Plan and Zoning to be consistent with the 1995 approval, as well as a Tentative Map to subdivide the property consistent with the land use designations. The City of Dixon identified the need to prepare a Subsequent EIR to address transportation concerns given the adoption of a recent Transportation Model, biological concerns, and public services. The basic land use, including the type and intensity of land use is not proposed to be modified; therefore, an air quality analysis, beyond the one for the original Southpark project was not prepared. The EIR, which was certified in 1995, provided an air quality analysis and mitigated to a less-than-significant level the construction-related air quality impacts. The1994/95 Southpark EIR found the impact on air quality regarding the generation of ozone precursor emissions to be a significant and unavoidable impact and the City Council adopted findings of fact and a statement of overriding considerations for this impact.

Response to Comment 7-3

The commentor is concerned that PM_{10} emissions will not adequately be reduced without reducing the number of vehicle trips and vehicle miles traveled. The commentor suggests a higher density of development be included in the proposed project. The applicant is proposing to develop at densities which are consistent with the 1995 City Council approvals for the Southpark annexation and prezoning. The 1994/95 Southpark EIR was processed by the City of Dixon and was certified as adequate by the Dixon City Council. The Subsequent EIR for the Southpark project is tiered from the EIR which was certified in 1995 for the Southpark project. The Southpark air quality impacts were quantified in the 1994/95 EIR. The 1994/95 EIR analyzed an increased density alternative for the proposed project. The increased density was identified

as having an increased number of trips; therefore an increased air quality impact, although not significantly increased.

The Subsequent EIR analyzed a reduced intensity alternative which resulted in fewer trips and a slightly reduced air quality impact. The Initial Study included as part of the Subsequent EIR includes the mitigation measures identified in the 1994/95 EIR to reduce construction-related PM_{10}. The Initial Study also includes the 1994/95 EIR mitigation measures related to operational PM_{10} impacts, including limiting the use of wood-burning fireplaces and implementing General Plan circulation improvements. Although circulation improvements would not specifically reduce PM_{10}, they would reduce overall air quality impacts. The project consists of requesting minor modifications of the General Plan and Zoning to be consistent with the 1995 approval, and a Tentative Map. The density of development was approved by the City Council in 1995. Please refer to Response to Comment 7-1 regarding the YSAQMD opportunity to comment on the project at that time.

Response to Comment 7-4

The comment states that the mitigation measure identified in the 1994/95 Southpark EIR regarding the provision of on-site amenities such as bicycle paths and parking, is not an effective means of mitigation and that the impacts should be quantified. The 1994/95 Southpark EIR was processed by the City of Dixon and was certified as adequate by the Dixon City Council. The Subsequent EIR for the Southpark project is tiered from the EIR which was certified in 1995 for the Southpark project. The Southpark air quality impacts were quantified in the 1994/95 EIR. The proposed project is within the development envelope of the original project. The project description for the Subsequent EIR, included no change in project densities; therefore, did not include further air quality analysis.

Response to Comment 7-5

The comment states that the Initial Study is incorrect in stating that the area is attainment for all pollutants measured except ozone. The comment is noted and the Initial Study will be modified to state that the District is also designated as nonattainment for PM_{10}.

The Initial Study, page 16 is hereby amended to read:

a,b) The proposed project is located within the Sacramento Valley Air Basin, and the City of Dixon is located within the jurisdiction of the Yolo-Solano Air ~~Pollution Control~~ Quality Management District. According to the City of Dixon 1993 General Plan, the District has been named an attainment area for all pollutants measured except ozone. The 1994/95 EIR stated that the City of Dixon is considered an attainment area for national PM_{10} and non-attainment for state air quality standards for PM_{10}.

For clarification purposed, the Initial Study discussion related to construction and operation PM_{10} impacts is included below:

a,b) The proposed project is located within the Sacramento Valley Air Basin, and the City of Dixon is located within the jurisdiction of the Yolo-Solano Air ~~Pollution Control~~ Quality Management District. According to the City of Dixon 1993 General Plan, the District has been named an attainment area for all pollutants measured except ozone. The 1994/95 EIR stated that the City of Dixon is considered an attainment area for national PM_{10} and non-attainment for state air quality standards for PM_{10}.

Construction

Construction traffic on unpaved roads, as well as activities such as land clearing and grading, would generate significant PM_{10} emissions. Stationary and mobile construction equipment and employee/delivery vehicles can result in increases in ozone precursors, CO, and particulate emissions. Additional vehicle emissions can occur if construction activities increase traffic congestion. The 1994 Southpark EIR (page 3.7-5) identified the following mitigation measures to reduce emissions during construction to ta less-than-significant level:

- *Dust emission shall be controlled by application of water. Water shall be applied using watering trucks, or sprinklers, as often as is necessary to keep the exposed soils damp;*
- *Construction equipment shall be maintained and tuned at the interval recommended by the manufacturers to minimize exhaust emissions;*
- *Equipment idling shall be kept to a minimum when equipment is not in use;*
- *Areas exposed by construction activities shall be paved or covered to prevent erosion as soon as practical within the needs of the construction project; and*
- *The construction contractor shall post a publicly visible sign on the project site during construction operations which specifies the telephone number and person/agency to contact for complaints and/or inquiries on dust generation and other air quality problems resulting from project construction.*

Compliance with the 1994 Southpark EIR mitigation measures would ensure that the proposed project would result in no new construction-related air impacts and no further mitigation is required.

Operation

The proposed project would generate additional long-term particulate matter (PM_{10}) emissions over what currently exists because of a significant increase in vehicular trips per day and woodburning fireplaces in the homes developed as part of the proposed project. The 1994 Southpark EIR (Page 3.7-6) identified the

following mitigation measures to reduce the long-term PM_{10} emissions impact to a less-than-significant level:

- *Require alternative means of residential heating other than wood burning units lacking catalytic converters; and*
- *Implement the circulation improvements contained in the General Plan Environmental Assessment to provide adequate traffic circulation in order to reduce congestion and therefore air emission.*

Compliance with the 1994 Southpark EIR mitigation measures would ensure that the proposed project would result in no new PM_{10} emissions impacts beyond those identified int eh EIR, and no further mitigation is required.

The Initial Study identifies the original Southpark EIR mitigation measures to reduce PM_{10} emissions during construction and operation of the proposed project. These mitigation measures were certified in 1995 as reducing the impacts to a less-than-significant level.

Response to Comment 7-6

The comment states that alternatives should be evaluated which reduce the air quality impacts. The original Southpark application included land use designations allowing 947 dwelling units. The 1994/95 EIR analyzed alternatives which included a No Project Alternative, a Reduced Density Development Alternative (747 dwelling units), and an Increased Density Alternative (1,200 dwelling units). The 1995 City Council approval for the Southpark development resulted in land use designations allowing for the development of 807 dwelling units. The Subsequent EIR for Southpark analyzed the proposed project (807 dwelling units), a No Project Alternative, and a Reduced Density Alternative (737 dwelling units). The 1994/95 EIR and Subsequent EIR studied a range of reasonable alternatives. The Subsequent EIR for the Southpark project is tiered from the EIR which was certified in 1995 for the Southpark project.

Letter 8

STATE OF CALIFORNIA

Governor's Office of Planning and Research

State Clearinghouse

Gray Davis
GOVERNOR

Steve Nissen
ACTING DIRECTOR

ACKNOWLEDGEMENT OF RECEIPT

DATE: September 6, 2000

TO: Warren Salmons
CITY OF DIXON
600 East A Street
Dixon, CA 95620

SEP - 8 00

RE: Southpark Planned Development
SCH#: 1994071013

This is to acknowledge that the State Clearinghouse has received your environmental document for state review. The review period assigned by the State Clearinghouse is:

Review Start Date: August 25, 2000
Review End Date: October 10, 2000

We have distributed your document to the following agencies and departments:

Caltrans, District 4
Department of Conservation
Department of Fish and Game, Region 3
Department of Food and Agriculture
Department of Parks and Recreation
Native American Heritage Commission
Public Utilities Commission
Reclamation Board
Regional Water Quality Control Bd., Region 5 (Sacramento)
Resources Agency
State Lands Commission

The State Clearinghouse will provide a closing letter with any state agency comments to your attention on the date following the close of the review period.

Thank you for your participation in the State Clearinghouse review process.

1400 TENTH STREET P.O. BOX 3044
916-445-0613 FAX 916-323-3018

Response to Comment 8-1

The comment states that the Governor's Office of Planning and Research received the environmental document from the lead agency and forwarded it to the appropriate agencies. The comment is noted and will be forwarded to the Dixon City Council for their consideration in the decision-making process.

5. MITIGATION MONITORING PROGRAM

MITIGATION MONITORING PROGRAM
SOUTHPARK PLANNED DEVELOPMENT

Impact	Mitigation Measure	Responsible Party	Timing	Completed (Initials)
4.2-1 Development of Phase 1 of the proposed project would cause an increase in peak hour traffic volumes at the First Street/A Street intersection.	*4.2-1 The project applicant shall be responsible to fund a fair share portion of the cost of a traffic signal installation at the First Street/A Street intersection to be constructed by the City and the installation of the conceptual configuration selected by the City for dedicated left-turn lanes to be constructed by the City. These improvements require coordination with the City of Dixon and approval of an encroachment permit by the California Department of Transportation. The signal and turn-lane improvements shall be completed prior to occupancy.*	City of Dixon	Prior to the issuance of building permits	
4.2-2 Development through 4 of the proposed project would cause an increase in peak hour traffic volumes at the First Street/A Street intersection.	*4.2-2(a) Implement Mitigation Measure 4.2-1.* *4.2-2(b) Prior to construction of Phase 4, the project applicant shall be required to fund a fair-share portion of the cost to construct a new roadway between First Street and Pitt School Road and the extension of Pitt School Road to the subdivision "A" street. These new roadways are intended to be consistent with the planned minor arterial (grade-separated railroad crossing) identified in the 1993 City of Dixon General Plan.*	City of Dixon	Prior to the issuance of building permits	

4.2-3	Buildout of the proposed project (through Phase 5) would cause an increase in peak hour traffic volumes at the First Street/A Street intersection.	*4.2-3 The project applicant shall be required to fund a fair-share portion of the cost to construct a new roadway between First Street and Pitt School Road. This new roadway is intended to be consistent with the planned minor arterial (grade separated railroad crossing) identified in the 1993 City of Dixon General Plan. This improvement shall be constructed prior to the development of Phase 5 to provide LOS C or better operations during the a.m. and p.m. peak hours.*	City of Dixon	Prior to issuance of building permits	
4.2-4	Implementation of the proposed project, in combination with the projected buildout of the City of Dixon, would cause an increase in a.m. and p.m. peak hour traffic volumes at the First Street/A Street intersection.	*4.2-4(a) The City of Dixon shall require the implementation and completion of Mitigation Measure 4.2-1 prior to the issuance of the first building permit for the proposed project.* *4.2-4(b) The project applicant shall fund a fair share portion of a city-wide transportation plan and subsequent projects that address the First Street/A Street intersection.*	City of Dixon	Prior to the issuance of building permits Prior to the issuance of building permits	
4.3-1	Implementation of the proposed project would result in the potential loss of burrowing owls and burrowing owl habitat.	*4.3-1(a) The project site shall be surveyed for burrowing owls during the peak of the breeding season (April 15 to July 15) and nesting (February 1 through August 31) season, unless burrowing owls are detected during the first survey. Surveys shall be conducted one hour before sunrise to two hours after, or two hours before sunset to one hour after.* *4.3-1(b) If owls are detected on the site, mitigation measures to minimize the impacts to this species would be required, as follows:* • *Occupied burrows shall not be*	City of Dixon	During the peak of the Burrowing Owl breeding season After the survey and prior to construction	

	disturbed during the nesting season (February 1 through August 31) unless approved by DFG; • *To offset the loss of foraging and burrow habitat on the project site, a minimum of 6.5 acres of foraging habitat per pair or unpaired resident shall be acquired and permanently protected. The protected lands should be adjacent to occupied burrowing owl habitat and acceptable to DFG;* • *When destruction of burrows is unavoidable, existing unsuitable burrows shall be enhanced, or new burrows created, at a 2:1 ratio on the protected lands site;* • *If owls must be moved off the project site, passive relocation techniques, such as excluder devices, shall be used rather than trapping; and* • *The project sponsor shall provide funding for long-term management and monitoring of the protected lands. Monitoring should include success criteria, remedial measures, and an annual report submitted to DFG.* *4.3-1(c) All mitigation shall be conducted generally between September 1 and January 31, as determined by DFG.* *4.3-1(d) Following implementation of mitigation*			

		measures, preconstruction surveys shall be conducted within 30 days of the start of construction to ensure no additional burrowing owls have established territories on the project site.			
4.3-3	Development of the project site would result in an incremental loss of wildlife habitat, including Swainson's hawk foraging habitat, when considered in combination with buildout of the region.	*4.3-3* *No disturbance, construction or other project-related activities which may cause abandonment or forced fledgling shall occur within ½ mile of the active Swainson's hawk nest located immediately to the south of the Southpark site during March 1 - August 15 or until the fledglings are no longer dependent upon the nest tree.* *Because at least one active nest is located within one mile of the project site, the project applicant would be required to provide replacement habitat at a 1:1 ratio, consistent with CDFG requirements. To mitigate for the loss of 211 acres of Swainson's hawk foraging habitat, the project applicant must provide 211 acres of Habitat Management lands to CDFG. Habitat Management lands protected under this requirement may be protected through fee title acquisition or a conservation easement (acceptable to CDFG) on agricultural or other suitable land that provides foraging habitat for Swainson's hawk. Should the City establish a fee program to fund the purchase of Habitat Management lands to compensate for the loss of Swainson's hawk foraging habitat, the project applicant may participate in the fee program in lieu of the provision of 211 acres of land required by this measure.*	City of Dixon	During construction	
4.5-1	The proposed project would create impervious surfaces and	*4.5-1(a)* *The City of Dixon shall ensure that adequate stormwater drainage capacity is available*	City of Dixon	Prior to the recording of	

	associated stormwater runoff which would affect the capacity of stormwater facilities in Detention Basin A.	*prior to the recording of any final maps for the project site.* *4.5-1(b) Prior to construction, the project applicant shall fund a fair share, per the AB 1600 fee program, of the drainage facilities improvements identified by the City of Dixon in the 1999 Storm Drain Report and the current AB1600 Facilities and Equipment study. In addition, the City of Dixon shall establish a maintenance district to pay a fair share of the maintenance costs.*		any final maps Prior to construction	
4.5-3	Development of the proposed project would generate an increased demand for domestic water and require the construction of additional water production and conveyance facilities.	*4.5-3 Prior to the approval of a final map, the project applicant shall provide confirmation that adequate fire flow exists throughout the development to meet the current DSMWS standards for fire flow and meets the approval of the City Engineer, DSMWS Engineering Staff, and Fire Chief.*	City of Dixon	Prior to approval of final maps	
4.5-4	Development of the proposed project would interfere with existing utilities and other facilities.	*4.5-4 The project applicant shall identify any existing underground utilities prior to construction and avoid these utilities if possible. If interfering with the utility is not feasible, the project applicant shall coordinate with the utility in question to alleviate the interference.*	City of Dixon	Prior to construction	
4.5-5	Implementation of the proposed project, in conjunction with buildout of the City of Dixon, would generate increased demand on the existing city infrastructure beyond its current capacity.	*4.5-5 The City of Dixon shall implement its Capital Improvement Program and collect appropriate AB1600 fees from new development to ensure the provision of adequate facilities.*	City of Dixon	Prior to approval of grading permits	
4.6-1	Implementation of the proposed project would generate the need for additional police protection services.	*4.6-1 Prior to the issuance of building permits, the project applicant shall pay the required impact fees to the city, per AB1600 to ensure the adequate provision of law enforcement*	City of Dixon	Prior to issuance of building permits	

	services.	*services in the City of Dixon.*			
4.6-2	Implementation of the proposed project would generate a need for additional fire protection services.	*4.6-2(a) Prior to the issuance of building permits, the project applicant shall pay the required impact fees to the City, per AB1600 to ensure that adequate fire protection levels are provided to the city.* *4.6-2(b) Prior to issuance of building permits, the applicant shall coordinate with the Dixon Fire Chief to review the development plans and identify any units that may not have a response time consistent with the City's ISO rating. For any unit identified with an inadequate fire response time, the applicant shall incorporate building design components to enhance fire safety. These measures may include the use of eave vents, fire sprinklers, or other design features required by the Fire Chief.*	City of Dixon	Prior to issuance of building permits	
4.6-3	The proposed project would add additional students beyond the Dixon Unified School District capacity.	*4.6-3 Prior to issuance of building permits, the project applicant shall pay the calculated school impact fee. Under SB50, a school district can levy Level 2 fees to projected development when it satisfies the criteria set for under that statute.*	City of Dixon	Prior to issuance of building permits	
4.6-4	Implementation of the proposed project would generate the need for additional parks and recreation services.	*4.6-4 Prior to the issuance of building permits, and on a per unit basis, the project applicant shall pay the appropriate parkland fee and AB 1600 impact fee to the City of Dixon to ensure the adequate provision of parks and recreation services.*	City of Dixon	Prior to issuance of building permits	
4.6-5	Implementation of the proposed project, in conjunction with the buildout of the City of Dixon, would increase the total student population beyond the capacity	*4.6-5 Prior to the issuance of building permits, and on a per unit basis, the city shall require all development applicants to pay the school impact fees collected by DUSD, on a per unit basis, to be used for new*	City of Dixon	Prior to issuance of building permits	

of the current school system.	*school facilities.*			
Erosion, changes in topography or unstable soil conditions from excavation, grading, or fill?	*The 1994 Southpark EIR (page 3.2-6) identified the following mitigation measure to reduce erosion impacts to a less-than-significant level:* • *Prior to the issuance of a grading permit, the City Public Works Department shall approve drainage and stormwater runoff control systems and their component facilities to insure that they are non-erosive in design;* • *During construction, the applicant shall not leave disturbed areas exposed during the rainy season or for more than seven continuous days if not actively under construction;* • *Areas disturbed by construction activity shall be revegetated immediately following construction to reduce the hazard of erosion;* • *Construction machinery shall be operated and stored only within construction areas and one designated parking area; and* • *Existing vegetation shall be retained in all other parts of the project area.*	City Public Works Department City of Dixon	Prior to issuance of grading permits During construction	
Violate any air quality standard or contribute to an existing or projected air quality violation? Exposure sensitive receptors to pollutants?	*The 1994 Southpark EIR (page 3.7-5) identified the following mitigation measures to reduce emissions during construction to a less-than-significant level:* • *Dust emission shall be controlled by application of water. Water shall be applied using watering trucks, or sprinklers, as often as is necessary to keep the exposed soils damp;*	City of Dixon	During construction	

	• *Construction equipment shall be maintained and tuned at the interval recommended by the manufacturers to minimize exhaust emissions;* • *Equipment idling shall be kept to a minimum when equipment is not in use;* • *Areas exposed by construction activities shall be paved or covered to prevent erosion as soon as practical within the needs of the construction project; and* • *The construction contractor shall post a publicly visible sign on the project site during construction operations which specifies the telephone number and person/agency to contact for complaints and/or inquiries on dust generation and other air quality problems resulting from project construction.* *The 1994 Southpark EIR (page 3.7-6) identified the following mitigation measures to reduce the long-term PM10 emissions impact to a less-than-significant level:* • *Require alternative means of residential heating other than wood burning units lacking catalytic converters; and* • *Implement the circulation improvements contained in the General Plan Environmental Assessment to provide adequate traffic circulation in order to reduce congestion and therefore air emissions.*	City of Dixon	During construction	

	The EIR (page 3.7-7) identified the following mitigation measure to reduce the ozone precursor emissions impact: *As part of project development, Southpark shall include on-site amenities that promote use of forms of transportation that are alternatives to the use of the automobile. Such amenities include bicycle parking spaces at the multi-family and commercial sites, and adequate road width for on-street bicycle lanes and off-street bike paths.* *The City of Dixon shall implement the Circulation Plan contained in the 1993 City of Dixon General Plan to provide adequate traffic circulation in order to reduce congestion and air emissions.* *Prior to recording of any tract of a parcel map, the project proponent shall dedicate the necessary right-of-way for a future bus turn out southbound on the First Street project frontage. The City of Dixon shall coordinate with the project proponent regarding the specific location and design requirements.*	City of Dixon City of Dixon City of Dixon	During construction During construction Prior to issuance of tentative map	
Increases in existing noise levels?	*Compliance with the 1994 Southpark EIR mitigation measure, as amended below, would ensure that the proposed project would result in no new impacts and no further mitigation is required.* *Prior to the approval of a tentative map in the project area for the any residential uses, the project proponent shall submit an acoustical analysis which identifies mitigation measures to reduce the noise level to 65 dB. The*	City of Dixon	Prior to issuance of building permit	

	mitigation measures shall be incorporated into the project design. The mitigation measures may include: • *Sound attenuation wall, berm or combination that equals the required height;* • *Roadway and building pads are at the same elevation;* • *Wall or berm is located at an appropriate distance from the First Street centerline; and* • *Housing units are located at an appropriate distance from First Street centerline* *Adherence with the Uniform Building Code during project construction would reduce interior noise an additional 20 dB. The resultant interior noise level of 45 dB would meet the standard for interior noise per state regulations (State Office of Noise Control).* *Prior to issuance of a building permit, the project proponent shall comply with the sound attenuation provisions listed above or provide additional sound analysis based on further refinement of the project description.*			
Have a demonstrable negative aesthetic effect?	*The 1994 Southpark EIR (page 3.13-3) included the following mitigation measure to reduce visual impacts to a less-than-significant level:* *Project plans shall provide for the undergrounding of all utilities that are visible from public rights-of-way. A landscaping program designed with an*	City of Dixon	Prior to issuance of building permits	

	emphasis toward the South First Street (Highway 113) entrance to the City of Dixon shall be included in these plans. Prior to the issuance of any building permits, the project proponent shall submit these plans to the City Planning Department for approval. The Planning Department will make a determination as to whether project landscaping conforms to the City of Dixon's landscaping requirement as found in the Zoning Ordinance (Section 12.26).			
Create light or glare?	*The 1994 Southpark EIR (page 3.13-4) identified the following mitigation measure to reduce impacts from new light sources to a less-than-significant level:* *As lighting plans are formulated, design of lighting for specific building projects shall be guided by the following principles:* • *avoid interference with reasonable use of adjoining properties;* • *minimize on-site glare; provide adequate on-site lighting;* • *limit height of pole lighting to avoid excessive illumination;* • *provide lighting structures which are compatible with landscape design along roadways and commercial structures;* • *use trees to screen lighting;* • *outdoor lighting shall be hooded and directed downward to minimize direct light and glare impacts on*	City of Dixon	Prior to issuance of occupancy permits	

	public rights-of-way; • *driveway lights shall be of a height which minimizes light and glare impacts;* • *indirect "box" lights shall be used for driveways and parking lot lighting; and* • *prior to the issuance of occupancy permits, the project proponent shall submit a lighting plan to the City Planning Department for a conformance determination.* *In addition, building materials that reflect minimal light and glare shall be used on all on-site structures. Prior to issuance of building permits, the project proponent shall be subject to the City Planning Department's regular design review.*			
Disturb paleontological resources? Disturb archaeological resources? Affect historical resources?	*The 1994 Southpark EIR (page 3.14-5) identified the following mitigation measure to ensure that impacts to cultural resources would be reduced to a less-than-significant level:* *All trenching and excavation associated with the project shall be monitored by an archaeologist. If any buried archaeological resources are discovered during construction activities, all work will be halted in the vicinity of the find in order for the monitoring archaeologist to determine whether the find is an isolated example or part of a more complex resource. Upon determining the significance of the resource, the consulting archaeologist, in coordination with the City, shall determine*	City of Dixon Certified Archeologist	During construction	

	the appropriate actions to be taken. The appropriate measures may include as little as recording the resource with the California Archaeological Inventory database or as much as excavation, recording, and preservation of sites that have outstanding cultural or historic significance. *Archaeological resources include artifacts of stone, shell, bone, or other natural materials associated with artifacts are hearths, house floors, and dumps. Historic artifacts include all byproducts of human use greater than 50 years old. Human burials, if encountered, require notification of the county coroner.*			
Hydrology and Drainage	*The following mitigation measures area adapted from the Master Drainage Plan EIR to reduce the significant of urban pollutants in the surface drainage system. However, because surface water quality data are unavailable and no water quality monitoring has been implemented by the City, the effect of urban pollutants to surface water resources cannot be quantitatively analyzed. Therefore, this impact remains potentially significant after mitigation.* *An Erosion and Sediment Control Plan, using Best Management Practices, shall be prepared by the project applicant and approved by the City of Dixon Public Works Department prior to the issuance of a grading permit. The plan shall detail the specific measures necessary to reduce the potential for soil erosion during grading and construction activities.* *These measures may include:* · *Limiting the amount of motorized traffic on*	City of Dixon	Prior to issuance of grading permit	

	the project site during construction to minimize loss of existing protective vegetation and reduce soil disturbance; • *Performing construction activities in the late spring and early summer to allow maximum revegetation prior to heavy runoff;* • *Landscaping with selected native or non-native plants conducive to erosion protection; and* • *Application of mulches or other surface protection materials to minimize the exposed soil surface.* *As a condition of the grading permit, the project applicant shall obtain a NPDES (National Pollutant Discharge Elimination System) construction stormwater permit from the Regional Water Quality Control Board.* *The City of Dixon shall design and construct Pond A to include an intake basin for the purpose of reducing scour. This design will increase the ability of the detention facility to retain urban runoff pollutants.* *As a condition of issuance of the grading permit, the project applicant shall contribute a fair share of the costs for the on-going maintenance of Pond A to the Dixon Enterprise Fund when that fund is formed. A fair share of the on-going costs shall be based upon the percentage of the developed portion of Area C that is represented by the developed portion of the Southpark site. Maintenance shall include periodic monitoring of the sediments in the detention facility. If the sediments are found to contain hazardous materials, the sediments shall be dredged and disposed of at an appropriate hazardous waste facility.*			
Hydrology and Drainage	*The following mitigation measures has (sic) been adapted from the Draft Environmental Impact Report for the Dixon Master Drainage Plan (Brown and*	City of Dixon Public Works Department	Prior to issuance of occupancy	

	Caldwell, 1989) to reduce the potential for groundwater contamination to a level that is less than significant. *The City of Dixon Public Works Department shall expand Pond A to allow it to accommodate additional drainage from the project site.*		permits	
Hydrology and Drainage	*The City of Dixon shall implement the water quality monitoring program as detailed in the Final Environmental Impact Report prepared for the Dixon Master Drainage Plan. Surface water quality monitoring data may ten be used to assess cumulative water quality impacts and develop appropriate stormwater discharge controls. The project applicant shall contribute a fair share toward the implementation of the City of Dixon water quality monitoring program. This fair share shall be based on the runoff calculations of the Southpark site relative to the total runoff calculations for the City of Dixon. Implementation of these measures would reduce the impact to a level that is less than significant.*	City of Dixon	Prior to issuance of building permit	
Hazards	*All structures shall be engineered to meet the Uniform Building Code construction standards for Seismic Zone 4. Implementation of this measure would reduce the impacts to a level that is less than significant.*	City of Dixon	Prior to issuance of building permits	
Hazards	*If an Area Plan has not been adopted prior to issuance of building permits, the applicant, in coordination with the City of Dixon, shall develop an evacuation plan that addresses a potential hazardous wastes or materials spill on the SPTCo railroad line. Implementation of this measure would reduce the impacts to a level that is less than significant.*	City of Dixon	Prior to issuance of building permits	
Hazards	*Drainage facilities for the proposed project shall be designed such that all new development within the*	City of Dixon	Prior to issuance of	

	Southpark Planned Development is constructed at a minimum of one foot above the 100-year base flood elevation. Implementation of this measure would reduce the impacts to a level that is less than significant.		grading permits	
Land Use	*The City shall ensure that all property buyers are informed of Chapter 2A of the County Code and its provisions prior to the final sale of any property within the Southpark project site. This measure would reduce the impact to a level that is less than significant.*	City of Dixon	Prior to issuance of occupancy permits	
Public Utilities	*The project applicant shall consult with the Solano Irrigation District prior to the siting and construction of all buildings, roads, parks and other facilities which intersect or lie adjacent to the existing SID easement to ensure that the project does not conflict with the terms and conditions of the SID easement. This measure would reduce the impact to a level that is less than significant.*	City of Dixon	Prior to siting and construction of all buildings, roads, parks, and other facilities	
Public Services	*The City of Dixon shall negotiate an agreement with the B&J Landfill, or another appropriate solid waste disposal facility, to ensure capacity for solid waste disposal is adequate for the development of urban land uses in the Dixon Planning Area through the year 2010. The project applicant shall contribute a fair share toward any expansion costs that may occur. This fair share shall be based on the percentage of additional solid waste generated by the developed portion of the Southpark relative to the total amount of solid waste generated by new development.*	City of Dixon	Prior to approval of a tentative map	
Energy and Mineral Resources	*The City of Dixon shall require the preparation of a noise analysis prior to the approval of a natural gas extraction facility on either of the mineral rights easements located within the Southpark site. This noise analysis shall quantify projected noise levels*	City of Dixon	Prior to approval of a natural gas extraction facility	

	from all proposed natural gas extraction facilities. The analysis shall then propose mitigation such as a compressor housing, to reduce noise impacts in surrounding residential areas to a level that is less than significant.			
Energy and Mineral Resources	*The property owner must provide evidence to the State Oil and Gas Supervisor that the test well was properly plugged and abandoned prior to development over the abandoned well site. If the well was not properly plugged and abandoned, the State Oil and Gas Supervisor may order the reabandonment of the well (at the property owners expense) if it is determined that construction over, or in the proximity of the well could result in a public hazard.*	City of Dixon	Prior to issuance of grading permit	

APPENDICES

APPENDIX A
STAFF REPORT ON BURROWING OWL MITIGATION

STAFF REPORT ON BURROWING OWL MITIGATION

Introduction

The Legislature and the Fish and Game Commission have developed the policies, standards and regulatory mandates to protect native species of fish and wildlife. In order to determine how the Department of Fish and Game (Department) could judge the adequacy of mitigation measures designed to offset impacts to burrowing owls (*Speotyto cunicularia*; A.O.U. 1991) staff (WMD, ESD, and Regions) has prepared this report. To ensure compliance with legislative and commission policy, mitigation requirements which are consistent with this report should be incorporated into: (1) Department comments to Lead Agencies and project sponsors pursuant to the California Environmental Quality Act (CEQA); and (2) other authorizations the Department gives to project proponents for projects impacting burrowing owls.

This report is designed to provide the Department (including regional offices and divisions), CEQA Lead Agencies and project proponents the context in which the Environmental Services Division (ESD) will review proposed project specific mitigation measures. This report also includes preapproved mitigation measures which have been judged to be consistent with policies, standards and legal mandates of the Legislature, the Fish and Game Commission and the Department's public trust responsibilities. Implementation of mitigation measures consistent with this report are intended to help achieve the conservation of burrowing owls and should compliment multi-species habitat conservation planning efforts currently underway. The *Burrowing Owl Survey Protocol and Mitigation Guidelines* developed by The California Burrowing Owl Consortium (CBOC 1993) were taken into consideration in the preparation of this staff report as were comments from other interested parties.

A range-wide conservation strategy for this species is needed. Any range-wide conservation strategy should establish criteria for avoiding the need to list the species pursuant to either the California or federal Endangered Species Acts through preservation of existing habitat, population expansion into former habitat, recruitment of young into the population, and other specific efforts.

California's burrowing owl population is clearly declining and, if declines continue, the species may qualify for listing. Because of the intense pressure for urban development within suitable burrowing owl nesting and foraging habitat (open, flat and gently rolling grasslands and grass/shrub lands) in California, conflicts between owls and development projects often occur. Owl survival can be adversely affected by disturbance and foraging habitat loss even when impacts to individual birds and nests/burrows are avoided. Adequate information about the presence of owls is often unavailable prior to project approval. Following project approval there is no legal mechanism through which to seek mitigation other than avoidance of occupied burrows or nests. The absence of standardized survey methods often impedes consistent impact assessment.

Burrowing Owl Habitat Description

Burrowing owl habitat can be found in annual and perennial grasslands, deserts, and arid scrublands characterized by low-growing vegetation (Zarn 1974). Suitable owl habitat may also include trees and shrubs if the canopy covers less than 30 percent of the ground surface. Burrows are the essential component of burrowing owl habitat. Both natural and artificial burrows provide protection, shelter, and nests for burrowing owls (Henny and Blus 1981). Burrowing owls typically use burrows made by fossorial mammals, such as ground squirrels or badgers, but also may use man-made structures such as cement culverts; cement, asphalt, or wood debris piles; or openings beneath cement or asphalt pavement.

Occupied Burrowing Owl Habitat

Burrowing owls may use a site for breeding, wintering, foraging, and/or migration stopovers. Occupancy of suitable burrowing owl habitat can be verified at a site by detecting a burrowing owl, its molted feathers, cast pellets, prey remains, eggshell fragments, or excrement at or near a burrow entrance. Burrowing owls exhibit high site fidelity, reusing burrows year after year (Rich 1984, Feeney 1992). A site should be assumed occupied if at least one burrowing owl has been observed occupying a burrow there within the last three years (Rich 1984).

CEQA Project Review

The measures included in this report are intended to provide a decision-making process that should be implemented whenever there is potential for an action or project to adversely affect burrowing owls. For projects subject to the California Environmental Quality Act (CEQA), the process begins by conducting surveys to determine if burrowing owls are foraging or nesting on or adjacent to the project site. If surveys confirm that the site is occupied habitat, mitigation measures to minimize impacts to burrowing owls, their burrows and foraging habitat should be incorporated into the CEQA document as enforceable conditions. The measures in this document are intended to conserve the species by protecting and maintaining viable populations of the species throughout their range in California. This may often result in protecting and managing habitat for the species at sites away from rapidly urbanizing/developing areas. Projects and situations vary and mitigation measures should be adapted to fit specific circumstances.

Projects not subject to CEQA review may have to be handled separately since the legal authority the Department has with respect to burrowing owls in this type of situation is often limited. The burrowing owl is protected from "take" (Section 3503.5 of the Fish and Game Code) but unoccupied habitat is likely to be lost for activites not subject to CEQA.

Legal Status

The burrowing owl is a migratory species protected by international treaty under the Migratory Bird Treaty Act (MBTA) of 1918 (16 U.S.C. 703-711). The MBTA makes it unlawful to take, possess, buy, sell, purchase, or barter any migratory bird listed in 50 C.F.R. Part 10, including feathers or other parts, nests, eggs, or products, except as allowed by implementing regulations (50 C.F.R. 21). Sections 3505, 3503.5, and 3800 of the California Department of Fish and Game Code prohibit the take, possession, or destruction of birds, their nests or eggs. To avoid violation of the take provisions of these laws generally requires that project-related disturbance at active nesting territories be reduced or eliminated during the nesting cycle (February 1 to August 31). Disturbance that causes nest abandonment and/or loss of reproductive effort (e.g., killing or abandonment of eggs or young) may be considered "take" and is potentially punishable by fines and/or imprisonment.

The burrowing owl is a Species of Special Concern to California because of declines of suitable habitat and both localized and statewide population declines. Guidelines for the Implementation of the California Environmental Quality Act (CEQA) provide that a species be considered as endangered or "rare" regardless of appearance on a formal list for the purposes of the CEQA (Guidelines, Section 15380, subsections b and d). The CEQA requires a mandatory findings of significance if impacts to threatened or endangered species are likely to occur (Sections 21001{c}, 2103; Guidelines 15380, 15064, 15065). To be legally adequate, mitigation measures must be capable of "avoiding the impact altogether by not taking a certain action or parts of an action"; "minimizing impacts by limiting the degree or magnitude of the action and its implementation"; "rectifying the impact by repairing, rehabilitating or restoring the impacted environment"; "or reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action" (Guidelines, Section 15370). Avoidance or mitigation to reduce impacts to less than significant levels must be included in a project or the CEQA lead agency must make and justify findings of overriding considerations.

Impact Assessment

Habitat Assessment

The project site and a 150 meter (approximately 500 ft.) buffer (where possible and appropriate based on habitat) should be surveyed to assess the presence of burrowing owls and their habitat (Thomsen 1971, Martin 1973). If occupied habitat is detected on or adjacent to the site, measures to avoid, minimize, or mitigate the project's impacts to the species should be incorporated into the project, including burrow preconstruction surveys to ensure avoidance of direct take. It is also recommended that preconstruction surveys be conducted if the species was not detected but is likely to occur on the project site.

Burrowing Owl and Burrow Surveys

Burrowing owl and burrow surveys should be conducted during both the wintering and nesting seasons, unless the species is detected on the first survey. If possible, the winter survey should be conducted between December 1 and January 31 (when wintering owls are most likely to be present) and the nesting season survey should be conducted between April 15 and July 15 (the peak of the breeding season). Surveys conducted from two hours before sunset to one hour after, or from one hour before to two hours after sunrise, are also preferable.

Surveys should be conducted by walking suitable habitat on the entire project site and (where possible) in areas within 150 meters (approx. 500 ft.) of the project impact zone. The 150-meter buffer zone is surveyed to identify burrows and owls outside of the project area which may be impacted by factors such as noise and vibration (heavy equipment, etc.) during project construction. Pedestrian survey transects should be spaced to allow 100 percent visual coverage of the ground surface. The distance between transect center lines should be no more than 30 meters (approx. 100 ft.) and should be reduced to account for differences in terrain, vegetation density, and ground surface visibility. To effectively survey large projects (100 acres or larger), two or more surveyors should be used to walk adjacent transects. To avoid impacts to owls from surveyors, owls and/or occupied burrows should be avoided by a minimum of 50 meters (approx. 160 ft.) wherever practical. Disturbance to occupied burrows should be avoided during all seasons.

Definition of Impacts

The following should be considered impacts to the species:

- Disturbance within 50 meters (approx. 160 ft.) Which may result in harassment of owls at occupied burrows;
- Destruction of natural and artificial burrows (culverts, concrete slabs and debris piles that provide shelter to burrowing owls); and
- Destruction and/or degradation of foraging habitat adjacent (within 100 m) of an occupied burrow(s).

Written Report

A report for the project should be prepared for the Department and copies should be submitted to the Regional contact and to the Wildlife Management Division Bird and Mammal Conservation Program. The report should include the following information:

- Date and time of visit(s) including name of the qualified biologist conducting surveys, weather and visibility conditions, and survey methodology;

- Description of the site including location, size, topography, vegetation communities, and animals observed during visit(s);

- Assessment of habitat suitability for burrowing owls;

- Map and photographs of the site;

- Results of transect surveys including a map showing the location of all burrow(s) (natural or artificial) and owl(s), including the numbers at each burrow if present and tracks, feathers, pellets, or other items (prey remains, animal scat);

- Behavior of owls during the surveys;

- Summary of both winter and nesting season surveys including any productivity information and a map showing territorial boundaries and home ranges; and

- Any historical information (Natural Diversity Database, Department regional files, Breeding Bird Survey data, American Birds records, Audubon Society, local bird club, other biologists, etc.) regarding the presence of burrowing owls on the site.

Mitigation

The objective of these measures is to avoid and minimize impacts to burrowing owls at a project site and preserve habitat that will support viable owls populations. If burrowing owls are detected using the project area, mitigation measures to minimize and offset the potential impacts should be included as enforceable measures during the CEQA process.

Mitigation actions should be carried out from September 1 to January 31 which is prior to the nesting season (Thomsen 1971, Zarn 1974). Since the timing of nesting activity may vary with latitude and climatic conditions, this time frame should be adjusted accordingly. Preconstruction surveys of suitable habitat at the project site(s) and buffer zone(s) should be conducted within the 30 days prior to construction to ensure no additional burrowing owls have established territories since the initial surveys. If ground disturbing activities are delayed or suspended for more than 30 days after the preconstruction survey, the site should be resurveyed.

Although the mitigation measures may be included as enforceable project conditions in the CEQA process, it may also be desirable to formalize them in a Memorandum of Understanding (MOU) between the Department and the project sponsor. An MOU is needed when lands (fee title or conservation easement) are being transferred to the Department.

Specific Mitigation Measures

1. Occupied burrows should not be disturbed during the nesting season (February 1 through August 31) unless a qualified biologist approved by the Department verifies through non-invasive methods that either: (1) the birds have not begun egg-laying and incubation; or (2) that juveniles from the occupied burrows are foraging independently and are capable of independent survival.

2. To offset the loss of foraging and burrow habitat on the project site, a minimum of 6.5 acres of foraging habitat (calculated on a 100 m {approx. 300 ft.} foraging radius around the burrow) per pair or unpaired resident bird, should be acquired and permanently protected. The protected lands should be adjacent to occupied burrowing owl habitat and at a location acceptable to the Department. *Protection of additional habitat acreage per pair or unpaired resident bird may be applicable in some instances.* The CBOC has also developed mitigation guidelines (CBOC 1993) that can be incorporated by CEQA lead agencies and which are consistent with this staff report.

3. When destruction of occupied burrows is unavoidable, existing unsuitable burrows should be enhanced (enlarged or cleared of debris) or new burrows created (by installing artificial burrows) at a ratio of 2:1 on the protected lands site. One example of an artificial burrow design is provided in Attachment A.

4. If owls must be moved away from the disturbance area, passive relocation techniques (as described below) should be used rather than trapping. At least one or more weeks will be necessary to accomplish this and allow the owls to acclimate to alternate burrows.

5. The project sponsor should provide funding for long-term management and monitoring of the protected lands. The monitoring plan should include success criteria, remedial measures, and an annual report to the Department.

Impact Avoidance

If avoidance is the preferred method of dealing with potential project impacts, then no disturbance should occur within 50 meters (approx. 160 ft.) of occupied burrows during the nonbreeding season of September 1 through January 31 or within 75 meters (approx. 250 ft.) during the breeding season of February 1 through August 31. Avoidance also requires that a minimum of 6.5 acres of foraging habitat be *permanently* preserved contiguous with occupied burrow sites for each pair of breeding burrowing owls (with or without dependent young) or single unpaired resident bird. The configuration of the protected habitat should be approved by the Department.

Passive Relocation - With One-Way Doors

Owls should be excluded from burrows in the immediate impact zone and within a 50 meter (approx. 160 ft.) buffer zone by installing one-way doors in burrow entrances. One-way doors (e.g., modified dryer vents) should be left in place 48 hours to insure owls have left the burrow before excavation. Two natural or artificial burrows should be provided for each burrow in the project area that will be rendered biologically unsuitable. The project area should be *monitored daily for one week* to confirm owl use of burrows before excavating burrows in the immediate impact zone. Whenever possible, burrows should be excavated using hand tools and refilled to prevent reoccupation. Sections of flexible plastic pipe should be inserted into the tunnels during excavation to maintain an escape route for any animals inside the burrow.

Passive Relocation - Without One-Way Doors

Two natural or artificial burrows should be provided for each burrow in the project area that will be rendered biologically unsuitable. The project area should be *monitored daily until the owls have relocated to the new burrows*. The formerly occupied burrows may then be excavated. Whenever possible, burrows should be excavated using hand tools and refilled to prevent reoccupation. Sections of flexible plastic pipe should be inserted into burrows during excavation to maintain an escape route for any animals inside the burrow.

Projects Not Subject to CEQA

The Department is often contacted regarding the presence of burrowing owls on construction sites, parking lots and other areas for which there is no CEQA action or for which the CEQA process has been completed. In these situations, the Department should seek to reach agreement with the project sponsor to implement the specific mitigation measures described above. If they are unwilling to do so, passive relocation without the aid of one-way doors is their only option based upon Fish and Game Code 3503.5.

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Reproductive Success of Burrowing Owls Using Artificial Nest Burrows in Southeastern Idaho

by Bruce Olenick

Artificial nest burrows were implanted in southeastern Idaho for burrowing owls in the spring of 1986. These artificial burrows consisted of a 12" × 12" × 8" wood nesting chamber with removable top and a 6 foot corrugated and perforated plastic drainage pipe 6 inches in diameter (Fig. 1). Earlier investigators claimed that artificial burrows must provide a natural dirt floor to allow burrowing owls to modify the nesting tunnel and chamber. Contrary to this, the artificial burrow introduced here does not allow owls to modify the entrance or tunnel. The inability to change the physical dimensions of the burrow tunnel does not seem to affect the owls' breeding success or deter them from using this burrow design.

In 1986, 22 artificial burrows were inhabited. Thirteen nesting attempts yielded an average clutch size of 8.3 eggs per breeding pair. Eight nests successfully hatched at least 1 nestling. In these nests, 67 of 75 eggs hatched (89.3%) and an estimated 61 nestlings (91.0%) fledged. An analysis of the egg laying and incubation periods showed that incubation commenced well after egg laying began. Average clutch size at the start of incubation was 5.6 eggs. Most eggs tended to hatch synchronously in all successful nests.

Although the initial cost of constructing this burrow design may be slightly higher than a burrow consisting entirely of wood, the plastic pipe burrow offers the following advantages: (1) it lasts several field seasons without rotting or collapsing; (2) it may prevent or retard predation; (3) construction time is minimal; (4) it is easy to transport, especially over long distances; and (5) the flexible tunnel simplifies installation. The use of this artificial nest burrow design was highly successful and may prove to be a great resource technique for future management of this species.

For additional information on constructing this artificial nest burrow, contact Bruce Olenick, Department of Biology, Idaho State University, Pocatello, ID 83209.

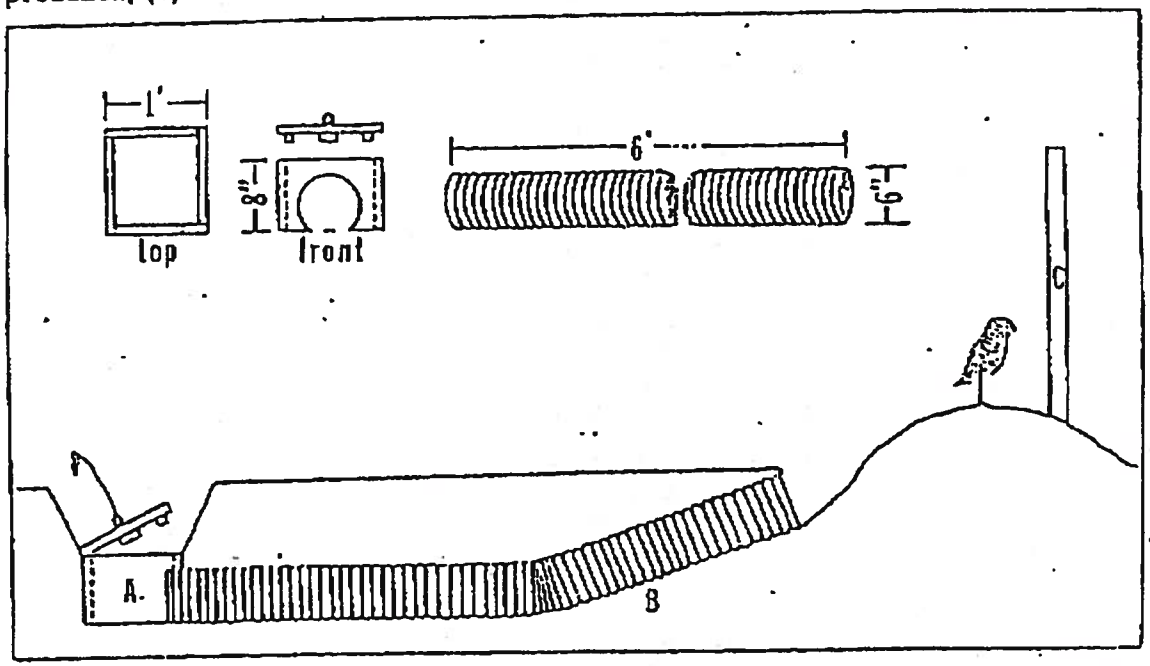

Fig. 1 Artificial nest burrow design for burrowing owls. Entire unit (including nest chamber) is buried 12"-18" below ground for maintaining thermal stability of the nest chamber. A = nest chamber, B = plastic pipe, C = perch.

APPENDIX B
STAFF REPORT REGARDING MITIGATION FOR IMPACTS TO SWAINSON'S HAWKS

Staff Report regarding Mitigation for Impacts to Swainson's Hawks (*Buteo swainsoni*) in the Central Valley of California

INTRODUCTION

The Legislature and the Fish and Game Commission have developed the policies, standards and regulatory mandates which, if implemented, are intended to help stabilize and reverse dramatic population declines of threatened and endangered species. In order to determine how the Department of Fish and Game (Department) could judge the adequacy of mitigation measures designed to offset impacts to Swainson's hawks in the Central Valley, Staff (WMD, ESD and Regions) has prepared this report. To ensure compliance with legislative and Commission policy, mitigation requirements which are consistent with this report should be incorporated into: (1) Department comments to Lead Agencies and project sponsors pursuant to the California Environmental Quality Act (CEQA); (2) Fish and Game Code Section 2081 Management Authorizations (Management Authorizations); and (3) Fish and Game Code Section 2090 Consultations with State CEQA Lead Agencies.

The report is designed to provide the Department (including regional offices and divisions), CEQA Lead Agencies and project proponents the context in which the Environmental Services Division (ESD) will review proposed project specific mitigation measures. This report also includes "model" mitigation measures which have been judged to be consistent with policies, standards and legal mandates of the Legislature and Fish and Game Commission. Alternative mitigation measures, tailored to specific projects, may be developed if consistent with this report. Implementation of mitigation measures consistent with this report are intended to help achieve the conservation goals for the Swainson's hawk and should complement multi-species habitat conservation planning efforts currently underway.

The Department is preparing a recovery plan for the species and it is anticipated that this report will be revised to incorporate recovery plan goals. It is anticipated that the recovery plan will be completed by the end of 1995. The Swainson's hawk recovery plan will establish criteria for species recovery through preservation of existing habitat, population expansion into former habitat, recruitment of young into the population, and other specific recovery efforts.

During project review the Department should consider whether a proposed project will adversely affect suitable foraging habitat within a ten (10) mile radius of an active (used during one or more of the last 5 years) Swainson's hawk nest(s). Suitable Swainson's hawk foraging habitat will be those habitats and crops identified in Bechard (1983), Bloom (1980), and Estep (1989). The following vegetation types/agricultural crops are considered small mammal and insect foraging habitat

for Swainson's hawks:

- alfalfa
- fallow fields
- beet, tomato, and other low-growing row or field crops
- dry-land and irrigated pasture
- rice land (when not flooded)
- cereal grain crops (including corn after harvest)

The ten mile radius standard is the flight distance between active (and successful) nest sites and suitable foraging habitats, as documented in telemetry studies (Estep 1989, Babcock 1993). Based on the ten mile radius, new development projects which adversely modify nesting and/or foraging habitat should mitigate the project's impacts to the species. The ten mile foraging radius recognizes a need to strike a balance between the biological needs of reproducing pairs (including eggs and nestlings) and the economic benefit of development(s) consistent with Fish and Game Code Section 2053.

Since over 95% of Swainson's hawk nests occur on private land, the Department's mitigation program should include incentives that preserve agricultural lands used for the production of crops, which are compatible with Swainson's hawk foraging needs, while providing an opportunity for urban development and other changes in land use adjacent to existing urban areas.

LEGAL STATUS

Federal

The Swainson's hawk is a migratory bird species protected under the Migratory Bird Treaty Act (MBTA) of 1918 (16 U.S.C. 703-711). The MBTA makes it unlawful to take, possess, buy, sell, purchase, or barter any migratory bird listed in Section 50 of the Code of Federal Regulations (C.F.R.) Part 10, including feathers or other parts, nests, eggs or products, except as allowed by implementing regulations (50 C.F.R. 21).

State

The Swainson's hawk has been listed as a threatened species by the California Fish and Game Commission pursuant to the California Endangered Species Act (CESA), see Title 14, California Code of Regulations, Section 670.5(b)(5)(A).

LEGISLATIVE AND COMMISSION POLICIES, LEGAL MANDATES AND STANDARDS

The FGC policy for threatened species is, in part, to: "Protect and preserve all native species...and their habitats...." This policy also directs the Department to work with all interested persons to protect and preserve sensitive resources and their habitats. Consistent with this policy and direction, the Department is enjoined to implement measures that assure protection for the Swainson's hawk.

The California State Legislature, when enacting the provisions of CESA, made the following findings and declarations in Fish and Game Code Section 2051:

a) "Certain species of fish, wildlife, and plants have been rendered extinct as a consequence of man's activities, untempered by adequate concern and conservation";

b) "Other species of fish, wildlife, and plants are in danger of, or threatened with, extinction because their habitats are threatened with destruction, adverse modification, or severe curtailment because of overexploitation, disease, predation, or other factors (emphasis added)";and

c) "These species of fish, wildlife, and plants are of ecological, educational, historical, recreational, esthetic, economic, and scientific value to the people of this state, and the conservation, protection, and enhancement of these species and their habitat is of statewide concern" (emphasis added).

The Legislature also proclaimed that it "is the policy of the state to conserve, protect, restore, and enhance any endangered or threatened species and its habitat and that it is the intent of the Legislature, consistent with conserving the species, to acquire lands for habitat for these species" (emphasis added).

Section 2053 of the Fish and Game Code states, in part, "it is the policy of the state that state agencies should not approve projects as proposed which would jeopardize the continued existence of any endangered or threatened species or result in the destruction or adverse modification of habitat essential to the continued existence of those species, if there are reasonable and prudent alternatives available consistent with conserving the species and or its habitat which would prevent jeopardy" (emphasis added).

Section 2054 states "The Legislature further finds and declares that, in the event specific economic, social, and or other conditions make infeasible such alternatives, individual projects may be approved if appropriate mitigation and enhancement measures are provided" (emphasis added).

Loss or alteration of foraging habitat or nest site disturbance which results in:

(1) nest abandonment; (2) loss of young; (3) reduced health and vigor of eggs and/or nestlings (resulting in reduced survival rates), may ultimately result in the take (killing) of nestling or fledgling Swainson's hawks incidental to otherwise lawful activities. The taking of Swainson's hawks in this manner can be a violation of Section 2080 of the Fish and Game Code. This interpretation of take has been judicially affirmed by the landmark appellate court decision pertaining to CESA (DFG v. ACID, 8 CA App.4, 41554). The essence of the decision emphasized that the intent and purpose of CESA applies to all activities that take or kill endangered or threatened species, even when the taking is incidental to otherwise legal activities. To avoid potential violations of Fish and Game Code Section 2080, the Department recommends and encourages project sponsors to obtain 2081 Management Authorizations for their projects.

Although this report has been prepared to assist the Department in working with the development community, the prohibition against take (Fish and Game Code Section 2080) applies to all persons, including those engaged in agricultural activities and routine maintenance of facilities. In addition, sections 3503, 3503.5, and 3800 of the Fish and Game Code prohibit the take, possession, or destruction of birds, their nests or eggs.

To avoid potential violation of Fish and Game Code Section 2080 (i.e. killing of a listed species), project-related disturbance at active Swainson's hawk nesting sites should be reduced or eliminated during critical phases of the nesting cycle (March 1 - September 15 annually). Delineation of specific activities which could cause nest abandonment (take) of Swainson's hawk during the nesting period should be done on a case-by-case basis.

CEQA requires a mandatory findings of significance if a project's impacts to threatened or endangered species are likely to occur (Sections 21001 {c}, 21083, Guidelines Sections 15380, 15064, 15065). Impacts must be avoided or mitigated to less than significant levels unless the CEQA Lead Agency makes and supports findings of Overriding Consideration. The CEQA Lead Agency's Findings of Overriding Consideration does not eliminate the project sponsor's obligation to comply with Fish and Game Code Section 2080.

NATURAL HISTORY

The Swainson's hawk (*Buteo swainsoni*) is a large, broad winged buteo which frequents open country. They are about the same size as a red-tailed hawk (*Buteo jamaicensis*), but trimmer, weighing approximately 800-1100 grams (1.75 - 2 lbs). They have about a 125 cm. (4+foot) wingspan. The basic body plumage may be highly variable and is characterized by several color morphs - light, dark, and rufous. In dark phase birds, the entire body of the bird may be sooty black. Adult birds generally have dark backs. The ventral or underneath sections may be light with a characteristic dark, wide "bib" from the lower throat down to the upper

breast, light colored wing linings and pointed wing tips. The tail is gray ventrally with a subterminal dusky band, and narrow, less conspicuous barring proximally. The sexes are similar in appearance; females however, are slightly larger and heavier than males, as is the case in most sexually dimorphic raptors. There are no recognized subspecies (Palmer 1988).

The Swainson's hawk is a long distance migrator. The nesting grounds occur in northwestern Canada, the western U.S., and Mexico and most populations migrate to wintering grounds in the open pampas and agricultural areas of South America (Argentina, Uruguay, southern Brazil). The species is included among the group of birds known as "neotropical migrants". Some individuals or small groups (20-30 birds) may winter in the U.S., including California (Delta Islands). This round trip journey may exceed 14,000 miles. The birds return to the nesting grounds and establish nesting territories in early March.

Swainson's hawks are monogamous and remain so until the loss of a mate (Palmer 1988). Nest construction and courtship continues through April. The clutch (commonly 3-4 eggs) is generally laid in early April to early May, but may occur later. Incubation lasts 34-35 days, with both parents participating in the brooding of eggs and young. The young fledge (leave the nest) approximately 42-44 days after hatching and remain with their parents until they depart in the fall. Large groups (up to 100+ birds) may congregate in holding areas in the fall and may exhibit a delayed migration depending upon forage availability. The specific purpose of these congregation areas is as yet unknown, but is likely related to: increasing energy reserves for migration; the timing of migration; aggregation into larger migratory groups (including assisting the young in learning migration routes); and providing a pairing and courtship opportunity for unattached adults.

Foraging Requirements

Swainson's hawk nests in the Central Valley of California are generally found in scattered trees or along riparian systems adjacent to agricultural fields or pastures. These open fields and pastures are the primary foraging areas. Major prey items for Central Valley birds include: California voles (*Microtus californicus*), valley pocket gophers (*Thomomys bottae*), deer mice (*Peromyscus maniculatus*), California ground squirrels (*Spermophilus beecheyi*), mourning doves (*Zenaida macroura*), ring-necked pheasants (*Phasianus colchicus*), meadowlarks (*Sturnella neglecta*), other passerines, grasshoppers (*Conocephalinae* sp.), crickets (*Gryllidae* sp.), and beetles (Estep 1989). Swainson's hawks generally search for prey by soaring in open country and agricultural fields similar to northern hariers (*Circus cyaneus*) and ferruginous hawks (*Buteo regalis*). Often several hawks may be seen foraging together following tractors or other farm equipment capturing prey escaping from farming operations. During the breeding season, Swainson's hawks eat mainly vertebrates (small rodents and reptiles), whereas during migration vast numbers of insects are consumed (Palmer 1988).

Department funded research has documented the importance of suitable foraging habitats (e.g., annual grasslands, pasture lands, alfalfa and other hay crops, and combinations of hay, grain and row crops) within an energetically efficient flight distance from active Swainson's hawk nests (Estep pers. comm.). Recent telemetry studies to determine foraging requirements have shown that birds may use in excess of 15,000 acres of habitat or range up to 18.0 miles from the nest in search of prey (Estep 1989, Babcock 1993). The prey base (availability and abundance) for the species is highly variable from year to year, with major prey population (small mammals and insects) fluctuations occurring based on rainfall patterns, natural cycles and agricultural cropping and harvesting patterns. Based on these variables, significant acreages of potential foraging habitat (primarily agricultural lands) should be preserved per nesting pair (or aggregation of nesting pairs) to avoid jeopardizing existing populations. Preserved foraging areas should be adequate to allow additional Swainson's hawk nesting pairs to successfully breed and use the foraging habitat during good prey production years.

Suitable foraging habitat is necessary to provide an adequate energy source for breeding adults, including support of nestlings and fledglings. Adults must achieve an energy balance between the needs of themselves and the demands of nestlings and fledglings, or the health and survival of both may be jeopardized. If prey resources are not sufficient, or if adults must hunt long distances from the nest site, the energetics of the foraging effort may result in reduced nestling vigor with an increased likelihood of disease and/or starvation. In more extreme cases, the breeding pair, in an effort to assure their own existence, may even abandon the nest and young (Woodbridge 1985).

Prey abundance and availability is determined by land and farming patterns including crop types, agricultural practices and harvesting regimes. Estep (1989) found that 73.4% of observed prey captures were in fields being harvested, disced, mowed, or irrigated. Preferred foraging habitats for Swainson's hawks include:

- alfalfa;
- fallow fields;
- beet, tomato, and other low-growing row or field crops;
- dry-land and irrigated pasture;
- rice land (during the non-flooded period); and
- cereal grain crops (including corn after harvest).

Unsuitable foraging habitat types include crops where prey species (even if present) are not available due to vegetation characteristics (e.g. vineyards, mature orchards, and cotton fields, dense vegetation).

Nesting Requirements

Although the Swainson's hawk's current nesting habitat is fragmented and unevenly distributed, Swainson's hawks nest throughout most of the Central Valley floor. More than 85% of the known nests in the Central Valley are within riparian systems in Sacramento, Sutter, Yolo, and San Joaquin counties. Much of the potential nesting habitat remaining in this area is in riparian forests, although isolated and roadside trees are also used. Nest sites are generally adjacent to or within easy flying distance to alfalfa or hay fields or other habitats or agricultural crops which provide an abundant and available prey source. Department research has shown that valley oaks (*Quercus lobata*), Fremont's cottonwood (*Populus fremontii*), willows (*Salix* spp.), sycamores (*Platanus* spp.), and walnuts (*Juglans* spp.) are the preferred nest trees for Swainson's hawks (Bloom 1980, Schlorff and Bloom 1983, Estep 1989).

Fall and Winter Migration Habitats

During their annual fall and winter migration periods, Swainson's hawks may congregate in large groups (up to 100+ birds). Some of these sites may be used during delayed migration periods lasting up to three months. Such sites have been identified in Yolo, Tulare, Kern and San Joaquin counties and protection is needed for these critical foraging areas which support birds during their long migration.

Historical and Current Population Status

The Swainson's hawk was historically regarded as one of the most common and numerous raptor species in the state, so much so that they were often not given special mention in field notes. The breeding population has declined by an estimated 91% in California since the turn of the century (Bloom 1980). The historical Swainson's hawk population estimates are based on current densities and extrapolated based on the historical amount of available habitat. The historical population estimate is 4,284-17,136 pairs (Bloom 1980). In 1979, approximately 375 ($\pm$ 50) breeding pairs of Swainson's hawks were estimated in California, and 280 (75%) of those pairs were estimated to be in the Central Valley (Bloom 1980). In 1988, 241 active breeding pairs were found in the Central Valley, with an additional 78 active pairs known in northeastern California. The 1989 population estimate was 430 pairs for the Central Valley and 550 pairs statewide (Estep, 1989). This difference in population estimates is probably a result of increased survey effort rather than an actual population increase.

Reasons for decline

The dramatic Swainson's hawk population decline has been attributed to loss of

native nesting and foraging habitat, and more recently to the loss of suitable nesting trees and the conversion of agricultural lands. Agricultural lands have been converted to urban land uses and incompatible crops. In addition, pesticides, shooting, disturbance at the nest site, and impacts on wintering areas may have contributed to their decline. Although losses on the wintering areas in South America may occur, they are not considered significant since breeding populations outside of California are stable. The loss of nesting habitat within riparian areas has been accelerated by flood control practices and bank stabilization programs. Smith (1977) estimated that in 1850 over 770,000 acres of riparian habitat were present in the Sacramento Valley. By the mid-1980s, Warner and Hendrix (1984) estimated that there was only 120,000 acres of riparian habitat remaining in the Central Valley (Sacramento and San Joaquin Valleys combined). Based on Warner and Hendrix's estimates approximately 93% of the San Joaquin Valley and 73% of the Sacramento Valley riparian habitat has been eliminated since 1850.

MANAGEMENT STRATEGIES

Management and mitigation strategies for the Central Valley population of the Swainson's hawk should ensure that:

- suitable nesting habitat continues to be available (this can be accomplished by protecting existing nesting habitat from destruction or disturbance and by increasing the number of suitable nest trees); and

- foraging habitat is available during the period of the year when Swainson's hawks are present in the Central Valley (this should be accomplished by maintaining or creating adequate and suitable foraging habitat in areas of existing and potential nest sites and along migratory routes within the state).

A key to the ultimate success in meeting the Legislature's goal of maintaining habitat sufficient to preserve this species is the implementation of these management strategies in cooperation with project sponsors and local, state and federal agencies.

DEPARTMENT'S ROLES AND RESPONSIBILITIES IN PROJECT CONSULTATION AND ADMINISTRATION OF CEQA AND THE FISH AND GAME CODE

The Department, through its administration of the Fish and Game Code and its trust responsibilities, should continue its efforts to minimize further habitat destruction and should seek mitigation to offset unavoidable losses by (1) including the mitigation measures in this document in CEQA comment letters and/or as

management conditions in Department issued Management Authorizations or (2) by developing project specific mitigation measures (consistent with the Commission's and the Legislature's mandates) and including them in CEQA comment letters and/or as management conditions in Fish and Game Code Section 2081 Management Authorizations issued by the Department and/or in Fish and Game Code Section 2090 Biological Opinions.

The Department should submit comments to CEQA Lead Agencies on all projects which adversely affect Swainson's hawks. CEQA requires a mandatory findings of significance if a project's impacts to threatened or endangered species are likely to occur (Sections 21001 (c), 21083. Guidelines 15380, 15064, 15065). Impacts must be: (1) avoided; or (2) appropriate mitigation must be provided to reduce impacts to less than significant levels; or (3) the lead agency must make and support findings of overriding consideration. If the CEQA Lead Agency makes a Finding of Overriding Consideration, it does not eliminate the project sponsor's obligation to comply with the take prohibitions of Fish and Game Code Section 2080. Activities which result in (1) nest abandonment; (2) starvation of young; and/or (3) reduced health and vigor of eggs and nestlings may result in the take (killing) of Swainson's hawks incidental to otherwise lawful activities (urban development, recreational activities, agricultural practices, levee maintenance and similar activities. The taking of Swainson's hawk in this manner may be a violation of Section 2080 of the Fish and Game Code. To avoid potential violations of Fish and Game Code Section 2080, the Department should recommend and encourage project sponsors to obtain 2081 Management Authorizations.

In aggregate, the mitigation measures incorporated into CEQA comment letters and/or 2081 Management Authorizations for a project should be consistent with Section 2053 and 2054 of the Fish and Game Code. Section 2053 states, in part, "it is the policy of the state that state agencies should not approve projects as proposed which would jeopardize the continued existence of any endangered or threatened species or result in the destruction or adverse modification of habitat essential to the continued existence of those species, if there are reasonable and prudent alternatives available consistent with conserving the species and or its habitat which would prevent jeopardy" . Section 2054 states: "The Legislature further finds and declares that, in the event specific economic, social, and or other conditions make infeasible such alternatives, individual projects may be approved if appropriate mitigation and enhancement measures are provided."

State lead agencies are required to consult with the Department pursuant to Fish and Game Code Section 2090 to ensure that any action authorized, funded, or carried out by that state agency will not jeopardize the continued existence of any threatened or endangered species. Comment letters to State Lead Agencies should also include a reminder that the State Lead Agency has the responsibility to consult with the Department pursuant to Fish and Game Code Section 2090 and obtain a written findings (Biological Opinion). Mitigation measures included in Biological Opinions issued to State Lead Agencies must be consistent with Fish and Game

Code Sections 2051-2054 and 2091-2092.

NEST SITE AND HABITAT LOCATION INFORMATION SOURCES

The Department's Natural Diversity Data Base (NDDB) is a continually updated, computerized inventory of location information on the State's rarest plants, animals, and natural communities. Department personnel should encourage project proponents and CEQA Lead Agencies, either directly or through CEQA comment letters, to purchase NDDB products for information on the locations of Swainson's hawk nesting areas as well as other sensitive species. The Department's Nongame Bird and Mammal Program also maintains information on Swainson's hawk nesting areas and may be contacted for additional information on the species.

Project applicants and CEQA Lead Agencies may also need to conduct site specific surveys (conducted by qualified biologists at the appropriate time of the year using approved protocols) to determine the status (location of nest sites, foraging areas, etc.) of listed species as part of the CEQA and 2081 Management Authorization process. Since these studies may require multiple years to complete, the Department shall identify any needed studies at the earliest possible time in the project review process. To facilitate project review and reduce the potential for costly project delays, the Department should make it a standard practice to advise developers or others planning projects that may impact one or more Swainson's hawk nesting or foraging areas to initiate communication with the Department as early as possible .

MANAGEMENT CONDITIONS

Staff believes the following mitigation measures (nos. 1-4) are adequate to meet the Commission's and Legislature's policy regarding listed species and are considered as preapproved for incorporation into any Management Authorizations for the Swainson's hawk issued by the Department. The incorporation of measures 1-4 into a CEQA document should reduce a project's impact to a Swainson's hawk(s) to less than significant levels. Since these measures are Staff recommendations, a project sponsor or CEQA Lead agency may choose to negotiate project specific mitigation measures which differ. In such cases, the negotiated Management Conditions must be consistent with Commission and Legislative policy and be submitted to the ESD for review and approval prior to reaching agreement with the project sponsor or CEQA Lead Agency.

Staff recommended Management Conditions are:

1. No intensive new disturbances (e.g. heavy equipment operation associated with construction, use of cranes or draglines, new rock crushing

activities) or other project related activities which may cause nest abandonment or forced fledging, should be initiated within 1/4 mile (buffer zone) of an active nest between March 1 - September 15 or until August 15 if a Management Authorization or Biological Opinion is obtained for the project. The buffer zone should be increased to 1/2 mile in nesting areas away from urban development (i.e. in areas where disturbance [e.g. heavy equipment operation associated with construction, use of cranes or draglines, new rock crushing activities] is not a normal occurrence during the nesting season). Nest trees should not be removed unless there is no feasible way of avoiding it. If a nest tree must be removed, a Management Authorization (including conditions to off-set the loss of the nest tree) must be obtained with the tree removal period specified in the Management Authorization, generally between October 1- February 1. If construction or other project related activities which may cause nest abandonment or forced fledging are necessary within the buffer zone, monitoring of the nest site (funded by the project sponsor) by a qualified biologist (to determine if the nest is abandoned) should be required . If it is abandoned and if the nestlings are still alive, the project sponsor shall fund the recovery and hacking (controlled release of captive reared young) of the nestling(s). Routine disturbances such as agricultural activities, commuter traffic, and routine facility maintenance activities within 1/4 mile of an active nest should not be prohibited.

2. Hacking as a substitute for avoidance of impacts during the nesting period may be used in unusual circumstances after review and approval of a hacking plan by ESD and WMD. Proponents who propose using hacking will be required to fund the full costs of the effort, including any telemetry work specified by the Department.

3. To mitigate for the loss of foraging habitat (as specified in this document), the Management Authorization holder/project sponsor shall provide Habitat Management (HM) lands to the Department based on the following ratios:

(a) Projects within 1 mile of an active nest tree shall provide:

- <u>one acre of HM land</u> (at least 10% of the HM land requirements shall be met by fee title acquisition or a conservation easement allowing for the active management of the habitat, with the remaining 90% of the HM lands protected by a conservation easement [acceptable to the Department] on agricultural lands or other suitable habitats which provide foraging habitat for Swainson's hawk) <u>for each acre of development authorized (1:1 ratio);</u> or

- <u>one-half acre of HM land</u> (all of the HM land requirements shall be met by fee title acquisition or a conservation easement

[acceptable to the Department] which allows for the active management of the habitat for prey production on the HM lands) for each acre of development authorized (0.5:1 ratio).

(b) Projects within 5 miles of an active nest tree but greater than 1 mile from the nest tree shall provide 0.75 acres of HM land for each acre of urban development authorized (0.75:1 ratio). All HM lands protected under this requirement may be protected through fee title acquisition or conservation easement (acceptable to the Department) on agricultural lands or other suitable habitats which provide foraging habitat for Swainson's hawk.

(c) Projects within 10 miles of an active nest tree but greater than 5 miles from an active nest tree shall provide 0.5 acres of HM land for each acre of urban development authorized (0.5:1 ratio). All HM lands protected under this requirement may be protected through fee title acquisition or a conservation easement (acceptable to the Department) on agricultural lands or other suitable habitats which provide foraging habitat for Swainson's hawk.

4. Management Authorization holders/project sponsors shall provide for the long-term management of the HM lands by funding a management endowment (the interest on which shall be used for managing the HM lands) at the rate of $400 per HM land acre (adjusted annually for inflation and varying interest rates).

Some project sponsors may desire to provide funds to the Department for HM land protection. This option is acceptable to the extent the proposal is consistent with Department policy regarding acceptance of funds for land acquisition. All HM lands should be located in areas which are consistent with a multi-species habitat conservation focus. Management Authorization holders/project sponsors who are willing to establish a significant mitigation bank (> 900 acres) should be given special consideration such as 1.1 acres of mitigation credit for each acre preserved.

PROJECT SPECIFIC MITIGATION MEASURES

Although this report includes recommended Management Measures, the Department should encourage project proponents to propose alternative mitigation strategies that provide equal or greater protection of the species and which also expedite project environmental review or issuance of a CESA Management Authorization. The Department and sponsor may choose to conduct cooperative, multi-year field studies to assess the site's habitat value and determine its use by nesting and foraging Swainson's hawk. Study plans should include clearly defined criteria for judging the project's impacts on Swainson's hawks and the methodologies (days of monitoring, foraging effort/efficiency, etc.) that will be used.

The study plans should be submitted to the Wildlife Management Division and ESD for review. Mitigation measures developed as a result of the study must be reviewed by ESD (for consistency with the policies of the Legislature and Fish and Game Commission) and approved by the Director.

EXCEPTIONS

Cities, counties and project sponsors should be encouraged to focus development on open lands within already urbanized areas. Since small disjunct parcels of habitat seldom provide foraging habitat needed to sustain the reproductive effort of a Swainson's hawk pair, Staff does not recommend requiring mitigation pursuant to CEQA nor a Management Authorization by the Department for infill (within an already urbanized area) projects in areas which have less than 5 acres of foraging habitat and are surrounded by existing urban development, unless the project area is within 1/4 mile of an active nest tree.

REVIEW

Staff should revise this report at least annually to determine if the proposed mitigation strategies should be retained, modified or if additional mitigation strategies should be included as a result of new scientific information.

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APPENDIX C
ALTERNATIVE MITIGATION TRANSPORTATION ANALYSIS

(Copy available at Dixon City Hall)