COUNCIL RESOLUTION NO. 2005-183

A RESOLUTION OF THE COUNCIL OF THE CITY OF FRESNO, CALIFORNIA, CERTIFYING ENVIRONMENTAL IMPACT REPORT NO. 10133 (STATE CLEARINGHOUSE NO. 2004021071) AS RELATED TO THE PROPOSED FANCHER CREEK PROJECT

WHEREAS, Fancher Creek Properties originally filed Plan Amendment Application No. A-01-21 and Rezone Application Nos. R-01-55 and R-02-02 relating to 490 acres of property located on the northwest and southwest corners of Belmont and Fowler Avenues; the northwest and northeast corners of Fowler Avenue and Kings Canyon Road; the northeast and southeast corners of Clovis Avenue and Tulare Street; and the north side of Belmont Avenue between Sunnyside and Fowler Avenues; and,

WHEREAS, said land use entitlements were withdrawn by the project applicant in April 2002; and,

WHEREAS, the project applicant had concurrently filed a plan modification to the proposed Fresno 2000 General Plan Update requesting regional commercial, community commercial, business park, and medium density residential land uses; and,

WHEREAS, said proposed land use plan modification was subsequently proposed for the 2025 Fresno General Plan, including amendments to the circulation element to include the elimination of Tulare Street from Fowler Avenue to its connection with Armstrong Avenue and to add the designation of a scenic drive to the proposed Fancher Creek Avenue between Clovis Avenue, extending east and southeast, to Fowler Avenue, then east and northeast to it termination at Armstrong Avenue, north of the existing Fancher Creek; and,

WHEREAS, the proposed plan modifications were incorporated into the draft 2025 Fresno General Plan Update for consideration; and,

WHEREAS, on November 19, 2002, by Resolution No. 2002-379, the City Council adopted the 2025 Fresno General Plan which correspondingly updated the 1992 Roosevelt Community Plan and by Resolution No. 2002-378 certified Master Environmental Impact Report No. 10130 which evaluated the potentially significant adverse environmental impacts of urban development within the City of Fresno's designated urban boundary line and extended sphere of influence; and,

WHEREAS, the project applicant filed Rezone Application No. R-04-14 requesting that the subject property be rezoned to the R-1/BA-15/UGM/cz *(Single Family Residential/Boulevard Area – 15-foot Landscape Setback/Urban Growth Management/conditions of zoning)* zone district for 211 acres; to

Adopted 6/7/05
Approved 6/7/05
Effective

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the R-2/BA-15/UGM/cz *(Low Density Multiple Family Residential/Boulevard Area – 15-foot Landscaped Setback/Urban Growth Management/conditions of zoning)* zone district for 32 acres; to the C-2/BA-15/UGM/cz *(Community Shopping Center/Boulevard Area – 15-foot Landscape Setback/Urban Growth Management/conditions of zoning)* zone district for 31 acres; to the C-3/UGM/cz *(Regional Shopping Center/Urban Growth Management/conditions of zoning)* zone district for 43 acres; and to the M-1/BA-15/UGM/cz *(Light Manufacturing/Boulevard Area – 15-foot Landscape Setback/Urban Growth Management/conditions of zoning)* zone district for 107 acres; and,

WHEREAS, the project applicant also filed Conditional Use Permit Application No. C-04-79 and Vesting Tentative Tract Map No. T-5232 related to 234 acres located on the northwest and northeast corners of East Kings Canyon Road and South Fowler Avenue which proposes to subdivide a 234-acre portion of the subject property into a 687-lot single family residential subdivision with five remainder lots and 25 outlots; and,

WHEREAS, the California Environmental Quality Act (CEQA) requires that an environmental impact report be prepared for any project which may have a significant effect on the environment; and,

WHEREAS, the Director of Planning and Development determined that an environmental impact report (EIR No. 10133/SCH 2004021071) shall be prepared for the Fancher Creek Project including submitted Rezone Application No. R-04-14, Conditional Use Permit Application No. C-04-79 and Vesting Tentative Tract Map No. T-5232, and the City of Fresno contracted with a professional environmental consultant to conduct the requisite studies and analyses of the potential environmental impact and proposed mitigation measures, as applicable; and,

WHEREAS, in February 2004, the Planning and Development Department duly issued and circulated a Notice of Preparation, pursuant to CEQA Guidelines Section 15082 and Public Resources Code Section 21080.4; and,

WHEREAS, the Draft Environmental Impact Report No. 10133 assessed the proposed entitlements covering 424 acres and an additional 52-acre parcel owned by MEGG Properties that was included in the environmental analysis; and,

WHEREAS, the proposed mixed land use project proposed for the entire Fancher Creek site will include single family residential, commercial and industrial development, together with the potential for a mixed use concept in the commercial areas; and,

WHEREAS, in October 2004, the Planning and Development Department staff exercising its independent judgment, completed the Draft Environmental Impact Report No. 10133 (hereinafter Draft EIR No. 10133), and the City of Fresno provided due public Notice of Availability of the Draft EIR for public comments pursuant to Public Resources Code Section 21092 and CEQA Guidelines Section 15087; and,

WHEREAS, on October 12, 2004, the city issued a Notice of Completion pursuant to Public Resources Code Section 21161 and CEQA Guidelines Section 15085; and,

WHEREAS, on October 12, 2004, public Notice of Availability of the Draft EIR No. 10133 was posted in the office of the Fresno County Clerk pursuant to Section 15087(d) of the CEQA Guidelines; and,

WHEREAS, for at least 45 days following the date of publication of the public notices, the public was given opportunity to comment, in writing, on the adequacy of the Draft EIR as an informational document; and,

WHEREAS, at the conclusion of the minimum 45-day public review and comment period, the Planning and Development Department is required to prepare a final EIR (Final EIR No. 10133) pursuant to CEQA Guidelines Sections 15088, 15089 and 15132 and which Final EIR is to include responses to public comments on the Draft EIR; and,

WHEREAS, pursuant to Section 21092.5 of CEQA, on April 1, 2004, the City mailed written responses to comments to all public agencies as well as private parties that commented on the Draft EIR No. 10133; and,

WHEREAS, on April 20, 2005, the Fresno City Planning Commission held a duly noticed public meeting at which the Commission considered and discussed the adequacy of the proposed Final EIR No. 10133 as an informational document, and found that the proposed Final EIR, as presented, adequately discusses the potential significant impacts of the Fancher Creek Project; and,

WHEREAS, pursuant to CEQA Guidelines Section 15132, the Final EIR No. 10133 is required to be completed in compliance with CEQA; and,

WHEREAS, the Commission has reviewed and considered the information in the Draft EIR No. 10133 as well as the proposed Final EIR prior to making a recommendation on the merits of the project.

WHEREAS, on April 20, 2005, the Fresno City Planning Commission held a duly noticed public

meeting at which the Commission considered and discussed the adequacy of the proposed Final EIR No. 10133 as an informational document, including Draft EIR No. 10133 dated October 2004 and Responses to Written Comments dated April 2005 and related technical analyses attached thereto; and,

WHEREAS, on April 20, 2005, the Commission reviewed and considered the information in the Draft EIR No. 10133 as well as the proposed Final EIR and recommended that the Council review and consider the Final EIR No. 10133, apply the Council's independent judgment and analysis to the review, and then certify the Final EIR (with all recommendations as presented by staff), as having been completed in compliance with CEQA, based on the proposed Draft EIR and comments thereon; and,

WHEREAS, the Commission further recommended, based on testimony presented by staff, that there are significant, unavoidable environmental impacts which have not been mitigated to a level below significant, and therefore, the Council should consider an appropriate statement of overriding considerations; and,

WHEREAS, on May 17, 2005, the City Council conducted a public hearing and received public testimony and reviewed and considered the information in the Final EIR including, but not limited to, the Responses to Written Comments for Draft Environmental Impact Report No. 10133 (State Clearinghouse No. 2004021071) for the Fancher Creek Project dated October 2004; and,

WHEREAS, on May 17, 2005, the City Council considered and discussed the adequacy of the proposed Final EIR as an informational document and applied its own independent judgment and analysis to the review, and hereby takes action to certify the Final EIR, as having been completed in compliance with CEQA, based on the findings noted below.

NOW, THEREFORE, BE IT RESOLVED AS FOLLOWS:

1. Recitals. The foregoing recitals are true and correct and incorporated herein by reference.

2. Compliance with CEQA. The Final Environmental Impact Report (FEIR) for the Fancher Creek Project, attached hereto as Exhibit A and incorporated herein by this reference (including the Draft EIR No. 10133 dated October 2004 and the Responses to Written Comments for Draft EIR No. 10133 dated April 2005) was prepared in compliance with the requirements of the California Environmental Quality Act (CEQA).

3. FEIR Reviewed and Considered. The City Council certifies that the FEIR has been completed in compliance with CEQA; that it has been presented to the Council and that the Council has reviewed and considered the information contained in the FEIR, and all of the information contained therein has substantially influenced all aspects of the decision by the Council. The FEIR is a material part of this resolution.

4. Findings Regarding Potentially Significant But Mitigable Effects. Section 21081(a) of the Public Resources Code requires the City Council to make certain findings regarding the significant effects of the Fancher Creek Project. As reported in the FEIR for the Fancher Creek Project, the City Council hereby finds that with regard to the following effects, "changes or alterations have been required in, or incorporated into, the project which mitigate or avoid the significant effects on the environment" (Section 21081(a)(1)). The City Council, exercising its independent judgment, determines that such findings are supported by substantial evidence in the record. Those effects addressed by this finding are:

EFFECTS	FEIR PAGES
Land Use, Planning and Agriculture	2.1.1 to 2.1.19
Air Quality	2.3.1 to 2.3.14
Geology and Soils	2.4.1 to 2.4.6
Biotic Resources	2.5.1 to 2.5.8
Noise	2.6.1 to 2.6.6
Drainage	2.7.1 to 2.7.4
Public Facilities and Services	2.8.1 to 2.8.11
Hydrology	2.9.1 to 2.9.27
Aesthetics	2.10.1 to 2.10.3
Cultural Resources	2.11.1 to 2.11.10
Pacific Gas & Electric (Substation)	2.12.1 to 2.12.16

In addition, the Council hereby finds that there are no mitigation measures identified in the FEIR that are within the responsibility of another public agency and have been, or can be and should be adopted by the other agency. (Section 21081(a)(2)).

5. Findings Regarding Unavoidable Significant Impacts/Statements of Overriding Considerations.

   a. The FEIR identified the following impacts as Significant and Unavoidable:

IMPACTS	FEIR PAGES
Traffic and Circulation (cumulative)	2.2.1 to 2.2.59
Air Quality (cumulative)	2.3.1 to 2.3.14
Agriculture	2.1.11 to 2.1.13

b. In accordance with Section 21081 of the Public Resources Code and Sections 15091 and 15093 of the CEQA Guidelines, in order to approve the Fancher Creek Project, the City Council must make a statement, supported by findings, as to the specific economic, social, or other considerations that outweigh the unavoidable environmental impacts. The City Council has balanced the benefits of the proposed project against its unavoidable environmental risks in determining whether to approve the project and has determined that some of the adverse environmental effects are acceptable.

c. The City Council adopts the Statement of Overriding Considerations, attached hereto as Exhibit B and incorporated herein by this reference, which makes findings (Section A) for each significant adverse and unavoidable impact identified in the FEIR, and by finding that specific economic, social or other considerations (Section B) make infeasible certain mitigation measures and project alternatives identified in the FEIR.

6. Revised Mitigation Measures /Additional Information/Recirculation Findings.

As a result of the public review and comment period and the public hearing process, certain modifications to the information published in the Final EIR were determined to be necessary, desirable, and appropriate. All said revisions, clarifications, and additions to the Final EIR are identified in Exhibit E to this resolution and are hereby incorporated by reference. Exhibit E also includes substantial evidence (required by CEQA Guidelines Section 15088 (e)) supporting the City's decision not to recirculate the Final EIR.

7. Alternatives.

a. In accordance with the Public Resources Code and CEQA Guidelines, the FEIR examined a range of reasonable alternatives to the Fancher Creek Project, which could feasibly attain the basic objectives of the project and evaluated the comparative merits of the alternatives, including the "No Project"; "Increased Density"; and "Reduced Units."

b. The City Council adopts the Findings Supporting Rejection of Alternatives, attached hereto as Exhibit C and incorporated herein by this reference, which makes findings for the approval of the Fancher Creek Project and the rejection of each alternative analyzed in the FEIR including the environmentally superior alternative. The City Council, exercising its own independent judgment, determines that such findings are supported by substantial evidence in the record.

8. Mitigation Monitoring. Pursuant to Public Resources Code Section 21081.6, the mitigation monitoring program set forth in Exhibit D is hereby adopted and incorporated herein by this reference to ensure that all mitigation measures adopted for the Fancher Creek Project are fully implemented.

9. Location and Custodian of Documents. The record of project approval shall be kept in the office of the City Clerk, City of Fresno, City Hall, 2600 Fresno Street, Fresno, California 93721.

10. Certification. Based on the above facts and findings, the City Council of the City of Fresno hereby certifies the Final EIR (Exhibit A attached hereto) together with all the changes noted in Exhibit E, attached hereto and including Exhibits B, C, and D, attached hereto, for the Fancher Creek Project as accurate and adequate. The City Council further certifies that the FEIR was completed in compliance with CEQA and the CEQA Guidelines. The Director of Planning and Development is directed to file a Notice of Determination as required by the Public Resources Code and CEQA Guidelines.

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CLERK'S CERTIFICATION

STATE OF CALIFORNIA)
COUNTY OF FRESNO)
CITY OF FRESNO)

I, REBECCA E. KLISCH, City Clerk of the City of Fresno, certify that the foregoing Resolution was adopted by the Council of the City of Fresno at a regular meeting held on the 17th day of May 2005.

AYES:	Boyajian, Calhoun, Perea, Sterling, Westerlund, Dages
NOES:	None
ABSENT:	None
ABSTAIN:	None
RECUSED:	Duncan

REBECCA E. KLISCH
City Clerk

By Rebecca E. Klisch

APPROVED AS TO FORM:

HILDA CANTÚ MONTOY
CITY ATTORNEY

By

Resolution No.
Application No. EIR No. 10133
Filed by Fancher Creek Properties
Action: Certification

K:\Common\Master Files - 2004\Fancher Creek EIR No. 10133\R-04-14 EIR No. 10133\CC Reso Final EIR 10133 5-17-05

EXHIBIT A

- DRAFT ENVIRONMENTAL IMPACT REPORT NO. 10133 DATED OCTOBER 2004 (State Clearinghouse No. 2004021071)

- "RESPONSES TO WRITTEN COMMENTS" FOR DRAFT ENVIRONMENTAL IMPACT REPORT NO. 10133 DATED APRIL 2005

EXHIBIT B
STATEMENT OF FINDINGS OF SIGNIFICANT UNAVOIDABLE IMPACTS AND OVERRIDING CONSIDERATIONS

Based upon the objectives identified in Environmental Impact Report (EIR) No. 10133, the Fresno City Council has determined that the Fancher Creek Development Project should be approved and that any remaining unmitigated environmental impacts attributable to the Fancher Creek Development Project are outweighed by the following specific economic, fiscal, social, environmental, land use, and other overriding considerations.

A. Findings Regarding Significant Unavoidable Impacts

Public Resources Code Section 21081(a)(3) requires the City Council to determine if any mitigation measures or project alternatives are infeasible due to overriding considerations. Following are three impact areas identified in the EIR in which mitigation measures have been judged to be infeasible. In other words, the Fancher Creek Development Project will cause significant and unavoidable impacts in the following areas:

1. Transportation and Circulation

Despite implementation of the proposed mitigation measures, the project, together with existing and planned future urban development to accommodate projected population and employment growth, is projected to continue to have significant impacts on vehicle traffic volumes and major street traffic level of service. The traffic study prepared for the project by TPG Consultants indicates significant and unavoidable cumulative traffic impacts will occur in 2025 for three street segments similar to those identified by the 2025 Fresno General Plan Master EIR No. 10130. These segments include Clovis Avenue from Olive Avenue to SR 180; Fowler between Tulare and Fancher Creek Drive; and Temperance between Kings Canyon and SR 180. All other future fully developed segments and intersections included in the traffic study are expected to operate at acceptable levels of service with mitigation measures incorporated into the project. The following are the facts, findings statement and analysis associated with expected unmitigable impacts regarding transportation and circulation:

Findings - Evidence and Explanation in Support of Findings

a. The traffic deficiencies projected for major street segments within the southeast quadrant of the Fresno Metropolitan Area occur due to a combination of projected regional population and employment growth and distribution, and local travel characteristics. Therefore, it is generally acknowledged that the capacity deficiencies on these major streets are not the result of a single project, but rather a metropolitan derived or even regionally derived problem.

b. Master Environmental Impact Report (MEIR) No. 10130 prepared for the 2025 Fresno General Plan indicates that future development projects are projected by the County of Fresno Council of Governments (COG) traffic model to cause congested Levels of Service (i.e., worse than LOS D) during the period when full street improvements are not present at or near the project. Future development projects are also projected to cause congested levels of traffic along key

identified major street segments. To mitigate traffic impacts on Clovis Avenue between Olive and SR 180 to less than significant, for example, Clovis Avenue would have to be widened to provide eight travel lanes requiring the City to acquire adjacent developed residential and commercial properties.

c. The proposed project would zone the Fancher Creek site consistent with the Fresno 2025 General Plan. As a result, vehicle trips that may be generated by the proposed project have been considered by MEIR No. 10130 prepared for the 2025 Fresno General Plan including consideration of the cumulative unavoidable demands upon the planned major street system. Certification of the MEIR acknowledged these impacts and determined that the benefits of allowing the completion of a logical extension of the urban form of the metropolitan area within the limited and geographically well-defined area (Clovis Avenue, Belmont Avenue, Kings Canyon Road, Armstrong Avenue) was appropriate and desirable.

Conclusions: Significant Vehicle Traffic Impacts to Surrounding Major Streets

As noted above, significant and unavoidable cumulative impacts have been identified for three street segments. As stated above and as identified within EIR No. 10133 and the project traffic analyses, traffic impacts upon these segments are a result of conditions for which the project is not the cause. These street segments are projected to function with a congested and, therefore, less than desirable, peak hour level of service regardless of whether or not the proposed project occurs. The project mitigation measures cannot reduce the area-wide impacts upon these major street segments, which will result in these street segments operating at a projected deficient peak hour level of service (LOS E or F) in the year 2025.

Project mitigation measures will insure the appropriate improvement of adjacent major streets and intersections, and the installation of traffic signals. These mitigation measures are intended to provide improvements consistent with the City of Fresno's adopted plans and policies and necessary to accommodate project generated vehicular traffic as well as the cumulative traffic impacts of planned urban land uses within the Roosevelt Community Plan and southeast Fresno.

2. Air Quality

Construction and use of the proposed Fancher Creek Development Project would result in the generation of air pollution emissions from area and operational sources. It is also expected to contribute to the long-term cumulative generation of emissions, which constitute a portion of the local and regional air pollution levels. Due to current air quality conditions in the San Joaquin Valley, any projected generation of substantial quantities of emissions which contribute to air pollution may be considered to have a significant cumulative impact upon air quality. The following are the facts, findings statement and analysis associated with expected unmitigable impacts of the degradation of air quality:

Findings - Evidence and Explanation in Support of Findings

a. Significant and unavoidable air quality impacts are largely attributable to existing conditions within the San Joaquin Valley Air Basin. While some progress has been made in reducing air pollution levels over the last 30 years, particulate and ozone levels are still not at attainable levels.

b. Master EIR No. 10130 prepared for the 2025 Fresno General Plan contains objectives and policies to moderate effects on air quality. The general plan calls for an increase in densities, mixed land uses and a refocus on existing neighborhoods that will work to reduce the dependence on the private automobile. Although these measures will result in positive air quality effects, they will not offset effects caused by increased population.

c. Compliance with the San Joaquin Valley Air Pollution Control District's rules and mitigation measures, as identified in the EIR, will render impacts associated with construction related emissions to a level less than significant. Through compliance with the mitigation measures, as identified in the EIR, mobile and area source emissions associated with the operation of the project are projected to exceed thresholds of significance established by the San Joaquin Valley Air Pollution Control District and remain significant and unavoidable.

d. The proposed project will provide a variety of transportation improvements such as pedestrian, bicycle and transit enhancing infrastructure that will aid in reducing the number and length of automobile vehicle trips and corresponding air emissions. Additionally, due to the arrangement and diversity of uses within the project area, which are proposed to be connected by a variety of bicycle and pedestrian facilities, the opportunity to capture trips within the project area is enhanced, and the contribution to traffic congestion beyond the project's boundaries reduced, as compared to a more conventional project alternative that would not provide the mixture of uses (i.e., commercial, residential, and mixed use) provided by the subject project. These project features will provide efficiencies that benefit air quality.

Conclusions: Degradation of Air Quality Impacts

The adverse air quality impacts associated with the Fresno metropolitan area can be expected to be significant and unavoidable, and cannot be completely mitigated by measures within the control of the City of Fresno. The mitigation measures offered by this project will aid in air quality improvement by providing a variety of uses in a pedestrian friendly development with extensive on-site landscaping which is expected to help reduce project related emissions. However, there are no reasonable feasible mitigation measures available to the proposed development alone, which would assure the reduction of area-wide air quality impacts to a less-than-significant level.

3. Agricultural Land

Approval of the project would substantially modify the current use of the land from agriculture to urban use and would result in the conversion of prime agricultural land. The Fancher Creek site contains approximately 320 acres of land in agricultural production. With development of the site, this land will be lost to conversion. Should this land be maintained in agricultural use or a fallow condition with development allowed on surrounding lands, agricultural conflicts would increase on the site, including noise, dust, and chemical sprays. In addition, such land surrounded by urbanization may not provide an economically viable unit for agricultural production in the long-term.

Findings - Evidence and Explanation in Support of Findings

a. In order to maintain a healthy agricultural economy, the City and County should maintain the most productive and desirable farmland in production. Remaining agricultural land in the southeastern portion of the community within the City's Sphere of Influence has been planned for urban growth at various levels of intensification. Development of the Fancher Creek site will help guide future growth away from productive agricultural lands in the southeast and southwest portion of the metropolitan area. As productive prime lands will be lost on the site, however, the potential impacts remain significant and unavoidable.

Conclusions: Loss of Agricultural Land

Adverse impacts to agricultural land, including the conversion of agricultural land to urban uses associated with continued growth in the Fresno metropolitan area, can be expected to be significant and unavoidable, and cannot be completely mitigated by measures within the control of the City of Fresno. The mitigation measures offered by this project, including recordation of right to farm covenants, will aid in allowing agriculture to continue on adjacent lands for the longest extent possible. However, there are no reasonably feasible mitigation measures available to the proposed development alone, which would assure the reduction of area-wide impacts to farmland to a less-than-significant level.

B. General Overriding Considerations

The City of Fresno hereby determines for these reasons set forth below that the economic, legal, social, technological and other considerations related to the proposed project outweigh the unavoidable traffic, air quality, and farmland conversion impacts identified in the Final EIR, including any effects not mitigated because of the infeasibility of mitigation measures and the adverse environmental effects are considered acceptable. This Statement of Overriding Considerations warrants rejection of project alternatives set forth in the Final EIR, including the no project alternative, and justifies finding the adverse environmental effects from the project acceptable, which cannot otherwise be avoided or substantially lessened.

The City of Fresno further determines that, based on the findings herein and the evidence in the record, the benefits identified below are each one, in and of themselves, sufficient to make a determination that the adverse environmental effects are acceptable. Furthermore, having balanced the adverse environmental effects, which cannot otherwise be avoided or substantially lessened, against each of the benefits, the City of Fresno hereby adopts this Statement of Overriding Considerations by reference as if set forth in full.

1. Economic Considerations

The proposed project provides for greater economic and social benefit than the other alternatives for the property. Development of residential and mixed urban uses on the project site, including retail commercial and business park uses located within the Roosevelt Community Plan Area, is endorsed by the City's 2025 Fresno General Plan.

Fresno County and the Fresno Metropolitan Area have historically experienced considerably higher rates of unemployment (12 to 15 percent or greater average annual unemployment) than most areas

of California. In order to provide an adequate opportunity for economic enhancement and employment growth it will be necessary to make available appropriate land area and resources to accommodate new retail commercial, office, and residential developments. The project site provides a unique opportunity within the Fresno Metropolitan Area to establish a residential and mixed use development in a pedestrian friendly environment that is generally accessible to the public.

Substantial Evidence

- Fancher Creek Development Project / Environmental Impact Report No. 10133
- 2025 Fresno General Plan and Master Environmental Impact Report No. 10130
- Report of Mayor's Office of Economic Advisors, July 10, 2002
- Central California Futures Institute, 2000. Population Projections for Fresno County
- Fresno Regional Jobs Initiative Implementation Plan, October 2003
- Fresno Regional Jobs Initiative: Economic Opportunities Areas, May 2003

2. Social Impacts

The proposed project site is one of the few remaining properties available in the Roosevelt Area that would allow for a substantial residential and mixed use development that would utilize and contribute to the development and operation of the city's public services and facilities systems. As an urban infill site, the project will provide important retail and employment opportunities not now available in Southeast Fresno and will benefit the existing population in the area. In addition, the project provides residential support for the Fresno Downtown area, aiding in the continued enhancement of the governmental and cultural center of the community. The benefits of providing a residential and mixed use development with a diverse variety of housing types, commercial goods and services, and employment opportunities outweigh the potential significant environmental effects of the project.

Substantial Evidence

- Fancher Creek Development Project / Environmental Impact Report No. 10133
- 2025 Fresno General Plan and Master Environmental Impact Report No. 10130
- Report of Mayor's Office of Economic Advisors, July 10, 2002
- Central California Futures Institute, 2000. Population Projections for Fresno County

3. Job Creation

The loss of jobs and failure to create new employment opportunities has led to continued unemployment in the Fresno Metropolitan Area and surrounding region. The proposed residential and mixed use project will provide employment opportunities and important support for the continued enhancement of Southeast Fresno and the Fresno Downtown Area.

Substantial Evidence

- Fancher Creek Development Project / Environmental Impact Report No. 10133
- 2025 Fresno General Plan and Master Environmental Impact Report No. 10130
- Report of Mayor's Office of Economic Advisors, July 10, 2002
- Central California Futures Institute, 2000. Population Projections for Fresno County
- Fresno Regional Jobs Initiative Implementation Plan, October 2003

- Fresno Regional Jobs Initiative: Economic Opportunities Areas, May 2003

EXHIBIT C
FINDINGS SUPPORTING REJECTION OF ALTERNATIVES

Draft EIR No. 10133 identified and evaluated a range of alternatives to the proposed Fancher Creek Development Project. These alternatives are:

- **Alternative 1** - "No Project" - Under the No Project alternative, no rezoning, tentative tract map or tentative parcel map approval, or annexation, would take place within the City of Fresno. Development of the site could proceed in accordance with existing zoning allowing a combination of agricultural and rural residential zoning. In general, the No Project alternative would lead to less disturbance of the site and less demand on urban resources and public services compared to the proposed project.

- **Alternative 2** – "Increased Density Alternative" - The Increased Density alternative would increase the housing and population capacity of the project by developing the Medium Density land use designation at 10.37 dwelling units/acre, the high end of the category as stipulated in the 2025 Fresno General Plan. Such density could be achieved by smaller single family residential lots interspersed with multiple family projects at densities of 15 to 20 units acre. Different housing types could be provided, including multiple family and rental units providing housing to a wider range of income groups. Higher densities would increase the potential for transit and offset a portion of the greater traffic impacts attributable to this alternative. With the greater density, the possibility of developing a cost-effective public transit system and the use of alternative transportation modes may be enhanced.

- **Alternative 3** – "Reduced Units Alternative" - The Reduced Units alternative would use the low end of the Medium Density Residential land use designation as established by the 2025 Fresno General Plan, or 4.99 dwelling units to the acre. The diversity and choice in the housing market would be reduced by eliminating 333 units from the housing inventory. Implementation of the Reduced Units alternative would reduce traffic impacts accruing to the project site on surrounding roadways and intersections. However, with the Reduced Units alternative, the possibility of developing a cost-effective public transit system and the use of alternative transportation modes may also be reduced.

In selecting the proposed project, the City Council simultaneously rejected the three alternatives analyzed in the environmental impact report.

Sections 15126.6, 15142, 15146, 15147, and 15151 of the CEQA Guidelines provide guidance regarding the consideration of project alternatives and the level of detail of analysis used to evaluate the project and project alternatives.

The three project alternatives were selected to give a range of reasonable alternatives that may achieve as many of the project objectives as possible, while considering the reality of existing conditions. These alternatives are discussed in detail in Section 3.1 of the environmental impact report.

Based upon the CEQA Guidelines provisions cited above, alternatives need not be analyzed in the same quantitative level of detail as does the proposed project. Rather, qualitative analysis is sufficient. Should an alternative be chosen to replace the proposed project, a full and complete environmental analysis must be subsequently prepared.

In selecting the Fancher Creek Development Project, the following factors were considered.

Alternative 1 - No Project.

The No Project alternative is generally environmentally superior to the proposed project. This alternative would have less impacts on land use, traffic, air quality, noise, and aesthetics. However, this alternative would not meet any of the design objectives of the proposed project nor the goals, objectives and policies of the 2025 Fresno General Plan.

From a pragmatic perspective, this alternative is not feasible given the site's designation for urban development on the 2025 Fresno General Plan. With limited development as might be allowed by existing zoning, the growth planned for the subject property would then be redistributed elsewhere in the metropolitan area, as well as possibly into surrounding communities. The environmental effects of this redistributed growth are uncertain, but since the subject property is essentially an infill property and it is likely that the redistributed growth would occur on properties on the urban fringe or new growth areas, the no development alternative could have greater impacts to agricultural uses, traffic, air quality, and public services.

The No Project alternative is considered an interim condition given the site's designation for urban development on the adopted 2025 Fresno General Plan.

Alternative 2 – Increased Density.

The Increased Density alternative is not environmentally superior to the proposed project. It would not eliminate any of the significant adverse environmental impacts associated with the proposed project and could result in greater impacts in several areas. By virtue of its more intense nature, the Increased Density alternative would create greater traffic, wastewater, water, and public facility impacts than the proposed project. More intense development could, however, reduce the amount and pace of agricultural land taken out of production elsewhere by development. The Increased Density alternative would increase the diversity in housing opportunities in the project by encouraging construction of smaller lot attached dwelling units and potential multiple family residences; large lot development would occur in other locations. The potential for transit and alternative transportation modes would increase.

Compared to the proposed project, the Increased Density alternative would increase impacts in several areas.

- Traffic levels would increase by nearly 10,000 vehicle trips per day, leading to decreased levels of service on several project area road segments.
- Air emissions would also proportionately increase. While the potential for transit use is increased with somewhat higher density, regional air quality is not expected to change.
- There would be a substantial increase in water demand.
- The Increased Density alternative would impact the planned second elementary school and proportionately increase impacts to middle schools and high schools.

Alternative 3 - Reduced Density.

The Reduced Unit alternative may reduce land use impacts and also reduce impacts to traffic, noise, and public facilities. The Reduced Unit alternative, however, would not achieve the developer's project objectives. Less than 85 percent of the residential units proposed by the developer would be allowed on the project site. The costs of infrastructure remain high even with the Reduced Density Alternative, including impact fees for streets and highways, well development, and other facilities.

The Reduced Units alternative reduces overall environmental impacts compared to the proposed project. By virtue of its impacts to traffic, noise, and public services, the Reduced Units alternative is considered the environmentally superior alternative for the project site.

The Reduced Units alternative, however, would reduce overall densities; as a result, more land off-site will be necessary to accommodate a given population base. It can therefore be argued that the Reduced Units alternative could force growth to other areas, further impacting agricultural production and increasing urban sprawl. In the long term, any growth alternative that directs growth further to the east and southeast of the urban area would ultimately have a greater impact on prime and productive agricultural lands due to the existence of more of such lands at the edge of the metropolitan area.

Compared to the proposed project, the Reduced Units alternative would result in a less efficient use of land. Provision of services to the project under this alternative may become less efficient and/or more costly because the basic service and utility infrastructure is still required; the population base over which to spread the cost, however, is substantially lower.

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TOPIC 2.1 LAND USE AND PLANNING		
1. The developer shall ensure that the project is designed with limited driveway access, back-on treatment of residential uses, and adequate landscaped buffers. 2. The City shall pursue appropriate measures, including recordation of right to farm covenants, to ensure that agricultural uses of land may continue within those areas of transition where planned urban areas interface with planned agricultural areas. 3. Prior to approval of specific land use entitlements in the FYI airport noise contours or within any FAA FAR Part 77 area, projects shall be reviewed for their conformance with standards in the applicable Airport Land Use Commission plan, FAA Part 77, as well as standards contained in the Caltrans California Airport Land Use Planning Handbook. 4. At the time of tentative tract map or site plan review, special consideration shall be given to potential visual, noise, and traffic impacts at the interface of project and existing surrounding uses. 5. Multifamily areas shall be designed as an integral part of a mixed-use development and shall be sensitive to surrounding residential land use. Free-standing multi-story construction, especially adjacent to existing single-family uses, shall not be permitted. 6. The proposed business park shall encourage a mix of light industrial and office uses that are compatible with surrounding existing and planned residential neighborhoods. Industrial uses that are inappropriate for the business park include, but are not limited to, food/meat processing, heavy chemical uses, solid waste recycling, auto repair and paint shops. Uses that do not create noise or nighttime activities shall be placed adjacent to residential areas when feasible, with heavier uses in the business park focused near the center or major street frontages. 7. The City shall apply consistent performance standards for commercial development on the Fancher Creek site to include, but not be limited to the following: a. All development associated with the project shall be consistent with all pertinent zoning conditions, policies, development standards, and mitigation measures addressing site design, visual resources, and aesthetics approved with the 2025 Fresno General Plan and the Fresno Zoning Ordinance.	Prior to approval of land use entitlement application	Planning and Development Dept

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b. Outdoor areas for shipping and receiving operations shall be located to avoid adverse noise, visual, and illumination impacts on existing and planned and residential areas. c. Parking areas shall be well landscaped with trees provided along the perimeter and interior of multi-aisle parking areas such that the trees form an overhead canopy providing sun and rain protection for the majority of the parking spaces. d. Area lighting shall be directed predominantly downward and placed to prevent glare or excessive spray of light on neighboring sites and be reviewed for impacts to flight operations at the FYI airport. e. A loading dock barrier shall be provided to mitigate noise impacts from shipping and receiving activities. The loading dock barrier shall be constructed of a noise attenuation product such as "FASTWALL " or Sound Box absorptive concrete block wall systems. As an alternative, loading docks adjacent to residential development shall be covered. f. Special orientation or design treatment of loading docks located in proximity to residential areas shall be required to reduce noise impacts to less-than-significant levels. g. All mechanical equipment placed on rooftops and exhaust ducts for rooftop mechanical equipment shall be oriented away from existing and planned residential uses. 7. On properties adjacent to residential development, all trash collection areas and compactors shall be completely screened from adjacent property.		
8. The City shall apply consistent design standards for development of the regional commercial site, to include, but not be limited to the following: a. The architectural style of structures shall utilize elements that complement the existing character of this area of southeast Fresno. Buildings shall have an attractive appearance on all sides, not just the front elevation. b. Building arrangements shall discourage a continuous facade; instead, several pedestrian links shall be created that connect the street, sidewalks, and parking areas to various buildings and uses.	Prior to approval of land use entitlement application	Planning and Development Dept

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c. Large, continuous facade surface treatments using a single material shall be minimized. In the event this is done, textural changes or relief techniques must be utilized. d. Buildings are to be designed with a distinct ground floor facade treatment that allows for signs, awnings or canopies to be varied within an overall architectural character. e. Special attention is to be paid to pedestrian movement through parking lots and connecting to adjacent residential areas. Accommodation for the pedestrian in the way of paths or sidewalks shall be included in the layout of the project. Trees which shade these paths shall be incorporated into the landscape plan. f. For exterior lighting, both the fixtures and the overall lighting scheme shall be conceived as an integral part of the architectural and landscape design for a project. g. Internal vehicular circulation between parcels shall be maintained to provide for a unified circulation pattern between developments. 9. Where portions of the on-site open space system and trail are adjacent to existing residential areas, the developer shall provide landscaping and other buffering measures to reduce potential visual, noise, and land use impacts to adjacent residents. The open space system shall be reviewed for conformance with standards in the applicable Airport Land Use Commission plan as well as standards contained in the Caltrans California Airport Land Use Planning Handbook. 10. The project shall provide facilities to allow project and area residents access to open space developed adjacent to Fancher Creek on properties controlled by Fancher Creek Properties, LLC. Supporting facilities, to be coordinated with the City of Fresno, shall include internal pathways leading to and from the trail, benches, drinking fountains, and restrooms, as appropriate.		

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TOPIC 2.2 TRAFFIC AND CIRCULATION		
1. To mitigate the segments projected to operate below adopted level of service standards, the following improvements are recommended for the Mitigated 2025 Project scenario: • Clovis Avenue from Olive Avenue to SR 180 - Widen from 6- to 8-lanes • Fowler Avenue from McKinley Avenue to Olive Avenue - Widen from 2- to 4-lanes • Fowler Avenue from Tulare Avenue to Fancher Creek Drive - Widen from 4- to 6-lanes • Temperance Avenue from SR 180 to Kings Canyon Road - Widen from 6- to 8-lanes	Prior to approval of land use entitlement application	Public Works Dept/ Transportation Planning; Planning & Development Dept; Caltrans
2. To mitigate the intersections projected to operate below adopted level of service standards, the following improvements are recommended for the Mitigated 2025 Project scenario: Kings Canyon Road at Temperance Avenue • Restripe/widen the northbound approach, south leg, from a separate left-turn lane, three (3) through lanes and a separate right-turn lane to a separate left-turn lane, three (3) through lanes and a shared through-right lane • Restripe/widen the southbound approach, north leg, from a separate left-turn lane, three (3) through lanes and a separate right-turn lane to a separate left-turn lane, three (3) through lanes and a shared through-right lane Temperance Avenue at Jensen Avenue • Restripe/widen the westbound approach, east leg, from dual (2) left-turn lanes, three (3) through lanes and a separate right-turn lane to dual (2) left-turn lanes, three (3) through lanes and a shared through-right • Restripe/widen the eastbound approach, west leg from dual (2) left-turn lanes, three (3) through lanes and a separate right-turn lane to dual (2) left-turn lanes, three (3) through lanes and a shared through-right	Prior to approval of land use entitlement application	Public Works Dept/ Transportation Planning; Planning & Development Dept; Caltrans

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Belmont Avenue at Clovis Avenue • Restripe/widen the northbound approach, south leg, from a separate left-turn lane, three (3) through lanes and a separate right-turn lane to dual (2) left-turn lanes, three (3) through lanes and a shared through-right lane Clovis Avenue at Ashlan Avenue • Restripe/widen the northbound approach, south leg, from a separate left-turn lane, three (3) through lanes and a separate right-turn lane to dual (2) left-turn lanes, three (3) through lanes and a separate right-turn lane • Restripe/widen the southbound approach, north leg, from a separate left-turn lane, three (3) through lanes and a separate right-turn lane to dual (2) left-turn lanes, three (3) through lanes and a separate right-turn lane • Restripe/widen the westbound approach, east leg, from a separate left-turn lane, one (1) through lane and a shared through-right lane to dual (2) left-turn lanes, two (2) through lanes and a separate right-turn lane • Restripe/widen the eastbound approach, west leg, from a separate left-turn lane, one (1) through lane and a separate right-turn lane to dual (2) left-turn lanes, two (2) through lanes and a separate right-turn lane	Prior to approval of land use entitlement application	Public Works Dept/ Transportation Planning; Planning & Development Dept
3. An encroachment permit from Caltrans must be approved prior to any work within or adjacent to the Kings Canyon Boulevard (SR 180) right-of-way.	Prior to approval of land use entitlement application	Caltrans; Public Works Dept.
TOPIC 2.3 AIR QUALITY		
1. Compliance with Regulation VIII under the San Joaquin Valley Air District for all construction sites will constitute sufficient mitigation to reduce PM_{10} impacts to a level considered less-than significant. 2. All personnel working on the project will be trained prior to starting work on methods for minimizing air quality impacts during construction.	Prior to approval of land use entitlement application	Planning and Development Dept; SJVAPCD

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3. All active portions of construction sites, earthen access roads, and material excavated or graded shall be sufficiently watered to prevent excessive amounts of dust. Watering shall occur at least twice a day with complete coverage, preferably in the late morning and after work is done for the day. Where feasible, reclaimed water shall be used. 4. All clearing, grading, earth moving, or excavation activities shall cease during periods of winds greater than 20 miles per hour averaged over one hour.	Prior to approval of land use entitlement application	Public Works Dept/ Transportation Planning; Planning & Development Dept
5. All material transported off site shall be either sufficiently watered or securely covered to prevent excessive amounts of dust. 6. The area disturbed by clearing, earth moving, or excavation activities shall be minimized at all times. This can be accomplished by mowing instead of disking for weed control and seeding and watering inactive portions of the construction site until grass is evident. 7. Construction site vehicle speeds shall be limited to 15 miles per hour.	Prior to approval of land use entitlement application	Public Works Dept/ Transportation Planning; Planning & Development Dept
8. If used, petroleum-based dust palliatives shall meet the road oil requirements of the District's rule regarding Cutback Asphalt Paving Materials. 9. Streets adjacent to the Project site shall be swept as needed to remove silt that may have accumulated from construction activities. The streets are required to be wet prior to or in conjunction with rotary sweeping. 10. All internal combustion engine driven equipment shall be properly maintained and well tuned according to the manufacturer's specifications. 11. Exposed stockpiles of soil and other excavated materials will be enclosed, covered, watered twice daily, or applied with soil binders.	Prior to approval of land use entitlement application	Public Works Dept/ Transportation Planning; Planning & Development Dept

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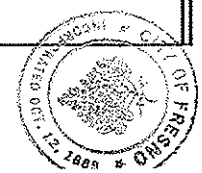
12. During the smog season (May through October) the construction period shall be lengthened to minimize the number of vehicles and equipment operating at the same time. 13. Carpooling will be encouraged among construction workers through contractor bid specifications and project orientation for workers. 14. When available, electric equipment shall be utilized in lieu of gasoline powered engines. 15. Vehicle idling time will be minimized (e.g., 5 minute maximum). 16. Construction activities shall minimize obstruction of through traffic lanes adjacent to the site and a flag person shall be retained to maintain safety adjacent to existing roadways. 17. The use of energy efficient street lighting and parking lot lighting shall be considered to reduce emissions. 18. Less polluting alternatives to wood stoves shall be required, in accordance with Rule 4901, where feasible, e.g. CEC certified natural gas fireplace appliances, which are 70% efficient and create far less pollution than wood stoves. 19. Landscaping shall include water efficient plant species and irrigation to reduce water consumption and provide passive solar benefits. 20. Require that space and water heaters comply with District Stationary Source Rules and Uniform Mechanical Code requirements, and encourage the installation of energy efficient lighting beyond Title 24 requirements for all commercial/residential developments. 21. Use HVAC equipment with a SEER of 12 or greater. 22. Provide pedestrian/transit oriented project design. 23. Restrict residential traditional wood fireplaces and install only natural gas fireplaces or inserts. 24. Commit to on-site improvements; bikeways, transit infrastructure, pedestrian enhancements. 25. For non-residential development include secure bicycle parking and paths connected to the bikeway system from the development. 26. For reducing VMT, consider Park and Ride Lots and a Satellite Telecommuting Center.	Prior to approval of land use entitlement application	Public Works Dept/ Transportation Planning; Planning & Development Dept



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TOPIC 2.4 GEOLOGY AND SOILS		
1. A qualified geologist or consultant shall prepare and submit an erosion control plan for approval by the City of Fresno Public Works Department demonstrating compliance with water quality standards. Elements of this plan shall address both the potential for soil erosion and non-point source pollution.	Prior to approval of land use entitlement application	Public Works Dept/ Transportation Planning; Planning & Development Dept
TOPIC 2.5 BIOTIC RESOURCES		
1. The Fancher Creek project shall maintain a minimum 100-foot building setback from Fancher Creek in order to maintain the Great Valley Cottonwood Riparian Forest. Any disturbance of the habitat shall be based on a management and monitoring plan prepared by a biological consultant and accepted by the California Department of Fish and Game. 2. The developer shall undertake a preconstruction survey by a qualified biologist to determine the existence of Burrowing Owl or Northern Harrier nesting sites on the project site. The survey shall be conducted within at least 14 days prior to site mobilization. If nesting sites are found, the California Department of Fish and Game's (1995) guidelines for Burrowing Owl "Staff Report on Burrowing Owl Mitigation" shall be consulted and the developer shall select one of the following measures for implementation. a) Destroy vacant burrows prior to March 1 and/or after August 31. b) Redesign the project temporarily or permanently to avoid occupied burrows or nest sites until after the nesting/fledgling season. c) Delay the project until after the nesting/fledgling season (March 1 thru August 31). d) Install artificial burrows and wait for passive relocation of the Burrowing Owl. e) Active relocation of Burrowing Owl with conditions. The developer funds relocation of Burrowing Owl to unoccupied, suitable habitat that is permanently preserved (up to 6.5 acres per nesting pair	Prior to approval of land use entitlement application and building permits	Planning & Development Dept

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3. Projects shall be reviewed for their conformance with hazardous wildlife mitigation standards in the applicable Airport Land Use Commission plan as well as standards contained in the Caltrans California Airport Land Use Planning Handbook.		
TOPIC 2.6 NOISE		
1. A 6-foot high sound wall shall be constructed along the project site where homes are located adjacent to roadways. The sound wall must be continuous and constructed of a dense material such as masonry blocks or stucco on both sides of a wood/steel frame. 2. The applicant shall follow the State Noise Insulation Standards (California Code of Regulations, Title 24) and Chapter 35 of the Uniform Building Code (UBC) concerning interior noise exposure for multi-family housing, hotels and motels. 3. Double pained windows shall be installed in all buildings at the project site. Exterior doors, excluding glass doors, shall be solid-core wood or insulated steel with perimeter weather-stripping and threshold seals. 4. Mechanical ventilation or air conditioning must be provided for all homes so that windows and doors may remain closed for the required acoustical insulation. 5. Prior to approval of specific land use entitlements in the FYI airport noise contours or within any FAA FAR Part 77 area, projects shall be reviewed for their conformance with standards in the applicable Airport Land Use Commission plan as well as standards contained in the Caltrans California Airport Land Use Planning Handbook.	Ongoing / Prior to approval of land use entitlement application and building permits	Planning and Development Department
TOPIC 2.7 DRAINAGE		
1. The master storm water plan developed and implemented for the project shall include all applicable best management practices identified in the Construction and Post-Construction Guidelines to ensure that pollutants are controlled to standards required by the City of Fresno and the State of California.	Prior to approval of land use entitlement application	Planning and Development Department

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TOPIC 2.8 PUBLIC FACILITIES AND SERVICES		
1. Maximize visibility and natural surveillance abilities through the placement and design of physical features including building orientation, windows, entrances and exits, parking lots, walkways, guard gates, low-maintenance landscaping (trees and shrubs), fences or walls, signage and any other physical obstructions.	Prior to approval of land use entitlement application and building permits	Police Department; Planning and Development Department

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2. Implement design features to clearly identify public/private spaces and to facilitate natural access control and territorial reinforcement, to include, but not limited to, the following measures: • Identify public entrances and exits through the implementation of sidewalks, pavement, lighting and landscaping to clearly guide the public. • Discourage/prevent public access to and from dark and/or unmonitored areas through the use of fences, walls, or landscaping. • Implement exterior nighttime lighting of display areas, parking lots, walkways, entrances, and exits. These areas shall be illuminated, at a minimum, one-half hour after sunset and one-half hour before sunrise during hours of operation. • Incorporate measures such as graffiti-resistant paints and surfaces, landscaping along bare surfaces, and view fences. • Provide clearly identifiable public access to emergency services-emergency and pay telephone locations, clearly identifiable streets, roads and paths, and clearly identifiable addresses. 3. The Police Department shall be consulted during site planning and design to ensure that adequate provisions for crime prevention are designed into the project. 4. The Police Department shall be consulted during site planning and design to ensure that adequate provisions for crime prevention are designed into the project. 5. The geometric sections of all interior roads shall, at a minimum, be improved to City of Fresno standards to adequately provide for emergency vehicles. Any deviations from the City standards shall be accomplished through modifications or exceptions requested at the site plan review stage. 6. The geometric sections of all interior roads shall, at a minimum, be improved to City of Fresno standards to adequately provide for emergency vehicles. Any deviations from the City standards shall be accomplished through modifications or exceptions requested at the site plan review stage. 7. The geometric sections of all interior roads shall, at a minimum, be improved to City of Fresno standards to adequately provide for emergency vehicles. Any deviations from the City standards shall be accomplished through modifications or exceptions requested at the site plan review stage	Prior to approval of land use entitlement application and building permits	Police Dept; Planning & Development Dept

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8. A water supply and distribution system including fire hydrants shall be designed and constructed to meet the minimum specifications of the Fresno Fire Department for fire protection purposes. 9. The project shall pay appropriate UGM Fire Service Fees. 10. Public streets shall be developed in accordance with Public Works standards. Non-standard proposals such as traffic circles or other traffic calming designs are subject to review and approval by the Fire and Public Works Departments. 11. Provide water supply and distribution systems including fire hydrant infrastructure as approved by the Fire and Public Works Departments. 12. Install fire sprinkler suppression systems in all commercial and five-or-more unit residential buildings beyond 2.0 miles from Fire Station #15. 13. Any tentative subdivision map submitted for the portion of development Area 3 to be zoned R-1/UGM shall include an elementary school site at a location acceptable to the Clovis Unified School District. 14. Participate with the City and the Clovis Unified School District in securing an agreement that will permit the use of the active recreational areas (athletic ball fields, basketball courts, gymnasium, and other appropriate facilities) at Fancher Creek Elementary and the nearby proposed new elementary school site. 15. The developer shall participate in the construction of necessary sewer mains as required by the City to serve the project in accordance with the UGM process and adopted City standards.	Prior to approval of land use entitlement application and building permits	Police Dept; Planning & Development Dept

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16. Specific sewer main extensions required will be made at the time of each specific entitlement submitted to serve that portion of the project. 17. The developer shall be responsible for payment of sewer connection fees in accordance with adopted City ordinances and the UGM process for each specific entitlement submitted at the time of approval or issuance of permits. 18. FAX staff shall be included in the project review for the proposed project, including subsequent tract maps, site plans, and conditional use permits. Measures shall be included in project design to facilitate transit, including transit stops and shelters, linkage of transit to the internal trail systems, and the funding for future transit improvements.	Prior to approval of land use entitlement application and building permits	Planning and Development Department; Public Utilities Dept.
TOPIC 2.9 HYDROLOGY		
1. The project shall commit to a water conservation program that shall include best management practices, including but not limited to low-flow fixtures, water meters, and water conserving landscape design. 2. Realistic water demands shall be estimated for each type of land use. 3. The developer shall prepare a water master plan acceptable to the City. 4. A balanced water budget will be assured by the supplemental importation and use of a minimum of 1,500 acre feet of surface water in the City of Fresno service area and 1,000 acre feet of surface water in the Bakman Water Company service area to be applied in specified water recharge facilities, in-lieu recharge projects or as treated surface water. 5. Use treated surface water (canal water) for irrigation of large landscapes and turf areas when and wherever available.	Prior to approval of land use entitlement application and building permits	Public Utilities Dept; Planning & Development Dept

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6. New public water wells will be subject to standard permits including site -specific environmental assessments and appropriate special permits. Such wells shall be sited and designed to minimize interference with existing wells while protecting the water quality of the aquifer serving the Fresno Metropolitan Area. 7. The developer shall participate in the construction of necessary water mains and facilities as required by the City to serve the project's peak water demands in accordance with the UGM process and adopted City Standards. 8. Specific water main extension(s) and development of additional water supply facilities (water well(s)), including dedication of site(s) for well development and wellhead treatment facilities, if necessary, will be made at time of submittal for each specific entitlement submitted to serve that portion of the project. 9. The developer shall be responsible for payment of water connection fees in accordance with adopted City Ordinances. 10. Shall any existing community water supply well exceed the DBCP MCL as detected in regular monitoring, granular activated carbon treatment or other acceptable technology shall be required consistent with CCR Title 22 requirements. 11. Shall other contaminants be identified in the future, remediation shall be resolved in accordance with CCR Title 22 requirements. 12. Grading plans shall demonstrate that all areas of irrigated turf or other open space drain away from FMFCD basins, except in extraordinary wet years (10-year frequency storms).	Prior to approval of land use entitlement application and building permits	Public Utilities Dept; Planning & Development Dept

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TOPIC 2.10 AESTHETICS		
1. The developer shall incorporate landscape, wall treatment, signage, and architectural standards for the development of residential, commercial, and recreation/open space. 2. A minimum 20-foot landscaped area shall parallel the northerly side of Kings Canyon Road. A berm and/or combination berm/sound wall shall parallel this roadway where residential lots are proposed. 3. Project entries along Fowler Avenue shall incorporate special entry features, such as extensive landscaping and low profile entry signs.	Prior to approval of land use entitlement application and building permits	Planning and Development Department
TOPIC 2.11 CULTURAL RESOURCES		
1. The developer shall include the following mitigation measures in all construction contracts: • If material that may be human remains, animal fossils, or archaeological material is encountered during project surveying, grading, excavating, or construction, work shall stop immediately. • If the material is, or includes, suspected human remains, the Fresno County Coroner shall be immediately contacted for his determination as to whether the material is prehistoric in nature. If the remains or other archaeological material is possibly Native American in origin, the Native American Heritage Commission shall be immediately contacted, and a recognized archaeologist shall be retained to conduct an archaeological assessment for the project. The site shall be formally recorded, and recommendations made to the City of Fresno as to any further site investigations or site avoidance/preservation.	Ongoing / Prior to approval of land use entitlement application and building permits	Planning and Development Dept

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• If the material is human-related, but does not include human remains, and if this archaeological material is possibly Native American in origin, the Native American Heritage Commission shall be immediately contacted and the California Archaeological Inventory/Southern San Joaquin Valley Information Center shall be contacted to obtain a referral list of recognized archaeologists. An archaeological assessment shall be conducted for the project, the site shall be formally recorded, and recommendations made to the City of Fresno as to any further site investigation or site avoidance/preservation. • If animal fossils are uncovered, the Museum of Paleontology, U.C. Berkeley shall be contacted to obtain a referral list of recognized paleontologists. An assessment shall be conducted by a paleontologist, and if the paleontologist determines the material to be significant, it shall be preserved.	Ongoing / Prior to approval of land use entitlement application and building permits	Planning and Development Dept

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TOPIC 2.12. PG&E SUBSTATION		
1. All personnel working on the project will be trained prior to starting work on methods for minimizing air quality impacts during construction. 2. All active portions of construction sites, earthen access roads, and material excavated or graded shall be sufficiently watered to prevent excessive amounts of dust. Watering shall occur at least twice a day with complete coverage, preferably in the late morning and after work is done for the day. Where feasible, reclaimed water shall be used. 3. All clearing, grading, earth moving, or excavation activities shall cease during periods of winds greater than 20 miles per hour averaged over one hour. 4. All material transported off site shall be either sufficiently watered or securely covered to prevent excessive amounts of dust. 5. The area disturbed by clearing, earth moving, or excavation activities shall be minimized at all times. This can be accomplished by mowing instead of discing for weed control and seeding and watering inactive portions of the construction site until grass is evident. 6. Construction site vehicle speeds shall be limited to 15 miles per hour.	Prior to approval of land use entitlement application and building permits	Planning and Development Dept; PG&E

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7. If used, petroleum-based dust palliatives shall meet the road oil requirements of the District's rule regarding Cutback Asphalt Paving Materials 8. Streets adjacent to the Project site shall be swept as needed to remove silt that may have accumulated from construction activities. The streets are required to be wet prior to or in conjunction with rotary sweeping. 9. All internal combustion engine driven equipment shall be properly maintained and well tuned according to the manufacturer's specifications. 10. Exposed stockpiles of soil and other excavated materials will be enclosed, covered, watered twice daily, or applied with soil binders. 11. During the smog season (May through October) the construction period shall be lengthened to minimize the number of vehicles and equipment operating at the same time. 12. Carpooling will be encouraged among construction workers through contractor bid specifications and project orientation for workers. 13. When available, electric equipment shall be utilized in lieu of gasoline powered engines. 14. Vehicle idling time will be minimized (e.g., 5 minute maximum). 15. Construction activities shall minimize obstruction of through traffic lanes adjacent to the site and a flag person shall be retained to maintain safety adjacent to existing roadways. 16. Where necessary, construction activities shall be scheduled for the dry season to allow safe and reliable truck and equipment access. Where the potential of unsafe soil exists, near surface soft and loose soils can be replaced with engineered backfill. 17. An erosion and sediment control plan shall be developed and implemented by PG&E throughout the project construction period. **18.** To further reduce potential impacts to the habitat along Fancher Creek, the width of the clearing required will be minimized. After construction, the area disturbed will be revegetated with native plant species. The revegetation will be designed, conducted and monitored by a qualified botanist or revegetation specialist. 19. To prevent destruction of active nests of bird species that are either special status or protected by the Migratory Bird Treaty Act, all trees and shrubs shall be removed outside the nesting season, generally between August and February. 20. During construction, compressors and other small stationary equipment will be shielded with portable barriers. 21. "Quiet" equipment that incorporates noise control elements will be used during construction.	Prior to approval of land use entitlement application and building permits	Planning and Development Dept; PG&E

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MITIGATION MONITORING CHECKLIST

MITIGATION MEASURE	WHEN IMPLEMENTED	COMPLIANCE VERIFIED BY
22. Equipment exhaust stacks/vents will be directed away from buildings. 23. Truck traffic will be routed away from noise-sensitive areas where feasible. 24. Temporary sound barriers will be employed, if necessary, when construction will occur within 100 feet of residences or businesses or if sensitive receptors will be exposed to construction noise for more than one day. 25. Pre-drilled piles and/or other methods will be used, where possible, to reduce duration of impact pile driving and reduce the noise and vibration impacts. 26. Vibration levels will be monitored at the beginning of the project and when construction is occurring near sensitive equipment to ensure that vibration criteria will not be exceeded at these sensitive locations. 27. Construction techniques, including but not limited to, the use of non-vibratory means of soil compression, will be used where possible to ensure that the determined construction criteria are not exceeded. 28. Design specifications for the proposed transformers must meet or exceed the following: • 45 MVA 215/21kV transformers will meet 79 dBA, at 45 MVA (full capacity) FA rating. 29. The substation will be designed to maintain a minimum 50-foot distance between the transformers and the nearest fence line. This separation will maintain noise levels below the 55 dBA ordinance during day time full-load operation. 30. All transformers must be operated at reduced loading and without fan cooling between the hours of 10:00 pm and 7:00 am.	Prior to approval of land use entitlement application and building permits	Planning and Development Dept; PG&E

EXHIBIT E

LIST OF REVISIONS, CLARIFICATIONS, AND ADDITIONS TO FINAL ENVIRONMENTAL IMPACT REPORT NO. 10133

As permitted by California Environmental Quality Act (CEQA) Guidelines Section 15132, the following list of revisions and clarifications represent additional information to be added to Final EIR No. 10133 in order to make the Final EIR complete. The addition of this new information to the Final EIR is determined, pursuant to CEQA Guidelines Section 15088.5(a), to be not significant and, therefore, does not require recirculation of the EIR. The following revisions and clarifications will not change the EIR in a manner that would deprive the public of a meaningful opportunity to provide comment upon a substantial adverse effect nor does it result in a feasible way to mitigate or avoid such an effect that the city has declined to implement. As evidenced in Exhibit A of this resolution, the new information to be added to the Final EIR does not result in a new significant environmental impact resulting from the Fancher Creek Development Project or resulting from a new mitigation measure nor does the new information result in a substantial increase in the severity of a previously identified environmental impact. Pursuant to the provisions of CEQA Guidelines Section 15088.5(b), the information to be added to the Final EIR as listed in this Exhibit E simply clarifies, amplifies, or makes insignificant modifications to the Final EIR primarily as a result of the city's "Responses to Written Comments" received for the Draft EIR during the public review and comment period required by CEQA Guidelines Section 15087 and the public review process.

ADDITIONAL INFORMATION AND REVISIONS TO FINAL ENVIRONMENTAL IMPACT REPORT (EIR) PURSUANT TO SECTION 2 OF FINAL EIR NO. 10133 DATED APRIL 2005

1. Page 1.1: Under **Introduction**, replace the first paragraph as noted.
2. Page 2.1.16: Under **Mitigation**, replace the wording as noted.
3. Page 2.1.19: Replace mitigation measure No. 1 as noted.
4. Page 2.5.8: Add the mitigation measures as noted.
5. Pages 2.8.3 and 2.8.4: Replace the Fire Protection Section as requested by the Fresno Fire Department as noted.
6. Page 2.6.6: Add the mitigation measure as noted.
7. Page 2.8.8: Replace the first paragraph under **Impact** as noted.
8. Page 2.9.25: Revise or add mitigation measures as noted.
9. Page 2.12.3: Correct the wording in the third paragraph as noted.
10. Page 2.12.9: Correct the wording in the last paragraph as noted.
11. Page 2.11.9: Correct the wording in mitigation measure No. 9 as noted.
12. Page 2.11.12: Delete mitigation measure No. 11 as noted.
13. Page 2.11.15: Correct wording in the first and second paragraphs as noted.

CITY OF FRESNO
FINAL EIR No. 10133

Fancher Creek Development Project

SCH No. 2004021071

- Rezoning Application No. R-04-14
- Annexation of 139 acres to the City of Fresno

Lead Agency

The City of Fresno Planning and Development Department
2600 Fresno Street
Fresno, CA 93721

Applicant

Fancher Creek Properties, LLC

Prepared by

Land Use Associates
286 W. Cromwell Avenue
Fresno, CA 93711

April 2005

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1. INTRODUCTION

This Final Environmental Impact Report (FEIR) contains responses to the comments received during the public review period on Draft Environmental Impact Report (DEIR) No. 10133 for the proposed Fancher Creek Development Project. The comment period for the DEIR extended from October 12, 2004, through November 29, 2004. The project applicant is Fancher Creek Properties, LLC, of Fresno, California. The project site is located in southeast Fresno and consists of approximately 476 acres, of which 425 are controlled by Fancher Creek Properties, LLC. Fifty-two acres within the Regional Commercial Area (MEGG Properties) are not under the applicant's control and will not be zoned at this time, but are included in the EIR for cumulative analysis. The site is generally bounded by Clovis Avenue on the west, Kings Canyon Road on the south, Armstrong Avenue on the east, and Belmont Avenue on the north.

As discussed in the DEIR, the portion of the site controlled by Fancher Creek Properties, LLC, is proposed to be zoned in conformance with the 2025 Fresno General Plan. Following circulation of the DEIR, a 32.2 -acre portion of land designated Medium Density Residential has been proposed to be zoned R-2/UGM to allow low density multifamily use at a density of 7.42 units per acre. R-2 zoning and the proposed number of units are consistent with the Medium Density designation. The resulting number of units is within the range of the units discussed in the DEIR. Resulting zoning would be:

M-1/UGM (Light Manufacturing/Urban Growth Management)	107 acres
R-1/UGM (Single Family Residential/Urban Growth Management)	210.8 acres
R-2/UGM (Low Density Multifamily/Urban Growth Management)	32.2 acres
C-2/UGM (Community Shopping Center/Urban Growth Management)	31 acres
C-3/UGM (Regional Shopping Center/Urban Growth Management)	43 acres
	425 acres

Zoning for 139 acres currently unincorporated would only become effective upon annexation. Annexation would occur subsequent to the rezoning and would be subject to requirements of the Fresno Local Agency Formation Commission (LAFCo). The Draft EIR states that formation of an Infrastructure Mello-Roos district is also proposed. The applicant no longer proposes formation of such a special district, however.

The site consists of vacant and fallow land, scattered residential and commercial structures, and areas planted to crops. Fancher Creek bisects the site in an east-west direction. Existing residential areas abut the project site on the south, east, northwest, and west, with commercial development occurring at the Clovis/Kings Canyon intersection. The FEIR has been prepared by the City of Fresno in accordance with the California Environmental Quality Act. In conjunction with the Draft EIR, this document constitutes the EIR for the proposed project to be considered for certification by the Fresno City Council.

2. LIST OF AGENCIES AND PERSONS COMMENTING

Letter 1: Barg, Coffin, Lewis & Trapp
Brian S. Haughton

Letter 2: Fresno Yosemite International Airport
Nathan Sanchez, Engineering Technician

Letter 3: Fresno County Department of Public Works and Planning
Rick Thaxton, Planning and Resource Analyst

Letter 4: California Department of Toxic Substances Control
Tim Miles, Hazardous Substances Scientist

Letter 5: California Regional Water Quality Control Board
Lisa Gymer, Environmental Scientist

Letter 6: City of Fresno Parks, Recreation & Community Services Department

Letter 7: Bakman Water Company
Steve Pickens, Field Supervisor

Letter 8: City of Fresno Department of Public Utilities
Martin R. McIntyre, Director

Letter 9: Fresno County Environmental Health System
Kathleen Boyer, Environmental Health Specialist III

Letter 10 San Joaquin Valley Air Pollution Control District
Don Hunsaker, Supervising Air Quality Planner

Letter 11: City of Fresno Public Works Department
Jose Luis Benavides, P.E., Traffic Engineering Manager

Letter 12: California Department of Transportation (Caltrans), District 6
Moses Stites, Office of Transportation Planning

Letter 13: City of Fresno, Fresno Area Express
John Downs, Planning Manager

Letter 14: Fresno Irrigation District
Bret Johnson, Engineering Technician I

Letter 15: City of Fresno Fire Department

Letter 16: Fresno Metropolitan Flood Control District
Dan Gilbert, Design Technician IV

Letter 17: Sunnyside Property Owners Association
Sue Williams

Letter 18: Medical Advocates for Healthy Air
Roger K. Larson, M.D., FACP

Letter 19: City of Clovis Department of Planning and Development Services
David E. Fey, AICP, Deputy City Planner

3. CHANGES AND ADDITIONS TO THE EIR

General: For all applicable mitigation measures, replace "should" with "shall."

Page 1.1: Under **Introduction**, replace the first paragraph with the following:

> This Environmental Impact Report (EIR) is prepared by the City of Fresno for the proposed Fancher Creek Development Project. The EIR is prepared in conformance with the California Environmental Quality Act (CEQA) and the CEQA Guidelines. The Fancher Creek EIR is prepared as a Project EIR as defined in Section 15161 of the CEQA Guidelines. The City intends to streamline the CEQA process for subsequent projects described herein and use the Fancher Creek EIR for tiering subsequent environmental analysis for projects not included in the project description as defined in Section 15152 of the CEQA Guidelines. Project land uses were also included within the Fresno 2025 General Plan and discussed within the Master Environmental Impact (MEIR) prepared for the General Plan. The proposed rezoning has been determined by the City to be consistent with the General Plan. As a result, program-level impacts of the project, including cumulative effects, are included in the MEIR, which is herein incorporated by reference.

Page 2.1.16: Under **Mitigation**, the following wording replaces the text.

> **Mitigation**
>
> 1. Prior to approval of specific land use entitlements in the FYI airport noise contours or within any FAA FAR Part 77 area, projects shall be reviewed for their conformance with standards in the applicable Airport Land Use Commission plan, FAA FAR Part 77, as well as standards contained in the Caltrans California Airport Land Use Planning Handbook.
>
> **Level of Significance After Mitigation**
>
> Implementation of the mitigation measure would reduce the potential for conflicts with operation of the Fresno Yosemite International Airport to a less-than-significant level.

Page 2.1.19: The following wording replaces mitigation measure No. 1:

1. Where portions of the on-site open space system and trail are adjacent to existing residential areas, the developer shall provide landscaping and other buffering measures to reduce potential visual, noise, and land use impacts to adjacent residents. The open space system shall be reviewed for conformance with standards in the applicable Airport Land Use Commission plan as well as standards contained in the Caltrans California Airport Land Use Planning Handbook.

Page 2.5.8: The following mitigation measures are added:

2. The developer shall undertake a preconstruction survey by a qualified biologist to determine the existence of Burrowing Owl or Northern Harrier nesting sites on the project site. The survey shall be conducted within at least 14 days prior to site mobilization. If nesting sites are found, the California Department of Fish and Game's (1995) guidelines for Burrowing Owl "Staff Report on Burrowing Owl Mitigation" shall be consulted and the developer shall select one of the following measures for implementation.

   a) Destroy vacant burrows prior to March 1 and/or after August 31.
   b) Redesign the project temporarily or permanently to avoid occupied burrows or nest sites until after the nesting/fledgling season.

   c) Delay the project until after the nesting/fledgling season (March 1 thru August 31).
   d) Install artificial burrows and wait for passive relocation of the Burrowing Owl.
   e) Active relocation of Burrowing Owl with conditions. The developer funds relocation of Burrowing Owl to unoccupied, suitable habitat that is permanently preserved (up to 6.5 acres per nesting pair). Details are specified in California Department of Fish and Game (1995).

3. Projects shall be reviewed for their conformance with hazardous wildlife mitigation standards in the applicable Airport Land Use Commission plan as well as standards contained in the Caltrans California Airport Land Use Planning Handbook.

Page 2.8.3: The Fresno Fire Department has requested that the following wording replace the Fire Protection section on pages 2.8.3 and 2.8.4.

FIRE PROTECTION

Presently, fire and emergency medical services are provided both by the City of Fresno Fire Department and the Fresno County Fire Protection District. Fresno City Fire Station No. 15 at Clovis Avenue and Park Circle Drive is under construction and will be staffed by March 31, 2005. By prior written agreement, Fresno County Fire Station No. 88 at Minnewawa and Tulare Street will close and all fire protection and emergency services to the project area will be provided by the Fresno Fire Department after that date.

IMPACTS

Analysis of fire protection services is based on consultation with Fresno Fire Department staff. The standard of service is based on response time and running distances as determined by national standards and the requirements of the Urban Growth Management Ordinance. The project area presently has no public water main/fire hydrant infrastructure to provide fire flow for fire suppression purposes.

Standards of Significance

Based on national standards, a significant impact occurs when response distance exceeds two miles, or roughly a four-minute response time. In addition to domestic demand, fire flow of 2,500 gpm for commercial, industrial, and multi-family units and 1,500 gpm for other residential development is required.

Impact

The project will result in the need for additional fire protection services which is a potentially significant impact.

Project areas 3 and 4 are within the two-mile primary response area for Fire Station No. 15 at Park Circle Drive and Clovis Avenue. This station will house a single fire engine. Additional units on a first alarm assignment will respond from Fire Station No. 10 at Aircorp Drive and Clovis Avenue (one engine); Station No. 1 at Maple and Olive Avenues (one engine, one truck); Station No. 8 at Cedar and Butler Avenues (one engine); and Station No. 3 at Fresno and "E" Streets (one truck).

Project areas 3 and 4 are between two and three miles from Fire Station No. 15 which will result in a response time of over four minutes. This condition is considered acceptable as provided for in the UGM Ordinance. All commercial buildings and residential development over four units per building in project areas 1 and 2 must have fire sprinklers.

Fire Station No. 20 is planned for construction near the intersection of Temperance and Belmont Avenues to serve the new Southeast Growth Area identified in the 2025 Fresno General Plan. Construction of this station in the future will bring project areas 1 and 2 within the four-minute response standard.

Project areas 3 and 4 are within the Bakman Water Company and areas 1 and 2 will be within the City of Fresno Water Service Division Service Area. As mentioned above, these areas do not currently have wells and water mains. Bakman Water Company has provided plans to the Fire Department for extension of their infrastructure to provide needed fire flow. The City Fresno Public Works Department will require planning for extension of City Services to project areas 1 and 2 prior to development of these areas.

Mitigation

1. The project shall pay appropriate UGM Fire Service Fees.
2. Public streets shall be developed in accordance with Public Works standards. Non-standard proposals such as traffic circles or other traffic calming designs are subject to review and approval by the Fire and Public Works Departments.
3. Provide water supply and distribution systems including fire hydrant infrastructure as approved by the Fire and Public Works Departments.
4. Install fire sprinkler suppression systems in all commercial and five-or-more unit residential buildings beyond 2.0 miles from Fire Station #15.

Level of Significance After Mitigation

Implementation of the proposed mitigation measures will reduce fire protection impacts to a less than significant level.

Page 2.6.6: Add the following mitigation measure:

5. Prior to approval of specific land use entitlements in the FYI airport noise contours or within any FAA FAR Part 77 area, projects shall be reviewed for their conformance with standards in the applicable Airport Land Use Commission plan as well as standards contained in the Caltrans California Airport Land Use Planning Handbook.

Page 2.8.8: Replace the first paragraph under **Impact** with:

> "A major facility improvement project will begin construction during calendar year 2005 at the WWTF to maintain treatment capacity at 80 MGD through the enhancement of processes that will improve biological treatment and accommodate continued planned urban development including the proposed project."

Page 2.9.25: The following mitigation measures are revised and or added.

The developer shall be responsible for the following mitigation measures:

1. The project shall commit to a water conservation program that shall include best management practices, including but not limited to low-flow fixtures, water meters, and water conserving landscape design.
2. Realistic water demands shall be estimated for each type of land use.
3. The developer shall prepare a water master plan acceptable to the City.
4. A balanced water budget will be assured by the supplemental importation and use of a minimum of 1,500 acre feet of surface water in the City of Fresno service area and 1,000 acre feet of surface water in the Bakman Water Company service area to be applied in specified water recharge facilities, in-lieu recharge projects or as treated surface water.
5. Use treated surface water (canal water) for irrigation of large landscapes and turf areas when and wherever available.
6. New public water wells will be subject to standard permits including site - specific environmental assessments and appropriate special permits. Such wells shall be sited and designed to minimize interference with existing wells while protecting the water quality of the aquifer serving the Fresno Metropolitan Area.
7. The developer shall participate in the construction of necessary water mains and facilities as required by the City to serve the project's peak water demands in accordance with the UGM process and adopted City Standards.
8. Specific water main extension(s) and development of additional water supply facilities (water well(s)), including dedication of site(s) for well development and wellhead treatment facilities, if necessary, will be made at time of submittal for each specific entitlement submitted to serve that portion of the project.
9. The developer shall be responsible for payment of water connection fees in accordance with adopted City Ordinances.

Page 2.12.3, third paragraph: The 2025 General Plan shows the proposed PG&E substation designated as Light Industrial, not Low Density Residential.

Page 2.12.9, last paragraph: Line voltage should be 115/12 kV, not 115/21 kV.

Page 2.11.9, mitigation measure 9: Should state 115/12 kV, not 215/21 kV.

Page 2.11.12, mitigation measure 11: This mitigation should be deleted as surrounding light industrial uses will not be sensitive to transformer noise

Page 2.11.15, first and second paragraphs: Tubular steel poles or wood poles will be used., not lattice poles.

4. RESPONSE TO COMMENTS

Comment letters are included after each response. Individual comments are keyed by number to the following responses.

Letter 1: Barg, Coffin, Lewis & Trapp

1. According to the City Traffic Engineering Manager and data provided by TPG Consultants, the proposed regional commercial designation controlled by Fancher Creek Properties, LLC, (not including the MEGG parcel) does not require the construction of Tulare Street or Fancher Drive east of Clovis Avenue or other improvements stipulated in the comment for approval and operation. The EIR must assume that the MEGG parcel will develop with regional commercial uses at some point in the future as shown on the 2025 Fresno General Plan and therefore shows and analyzes the planned circulation system as adopted as part of the General Plan.

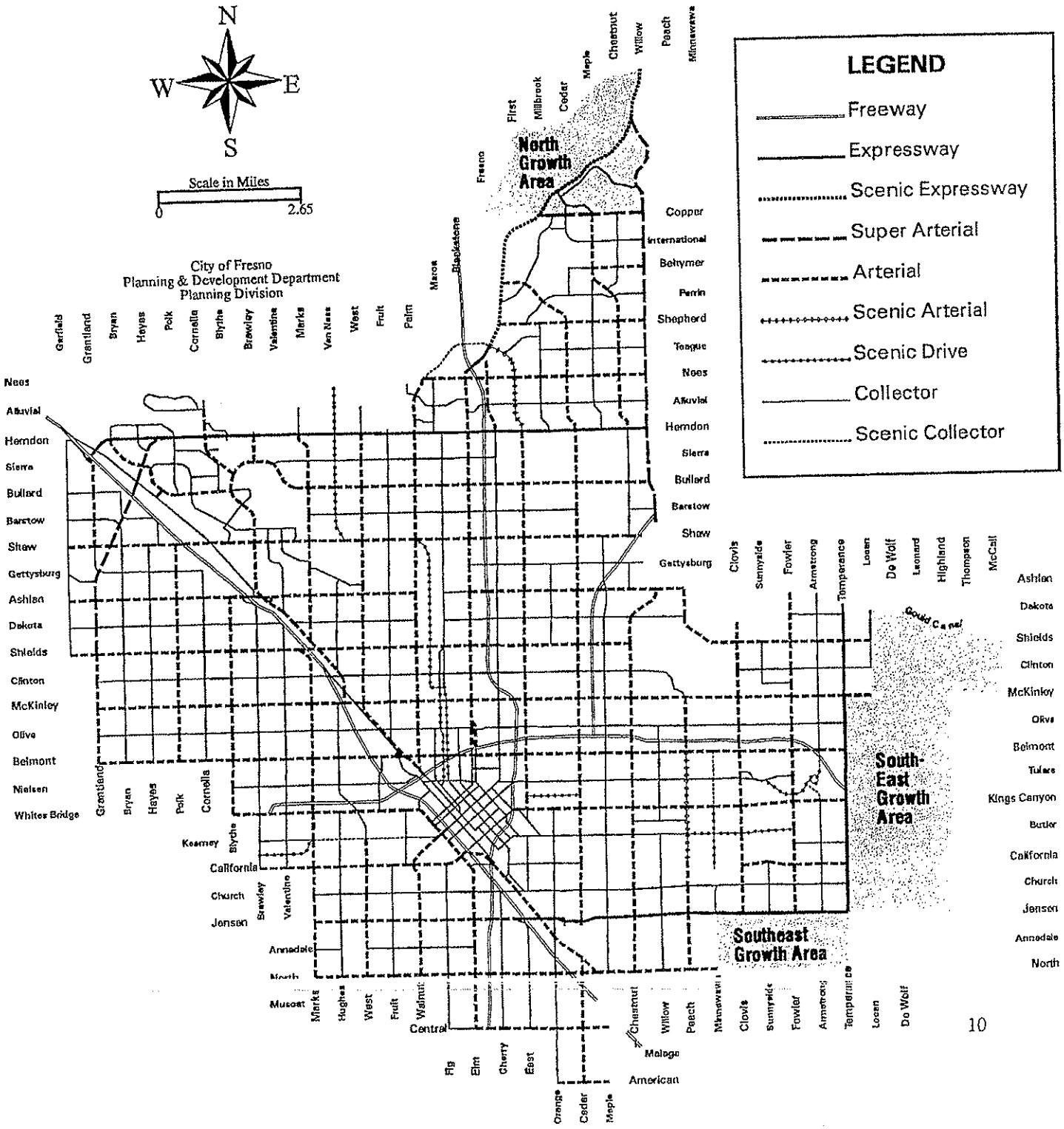
   The circulation configuration shown in Figure 2.2.14 is consistent with the adopted circulation system. Tulare Street was designated as a collector street extending east from the current "T" intersection at Clovis Avenue on the 1984 Fresno General Plan and the 1992 Roosevelt Community Plan. This designation was carried forth on the 2025 Fresno General Plan. A collector is defined by the Circulation Element of the General Plan as a, "Two-to- four lane undivided roadway, with the primary function of connecting local streets and arterials and neighborhood traffic generators and providing access to abutting properties."

   Tulare Street provides the functions defined and connects southwest Fresno and downtown Fresno with areas to the east, including the Edison Community Plan, the Central Area Community Plan, and the Roosevelt Community Plan. In addition, Tulare Street provides connection to Highways 41 and 99, components of the State Highway system. As such, Tulare Street it is an integral component of the City's circulation system, necessary for smooth and efficient traffic movement.

   With adoption of the 2025 Fresno General Plan, Fancher Drive was added as a component of the circulation system as a designated collector with the intent to provide a second signalized intersection with Clovis Avenue north of Tulare Street to serve the large regional commercial and potential mixed uses designated property. Both Tulare Street and Fancher Drive are integral components of the City's circulation system and are included on the 2025 Fresno General Plan Transportation Element Streets and Highways map (attached). This map is used, among other things, to plan, finance, and implement the City's public street system.

Streets and Highways Map

2025 Fresno General Plan
Transportation Element
(Streets and Highways)



The City has the responsibility to facilitate and require the construction of all public streets to their planned standards for the benefit of the larger community as well as adjoining properties.

As a separate parcel, the portion of the regional commercial area controlled by Fancher Creek Properties, LLC, may proceed with development following zoning and approval of site plans, use permits, and building plans. Adequate access is provided by the future signalized intersection of Clovis Avenue and Fancher Drive (an arterial and collector street intersection) and project driveways to Clovis Avenue that would be approved as part of the site plan review process.

In response to the above concerns, the traffic consultant for the EIR (TPG Consultants) was asked to review circulation issues should Tulare Street and Fancher Drive not be extended to the east as called for by the General Plan. Both the AM and PM peak hour trips utilizing the Tulare Street extension east of Clovis Avenue were reviewed to determine what impacts might result should the Tulare Street extension not occur. Since projected PM peak hour vehicle trips utilizing Tulare Street east of Clovis Avenue were larger than the AM peak hour trips, the PM analysis was used to determine impacts.

Of the approximately 1,450 PM peak hour trips projected to utilize the Tulare Street extension east of Clovis Avenue located on the MEGG property, 6% (approximately 90 trips) is non-project related background traffic; 74% (approximately 1,100 trips) is related to regional commercial uses; and the remaining 20% (approximately 260 trips) is other project related traffic. Of the regional commercial traffic, 72% (approximately 800 trips) is attributable to the Fancher Creek Properties, LLC - controlled parcel with the remaining 28% (approximately 300 trips) attributable to the MEGG parcel. If the MEGG parcel is not developed, these 300 PM peak hour trips would not occur.

The approximately 800 PM peak hour trips attributable to the Fancher Creek Properties-controlled parcel would utilize the applicant's northern most driveway on Clovis Avenue to access the regional commercial component of the project. These trips would split with some coming from/going to the north on Clovis Avenue and some coming from/going to the south on Clovis Avenue and then east along either Belmont Avenue or Kings Canyon Road. The 6% non-project related background traffic and 20% non-regional commercial related trips would likewise distribute across the network on Belmont Avenue and Kings Canyon Road. As shown in the *September 2004 Traffic Study*, the levels of service on both the Belmont Avenue and Kings Canyon Road intersections with Clovis Avenue are such that the additional PM peak hour traffic redistributed from the Tulare Street extension east of Clovis Avenue would not have a significant effect on levels of service.

Rather than burdening the MEGG parcel with infrastructure, the future construction of the General Plan designated roadway system will provide important access and allow the future development of the MEGG parcel. Figure 2.2-1 was prepared by the traffic consultant and is not only conceptual for the Tulare Street and Fancher Drive alignments, but for other planned streets in the project area. It is not intended to be an engineered drawing with exact locations of future roadways.

The MEGG parcel is not integral to the development of the balance of the project but it is integral to implementation of the General Plan circulation system. The project description and maps clearly show the planned public circulation system as adopted by the City of Fresno. Because development of the balance of the project does not require the MEGG parcel, the project description is considered adequate for purposes of describing the planned circulation system in the project area. Figure 1-2 is revised to show the boundaries of the MEGG property.

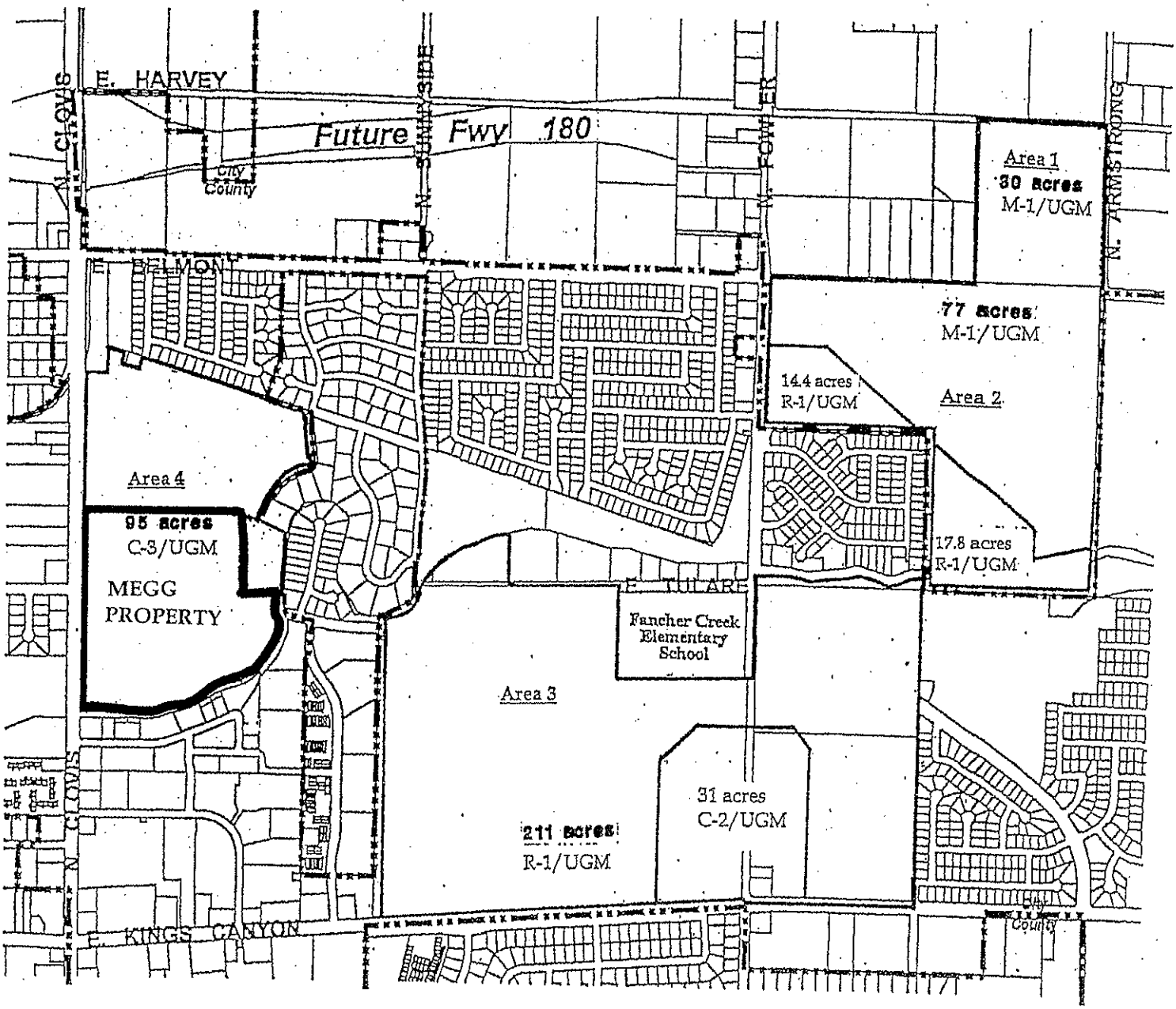
2. The fact that the MEGG parcel is not under the applicant's control is not relevant. As discussed above, development of the project could occur without construction of the Tulare Street extension improvements on the MEGG parcel. Such construction would be anticipated in the future as it is designated as a major street on the 2025 Fresno General Plan, and would be of benefit to the larger community.

3. The use of eminent domain is not discussed in the EIR because such action by the City to implement the Circulation Element of the 2025 Fresno General Plan is not presently contemplated, and is therefore considered too speculative for discussion. Because it is assumed that the MEGG parcel will develop to regional commercial uses in the future, the Circulation Element adopted as part of the 2025 Fresno General Plan will be implemented with development of the parcel.

   The City may use its power of eminent domain to secure right-of-way for public streets but uses that right infrequently and is not anticipated in this case. The comment, however, is based on an incorrect assumption that such action would benefit private land owned by Fancher Creek Properties, LLC. Eminent domain would only be used for broad public benefit, in this case, to secure right-of-way for a public street designated on the General Plan Circulation Element.

Figure 1-2 revised

Figure 1-2: Specific Location, Project Areas, Proposed Zoning



4. The TIS must include all designated streets on the Circulation Element of the General Plan in the project area as a matter of policy and perform analysis of street segments and intersections as required by the City traffic engineer. Further, for the required 2025 traffic analysis, the TIS must assume that all designated street segments are constructed to general plan standards. It is agreed that an EIR should not include speculation or unsubstantiated opinion. There is no evidence to suggest that the components of the planned street system on the MEGG property will not be constructed in the foreseeable future. To purposely delete segments of the designated street system would be irresponsible and would require speculation on the part of the traffic consultant as to which of many segments may or may not develop in the future. Such a process would not be in keeping with traffic study requirements of the City or Caltrans. Please see also responses to comments Nos. 1, 2, and 3.

5. As stated in response No. 1, in the unlikely event that planned road improvements are not constructed on the MEGG parcel, redistributed traffic is not expected to result in adverse effects on project area intersections.

6. Jeff Halstead, principal of Halstead & Associates, environmental and biological consultants, reviewed the project area and provided the following information.

   Burrowing Owl. The Burrowing Owl is listed as a Species of Special Concern by the California Department of Fish and Game, a Federal Species of Concern, and a Migratory Non-game Bird of Management Concern by the U. S. Fish and Wildlife Service. The Burrowing Owl is a common permanent resident throughout much of California, but its populations have been declining for decades. Burrowing owls prefer open, dry, and nearly level grassland habitats where they feed on insects, small mammals, and reptiles. They typically occupy abandoned ground squirrel burrows. The breeding season usually extends from late February through August. Burrowing owls often nest in roadside embankments, on levees, and along irrigation canals. They are more diurnal than most owls and often can be observed standing outside their burrows during the day.

   The project site occurs within the range of the Burrowing Owl, but no CNDDB records for the owl occur in the vicinity of the project. The DEIR states "The site provides suitable rodent burrows for nesting and roosting cover for this species. Owl pellets were located at two separate ground burrow entrances in the site." Table 2.5.1 of the DEIR states that this species is "likely" to occur in the project area. The observation of the owl pellets on the project site near potential burrows indicates that the Burrowing Owl inhabits and uses the project site for at least roosting.

Northern Harrier. The Northern Harrier is listed as a Species of Special Concern by the California Department of Fish and Game. The Northern Harrier is a permanent or winter resident throughout California, except in the Klamath Mountains, Cascade Range, and Sierra Nevada. Northern Harriers breed between sea level and 5,577 feet elevation in the Central Valley and Sierra Nevada, and up to 2,625 feet elevation in northeastern California. This species is commonly found in meadows, grasslands, open rangelands, desert sinks, and fresh and saltwater emergent wetlands, but is seldom found in wooded areas. Northern Harriers nest mostly in emergent wetlands or along rivers or lakes, but may nest in grasslands or grain fields several miles from water.

The project site occurs within the range of the Northern Harrier, but no CNDDB records for the harrier occur in the vicinity of the project. The DEIR states "The site provides suitable breeding and foraging habitat for this species." Table 2.5.1 of the DEIR states that this species is "likely" to occur in the project area.

The proposed project would affect special-status species of Burrowing Owl and Northern Harrier as discussed below. Impacts to Burrowing Owl or Northern Harrier could violate the Federal and California Endangered Species Acts, California Fish and Game Code, Migratory Bird Treaty Act, the California Environmental Quality Act, and policies of the Fresno County General Plan (2000).

If Burrowing Owl or Northern Harrier were to nest, reside, roost, or winter on the project site, they could be killed or temporarily disturbed by land grading, heavy equipment use, and other construction activities for the project. Construction activities could destroy nests, eggs, nestlings, fledglings, and adult owls or harriers. Burrows of the Burrowing Owl could be collapsed, and the residing owls could be entombed and perish. Also, if the Burrowing Owl or Northern Harrier were to forage on the project site, they could be disturbed by land grading, heavy equipment use, and other construction activities for the project.

The DEIR denotes that special-status species of Burrowing Owl and Northern Harrier could potentially or are likely to occur in the project area and that evidence of Burrowing Owl was found on the project site. Thus, the Burrowing Owl and/or Northern Harrier may currently or could potentially inhabit the project site and could be negatively impacted by the project and its construction activities. The above impacts to Burrowing Owl and Northern Harrier would be considered a potentially significant impact. However, through the implementation of Avoidance Measures, no take of Burrowing Owl or Northern Harrier will occur and impacts will be reduced to a less-than-significant level (with mitigation incorporated). Avoidance and compensation measures that pertain to the Burrowing Owl and Northern Harrier are presented in the Mitigation Measures section.

Mitigation

Through implementation of Avoidance Measures, no take of Burrowing Owl or Northern Harrier will occur and impacts will be reduced to a less-than-significant level. If impacts cannot be avoided, the implementation of Compensation Measures will mitigate impacts and thereby reduced impacts to a less-than-significant level. Avoidance and compensation measures that pertain to the Burrowing Owl and Northern Harrier are presented below.

Avoidance Measures

The developer shall undertake a preconstruction survey by a qualified biologist to determine the existence of Burrowing Owl or Northern Harrier nesting sites on the project site. The survey shall be conducted within at least 14 days prior to site mobilization. If nesting sites are found, the California Department of Fish and Game's (1995) guidelines for Burrowing Owl "Staff Report on Burrowing Owl Mitigation" shall be consulted and the developer shall select one of the following measures for implementation.

a) Destroy vacant burrows prior to March 1 and/or after August 31.
b) Redesign the project temporarily or permanently to avoid occupied burrows or nest sites until after the nesting/fledgling season.
c) Delay the project until after the nesting/fledgling season (March 1 thru August 31).
d) Install artificial burrows and wait for passive relocation of the Burrowing Owl.

Through the implementation of Avoidance Measures denoted above, no take of or significant impacts will occur to the Burrowing Owl or Northern Harrier and project impacts to these birds will be less-than-significant.

Compensation Measures

a) Active relocation of Burrowing Owl with conditions. The developer funds relocation of Burrowing Owl to unoccupied, suitable habitat that is permanently preserved (up to 6.5 acres per nesting pair). Details are specified in California Department of Fish and Game (1995).

If the Burrowing Owl or Northern Harrier were to occur on the project site and if avoidance measures for them were unsuccessful, project impacts will be mitigated through the implementation of the above Compensation Measures and thereby reduce impacts to a less-than-significant level.

7. As stated in the Introduction to the Final EIR, the applicant no longer will pursue formation of a Community Facilities District or Benefit Assessment District and this proposal need no longer be discussed.

8. City Planning and Development Department staff has determined that the Fancher Creek project is consistent with the 2025 Fresno General Plan and that the proposed zoning is consistent with the land use designations. This is a critical determination as no plan amendments are required to implement the project and approval of the project by the City Council is an important implementation measure for the General Plan. Due to this consistency finding, it can also be determined that many potential environmental impacts of the project have been evaluated in the Final Master EIR for the 2025 Fresno General Plan (EIR No.10130, SCH # 2001071097). The Master EIR identifies the potential environmental consequences of adopting and implementing the General Plan and identifies measures to reduce these environmental impacts when feasible. The Master EIR discusses the more broad environmental implications of urbanization of the Fancher Creek site and surrounding area that have been refined in the Fancher Creek EIR.

   The 2025 Fresno General Plan contains policies to efficiently use land and resources within established communities of the metropolitan area. The City's vision is to balance the metropolitan area around the city's central area and traditional downtown. Central to this vision is encouragement of development within the Roosevelt Community Plan area to sustain its many desirable community features and use its substantial growth potential (land area, transportation, sewer collection, water, and natural resources) to accommodate projected population growth and economic development within a pleasing and desirable environment. Key proposals of the 2025 General Plan for the Roosevelt area include:

   - Apply development standards and design strategies to accommodate expanded and appropriately intensified residential development within the eastern quadrant of the community that ensure existing neighborhoods are respected and enhanced.

   - Aggressively promote economic growth through development of new commercial and industrial uses in the southern and eastern sectors of the community, and

   - Utilize innovative strategies to establish appropriately located mixed use developments such as the area east of Clovis Avenue and north of Kings Canyon Road (the Fancher Creek Property) to include retail commercial/entertainment, business/industrial, residential and public facility activities within an aesthetically pleasing and healthful environment.

The Master EIR contains an analysis of cumulative impacts of general plan implementation and was certified by the Fresno City Council on November 19, 2002. The Master EIR should be consulted for a full discussion of cumulative impacts of general plan implementation.

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Letter 1

November 29, 2004

RECEIVED
NOV 29 2004

VIA FEDERAL EXPRESS AND FACSIMILE

Mike Sanchez
Associate Planner
City of Fresno
Planning and Development Department
2600 Fresno Street, Room 3043
Fresno, California 93721-3604

Re: **Draft Environmental Impact Report**
(EIR No. 10133 – Fancher Creek Development Project)

Dear Mr. Sanchez:

We are writing on behalf of Drs. Armen Michaelian, Shiro Ego and Arnold Gazarian, owners of a 75-percent undivided interest in a property in the City of Fresno bordering Clovis Avenue known as the "MEGG parcel," APN 313-021-01. The MEGG parcel will be directly and significantly affected by the Fancher Creek Development Project ("Project"). Previously, we submitted comments on the Notice of Preparation regarding the referenced Draft Environmental Impact Report ("DEIR").[1] This letter contains our comments in response to the DEIR.

As explained more fully below, the DEIR is deficient and does not comply with the requirements of the California Environmental Quality Act ("CEQA"). Until these deficiencies are corrected, the DEIR cannot legally be certified by the City of Fresno.

[1] *See* March 16, 2004 letter from B. Haughton to M. Sanchez, with attachments ("NOP Comment Letter"), on file with the City of Fresno Planning and Development Department. A copy of this letter without the submitted attachments is contained in Appendix A of the DEIR. The Doctors hereby incorporate the NOP Comment Letter and its attachments in their entirety as part of the comments contained in this letter.

THE DEIR IS DEFICIENT BECAUSE IT ERRONEOUSLY ASSUMES THAT THE MEGG PARCEL IS AVAILABLE TO THE PROJECT APPLICANT FOR CONSTRUCTION OF TRANSPORTATION INFRASTRUCTURE NECESSARY TO THE PROJECT

The DEIR is predicated on a flawed assumption that has serious ramifications for many aspects of the DEIR's analysis: the DEIR assumes that the MEGG parcel is available to the Project applicant for construction of transportation infrastructure that is necessary to this (wholly private) project. The numerous deficiencies resulting from this flawed assumption render the DEIR legally inadequate.

Comment 1: *The Project Description is deficient, because, contrary to the Description, the DEIR describes the MEGG parcel as an integral part of the Project, rather than as a separate project relevant solely to the DEIR's cumulative impacts analysis.*

The DEIR's Project Description states that "Fifty-two acres within the Regional Commercial area (MEGG properties) are not under the applicant's control and will not be zoned, but are *included in the EIR for cumulative analysis*." DEIR at 1.1 (emphasis added). However, the remainder of the DEIR indicates that this Project Description is incorrect.

The MEGG parcel is, in fact, an integral part of the Project under review, as the Project will require the construction of transportation infrastructure necessary to the Project on the MEGG parcel. Figure 2.2-1 (DEIR page 2.2.14) shows that the proposed circulation system in the vicinity of the Project includes:

1. the eastward extension of Tulare Avenue across the MEGG parcel ("Tulare Extension");

2. the westward extension of proposed Fancher Creek Boulevard across the eastern portion of the MEGG parcel ("Fancher Creek West");

3. construction of a roundabout on or about the eastern portion of the MEGG parcel to connect the Tulare Extension with Fancher Creek West ("Southern Roundabout");

4. construction of an east-west segment of proposed Fancher Drive parallel to and along the northern border of the MEGG parcel ("East/West Fancher Connector");

5. construction of a second roundabout on or about the northeast corner of the MEGG parcel ("Northern Roundabout"); and

6. construction of a north-south segment of proposed Fancher Drive along the northern segment of the eastern border of the MEGG parcel to link the Northern Roundabout and the Southern Roundabout ("North/South Fancher Connector").

This transportation infrastructure is discussed in general terms in the "Circulation Issues" section of the DEIR (page 2.2.59), but nowhere does the DEIR state that the MEGG parcel is a necessary component of the Project's circulation system. The DEIR's silence is particularly puzzling because the Doctors explicitly raised this issue in the NOP Comment Letter and requested that the DEIR consider and prefer alternatives that do not include infrastructure burdening the MEGG parcel. *See* NOP Comment Letter at pp. 2-3. Worse, the DEIR appears to consciously avoid the problem by placing in the legend of Figure 2.2-1 the statement "Road Way Alignment Conceptual Only," and by later stating that the "final alignment of these roadways will be determined at the time of site plan review." DEIR at 2.2.59.

Whichever alignment is finally chosen, however, **no feasible alignment eliminates the Project's need to utilize the MEGG parcel for critical transportation infrastructure.** Indeed, the Project applicant's own depiction of the alignment shows that all components of this transportation infrastructure, other than the East-West and North-South Fancher Connectors, will require construction on the MEGG parcel. *See* enclosed October 21, 2004 drawing prepared by the Project applicant's engineers, Yamabe & Horn.

Nevertheless, the DEIR's Project Description's only reference to the MEGG parcel is to assert that it is not part of the Project, saying it is "not under the applicant's control and will not be zoned, but [is] included in the EIR for cumulative analysis." DEIR at 1.1. The Project Description does not mention that the MEGG parcel is essential to the Project's transportation infrastructure. Moreover, the DEIR conceals that omission by (1) showing road alignments as "conceptual only" and (2) failing to provide any detailed maps that would inform readers that any alignment requires crossing the MEGG parcel. Thus, by stating that the MEGG parcel is included in the DEIR only "for cumulative analysis" (and therefore is not a part of the Project under review), the Project Description deprives the public of the ability to comprehend the true nature and scope of the entire project.

To be legally adequate under CEQA, a project description must be accurate. *County of Inyo v. City of Los Angeles*, 71 Cal.App.3d 185, 199 (1977). Moreover, the project description must be complete: the entire project being proposed for approval must be described. *City of Santee v. County of San Diego*, 214 Cal.App.3d 1438, 1450 (1989). The precise location and boundaries of the proposed project must be shown on a detailed map, preferably topographic. 14 Cal. Code Regs. § 15124(a). An environmental impact report that artificially narrows a project description to minimize the project's impacts and undercut public review is legally deficient.

To correct the DEIR's deficient Project Description, the City should (1) revise it to state that the MEGG parcel, though not under the applicant's control and not to be zoned as part of the Project, is part of the Project under review in the DEIR because transportation infrastructure necessary to the Project will be constructed on the MEGG parcel, and (2) add a detailed map showing the precise location and boundary of the Project, including the necessary portions of the MEGG parcel.

Comment 2: *The DEIR is deficient because it is internally inconsistent: though admitting that the MEGG parcel is not under the Project applicant's control, the DEIR assumes that the Project applicant has the right to build transportation infrastructure necessary to the Project on the MEGG parcel.*

As explained in Comment 1, above, transportation infrastructure necessary to the Project is planned for construction on the MEGG parcel as part of the Project, yet the Project Description admits that the MEGG parcel is "not under the applicant's control." DEIR at 1.1. The DEIR contains no discussion of how this key issue will or could be resolved, and therefore is internally inconsistent.

An EIR that contains such a major unresolved internal inconsistency cannot function as an adequate informational document under CEQA. This is because such an EIR does not fully inform the public or the reviewing agencies of significant environmental effects of the project, possible ways to minimize those effects, and reasonable alternatives to the project. Pub. Res. Code § 21061; 14 Cal. Code Regs. §15121. As discussed further in Comments 4 and 5 below, this internal inconsistency creates numerous deficiencies in the DEIR and deprives those reviewing the document of the opportunity to fully understand the environmental impacts of the Project.

To correct this internal inconsistency, the DEIR should be revised to add a mitigation measure conditioning any Project approval on the applicant's obtaining the right to construct transportation infrastructure on the MEGG parcel from the owners of that property.

Comment 3: *The DEIR is deficient because it may mislead readers to believe that the City will resolve the internal inconsistency described above by using the City's eminent domain power (to condemn portions of the MEGG parcel for construction of transportation infrastructure to serve a wholly private Project), which the City cannot legally do.*

Readers of the DEIR may mistakenly conclude that the City will resolve the internal inconsistency described above by condemning rights of way on the MEGG parcel for construction of transportation infrastructure necessary to the Project.

Using that power to take portions of the MEGG parcel from its current owners to facilitate the development of private land owned by the Project applicant, however, would violate the state and federal constitutions. *See* U.S. Const. Amend. 5; Cal. Const. Art. I, §14; *Hawaii Housing Authority v. Midkiff*, 467 U.S. 229, 241 (1984) (interpreting U.S. Constitution, U.S. Supreme Court has "repeatedly stated that 'one person's property may not be taken for the benefit of another private person without a justifying public purpose, even though compensation be paid.'"); *City and County of San Francisco v. Ross*, 44 Cal.2d 52, 59 (1955) (California Supreme Court holding that California Constitution "does not contemplate that the exercise of the power of eminent domain shall secure to private activities the means to carry on a private business whose primary objective and purpose is private gain and not public need.").

To avoid misleading readers, therefore, the DEIR should clarify that the City, as a legal matter, cannot – and, as a practical matter, will not – use its eminent domain power to condemn property to facilitate the applicant's wholly private Project.

Comment 4: *The traffic impact study on which the DEIR is based is deficient because it does not analyze the traffic impacts resulting from the Project if transportation infrastructure necessary for the Project cannot be built on the MEGG parcel.*

As discussed above, the Project applicant does not currently have the right to construct transportation infrastructure necessary to the Project on the MEGG parcel, and the DEIR does not address how or when such rights will be obtained. However, the traffic impact study (TIS) prepared for the DEIR[2] erroneously assumes that this infrastructure will be built. The adequacy of the TIS is critical to the adequacy of the DEIR, because the DEIR's analysis of traffic and circulation impacts resulting from the Project is based wholly on the TIS. DEIR at 2.2.1.

The TIS suffers from the same internal inconsistency as the DEIR (discussed in Comment 2, above). The Executive Summary of the TIS recognizes that the MEGG parcel is "not under applicant control" and then states that "[t]he applicant does not wish to phase the Project but rather wants to construct all required infrastructure at Project initiation." TIS at p. 5. However, the TIS does not analyze or discuss the fact that the Project applicant does not have the right to construct "all required infrastructure at Project initiation," precisely because the MEGG parcel is "not under applicant control."

Instead, the TIS is based entirely on a circulation system to service the Project that includes all of the transportation infrastructure proposed for construction on the MEGG parcel. The Vicinity Map for the TIS indicates that all of this MEGG-based infrastructure –the Tulare Extension, Fancher Creek West and the Southern and Northern Roundabouts – is part of the Project under consideration in the TIS. *See* TIS, Figure 1. Moreover, the TIS explicitly states that it analyzed the Project's impacts as if all of the MEGG-based transportation infrastructure were constructed. *See* TIS at pp. 15-16 (road segments analyzed), 18-19 (intersections analyzed), 20 (roundabouts analyzed), and 22 (network improvements analyzed). Finally, all of the Figures in the TIS depicting projected transportation and circulation impacts (traffic volumes) and/or mitigation (proposed intersection lane configurations and intersection controls) are based on the construction of such a circulation system. *See* TIS, Figures 2, 7-12. The TIS therefore analyzes traffic and circulation impacts that would only exist if the Project applicant were to obtain the right to construct the MEGG-based infrastructure.

An environmental impact report's analysis must be supported by substantial evidence. Pub. Res. Code §§ 21168, 21168.5; *Laurel Heights Improvement Ass'n v. Regents of University of California*, 47 Cal.3d 376, 392 & n.5 (1988). Substantial evidence includes facts, reasonable assumptions predicated on facts, and expert opinion supported by facts, but it does not include

[2] Traffic Impact Study for the Fancher Creek Project (September 2004, TPG Consulting, Inc.), on file with the City of Fresno Planning and Development Department.

speculation or unsubstantiated opinion. Pub. Res. Code §§ 21080(e), 21082.2(c). The TIS's analysis of traffic and circulation impacts is based wholly on speculation, namely, that the Project applicant will be able to construct the necessary infrastructure on the MEGG parcel. Moreover, the TIS does not even consider the most reasonable assumption in this regard, *i.e.*, that the MEGG-based traffic infrastructure will not be constructed, because the applicant does not have the right to do so. Thus, the TIS provides no basis for evaluating the traffic and circulation impacts of the Project under the conditions that are reasonably likely to exist, *i.e.*, without the MEGG-based infrastructure. As a result, there is no data upon which the DEIR can rely to evaluate whether these impacts are significant under CEQA, and, if so, how to mitigate them. The TIS is therefore not substantial evidence upon which the DEIR may be based, and there is no other evidence in the record that could support the DEIR's analysis of traffic and circulation impacts.

To correct this deficiency, the City must either (1) revise the DEIR to add a mitigation measure conditioning any Project approval on the applicant's obtaining the right to construct transportation infrastructure on the MEGG parcel from the owners of that property, or (2) prepare a revised traffic impact study analyzing traffic and circulation impacts assuming the MEGG parcel is not available for construction of transportation infrastructure to serve the Project.

Comment 5: *The traffic and circulation analysis in the DEIR (section 2.2) is deficient, because it does not evaluate the potential for significant traffic impacts resulting from the Project if transportation infrastructure necessary for the Project cannot be built on the MEGG parcel.*

The DEIR's analysis of traffic and circulation impacts resulting from the Project (section 2.2) is based wholly on the TIS, whose deficiencies are discussed above. DEIR at 2.2.1. As with the TIS, this section of the DEIR is based entirely on a circulation system that includes all of the transportation infrastructure proposed for construction on the MEGG parcel. *See* DEIR at pp. 2.2.2-2.2.3 (road segments analyzed), 2.2.4 (intersections analyzed), 2.2.5 (roundabouts analyzed), and 2.2.6-2.2.7 (network improvements analyzed), 2.2.14 (Figure 2.2-1, showing MEGG-based infrastructure as part of Project), 2.2.27-2.2.39 (assuming existence of MEGG-based infrastructure in analyzing and mitigating 2015 level of service conditions), 2.2.40-2.2.59 (assuming existence of MEGG-based infrastructure in analyzing and mitigating 2025 level of service conditions). However, as discussed above, the Project applicant does not have the right to construct any infrastructure on the MEGG parcel.

Under CEQA, an EIR must identify and focus on the significant environmental effects of the proposed project. Pub. Res. Code § 21100(b)(1); 14 Cal. Code Regs §§ 15126(a), 15126.2(a), 15143. For each significant environmental effect identified, the EIR must propose and describe a mitigation measure designed to minimize, reduce, or avoid the identified environmental impact, or to rectify or compensate for this impact. Pub. Res. Code §§ 21002.1(a), 21100(b)(3); 14 Cal. Code Regs. §§ 15126.4, 15370. The DEIR is deficient because it does not identify or mitigate the significant impacts that may result from the Project if the

MEGG-based traffic infrastructure is not constructed, due to the Project applicant not controlling the MEGG parcel.

To correct this deficiency, the City must either (1) revise the DEIR to add a mitigation measure conditioning any Project approval on the applicant's obtaining the right to construct transportation infrastructure on the MEGG parcel from the owners of that property, or (2) revise the DEIR's analysis of traffic and circulation to identify and mitigate impacts assuming the MEGG parcel is not available for construction of transportation infrastructure to serve the Project.

THE DEIR IS DEFICIENT BECAUSE IT CONTAINS INADEQUATE DISCUSSION AND ANALYSIS OF OTHER SIGNIFICANT IMPACTS AND PROPOSED MITIGATION MEASURES

Comment 6: *The DEIR's analysis of impacts on Biotic Resources (section 2.5) is deficient, because it fails to identify, discuss, and mitigate the impact of the Project on the Burrowing Owl and Northern Harrier, two special status species that are likely to occur in the Project area.*

The DEIR lists 37 special status animals that occur or have the potential to occur in the Project area. DEIR, Table 2.5.1. Of these 37 species, the DEIR determines that 22 species are "absent" or "unlikely" to occur in the Project area, 13 species "possibly" occur, and two species *(Burrowing Owl, Northern Harrier) "likely" occur. Id.* With regard to the Burrowing Owl, the DEIR states: "The site provides suitable rodent burrows for nesting and roosting cover for this species. *Owl pellets were located at two separate ground burrow entrances in the site.*" *Id.* (emphasis added). With respect to the Northern Harrier, the DEIR states: "The site provides suitable breeding and foraging habitat for this species." *Id.* However, the DEIR does not discuss or analyze Project impacts on these two species likely to be found at the Project site.

Although the DEIR does conclude that special status species could be adversely affected by implementation of the Project (thereby resulting in a significant impact), this analysis focuses exclusively on species that are *not likely to occur* at the Project site. The DEIR concludes that the Project "is not expected to have any effect on regional populations" of the 22 species that are absent or unlikely to occur, and that the project area "provides marginal habitat" for the 12 species[3] that possibly occur at the Project site because they "occur regionally and typically use habitats similar to those found in the study area." DEIR at 2.5.7. Based on this analysis, which concludes that little or no habitat for special status species is affected by the project, the DEIR adopts a mitigation measure (100-foot setback from Fancher Creek). DEIR at 2.5.8.

Inexplicably, the DEIR fails to analyze the potential impacts of the project on the two species that the DEIR itself states are *likely to occur* at the Project site. As noted above, the DEIR's discussion of significant impacts on special status species only looked at species for

[3] Table 2.5-1 actually identifies 13 – not 12 – species that possibly occur at the Project site. This discrepancy appears to be a typographical error, but, in any event, must be explained.

whom the Project provides no habitat or marginal habitat. Nowhere does the DEIR discuss the potential for significant impacts on the Northern Harrier, even though the Project site "provides suitable breeding and foraging habitat for this species." The same is true of the Burrowing Owl, even though the Project site provides "suitable rodent burrows for nesting and roosting cover for this species," and, even more importantly, there is substantial evidence that *this species is present at the Project site.* Because the DEIR concludes that mitigation is required for potential significant impacts on species less likely to be found at the Project site, more substantial mitigation is likely required for impacts on the Northern Harrier and the Burrowing Owl.

Under CEQA, an EIR must identify and focus on the significant environmental effects of the proposed project. Pub. Res. Code § 21100(b)(1); 14 Cal. Code Regs §§ 15126(a), 15126.2(a), 15143. For each significant environmental effect identified, the EIR must propose and describe a mitigation measure designed to minimize, reduce, or avoid the identified environmental impact, or to rectify or compensate for this impact. Pub. Res. Code §§ 21002.1(a), 21100(b)(3); 14 Cal. Code Regs. §§ 15126.4, 15370. Here, the DEIR fails to identify and mitigate significant impacts on the Northern Harrier and Burrowing Owl.

To correct this deficiency, the DEIR must be revised to (1) identify and describe the Project's significant impacts on the Northern Harrier and Burrowing Owl, and (2) propose and describe mitigation measures for these impacts.

Comment 7: *The DEIR is deficient because it does not adequately explain the nature, scope, role, impacts or mitigation measures for the impacts of the Community Facilities District or Benefit Assessment district proposed by the Project applicant.*

The DEIR's Project Description states:

> . . . pursuant to Section 53311 of the Government Code, the applicant also proposes the *formation of an Infrastructure Mello-Roos district.* This code section provides the ability to utilize voter approved special districts to construct, operate, and maintain public facilities within a project area. Therefore, the applicant may also propose *the parallel formation of a Benefit Assessment district for landscape maintenance* with [sic] the project area.

DEIR at 1.1 (emphasis added). The Project Description later defines the proposed Infrastructure Mello-Roos district as a "Community Facilities District" (CFD) which, pursuant to the California Constitution and statutes, requires certain actions – both by local government and by voters within the proposed CFD – before it can be approved. DEIR at 1.12.

The DEIR does not provide adequate information or analysis of the CFD proposed by the Project applicant. The Project Description only states: "Should the district be formed, it will construct public facilities within the project boundaries to be paid for by future residents and

businesses." DEIR at 1.12. Although the DEIR states that the CFD will fund facilities within the "project boundaries," there is no discussion as to what those facilities will be, where they will be located or whether the geographical boundaries of the proposed CFD will coincide with the boundaries of the Project. Specifically, there is no discussion as to whether the Project applicant contemplates including the MEGG parcel within the proposed CFD. There is also no discussion as to what the impacts of the facilities will be or how to mitigate those impacts.

The same problems infect the DEIR's mention of the proposed "Benefit Assessment district for landscape maintenance." Moreover, in this case, there is also no discussion of the legal authority under which the district is to be formed.

If these districts are intended as mitigation measures, they are legally inadequate. An EIR cannot rely on mitigation measures – such as the CFD and Benefit Assessment district proposed here – that are so vague that it is impossible to determine if they will be effective in mitigating significant impacts of the project. *See, e.g., San Franciscans for Reasonable Growth v. City & County of San Francisco*, 151 Cal.App.3d 61, 79 (1984) (requirement that unspecified fee would be paid to fund an unspecified transit funding mechanism held to be inadequate mitigation measure). Moreover, CEQA requires that mitigation measures be formulated at the time the EIR is prepared – mitigation cannot be deferred until some unspecified future time – and they must be fully enforceable through permit conditions, agreements, or other legally-binding instruments. 14 Cal. Code Regs. §§ 15126.4(a)(1)(B), (a)(2). The CFD and Benefit Assessment district proposed by the Project applicant cannot function as adequate mitigation measures because their future existence is purely speculative. At best, the districts will be created at some indefinite point in the future. At worst, they will never be created, because the EIR does not contain any enforcement mechanism that would ensure the creation or funding of these districts.

To correct these deficiencies, the DEIR must be revised to:

(a) describe the specific "infrastructure" projects for which the Project applicant proposes the creation of a CFD;

(b) describe the specific "landscape maintenance" projects for which the Project applicant proposes the creation of a Benefit Assessment District;

(c) describe the statutory authority under which the Benefit Assessment District is to be created;

(d) describe the geographical boundaries of the CFD and the Benefit Assessment District, including whether the Project applicant proposes including the MEGG parcel within these districts;

(e) identify any significant impacts of the projects to be funded by these districts;

(f) identify mitigation measures for any such impacts;

(g) state whether the creation of either district is a mitigation measure for potentially significant impacts identified in the DEIR. If so, the DEIR must:

(i) describe which impacts will be mitigated by creation of the district;

(ii) describe how the impacts will be mitigated by creation of the district; and

(iii) describe how this mitigation will be made fully enforceable.

Comment 8: *The DEIR's analysis of cumulative impacts (section 3.4) is deficient because it lacks the required specificity and detail regarding the assumptions on which the analysis is based.*

The DEIR's analysis of cumulative impacts begins with a disclaimer that CEQA does not require discussion of such impacts "to be as detailed as the impact analysis for the project," and "the applicable standards for adequacy of this examination are 'practicality and reasonableness.'" DEIR at 3.10. However, this rule does not eliminate the requirement that an EIR provide a reasonable basis for a cumulative impacts analysis. The lack of meaningful information in the DEIR regarding the assumptions underlying the cumulative impacts analysis renders this analysis legally deficient.

The rule that "practicality and reasonableness" should govern analysis of cumulative impacts does not exist in a vacuum. The quoted language comes from a CEQA Guideline that also states:

> The following elements are necessary to an adequate discussion of significant cumulative impacts:
> . . . (1) . . . (B) A summary of projections contained in an adopted general plan or related planning document, or in a prior environmental document which has been adopted or certified, which described or evaluated regional or areawide conditions contributing to the cumulative impact. . . .
> . . . (3) Lead agencies should define the geographic scope of the area affected by the cumulative effect and provide a reasonable explanation for the geographic limitation used.

14 Cal. Code Regs. § 15130(b).

The DEIR's cumulative impacts analysis is legally deficient because it contains neither of these necessary elements. The only language in the DEIR that is relevant to these legal requirements is the statement that:

A "full build-out" condition was assumed which relied on a combination of projections and specific project assumptions to define full build-out of the following:

1. Existing County General Plan
2. 2025 Fresno General Plan
3. 1993 Clovis General Plan

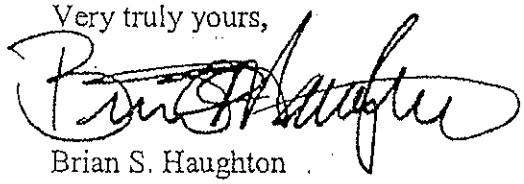
DEIR at 3.10. This language does not satisfy the requirement that the DEIR provide a "summary of projections" on which the cumulative impacts analysis is based. The DEIR does not reference (let alone summarize or describe) any specific "projections" or "assumptions" contained in the three referenced documents that were the basis for the cumulative impacts analysis. Nor does it provide any other information or data regarding the "full build-out" condition assumed by the DEIR in reliance on "a combination" of these undisclosed "projections" and "assumptions." Moreover, this language does not provide the required definition of the "geographic scope of the area" that was analyzed for cumulative impacts. These deficiencies render public or judicial review of the DEIR's discussion of cumulative impacts impossible: the reader has no basis for understanding whether the DEIR's findings regarding significant cumulative impacts are based on substantial evidence, or instead are wholly speculative and without basis.

To correct these deficiencies, the DEIR must be revised to (1) include a summary of the projections on which the cumulative impacts analysis is based, so that meaningful public and judicial review of that analysis is possible, and (2) define the geographic area analyzed for cumulative effects and provide a reasonable explanation for that geographic limitation.

* * *

We look forward to the City's response to these comments pursuant to 14 Cal. Code Regs. § 15088. Should City staff require further information or consultation regarding the above comments, I would be happy to assist in any way possible. I can be reached at the telephone number and U.S. Mail address shown above or by e-mail at bsh@bcltlaw.com. Thank you for your consideration.

Very truly yours,



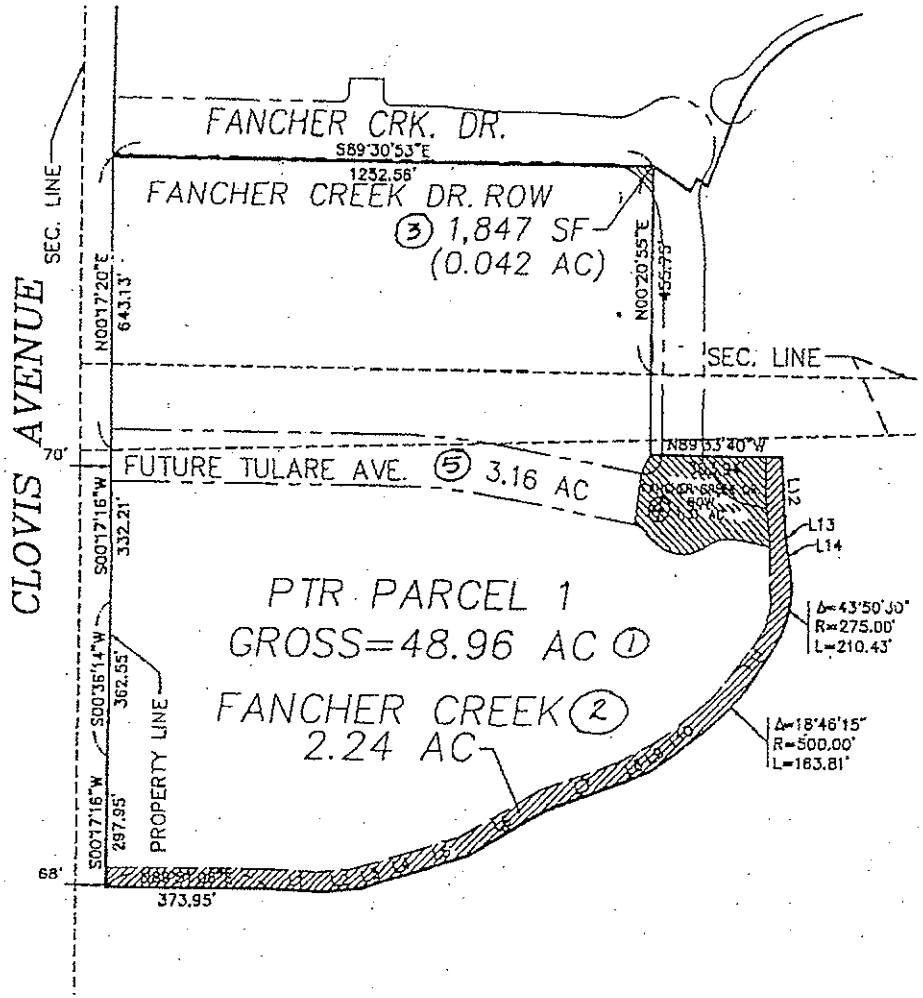
Brian S. Haughton

BSH:efp

Encl.: October 21, 2004 Yamabe & Horn drawing

cc: Dr. Armen Michaelian
Dr. Shiro Ego
Dr. Arnold Gazarian
Dean Arakelian, Berberian Companies
Thomas Gibbs, Esq. (attorney for the Project applicant)

11/29/2004 15:10 FAX 415 228 5450 BARG COFFIN LEWIS TRAPP 014



LEGAL DESCRIPTION

PARCEL 1: APN: 313-021-01 PORTION

THE SOUTH THREE-FOURTHS OF THE SOUTH HALF OF THE SOUTHWEST QUARTER OF THE NORTHWEST QUARTER; AND THE NORTH QUARTER OF THE NORTH HALF OF THE NORTHWEST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 4, TOWNSHIP 14 SOUTH, RANGE 21 EAST, MOUNT DIABLO BASE AND MERIDIAN, IN THE CITY OF FRESNO, COUNTY OF FRESNO, STATE OF CALIFORNIA, ACCORDING TO THE UNITED STATES GOVERNMENT TOWNSHIP PLAT; AND

ALSO A PORTION OF THE SOUTHWEST QUARTER OF SECTION 4, TOWNSHIP 14 SOUTH, RANGE 21 EAST, MOUNT DIABLO BASE AND MERIDIAN, IN THE COUNTY OF FRESNO, STATE OF CALIFORNIA, ACCORDING TO THE UNITED STATES GOVERNMENT TOWNSHIP PLATS, IN THE CITY OF FRESNO, COUNTY OF FRESNO, STATE OF CALIFORNIA, DESCRIBED AS:

BEGINNING AT THE SOUTHWEST CORNER OF THE NORTH HALF OF THE NORTHWEST QUARTER OF THE SOUTHWEST QUARTER OF SAID SECTION 4; THENCE EASTERLY TO THE SOUTHEAST CORNER THEREOF; THENCE NORTHERLY ALONG THE EAST LINE OF SAID NORTH HALF OF THE NORTHWEST QUARTER OF THE SOUTHWEST QUARTER OF SAID SECTION 4, A DISTANCE OF 437.1 FEET; THENCE EASTERLY PARALLEL WITH THE NORTH LINE OF THE SOUTHWEST QUARTER OF SAID SECTION 4, A DISTANCE OF 323 FEET, MORE OR LESS, TO THE CENTER OF FANCHER CREEK CANAL; THENCE SOUTHERLY, SOUTHWESTERLY AND WESTERLY ALONG THE CENTER OF FANCHER CREEK CANAL TO THE WEST LINE OF THE SOUTHWEST QUARTER OF SAID SECTION 4; THENCE NORTHERLY ALONG THE SAID WEST LINE TO THE POINT OF BEGINNING.

EXCEPTING THEREFROM THAT PORTION THEREOF DESCRIBED AS FOLLOWS:

BEGINNING AT THE WEST CORNER OF SAID SECTION 4; THENCE NORTHERLY ALONG THE WEST BOUNDARY OF SAID SECTION 4, TO THE NORTHWEST CORNER OF THE SOUTH 7 OF THE SOUTH HALF OF THE SOUTHWEST QUARTER OF THE NORTHWEST QUARTER OF SAID SECTION 4; THENCE EASTERLY ALONG THE NORTH BOUNDARY OF THE SOUTH 7 OF THE SOUTH HALF OF THE SOUTHWEST QUARTER OF THE NORTHWEST QUARTER OF SAID SECTION 4, 70 FEET (MEASURED AT RIGHT ANGLES); THENCE SOUTHERLY TO A POINT ON WHICH IS 70 FEET EAST OF THE WEST BOUNDARY AND 818.58 FEET SOUTH OF THE NORTH BOUNDARY OF THE SOUTHEAST QUARTER OF SAID SECTION 4; THENCE SOUTHERLY TO A POINT WHICH IS 88 FEET EAST OF THE WEST BOUNDARY AND 581.13 FEET SOUTH OF THE NORTH BOUNDARY OF THE SOUTHWEST QUARTER OF SAID SECTION 4, TO A POINT ON THE CENTERLINE OF FANCHER CREEK; THENCE WESTERLY ALONG THE CENTERLINE OF FANCHER CREEK TO THE WEST BOUNDARY OF SAID SECTION 4; THENCE NORTHERLY ALONG THE WEST BOUNDARY OF SAID SECTION 4 TO THE WEST QUARTER CORNER OF SAID SECTION 4.

①	GROSS=48.96 AC	
②	FANCHER CREEK 2.24 AC	
③	RIGHT OF WAY 0.042 AC	
④	RIGHT OF WAY 1.31 AC	
⑤	TULARE ROW 3.16 AC	
	NET=42.208 AC	

LINE TABLE		
LINE	LENGTH	BEARING
L1	128.41'	S87°31'54"E
L2	92.74'	N83°39'36"E
L3	61.07'	N70°42'51"E
L4	66.31'	N73°33'36"E
L5	109.84'	N72°10'26"E
L6	212.86'	N58°06'58"E
L7	193.99'	N70°05'46"E
L8	61.55'	N86°04'52"E
L9	56.72'	N55°23'16"E
L10	98.18'	N52°20'46"E
L11	75.87'	N33°34'32"E
L12	155.49'	N02°16'50"W
L13	42.73'	N05°50'18"W
L14	35.63'	N10°15'58"W

SCALE: 1" = 200'
0 100 200 400

PREPARED BY:
YAMABE & HORN ENGINEERING, Inc.
3300 EAST SHAW AVENUE, SUITE 174
FRESNO, CA 93710
PH. 559-244-3123 FAX 559-244-3120

Letter 2: Fresno Yosemite International Airport

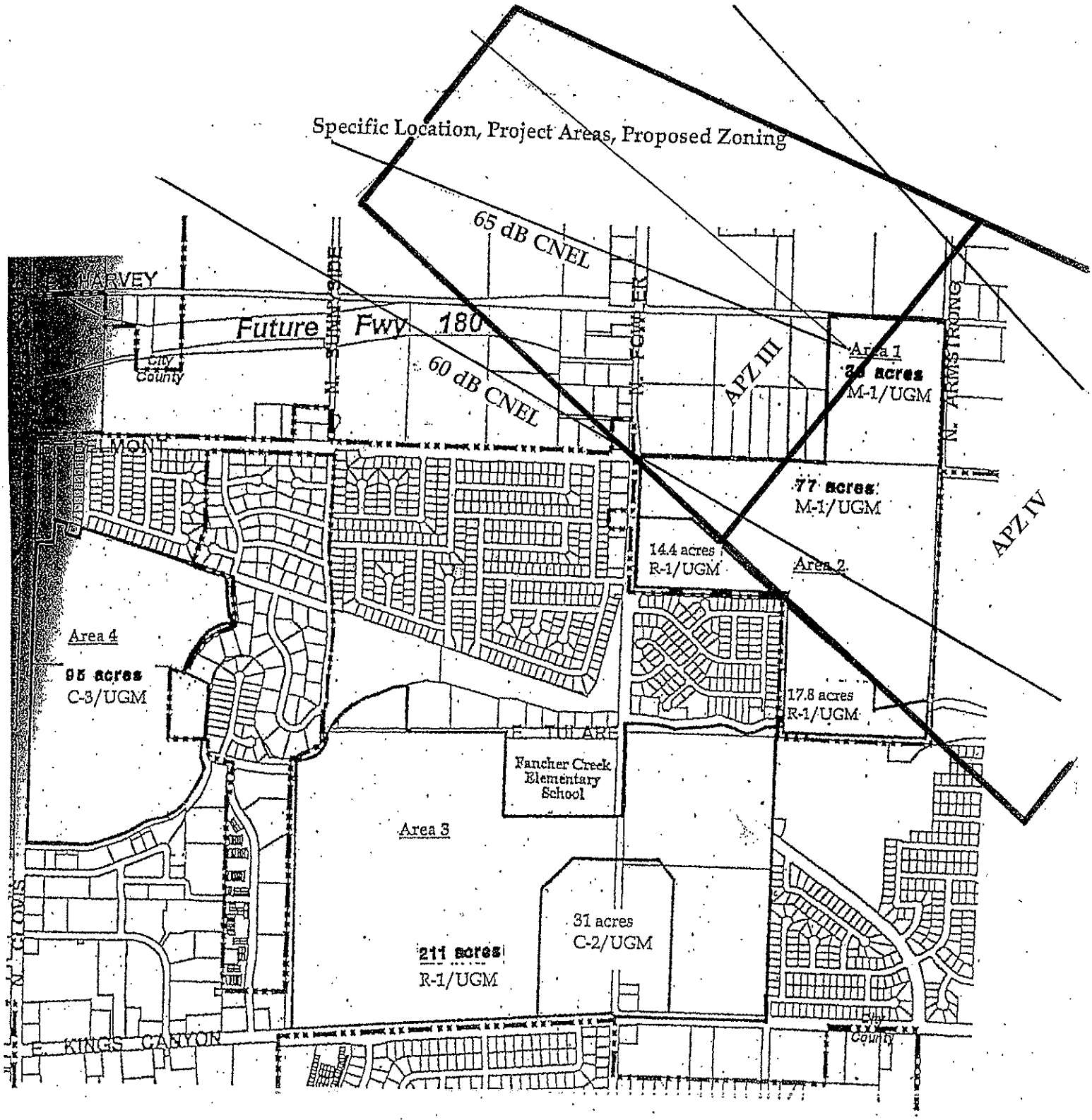
1. Information in the Draft EIR was taken from the response to the Notice of Preparation by FYI (see Appendix A of the DEIR). The DEIR comment letter appears identical to the NOP response letter. Airport compatibility is discussed on pages 2.2.14-15 of the DEIR and is based on criteria within the *California Airport Land Use Planning Handbook as required by CEQA*. A more detailed map showing the Fresno Yosemite International Airport Area, the project, and regulatory areas is shown on the following page.

   Within those areas of the project within California Safety Zone 6: Traffic Pattern Zone (portions of project areas 1, 2, and 4), there is no residential density limit. In that the project is an urban use, there is also no limit to non-residential density.

2. Project areas 1 and 2 are within the Airport Review area, defined as all land within the 60 or greater CNEL contours and/or within Approach Protection Zones I through IV as shown on the Fresno International Airport Environs Plan Map. Project areas 1 and 2 lie within Approach Protection Zone (APZ) III and IV. From the figure, portions of the M-1 zoned portion of areas 1 and 2 are located in APZ III. Within APZ III, there are no density limitations on non-residential uses. The remainder of the M-1 zoned area is within APZ IV within which there are no density limitations for non-residential uses. All of the R-1 zoned is located outside APZs III and IV. The R-1 zoned residential areas are also outside the 60 CNEL contour.

3. The provisions listed are all contained on page 2.1.14 of the DEIR and are consistent with regulatory requirements in the airport environs area.

Fresno Yosemite International Airport - Fresno Air Terminal
Noise and Safety Compatibility Areas



Letter 2

FRESNO YOSEMITE
International Airport

DATE: December 7, 20004

TO: Mike Sanchez, Associate Planner

FROM: Daniel Yrigollen, Airport Projects Supervisor

BY: Nathan Sanchez, Engineering Technician

SUBJECT: Fancher Creek Project, EIR No. 10133

The 476-acre subject property is located in the area of Fowler Ave. and Kings Canyon Ave. This project lies within the Environs of the Fresno Yosemite International Airport. The current Fresno Yosemite International Airport – Airport Environs Plan is being updated to be consistent with the California Airport Land Use Planning Handbook (CALUPH). As such, the criteria identified by the CALUPH are being used in the evaluation of the subject project.

1. Project areas 1, 2, & 4 lie within the California Safety Zone 6: Traffic Pattern Zone as defined in the California Airport Land Use Planning Handbook.

- As stated in Table 9B on page 9-45
  - There is a low likelihood of accidental occurrence at most airports: risk concerns primarily with uses for which potential consequences are severe.
  - Zone includes all other portions of regular traffic patterns and pattern entry routes.
  - Allows residential uses.
  - Allows most nonresidential uses.
  - Prohibit outdoor stadiums and similar uses with very high intensities.
  - Avoid children's schools, large day care centers, hospitals, nursing homes.

- As stated in Table 9C on page 9-47
  - Residential density is no limit.
  - Non-residential density in rural/suburban land use is 150 people per acre.
  - Non-Residential density in urban use is no limit.

2. Areas 1 & 2 lie within the Airport Review area as defined in the Fresno Yosemite International Airport - Airport & Environs Plan

- The Airport Review area is defined as follows: all land within the 60 or greater CNEL contours and/or within Approach Protection Zones I through IV as shown on the Fresno Yosemite International Airport Environs Plan Map. The Fresno Yosemite International Airport Environs Plan Map is attached as Figure E-1.

- If a parcel of land is partially within the Airport Review Area, the entire parcel is considered to be subject to the land use consistency requirements of this plan.

Areas 1 & 2 lie within Approach Protection Zone (APZ) III & IV and are subject to the following land use safety compatibility criteria:

- APZ III - Density no greater than 2 dwelling units per acre.
- APZ IV – Density no greater than 5 dwelling units per acre.
- APZ III & IV – No Schools, Hospitals, Nursing Homes, Large residential support facilities,

Large child day care centers, Adult day care facilities, Churches, Auditoriums, Concert Halls, Amphitheaters or other uses that would concentrate a large number of people.

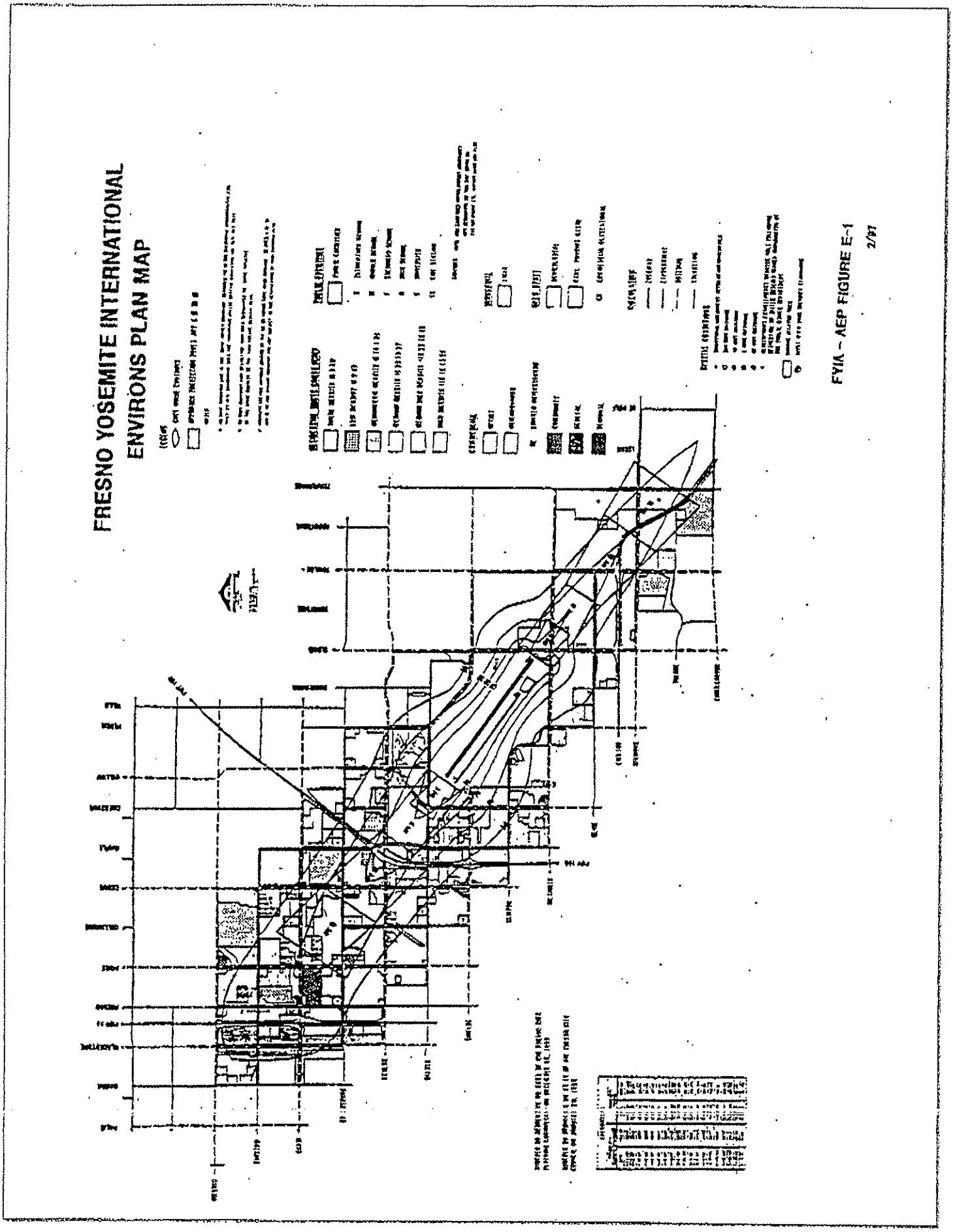
- That it is understood by the owners and owners' successors in interest that the real property in question lies close to the Fresno Yosemite International Airport and that the operation of the Airport and the landing and take-off of aircraft may generate moderate interference with outdoor activities and with indoor activities when windows are open.

3.

- Recommend residential construction include features which provide sufficient noise attenuation (e.g. installation of air-conditioning so that windows can be kept closed).

- **Buyers Notification**
  Buyer notification shall be accomplished by the use of real estate disclosure statements for property within the Airport Review Area. The disclosure statement shall notify the buyers of property located within the Airport Review Area of the proximity of the property to the Fresno Yosemite International Airport and that aircraft overflights may affect the habitability and quiet enjoyment of the property.

The environmental review for this project should address the potential for hazardous wildlife attractants on or near airports. Refer to FAA Advisory Circular 150/5200-33A for guidance.


FRESNO YOSEMITE INTERNATIONAL
ENVIRONS PLAN MAP
FYIA – AEP FIGURE E-1
2/97

Letter 3: Fresno County Department of Public Works and Planning

1. The addition of other areas to the proposed annexation will be determined through negotiations between LAFCo, Fresno County, and City staff at the time of annexation application and in conformance with LAFCo standards and the MOU on annexations between the City and County.

2. It is anticipated that the Fancher Creek project will be reviewed by the Airport Land Use Commission (ALUC) for a determination of consistency with the applicable Fresno Yosemite International Airport plan (please see response to No. 3, below). Such a request for determination will be in conformance with Government Code Section 2670 et. seq.

3. Please see response to Letter 2: Fresno Yosemite International Airport. Although the City of Fresno has determined consistency with the *Fresno Yosemite International Airport Environs Plan* using criteria from the California Airport Land Use Planning Handbook (CALUPH), Fresno County staff for the ALUC have determined that the applicable plan for determining consistency is the *Fresno Air Terminal Land Use Policy Plan* adopted by the ALUC on June 23, 1986 and revised on May 21, 1990. City Planning and Development Department staff has concurred that the *Fresno Yosemite International Airport Environs Plan* revised in 1992 and 1997 has not been formally adopted by the ALUC. As a result, the following analysis compares criteria of the *Fresno Air Terminal Land Use Policy Plan* as adopted by the ALUC with the proposed project.

   The *Fresno Air Terminal Land Use Policy Plan* contains the Airport Safety Zones and Review Areas attached in the following figure with the project location identified. The 60 to 65 CNEL contours and safety zones are identical to that contained in the *Fresno Yosemite International Airport Environs Plan* and discussed previously. The primary difference between the *Fresno Air Terminal Land Use Policy Plan* and the *Fresno Yosemite International Airport Environs Plan* are the noise and safety compatibility criteria as shown in Tables 1, 2, and 3 of the *Fresno Air Terminal Land Use Policy Plan* and the Land Use Compatibility Policies (attached).

   In order to ensure future compatibility, the following mitigation measure has been added:

   > Prior to approval of specific land use entitlements in the FYI airport noise contours or within any FAA FAR Part 77 area, projects shall be reviewed for their conformance with standards in the applicable Airport Land Use Commission plan, FAA FAR Part 77, as well as standards contained in the Caltrans California Airport Land Use Planning Handbook.

4. **Noise Compatibility.** From Table 1, all residential areas in the Fancher Creek project remain outside (are less than) the 60 CNEL contour. Table 1 does not include criteria for any land uses, including residential, for noise contour areas less than 60 CNEL. The Land Use Compatibility Policies state," The maximum noise exposure which shall be considered normally acceptable for residential areas is 60 CNEL. The residential area criterion establishes the baseline from which noise compatibility for other land uses shall be evaluated."

The M-1 zoned business park area is 137acres in size. A parcel map is proposed for the area creating lots of 1.2 to 2.7 acres for build-to-suit or purchase for construction of business offices and light industrial uses (see Figure 1-4 of the Draft EIR). An estimated 66 acres, or 48.1%, are outside the 60 CNEL contour and not subject to noise compatibility criteria. The majority of the business park area, about 70.5 acres, or 51%, is within the 60-65 CNEL contour. A very small triangular area of the business park just south of E. Harvey Avenue is within the 65-70 CNEL contour (about 0.5 acres, or 0.4%).

Table 1 stipulates that, within the 60-65 CNEL contour, offices (as might occur within a business park) are marginally acceptable, and that such uses would be, "acceptable only by ALUC determination." The criteria further state that, "The Commission may determine the land use to be acceptable under conditions where outdoor activities are minimal and normal construction features provide sufficient noise attenuation (e.g., installation of air conditioning so that windows can be kept closed)." These construction practices would be considered standard practice for any new office construction in the San Joaquin Valley. Additional noise reduction requirements can be demonstrated in the design of office structures. Within the 65-70 CNEL contour, offices are normally unacceptable, although "noise intrusion upon indoor activities can be mitigated by requiring special noise insulation construction." Because this contour effects only a portion of one lot within the proposed parcel map, office uses can be prohibited on this lot or noise reduction requirements can be demonstrated in the design of the structure.

For "service commercial, wholesale trade, warehousing, and light industrial", Table 1 shows that such uses are normally acceptable within the 60-65 CNEL contour, and that, "Noise is a factor to be considered in that slight interference with outdoor activities may occur. Conventional construction will eliminate most noise intrusions upon indoor activities." Within the 65-70 CNEL contour, service commercial, wholesale trade, warehousing, and light industrial uses are marginally acceptable, and "acceptable only by ALUC determination." The criteria further state that, "The Commission may determine the land use to be acceptable under conditions where outdoor activities are minimal and normal construction features provide sufficient noise attenuation (e.g., installation of air conditioning so that windows can be kept

closed)." Because this contour effects only a portion of one lot within the proposed parcel map, noise reduction requirements can be demonstrated in the design of the structure.

Table 2 contains criteria for interior noise level reduction. As no residential areas are located within the 60-65 CNEL contour, no special studies are required. Commercial areas within the 60-65 CNEL contour and manufacturing uses within the 65-70 CNEL contour require acoustical studies to determine if insulation should be added to sensitive occupancy uses. Manufacturing uses within the 60-65 CNEL contour are considered normally acceptable and do not require special studies.

In order to ensure future compatibility, the following mitigation measure has been added:

> Prior to approval of specific land use entitlements in the FYI airport noise contours or within any FAA FAR Part 77 area, projects shall be reviewed for their conformance with standards in the applicable Airport Land Use Commission plan as well as standards contained in the Caltrans California Airport Land Use Planning Handbook.

5. **Safety Compatibility.** Table 3 lists safety compatibility criteria. From Figure 1, the project is affected by airport safety zones III and IV. Proposed residential areas are outside both safety zones and are therefore not subject to the safety criteria. Approximately 2.0 acres of the 137-acre M-1 business park is also outside safety zones III and IV. Approximately 118.6 acres, or 86.6% of the M-1 zoned area, are within safety zone III. Approximately 16.4 acres, or 12%, are within safety zone IV.

   For "other uses in structures," only schools, hospitals, nursing homes, or similar uses" are prohibited in safety zones III and IV. For "other uses not in structures," there are no other restrictions in safety zones III and IV and the use is acceptable with little or no risk.

6. Comments on noise and safety concerns are noted. As previously noted, project development would be dependent on review on a case-by-case basis, including consideration of noise attenuation construction. The following discussion summarizes the noise and safety risks associated with the project and compares compatibility criteria of the *Fresno Air Terminal Land Use Policy Plan* as adopted by the ALUC with the *Fresno Yosemite International Airport Environs Plan* and criteria from the California Airport Land Use Planning Handbook (CALUPH).

Compatibility Area/Criteria

Safety Zone 6: Traffic Pattern Zone

FAT Policy Plan: No restrictions.

FYI Environs Plan: Allows residential uses (no density limit); allows most non-residential uses (150 people/acre for rural/suburban land use, no limit in urban use), prohibits outdoor stadiums and similar uses with very high intensities; avoid schools, large day care centers, hospitals, nursing homes.

60 CNEL or Greater

Residential:

No residential units in 60 CNEL or greater contour – no restrictions in either plan.

Non-residential:

FAT Policy Plan:

60-65 CNEL: Offices marginally acceptable "only by ALUC determination" based on standard construction practices. Light industrial is normally acceptable.

65-70 CNEL contour, offices normally unacceptable, although "noise intrusion upon indoor activities can be mitigated by requiring special noise insulation construction." Light industrial uses marginally acceptable "only by ALUC determination" based on standard construction practices.

FYI Environs Plan: No restrictions

Safety Criteria

No residential units in safety zones III and IV– no restrictions in either plan.

FAT Policy Plan (safety zones III and IV):

For "other uses in structures," only schools, hospitals, nursing homes, or similar uses" are prohibited. For "other uses not in structures," there are no other restrictions and the use is acceptable with little or no risk.

FYI Environs Plan (Airport Protection Zones III and IV):

No schools, hospitals, nursing homes, large residential support facilities, large child day care facilities, churches, auditoriums, concert halls, amphitheaters or other uses and would concentrate a large number of people

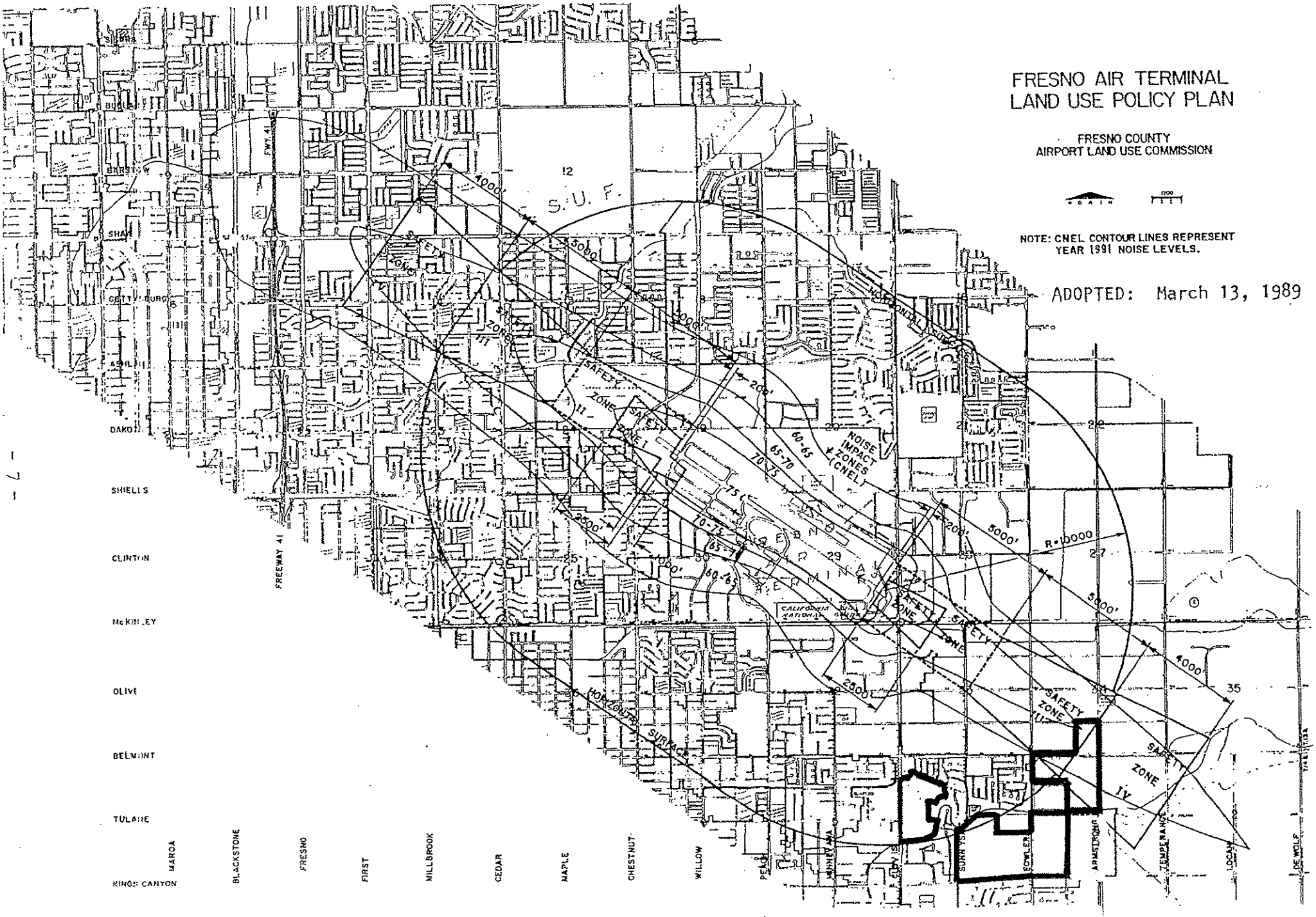
In summary, neither plan would place restrictions on planned residential development within Fancher Creek. While the FYI Environs Plan would place no restrictions on the planned business park area, the FAT Policy Plan would require additional noise reduction requirements be demonstrated in the design of office structures and for light industrial uses in the small area of the project within the 60-65 CNEL contour.

7. The *Fancher Creek Traffic Study, September 2004*, and the Draft EIR analyzed Fresno County segments and intersections in the vicinity of the project and provided trip trace information for all segments and intersections that the County initially identified as areas of concern.

8. The Belmont Avenue segment from Temperance to Locan is located within the City's Southeast Growth Area and was added to the Fresno Sphere of Influence by LAFCo on January 12, 2005. The City will soon begin a community plan process to provide land uses, circulation, and public facilities for a future urban community. As such, this segment of Belmont Avenue was analyzed using City of Fresno level of service standards. It is also noted that, per Fresno County level of service policy, the County "strives to meet LOS "D" on urban roadways and LOS "C" on all other roadways". As the City of Fresno continues development in the southeast growth area within the sphere, the area will become more urbanized and the LOS "D" policy would be appropriate.

9. The project is consistent with the City of Fresno General Plan and therefore the 2025 without Project would be the same as the 2025 with Project condition. Both a 2025 with Project and a 2025 with Project with mitigation scenarios were prepared and are included in The *Fancher Creek Traffic Study, September 2004*, and the Draft EIR.

10. Please see response to Letter 11: City of Fresno Public Works Department. The City of Fresno, as lead agency, will identify project mitigation measures for all modes of travel including but not necessarily limited to school pedestrians, transit and bike travel, as conditions of approval of tentative tract maps and site plans.


FRESNO AIR TERMINAL
LAND USE POLICY PLAN
FRESNO COUNTY
AIRPORT LAND USE COMMISSION
NOTE: CNEL CONTOUR LINES REPRESENT
YEAR 1991 NOISE LEVELS.
ADOPTED: March 13, 1989
S.U.F.
NOISE IMPACT ZONES (CNEL)
SAFETY ZONE I
SAFETY ZONE II
SAFETY ZONE III
SAFETY ZONE IV
HORIZONTAL SURFACE
CALIFORNIA NATIONAL GUARD
R=10000
4000'
5000'
2500'
1000'
200'
60-65
65-70
70-75
75
FWY 41
FREEWAY 41
BARSTOW
SHAW
GETTYSBURG
ASHLAN
DAKOTA
SHIELDS
CLINTON
McKINLEY
OLIVE
BELMONT
TULARE
KINGS CANYON
MAROA
BLACKSTONE
FRESNO
FIRST
MILLBROOK
CEDAR
MAPLE
CHESTNUT
WILLOW
PEACH
SUNNYSIDE
FOWLER
ARMSTRONG
TEMPERANCE
LOCAN
DE WOLF

LAND USE COMPATIBILITY POLICIES

A. Noise

1. Airport/land use noise compatibility shall be evaluated in terms of the Community Noise Equivalent level (CNEL), as defined in Title 21 Subchapter 6 of the California Administrative Code (noise standards).

2. The maximum noise exposure which shall be considered normally acceptable for residential areas is 60 CNEL. The residential area criterion establishes the baseline from which noise compatibility for other land uses shall be evaluated.

3. The relative acceptability or unacceptability of particular land uses with respect to the noise levels to which they would be exposed is indicated in the "Airport/Land Use Noise Compatibility Criteria" matrix, Table 1. These criteria shall be the principal determinants of whether a proposed land use is compatible with the noise impact from the airport. Special circumstances affecting the specific proposal's noise sensitivity (e.g., the extent or lack of outdoor activity) shall also be taken into account.

4. As determined by the Commission, a condition for approval of a proposed land use which is shown on Table 1 to be "marginal" or "normally unacceptable" for a given noise environment shall be that the building intended for habitation or occupation will provide a satisfactory degree of noise attenuation. Table 2 sets forth the minimum noise level attenuation required. If the structure can reduce the noise exposure by the indicated amount, the use may be acceptable.

   An acoustical analysis shall be required for proposed projects involving land uses which are "marginal" within the 60 CNEL contour of the airport. The acoustical analysis shall be completed in a manner consistent with the requirements of Subchapter 1 of Chapter 1 of Title 25 ("California Noise Insulation Standards"). In quantifying airport/aircraft noise exposure at the project site, the acoustical analysis shall include consideration of engine run-up noise where applicable. A single report may suffice for all similar proposals within this noise impact area.

5. The interior CNEL attributable to exterior sources shall not exceed 45 CNEL, with windows and doors closed, in any habitable room of a residential dwelling.

Table 1

AIRPORT/LAND USE NOISE COMPATIBILITY CRITERIA

CNEL OR LDN, DBA 1/ LAND USE CATEGORY	60-65	65-70	70-75
Residential			
single-family detached and duplexes	o	--	--
multi-family and transient lodging	o	--	--
mobile homes	-	--	--
Public			
schools, libraries, hospitals, nursing homes	-	-	--
churches, auditoriums, concert halls	o	-	--
transportation, parking, cemetaries	++	+	o
Commercial and Industrial			
offices, retail trade	o	o	-
service commercial, wholesale trade, warehousing, light industrial	+	o	o
general manufacturing, utilities, extractive industry	++	+	+
Agricultural and Recreational			
cropland	++	++	+
livestock breeding	o	o	-
parks, playgrounds, zoos	+	o	-
golf courses, riding stables, water recreation	+	o	o
outdoor spectator sports	+	o	-
amphitheaters	-	--	--

1/ See Policy Plan Map for contours.

LAND USE ACCEPTABILITY	INTERPRETATION/CONDITIONS
++ Clearly Acceptable	The activities associated with the specified land use can be carried out with essentially no interference from the noise exposure.
+ Normally Acceptable	Noise is a factor to be considered in that slight interference with outdoor activities may occur. Conventional construction methods will eliminate most noise intrusions upon indoor activities.

o Marginal (acceptable only by ALUC determination)	The indicated noise exposure will cause moderate interference with outdoor activities and with indoor activities when windows are open. Uses that fall within this category must be reviewed on a case by case basis by the Commission. The Commission may determine the land use to be acceptable under conditions where outdoor activities are minimal and normal construction features provide sufficient noise attenuation (e.g., installation of air conditioning so that windows can be kept closed). Under other circumstances, the land use should be discouraged. New construction or development should be undertaken only after a detailed analysis of noise reduction requirements is made and needed noise insulation features included in the design.
- Normally Unacceptable	Noise will create substantial interference with both outdoor and indoor activities. Noise intrusion upon indoor activities can be mitigated by requiring special noise insulation construction. Land uses which have conventionally constructed structures and/or involve outdoor activities which would be disrupted by noise should generally be avoided.
-- Clearly Unacceptable	Unacceptable noise intrusion upon land use activities will occur. Adequate structural noise insulation is not practical under most circumstances. The indicated land use should be avoided unless strong overriding factors prevail and it should be prohibited if outdoor activities are involved.

Table 2

INTERIOR
NOISE LEVEL REDUCTION
(dBA)

Generalized Land Use	CNEL RANGE (annual average) 60–65	65–70	70–75
Residential	AS	--	--
Transient Lodging	AS	--	--
Schools, Hospitals & Nursing Homes	AS	25[1]dBA	--
Commercial	AS	AS	25dBA
Manufacturing[2]	+	AS	25dBA

Legend

+ Uses normally acceptable.

-- Uses should not be permitted.

1 Acoustical studies may indicate a need for additional insulation in noise sensitive living areas, such as sleeping quarters and areas of the house used at night for relaxing and conversing.

2 Noise level reductions are for those portions of the buildings where the public is received, office areas, and noise sensitive areas where normal noise levels are low.

AS Acoustical studies shall be performed to determine if insulation should be added to sensitive occupancy areas.

Table 3

AIRPORT/LAND USE SAFETY COMPATIBILITY CRITERIA

LAND USE CHARACTERISTIC	SAFETY ZONES 1/ (Safety Zn I) 2/	(Safety Zn II) 3/	(Safety Zn III) 4/	(Safety Zn IV) 5/
Residential Uses	-	(A)	(B)	(C)
Other Uses in Structures	-	(D,E)	(E)	(E)
Other Uses Not in Structures	(D,F)	(D)	+	+
Special Characteristics (in or outside of structures)				
Distracting Lights or Glare	-	-	-	-
Sources of Smoke or Electronic Interference	-	-	-	-
Attractor of Birds	-	-	-	-

NOTES

1/ See Policy Plan Map of Zones

2/ Safety Zone I (clear zone) is that area at ground level that begins at the end of each Primary surface and terminates directly below each approach surface slope.

3/ The approach protection area (Safety Zone II) is 2500 feet wide by 5000 feet long to the northwest and southeast of the thresholds of the runways.

4/ Safety Zone III extends 5000 feet beyond Safety Zone II.

5/ Safety Zone IV extends 4000 feet beyond the horizontal surface.

INTERPRETATION

\+ ACCEPTABLE: Use is acceptable with little or no risks.

( ) MARGINAL: Risks exist for land use proposals that fall within this category and must be reviewed on a case-by-case basis by the Commission. The Commission may determine the use to be acceptable under conditions cited below.

A Density no greater than 1 dwelling unit per 3 acres.
B Density no greater than 2 dwelling units per acre.
C Density no greater than 5 dwelling units per acre.
D No uses attracting more than 10 persons per acre.
E No schools, hospitals, nursing homes, or similar uses.
F Characteristic cannot reasonably be avoided or located outside the indicated safety zone.

\- UNACCEPTABLE: Use is unacceptable due to associated high risks.

RECEIVED
NOV 30 2004
Planning Division
Development Department

County of Fresno

Department of Public Works and Planning
Cecil Leonardo
Interim Director

November 29, 2004

VIA FACSIMILE (559) 227-1463

Bruce O'Neal, Consultant Planner
City of Fresno Planning and Development Department
2600 Fresno Street, Third Floor
Fresno, CA 93721-3604

Letter 3

Dear Mr. O'Neal:

SUBJECT: Notice of Availability/Completion - DEIR No. 10133
Fancher Creek Development Project

The Department of Public Works and Planning, Development Services Division, has completed review of the Notice of Draft Environmental Impact Report Availability/Completion for the Fancher Creek Development Project. We appreciate the opportunity to comment on the Project. In addition to the areas already outlined in our response to the Notice of Preparation, dated March 12, 2004, we offer the following comments:

Planning

Regarding annexation and the logical extension of City limits, we would encourage that the single unincorporated parcel on the west side of N. Fowler be included in the planned annexation to avoid the creation of an unincorporated island. The County would also encourage annexation of the unincorporated island along Argyle and west of Sunnyside or parts thereof. 1

Land Use

An Airport Land Use Commission (ALUC) Determination of Consistency with the adopted Airport Land Use Policy Plan is required whenever a project meets the standards for "projects" as that term is defined at Government Code Section 21670, et. seq. (with particular attention to 21676). To ensure that the comments of the ALUC are considered and incorporated in the final project as approved, a Request for Determination is made prior to approval of the draft environmental document by your Planning Commission and City Council. 2.

Since the subject proposal involves adoption or change of an existing land use plan, zoning code or building regulation within the bounds of an approved airport land use policy plan, a routing of a Request for Determination to the ALUC would seem to be warranted. However,

such a determination must be made by your agency, and based upon the requirements of SS21670 et seq..

3. Density and land use are limited in specific areas to avoid conflicts between land use and aviation and to ensure safe aviation. The environmental documents reviewed raise questions regarding uses in Safety Zones and Noise Zones that will require further description to allow full ALUC review.

4. Noise: Portions of the project area (Areas 1 and 2) are within the 60-65 CNEL Zone of the Fresno Air Terminal Land Use Policy Plan. Proposed office and residential uses are listed as "Marginal" within this zone and subject to restriction, including review "on a case-by-case basis" by the ALUC. See Fresno Air Terminal Land Use Policy Plan Table I, Airport/Land Use Noise Compatibility Criteria, for more information. Other significant limitations are imposed on development in this area and may apply.

5. Safety: Portions of the project area (Areas 1, 2, 3, and 4) are located within the Horizontal, and Safety Zones of the Fresno Air Terminal Land Use Policy Plan. Significant Land Use limitations are imposed in these areas. See Fresno Air Terminal Land Use Policy Plan Table 3, Airport/Land Use Safety Compatibility Criteria, for more information. Other significant limitations are imposed on development in this area.

6. Scope of Review: The Fresno Air Terminal Land Use Policy Plan includes guidance as to the "Scope of ALUC Review" which guides Commission actions in reviewing projects. The following language taken from this section is instructive in guiding Commission action: "In cases where the noise compatibility criteria indicate the project to be "marginal" and the safety compatibility criteria indicate a risk exists, the type of project should be discouraged." Contact David Laumer at 262-4196 if you require further information regarding ALUC issues.

Traffic/Transportation

7. The DEIR does not adequately address impacts from traffic generated from the Project to intersections and road segments within County of Fresno jurisdiction.

8. According to the Traffic Impact Study (TIS) Table 19 and Table 29 the Level of Service (LOS) with mitigated conditions for the road segment of Belmont Avenue from Temperance Avenue to Locan Avenue is LOS D. The level of service threshold for the County of Fresno is LOS C. This segment needs to be reevaluated and new mitigation provided for our review.

9. Fresno County requires the TIS to include a 2025 without Project, 2025 with Project and 2025 with Project with mitigation conditions. Without seeing an analysis for the future condition without the Project and comparing it to the future condition with the Project it is difficult to determine if the Project triggered certain conditions on its own and if it is 100% responsible for mitigation.

10. The Traffic Impact Study must identify triggered improvement and pro-rata share for participants of cumulatively warranted improvements at 2025. All modes of travel should be addressed including, but not limited to, school pedestrians, transit and bike travel. The Fresno County Traffic Operations Section requests representation at a meeting to discuss the Traffic Study.

We appreciate the opportunity to comment on the project. If you have any questions, please telephone me at (559) 262-4334.

Sincerely,

Rick Thaxton

Rick Thaxton, Planning and Resource Analyst
Development Services Division

RT
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c: Bernard Jimenez, Development Services
Robert Thompson, Operation & Maintenance
Janet Dailey, Design

Letter 4: California Department of Toxic Substances Control

Pesticides were used on the site in association with past agricultural use and some limited pesticide use occurs on the farming that continues on portions of the site. Developing lands in the Fresno/Clovis area were primarily in agriculture and the historic application of pesticides is considered typical of urbanizing areas. No significant impacts are anticipated at the proposed site as a result of past pesticide use, as such impacts have not been documented or considered significant elsewhere in the metropolitan area.

Department of Toxic Substances Control

Terry Tamminen
Agency Secretary
Cal/EPA

8800 Cal Center Drive
Sacramento, California 95826-3200

Arnold Schwarzenegger
Governor

October 28, 2004

RECEIVED
NOV 0 5 2004
Planning Division
Development

Letter 4

Mr. Bruce O'Neal
City of Fresno
Planning and Development Department
2600 Fresno Street, Third Floor
Fresno, California 93721-3604

DRAFT ENVIRONMENTAL IMPACT REPORT FOR FANCHER CREEK DEVELOPMENT PROJECT (SCH #2004021071)

Dear Mr. O'Neal:

The Department of Toxic Substances Control (DTSC) has reviewed the above document that proposes rezoning agricultural property to residential and commercial and building residential and commercial properties on the land. DTSC recommends that additional research be conducted to determine whether pesticides were used on the proposed development site. Although DTSC does not regulate legally applied pesticides, if pesticides have historically been used on the property, we strongly recommend that these areas be tested for environmentally persistent pesticides such as DDT and metals prior to development. The results of any testing should be evaluated to determine if concentrations present in soils will be protective of residents and workers.

Please contact me at email *tmiles@dtsc.ca.gov* or by telephone at (916) 255-3710 if you have any questions.

Sincerely,

Tim Miles

Tim Miles
Hazardous Substances Scientist

cc: See next page.

cc: State Clearinghouse
Office of Planning and Research
1400 10th Street, Room 121
Sacramento, California 95814-0613

Planning & Environmental Analysis Section (PEAS)
CEQA Tracking Center
1001 I Street, 22nd Floor
P.O. Box 806
Sacramento, California 95812-0806

Letter 5: California Regional Water Quality Control Board

1. The requirement for NPDES permits is discussed on page 2.7.1 and 2.7.2 of the DEIR. Individual developers will be responsible for compliance with the NPDES permit process depending upon the specific use proposed.

2. See above response.

3. No dewatering of the site is anticipated. Should dewatering be required, the developer and the City of Fresno will comply with NPDES General Order No. 5-00-175 for Dewatering and Other Low Threat Discharges to Surface Waters or other applicable requirements.

4. There are no known navigable waters or wetlands on the project site. It is acknowledged that the discharge of dredged or fill materials into navigable waters or wetlands will require a permit pursuant to Section 404 of the Clean Water Act as well as a Section 401 Water Quality Certification.

Terry Tamminen
Secretary for Environmental Protection

California Regional Water Quality Control Board
Central Valley Region

Robert Schneider, Chair

Fresno Branch Office
Internet Address: http://www.swrcb.ca.gov/rwqcb5
1685 E Street, Fresno, California 93706
Phone (559) 445-5116 • FAX (559) 445-5910

Arnold Schwarzenegger
Governor

Letter 5

8 November 2004

Bruce O'Neal, Consultant Planner
City of Fresno Planning and Development Department
2600 Fresno Street, Third Floor
Fresno, CA 93721

DRAFT ENVIRONMENTAL IMPACT REPORT NO. 10133, FANCHER CREEK DEVELOPMENT PROJECT, SCH# 2004021071, FRESNO COUNTY

Your request for comments on Draft Environmental Impact Report No. 10133 for the Fancher Creek Development Project was received on 13 October 2004. The proposed project is to develop 476 acres as mixed-use commercial, residential, and business park development. The project site is generally bounded by North Clovis Avenue on the west, East Kings Canyon Road on the south, North Armstrong Avenue on the east, and East Belmont Avenue on the north.

.1 Depending on the Standard Industrial Classification (SIC) code of each individual component of the final project, compliance with the National Pollutant Discharge Elimination System (NPDES) General Permit No. CAS000001 for Discharges of Storm Water Associated With Industrial Activities may be required. The SIC codes of activities requiring coverage are listed in the General Permit. In order to obtain coverage under the General Permit, the each proponent must submit a Notice of Intent (NOI) to comply with the permit, a site map, and an appropriate fee to the State Water Resources Control Board and a Storm Water Pollution Prevention Plan (SWPPP) must be prepared, prior to commencing operations at the facilities.

2 If construction associated with any individual component of the project will disturb one acre or more, compliance with the National Pollutant Discharge Elimination System (NPDES) General Permit No. CAS000002 for Discharges of Storm Water Associated With Construction Activity will be required for potential discharges to surface waters, including ephemeral and intermittent drainages, or municipal storm sewer systems. Before construction begins, the each proponent must submit a NOI to comply with the permit, a site map, and an appropriate fee to the State Water Resources Control Board and a SWPPP must be prepared. The SWPPP must contain at a minimum all items listed in Section A of the General Permit including descriptions of measures taken to prevent or eliminate unauthorized non-storm water discharges, and both temporary (e.g., fiber rolls, silt fences, etc.) and permanent (e.g., vegetated swales, riparian buffers, etc.) best management practices (BMPs) that will be implemented to prevent pollutants from discharging with storm water into waters of the United States. If portions of the project area are to be sold off before the entire project is completed, each proponent must submit to us a Change of Information form identifying the new owners along with a revised site map clearly depicting

those portions that were sold and those that are remaining. Each proponent is also responsible for informing each new owner of their responsibility to submit their own NOI, site map, and appropriate fee to the SWRCB and prepare their own SWPPP.

3 If any individual project component will result in construction dewatering discharges, compliance with the NPDES No. CAG995001, General Order No. 5-00-175 for Dewatering and Other Low Threat Discharges to Surface Waters may be required. Before construction begins, the proponent must submit a NOI to comply with the permit and a filing fee to this Regional Board office. The dewatering General Order is applicable only if the discharge does not contain significant quantities of pollutants, and is less than four months in duration or has an average dry weather flow of less than 0.25 million gallons per day. Otherwise, the proponent must apply for site-specific waste discharge requirements (WDRs). A representative sample of the construction dewatering discharge would need to be collected and analyzed to demonstrate that no constituents of concern are present in quantities that would cause an exceedance of water quality objectives.

4. If any individual project component will result in the discharge of dredged or fill material into navigable waters or wetlands (jurisdictional waters), the proponent must obtain a permit pursuant to Section 404 of the Clean Water Act from the US Army Corps of Engineers and a Section 401 Water Quality Certification from this office. The Regional Board will review the Section 401 certification application to ensure that discharges will not violate water quality standards. If the project will result in the discharge of dredged or fill material into wetlands that are determined by the Corps to be non-jurisdictional, the proponent will not be required to obtain a Section 401 Water Quality Certification, but may be required to submit a report of waste discharge (RWD) if the wetlands are waters of the State. The Regional Board will either prescribe WDRs that will incorporate measures to mitigate potentially significant impacts to water quality and potential public nuisances or issue a waiver of WDRs. For more information regarding Section 404 permitting, contact the Sacramento District of the Corps of Engineers at (916) 557-5250.

Thank you for the opportunity to comment on Draft Environmental Impact Report No. 10133. If you have any questions regarding our comments, please call me at (559) 445-6046.

LISA GYMER
Environmental Scientist

cc: State Clearinghouse, Sacramento

Letter 6: City of Fresno Parks, Recreation & Community Services Department

The changes recommended to the text by the Parks, Recreation & Community Services Department were incorporated into the Draft EIR prior to circulation for comment. No further revisions are necessary.

Letter 6

PARKS & RECREATION

The project area will be served by the City of Fresno for parks and recreation services. The City of Fresno *Parks and Recreation Master Plan* determined that there was a shortage of park space within the plan area. In addition to construction of additional neighborhood, community and regional parks, the Plan calls for the creation of open space within future residential developments. Park sites are constructed through a combination of various funding sources, including State and Federal grants, City revenues, and UGM fees. The UGM fees are designated to construct park sites within the specific geographic boundary of the UGM district.

Additional park space has been developed west and south of the project site in the past five years. The City has developed Sunnyside Park, a 5.0-acre neighborhood park at Peach and Butler Avenues, and ~~Ayer Park,~~ a ~~large~~ 13.29-acre soccer park ~~has been developed~~ on Willow and Lane Avenues east of Chestnut.~~, an~~ Two additional soccer ~~park~~ fields ~~is being~~ have been completed at Mosqueda Community Park at the southeast corner of Maple and Butler. While these do not fully meet the needs of the area, they have improved the ratio of open/park space per capita.

IMPACTS

Standards of Significance

An impact due to project development is considered potentially significant if there is a substantial increase in the demand of public parks and recreation that would potentially impact existing or proposed properties/projects in the vicinity of the site.

Impact

- **Approval of the project will generate the need for additional park space. This is a less-than-significant impact.**

The proposed project is expected to generate a population of approximately 5,000 residents. It will be necessary to provide active and passive recreation opportunities within the immediate vicinity of the project. Active recreational areas (ball diamonds, soccer fields, and basketball courts) at the Fancher Creek Elementary School site and the future elementary school site will also be used by project residents. The project is within a UGM area expected to collect fees for the future development of parks.

The City of Fresno park standard is three acres per 1,000 persons, or about 15 acres of park space for residents within the project. Policies of the 2025 Fresno General Plan will require that a portion of the project will be set aside for open space purposes. The project will also be served by a network of internal paths connected to the regional trail system which will provide walking and bicycling opportunities for residents as well as access to other recreational amenities.

The ~~proposed project~~ Roosevelt Community Plan proposes a neighborhood park site (net 7.5 acres) just south of and adjacent to Fancher Creek Elementary School. The proposed rezoning is ~~compatible with this designation as parks are allowed in the R-1 zone district with a conditional~~ use permit. There also exists the potential for the proposed project to incorporate a smaller neighborhood park (net 5.0 acres) adjacent and contiguous to the Fancher Creek Elementary

School, ~~or~~ and a series of pocket and linear parks.

There is also a proposal for a "Linear Park" designation for Fancher Creek extending on the project site from Armstrong Avenue to Clovis Avenue. Although this linear park is conceptual at this point, there are general concerns that need resolution such as individual property rights, jurisdictional issues, and financial responsibilities. The "linear park" proposes to be a lively and active park which would include a place to hike, run, skate, bike, watch birds, picnic, and sit.

Mitigation

1. Participate with the City and the Clovis Unified School District in securing an agreement that will permit the use of the active recreational areas (athletic ball fields, basketball courts, gymnasium, and other appropriate facilities) at Fancher Creek Elementary and the nearby proposed new elementary school site.

Level of Significance After Mitigation

Implementation of the proposed mitigation measure will reduce project impacts to parks to a less than significant level.

Letter 7: Bakman Water Company

1. Although it is acknowledged that Bakman may have capacity to serve areas outside its service boundary, there is no formal proposal to do so and the City of Fresno would oppose such action. In that both Bakman and the City have established that they can serve the portion of the Fancher Creek project within their service areas, the EIR assumes that service areas will not be expanded by either entity as a result of the project.

2. The Fresno Fire Department has stipulated that Bakman has provided plans to the Fire Department for extension of their infrastructure to provide needed fire flow within that portion of the project served by Bakman (see Letter No. 14).

3. Metered water flow is a best management water conservation practice and as a private water company, Bakman institutes water metering on all customers within its service area. The City of Fresno requires installation of meters on all development within the Fancher Creek project. Water metering of all uses will be a requirement of the renewal of the CVP water contract for the City of Fresno.

4. As noted in the responses to Letter 7, City of Fresno Department of Public Utilities, Bakman will require the recharge of surface water in order to achieve a water balance.

BAKMAN WATER COMPANY

TELEPHONE (559) 255-0324 • P.O. BOX 7965 • 5105 E. BELMONT • FRESNO, CA 93747

Letter 7

November 17, 2004

RECEIVED
NOV 2 2 2004

City of Fresno Planning and Development Dept.
Attn: Bruce O'Neal, Consultant Planner
2600 Fresno St., Third Floor
Fresno, CA 93721-3604

Re: Fancher Creek Project E.I.R. Response Letter for Draft No. 10133

Dear Bruce O'Neal,

Through further cooperation with the Developers on understanding their proposed development sites, approximately 257 acres of the proposed 476 acres of development are within the boundaries of the Bakman Water Company and approximately 219 acres are to be served water by the City of Fresno water department. The boundaries of Bakman Water Company are set by the California Public Utilities Commission (C.P.U.C). However, these boundaries may be expanded to benefit a development project for future growth in this area. 139 acres of the 476 acres of development are not contiguous to our system, however 337 acres are serviceable by Bakman Water Co. Area 4-C3/UGM (95 acres), Area 3-R1/UGM (211 acres) and 31 acres of C-2/UGM, approximately 2/3 of this area are within Bakman Water Company and 1/3 is in the City of Fresno boundaries. We feel it would be in the best interest of the developer and future residents to incorporate all 337 acres within the new expansion loop of the Bakman Water Company. This will alleviate the duplication of services for this area of development and the combined acreage is contiguous to Bakman Water Company boundaries.

1.

Bakman Water Company's system is currently serving approximately 8500 in population with the highest quality of drinking water, service, landscape irrigation and fire flow protection. The Bakman Water Company's C.E.O., Richard Tim Bakman, has invested time and energy into creating a working model with the company's engineers showing how a very reliable system can be expanded to service this area. The model illustrates the addition of 12" C900 lines to service this project, utilizing existing Bakman Water Company's facilities at the area of Tulare and Argyle. It further illustrates the addition of two VFD wells strategically placed within this development and sized according to the needs of this project, additionally outlining its vital interaction with the flows of this areas' distribution system. This will therefore enhance the area being developed to have very effective fire protection when needed, but also keep the distribution system very efficient. Bakman Water Co. has contacted the Fresno City/County Fire Departments to address any concerns they might have in regards to this new development. The VFD (variable frequency drive) type motor on a well is crucial in a time when power and water issues are of great importance. The approximately 80 acres of development addressed above can easily be included into the looped system recommendations with no effect to existing distribution system designs.

2.

3. We would recommend that the C.V.P. (Central Valley Project) requirements for metering be the standard by which water utilities for this project are developed and managed. This will allow for the standardization of the water usage monitoring in this era of vast development and for the consolidation of services, if needed in the future. Bakman Water Company would require water metering for all new construction within this area and has researched the type of meters that will work most reliably with its existing electronic metering plan. The meters will be of the touch/radio read type and AWWA approved. Bakman Water Co. has also been in contract negotiations with Fresno

4. Irrigation District to expand on its existing ground water recharge program. In conclusion, we will have done our part in maximizing and conserving our precious resources.

Thank you,

Steve Pickens
Field Supervisor

Cc: City of Fresno Councilmember District 1 - Tom Boyajian
City of Fresno Councilmember District 2 - Brian Calhoun
City of Fresno Councilmember District 3 - Cynthia Sterling
City of Fresno Councilmember District 4 - Brad Castillo
City of Fresno Councilmember Elect. District 4 - Larry Westerlund
City of Fresno Councilmember District 5 - Mike Dages
City of Fresno Councilmember District 6 - Jerry Duncan
City of Fresno Councilmember District 7 - Henry Perea
Fresno County Board of Supervisor – Bob Waterston
Quadknopf – Ron Wathen
Centex Homes – Allen Bennett

Letter 8: City of Fresno Department of Public Utilities

1. While hydrology and water service are different issues, they have been combined in the DEIR for purposes of a unified discussion of water issues.

2. Please see comments Letters Nos. 6 and 14. Bakman has modeled the development area within the Fancher Creel project and plans for a series of 12" lines to service the project as well as the addition of two wells strategically placed within the development and sized according to the needs of the project. The Fresno Fire Department has stipulated that Bakman has provided plans to the Fire Department for extension of their infrastructure to provide needed fire flow within that portion of the project served by Bakman.

3. Please see response to comment 1, Letter No. 6, Bakman Water Company. In that both Bakman and the City have established that they can serve the portion of the Fancher Creek project within their service areas, the EIR assumes that service areas will not be expanded by either entity as a result of the project.

   The Fancher Creek applicants have held extensive conversations with both the City of Fresno and Bakman Water Company and have cooperated with both entities in planning future water service. Recently, there have been disagreements between the City and Bakman concerning long-term water supplies and service areas. Analysis within the Draft EIR indicates adequate long-term water supplies are available to the project with incorporation of surface water recharge. As recently as 2002, both the City and Bakman indicated their ability and willingness to serve that portion of the Fancher Creek Project within their service areas. Comments received on the Draft EIR from both the City Public Utilities Department and Bakman indicate their continued ability to provide service to the project area.

   CEQA Guidelines Sec. 15151 states that, "disagreement among experts does not make an EIR inadequate, but the EIR should summarize the main points of disagreement among the experts." The EIR has fulfilled this responsibility. Irrespective of any on-going disagreements, the Fancher Creek applicant is relying on both the City and Bakman to provide water supplies in keeping with local, state, and federal requirements governing water providers.

4. It is agreed that Bakman must recharge surface water in order to maintain a water balance. The DIER does not assume the expansion of Bakman.

5. New Bakman wells within the incorporated area will require approval of a CUP by the City of Fresno, including an environmental assessment.

6. The anticipated need for two Bakman two wells in the Fancher Creek portion of its service area is a result of hydrologic modeling by the water company. Depending on the actual design and flow of the developed wells, more wells may be required. The City of Fresno has experienced lower yields in the southeast portion of the City and has been requiring more wells than originally anticipated.

7. That portion of the project within the City of Fresno water service area can provide recharge in existing and future planned FMFCD and City facilities. As noted by the Public Utilities Department, the City anticipates the need for extensive new recharge facilities or treated surface water to balance the water budget in southeast Fresno. The Metropolitan Water Supply Plan includes a surface water treatment facility to be located in southeast Fresno. This facility is a key mitigation measure for water supply and water quality impacts of the proposed Fancher Creek project and future developments in the vicinity. Please see additional responses below on the need for water recharge for the Bakman Water Company.

8. Please see Letter 13, Fresno Irrigation District. According to FID officials, the primary mitigation is to bring the surrounding land up to the level of the high water mark in the canal to ensure that flooding does not occur during high water due to a breach in the canal bank. With such measures in place, no lining or encasement will be required.

9. Please see response to comment No. 7, above.

10. The estimated need for 1,000 acre feet of recharge to achieve a balance within the Bakman Water Company portion of the project is consistent with estimates made by Kenneth Schmidt & Associates, hydrologists for the DEIR. The need to recharge 1,000 acre-feet of surface water annually within the Bakman service area has been added as a mitigation measure.

11. The Bakman Water Company has an existing limited surface water recharge program. The company, however, has been in contract negotiations with the Fresno Irrigation District to recharge surface water in facilities to be developed by FID, Bakman, and FMFCD. As development occurs within the Fresno Irrigation District, surface supplies formerly delivered for irrigation are made available for domestic use. This supply has been a major source of surface water to the City of Fresno and would be the primary source for Bakman.

    As an alternative as suggested by the Public Utilities Department, the City of Fresno could manage the required recharge through its facilities with full cost recovery by Bakman paying operation costs.

12. Several ponding basins within FMFCD in the site vicinity are shown on the 2025 Fresno General Plan, including two basins north of Belmont Avenue and west of Clovis Avenue. Preparation of the Southeast Growth Area plan east of Temperance Avenue will also include locations for water recharge facilities.

13. Comments are acknowledged that extensive new recharge facilities will be required to balance the water budget in southeast Fresno. The Fancher Creek project will participate in these facilities through the payment of development fees and the provision of surface water supplies.

14. The new water treatment plant in northeast Fresno will not directly serve the Fancher Creek project but will reduce pumping in areas north of the project and be an important component of the total water supply in the City of Fresno.

15. The comment is acknowledged and has been added as an additional mitigation measure.

16. The discussion commencing on page 2.9.22 of the DEIR is intended to satisfy the requirements of SB 610 and SB 221 for the project, with the understanding that additional recharge of surface water supplies by the Bakman Water Company should be required.

17. Groundwater contamination in wells is discussed on page 2.9.25 of the DEIR. A mitigation measure is included requiring remediation in compliance with CCR Title 22 requirements.

18. It is agreed that areas of known contamination concentrations should be taken into consideration when siting recharge facilities.

19. The suggested change has been made. Please see Section 3, Changes And Additions To The EIR.

20. Comments on corrections are noted. The corrections do not change the findings or conclusions of the document.

21. The mitigation measures have been added to the project. Please see Section 3, Changes And Additions To The EIR.

City of
FRESNO

Letter 8

DATE: November 29, 2004

TO: MIKE SANCHEZ, Planner III

FROM: MARTIN R. McINTYRE, Director
Department of Public Utilities
MRM

SUBJECT: FANCHER CREEK DEVELOPMENT PROJECT

The Department of Public Utilities provides the following comments to the Draft Environmental Impact Report No. 10133 (DEIR)) for the "Fancher Creek Development Project"

GENERAL COMMENTS

2.8 Public Services

1. Hydrology and water supply facilities are distinctly different issues. For clarity the discussion of impacts to water facilities should be separated from the hydrology issues. One is an environmental resource impact while the other is a facility/service impact. A section should be added for water facilities similar to the Sewer Services impacts section on Page 2.8.8.

2.8.3 Fire Protection

2. It is proposed that a significant portion of the project would be served by the Bakman Water Company (BWC). Reliable fire flows of 2,500 gallons per minute are required for commercially zoned properties. Historic fire flow records indicate deficiencies in available fire flows within the BWC system. The historic deficiency and proposals to mitigate additional fire flow demand should be addressed in greater detail.

WATER

Facilities

3. A November 17, 2004 letter from the BWC commenting on this DEIR suggests expanding the BWC service area, and stating that such and expansion "... will alleviate the duplication of services for the area of development....". In fact such an expansion would cause duplication of service. The City of Fresno already has a 16 inch water main in Fowler Avenue and a 14 inch, water main in Kings Canyon Avenue, more than adequate to serve all of the Fancher Creek project proposed west of Fowler Avenue. The City already serves the Fancher Creek Elementary School located west of Fowler Ave.

To avoid duplication of service, we recommend that the 211 acres proposed as R-1, UGM, located west of Fowler Ave. be served water by the City of Fresno. At a minimum we recommend, that all proposed project development (C-2 UGM in the EIR exhibit on Page 1.3) on the west side of Fowler Avenue be served water by the City of Fresno via the existing 16-inch water main currently installed in the Fowler Ave alignment.

4. The Public Utilities Department is opposed to any expansion of the BWC service area unless and until the water resource management issues (discussed below in Water Supply/Water Budget) are addressed.

Wells

5. Page 2.9.22, first paragraph- It appears that BWC, a private for profit water company, proposes two additional wells to service project water demands. Any such wells must be subject to a City of Fresno C.U.P. and a site specific Environmental Assessement. Any wells should be located and designed to avoid or mitigate impacts to existing public and private wells.

6. Experience throughout the City of Fresno indicates typical peak water demand averages above 10 gallons per minute (without fire flow). The 327 acres of the project within the BWC service area is expected to generate peak demands exceeding 3,000 gallons per minute. Typical wells within the project vicinity produce 800 gallons per minute or less (Page 2.9.9). It is unlikely the new project demand can be satisfied with the two wells proposed by the BWC (Page 2.9.22) without excessive drawdown.

HYDROLOGY

Water Supply/Water Budget

7. The Draft EIR indicates that the additional impacts of the proposed Fancher Creek Project can be mitigated by the recharge or supplemental use of an additional 1,500 acre feet of imported surface water in the project vicinity. The EIR does not appear to adequately identify facilities or programs to address such impacts in the areas proposed to receive BWC water service.

8. We also should note a November 3, 2004 comment letter from the Fresno Irrigation District indicating that this project will be conditioned with a requirement to line the Fancher Creek Canal. Such lining will further reduce historic groundwater recharge in the project vicinity.

9. It does not appear that there are adequate recharge basins in place or planned adequate to balance the water budget for the Fancher Creek project or the surrounding vicinity. The aquifer underlying the project area is currently in a state of overdraft with the water table declining an average of 2.5 feet per year (Draft EIR Page 2.9.6 and Page 10 of Technical Appendices). Existing Flood Control basins in the project vicinity, currently used for recharge, have historically percolated an average of 0.2 feet per day or less. Basins in the vicinity currently

used for recharge by the City of Fresno are necessary to serve existing, not future development. In general, when considering water budget elements it is critical to assess historic, current and future land and water uses, including project specific and surrounding conditions.

10. It has been estimated that approximately 2,000 acre feet of additional imported surface water would be required to correct current groundwater overdraft in the existing BWC service area. The proposed project would require an additional 1,000 acre feet to balance the water budget for the project area currently proposed to receive BWC water service.

11. While the draft EIR (Pages 2.9.22 to 2.9.25) identifies City of Fresno water entitlements, recharge, reclamation water resource management programs, no such programs or water supplies are identified for the BWC, proposed as water provider for two thirds of the project. No similar effort is made to identify the resources or projects BWC would implement to mitigate environmental impacts of their current and proposed groundwater extraction. To our knowledge, the BWC does not currently recharge any surface water in their service area, has no surface water entitlements to recharge in the vicinity and no facilities have been identified accomplish such recharge. It is conceivable that the Fresno Water Division could mitigate BWC groundwater impacts, however past legal opinions would indicate the Fresno City Charter would require cost recovery for such mitigation benefit.

12. Specific mitigations of hydrologic impacts of BWC groundwater pumping should be identified and incorporated in the mitigation checklist including facilities, lands and water supplies. The only additional recharge facilities identified in the Draft EIR are " two new basins north of the project area" which are "being considered for development." It is not clear which basins this refers to and whether or not they are suitable for or planned as recharge facilities.

13. Given current groundwater overdraft in the project vicinity, aquifer limitations, recharge facility limitations and proposed development anticipated in the 2025 General Plan, the City anticipates the need for extensive new recharge facilities or treated surface water to balance the water budget in southeast Fresno. The City of Fresno's Metropolitan Water Supply Plan includes a surface water treatment facility to be located in southeast Fresno. This facility is a key mitigation measure for water supply and water quality impacts of the proposed Fancher Creek project and future developments in the vicinity.

14. The City's current surface water treatment facility (discussed in Draft EIR Page 2.9.20) located in northeast Fresno could supply water to the project vicinity with an expansion and the construction of a major water transmission pipeline, not currently considered economically feasible.

Landscape Irrigation with Surface Water

15. We recommend that the water supply impacts of all large landscape projects such as parks, schools etc. be mitigated wherever practical, by the requirement to use canal water for irrigation when available.

Water Supply Assessment

16. It is not clear whether the discussion commencing on Page 2.9.22 of the DEIR is intended to satisfy the Water Supply Assessment (WSA) requirements of SB 610 and SB 221. We have attached the WSA for the Copper River Project for reference. If in fact the DEIR is intended to satisfy the statutory requirements, it should identify what specific water resources and facilities the Bakman Water Company relies upon to meet the water requirements of portion of the Fancher Creek Project they propose to serve.

Water Quality

Various water quality problems including DBCP, Iron, Manganese, elevated TDS and in particular Nitrates impact groundwater quality in the project vicinity. The historic practice of providing deep seals on municipal wells may produce water complying with Safe Drinking Water Act standards, however it does nothing to limit the further migration of those contaminants into the aquifer underlying the Fresno Metropolitan Area (FMA).

17. Various wellhead treatment, blending options and coordinated strategic pumping programs can provide safe clean water while limiting the spread of contaminants. The City of Fresno constructs and operates various facilities to manage contaminant plumes to the extent practical. Such practices are an important part of ensuring the FMA has a safe, reliable water supply over time and should be included as a mitigation measure for this project. It is our strong opinion that wells and wellhead treatment systems must be constructed for the benefit of the entire aquifer serving the FMA, not a single well or project.

18. Figure 5 in the DEIR, identifies areas of high nitrate concentrations in the project vicinity, in particular north of the project. Such contaminant concentrations should be taken into consideration when siting recharge facilities.

SEWER

19. Page 2.8.8 , middle of page – Strike the paragraph that starts with "Several major" and ends with "proposed project". Replace with " A major facility improvement project will begin construction during calendar year 2005 at the WWTF to maintain treatment capacity at 80 MGD through construction and enhancement of processes to improve biological treatment, which will for continued planned urban development including proposed project."

20. **GENERAL CORRECTIONS/ RECOMMENDATIONS**

Page xiv. 1 At one or more locations in the Draft EIR, reference is made to golf course irrigation. The preliminary project site plan does not indicate a golf course feature.

Page xiv. 4, The term "balanced" should be inserted before "water budget". By itself the term "water budget" is insufficient to capture the intent of this mitigation measure.

Page 2.9.1, Last paragraph – "deposits", not "de-posits"

Page 2.9.9, 1st paragraph – "capacities", not "capa-cities"

Page 2.9.11, table 2.9-5 – Columns are out of alignment – shift back to right

Page 2.9.14, 1st paragraph – it is "concentrations", not "concentra-tions"

Page 2.9.18, 3rd paragraph – it is "budget", not "budge"

Page 2.9.19, 2nd paragraph – correct to read, "... average of about 400 acre-feet per year ~~this~~ of water was ..."

Page 2.9.19 5th line from bottom – Word is missing, "The amount of additional surface water to be recharged ..."

Page 2.9.1, 2nd paragraph, 4th line – It states, "The project is to be served by Bakman Water Company and City of Fresno." The Utility Department objects to to annexation of additional acreage to the Bakman service area due to the apparent absence of Bakman's water resource management planning or activity.

Page 2.9.20, – Should read, "The City is ~~constructing~~ **operating** a new 20 MGD surface water treatment plant ...". Also, the next sentence following this corrected sentence can be deleted. "~~The surface water treatment plant is completed and on-line~~."

Page 2.9.22, 3rd paragraph, – We think it unlikely that only two domestic wells will be necessary to meet peak demands of the project. This area has a history of low-yielding, low-producing wells.

Page 2.9.25, 1st paragraph, - We agree that the there are adequate water supplies available to satisfy the project, however we do not believe the necessary programs or facilities to make Fresno's water entitlements available to the project are adequately identified.

21.

11. Page 2.9.25, Mitigation – We recommend these mitigation measures be modified to read as follows:
    1) The project shall commit to a water conservation program, which shall include best management practices, including, but not limited to low flow fixtures, water meters and water conserving landscape designs.
    2) Realistic water demands shall be estimated for each type of land use.
    3) The developer shall prepare a water master plan acceptable to the City.
    4) A balanced water budget will be assured by the supplemental importation and use of a minimum of 1,500 acre feet of surface water to be applied in specified recharge facilities, in-lieu recharge projects or as treated surface water.
    5) Use of untreated surface water (canal water) for irrigation of larger landscapes and turf areas when and wherever available.
    6) New public water wells will be subject to standard permits including, site specific environmental assessments and a C.U.P. Such wells shall be sited and designed to minimize interference with existing wells, while protecting the water quality of the aquifer serving the FMA.
    7) The Developer shall participate in the construction of necessary water mains and facilities as required by the City to serve the projects peak water demands in accordance with the UGM process and adopted City Standards.
    8) Specific water main extension(s) and development of additional water supply facilities (water well(s)), including dedication of site(s) for well development and wellhead treatment facilities, if necessary, will be made at time of submittal for each specific entitlement submitted to serve that portion of the project.
    9) The Developer shall be responsible for payment of water connection fees in accordance with adopted City Ordinances.

Attachments

Copper River Ranch Water Supply Assessment

Water Supply Assessment
for the
Copper River Ranch,
City of Fresno
September 25, 2002

Introduction and Description of the Project:

Pursuant to Water Code section 10910, et seq. (SB 610), this document presents the water supply assessment (WSA) for the proposed Copper River Ranch development (Project). SB 610 requires the preparation of a WSA in conjunction with the environmental review of certain large development projects. As the lead agency for the Project, the City has determined the Project requires the preparation of a WSA. The proposed Copper River Ranch development includes 2,873 residential dwelling units, and 53 acres of commercial development (the "Project"). In compliance with the California Environmental Quality Act ("CEQA"), an environmental impact report ("EIR") has been prepared for the Project. This WSA will be included as an appendix to the Draft EIR and the conclusions reached in this document will be considered in analyzing the Project's potential impacts on water supply.

The City provides municipal water service to 114,000 commercial and residential customers within its jurisdiction. The City is the planned municipal water purveyor for the Project. In lieu of an Urban Water Management Plan, the City has prepared and adopted the Fresno Metropolitan Water Resource Management Plan (Water Plan). The Water Plan evaluates the anticipated growth of the City and the associated water demands through 2050. Growth and land use assumptions associated with this Project are contained within the Water Plan. The Water Plan provides an in-depth discussion of the City's current and anticipated future water supplies, including an extensive assessment of the hydrologic circumstances that might impact the City's surface and groundwater supplies. The Water Plan also includes an in-depth analysis of the local groundwater basin, the "Fresno Groundwater Unit".

The Water Plan and this WSA conclude that the City has, and will have, sufficient water supplies to meet the City's current and anticipated needs through 2025 (the planning horizon of the City's Draft General Plan), including those associated with this Project, during all reasonable normal, dry and multiple dry-year hydrologic conditions. The Water Plan is incorporated in full into this WSA for the Project.

Additional information regarding the water supplies available to the Project is contained in the "Groundwater Conditions at Copper River Ranch" report (Schmidt Report) produced by Kenneth D. Schmidt and Associates (as updated July 2002). The Schmidt Report is incorporated in full in this WSA.

Summary of City's Water Supplies

As provided in detail in the Water Plan, the City has, or will have available, a large portfolio of water supplies (rights/entitlements) to serve the City's needs, including the Project:. These water supplies include:

(1) Groundwater. The City operates a network of groundwater wells to provide to its customers water pumped from the local groundwater basin. The local groundwater basin is referred to as either the Kings River groundwater basin or the Fresno Hydrologic Unit, depending upon the nature of the reference. The Kings River groundwater basin is the reference adopted by the State Department of Water Resources. According to Draft Bulletin No. 118 of the Department of Water Resources, the boundaries of the Kings River groundwater basin are as follows: on the north, the San Joaquin River to the boundary of the Farmers Water District; on the west, the eastern boundaries of the Delta-Mendota Basin and the Westlands Water District; on the south, the northern boundary of the Empire Westside Irrigation District, the southern fork of the Kings River, the southern boundary of Laguna Irrigation District, the northern boundary of the Kings County Water District, and the southern boundaries of Consolidated Irrigation District. The Bulletin fails to identify verbally the eastern boundaries of the Kings River Basin. However, the Department of Water Resource's San Joaquin office website does include a map that depicts the Basin's boundaries. Bulletin No. 118 was most recently updated in 1995 and is the most recent DWR bulletin describing this basin. A copy of the basin map is attached to this WSA. Both the map and Bulletin 118 are incorporated in full by this reference.

From a hydrologic perspective, the regional aquifer is more accurately described as the Fresno Hydrologic Unit. The "Kings River groundwater basin" is not a true groundwater basin in the hydrological sense because it does not represent a hydrologically or geologically separated unit. Rather, the groundwater underlying the Fresno area is hydrologically and geologically linked, and has previously been described by the State Water Resources Control Board as the "Fresno Ground Water Unit." (Decision No. 935, pp. 20-21.) This Unit covers a 258,560-acre area bounded on the east by the low-lying foothills of the Sierras, on the north by the San Joaquin River, on the south by the Kings River and the Consolidated Irrigation District boundary, and on the west generally parallel to and several miles east of the Fresno Slough. (Decision No. 935, pp. 20-21.) Hydrologically and geologically, the Unit comprises a single groundwater basin. (Decision No. 935, p. 21.) The Fresno Hydrologic Unit entirely underlies the City of Fresno and Fresno Irrigation District service areas.

The Fresno Groundwater Unit is a very productive aquifer characterized by highly permeable alluvial geology with significant deposition of porous, coarse-grained materials, providing a high water storage coefficient. Draft Bulletin No. 118 characterizes the native safe yield of the Kings River Basin as being overdrafted. However, as noted in the Water Plan and the Schmidt Report, several water supply agencies, including the City, have implemented, and have plans for further water

management programs within the Fresno Groundwater Unit to augment the native yield of the basin. These projects include the use of developed water sources obtained from Friant and Pine Flat dams, along with recycled water and storm water recharge. These supplemental water sources are used "conjunctively" with local groundwater to meet the area's agricultural and urban water demands.

The Water Plan and the Schmidt Report describe in more detail the hydrologic conditions of the Fresno Unit. In summary, the Fresno Unit is in near equilibrium. Overdraft is conservatively estimated at less than 20,000 acre feet (as reflected in net annual reduction in stored groundwater) out of an annual water budget of almost 1,000,000 acre feet. Conservative estimates of useable groundwater in storage well exceed 10,000,000 acre feet. Although this minimal overdraft has only nominal impact on the areas long term water supply viability, the City and other water management agencies have planned enhancement and expansion of conjunctive use programs. With full implementation of current and planned programs, the Fresno Groundwater Unit will remain in long-term equilibrium beyond 2025, even with anticipated urban growth.

It should also be noted that the Kings River Basin is not adjudicated, nor are there any legal limitations on the use of groundwater. Therefore, there are no court orders or judgments specifying the amount of groundwater to which the City or the Project applicant is entitled.

(2) Long-term Central Valley Project Water Supply Contract (Friant Unit). The City of Fresno has a contractual right to obtain 60,000 acre-feet of water per year from the Friant Unit of the Central Valley Project. Water delivered from the Friant Unit is classified as either Class 1 water or Class 2 water. Contracts to serve Class 1 water take priority and all Class 1 water is allocated before any Class 2 water supplies are allocated. The total amount of water subject to Class 1 contracts is 800,000 acre-feet. In comparison, the average annual flow of the San Joaquin River, which is the source of inflow for water delivered by the Friant Unit, is 1,670,000 acre-feet. (Decision No. 935 of the State Water Resources Control Board, p. 24.) Thus, in Decision No. 935, the State Water Resources Control Board described the Friant Unit's Class 1 contractual supplies as very reliable:

> "Class 1" water is that supply which can be considered dependable in practically every year with deficiencies only in occasional very dry years. Under a study performed by the United States based upon a recurrence of hydrological conditions during the 58-year period 1897 through 1954, deficiencies in the Class 1 supply would have occurred only in years such as 1924, 1929, 1930, 1931, and 1934. Deficiencies in those years would have been 36, 4, 8, 45 and 11 per cent, respectively.

(Decision No. 935, p. 7, fn. 1.) Four of the five years that the Class 1 supply would have been subject to reduction occurred during the 1928-34 drought, which was the worst recorded drought in California's history. (Some recent historical

reconstruction research based on tree ring analysis indicates that the 1928-34 period represents California's worst drought since 1560.) Even through an extended, severe drought, deficiencies in the Friant Class 1 supply occur only in occasional very dry years. On average over the last 10 years, the Friant Unit has been able to supply 98% of the Class 1 contractual allocations. The water allocated to Class 1 contractors is reduced on a pro rata basis during those infrequent years where Class 1 supplies are limited. Over the past 46 years of Friant Unit operations, Class 1 water users have received 94.9% of their contractual allocations.

The City's Central Valley Project water supply contract provides the City a guaranteed right to receive available supplies from Friant Dam for a 40-year term. Under federal law and as provided in the City's CVP contract, the City enjoys a mandatory right to renew the contract. The only contingency that might limit the City's renewal right is the Bureau of Reclamation's (the federal agency responsible for operating the Central Valley Project) contention that the City must agree to implement a plan to meter each City water service connection during the term of the renewed contract. The City Charter currently prohibits billing single family residents a metered rate. While the City fully intends to renew its CVP contract, if this conflict ultimately precludes renewal, the City anticipates trading its Central Valley Project contract entitlement to another party in exchange for surface water supplies which are not encumbered with the water meter requirement.

(3) Entitlement Through the Fresno Irrigation District. The City has a permanent right to receive a portion of the water supplies available to the Fresno Irrigation District (FID). The FID holds high priority vested rights to receive approximately 470,000 acre-feet per year of water from the Kings River, as well as a Class 2 Central Valley Project water supply contract, with an average annual yield of about 30,000 acre feet. Within the FID, water entitlements "run with the land". When lands are converted from agricultural to urban uses, the FID water entitlements are transferred to the new land use. Currently, the City represents approximately 19% of the area within the FID and enjoys a proportionate allocation of the FID water entitlements – roughly 95,000 acre-feet per year. As more property within FID urbanizes and receives potable water supply from the City, the City's pro rata share of FID's entitlement increases. Given the current land use patterns and associated water demands, the consumptive use of the average urban development is slightly lower than the consumptive use of associated agricultural lands. Thus, the urbanization of agricultural land within FID results in a net increase in availability (reliability) of water.

The City accesses its portion of the FID entitlement through a set of water sharing agreements with FID [1]. These agreements create an institutional framework through which the City and FID conjunctively use various surface water, groundwater and recycled water supplies available to each entity. This arrangement ensures that the

[1] Primary agreements: Cooperative Agreement Between Fresno Irrigation District and the City of Fresno for Water Utilization and Conveyance (1976). Agreement Between City of Fresno and the Fresno Irrigation District for the Exchange of Recycled Water (1974).

full portfolio of water supplies available to each entity is used directly, or recharged into the local groundwater basin so that the long-term regional water supply/demand equilibrium is maintained.

(4) Additional Local Surface Water Supplies. The City of Fresno, the City of Clovis, FID and the Fresno Metropolitan Flood Control District are collaborating an a new water supply project that will capture intermittent regional stream flows to enhance recharge of the local groundwater basin. The four entities have submitted a water rights application to the State Water Resources Control Board to establish their priority right to capture these surface water flows. The application has not been contested. The State Water Resources Control Board is expected to grant the application within the next 3 years. During this time, the four entities will finalize the design and construction of the physical infrastructure needed to implement this water supply project. The average annual yield from this water supply is estimated between 40,00-50,000 acre-feet. The cities of Fresno and Clovis will have priority rights to use the water developed from this project.

(5) Reclaimed wastewater. The City reclaims the municipal wastewater generated through the City's consumptive water use. Currently, approximately 70,000 acre ft. per year of treated wastewater is used directly for agricultural irrigation or banked in the groundwater basin, generally augmenting the availability of groundwater to the City. For example, about 30,000 acre feet per year is provided to the FID is made available by the City in exchange for additional surface water supplies beyond that which the City is otherwise entitled from FID. The City intends to take delivery of this exchange water once it has completed the development of additional facilities. Additional recycled water exchange capacity is conservatively estimated at 30,000 acre ft over the life of the 2025 General Plan.

(6) Additional water available to FID and the City. During wet years, significant amounts of unallocated surface water is available for capture for groundwater recharge. More efficient use of these –"floodwaters" from the Kings and San Joaquin rivers could be made with the development of additional groundwater recharge and banking facilities. These facilities are commonplace in other groundwater basins in the state. FID has plans to add additional dedicated spreading basins to increase the ability to capture and bank floodwaters from the Kings and San Joaquin Rivers for later use. The City and FID plan to further develop these water resources.

Additional Water Supply Associated with the Project

The Project has an additional surface water supply entitlement to augment those supplies discussed above. The Project lands receive approximately 230 acre-feet annual surface water deliveries from FID in to the City's traditional FID entitlement. Project lands have continuously received this water for over 70 years. FID has provided notice to the Project proponents and the City, that the Projects lands will continue to

receive this supply on the same basis as has occurred historically and indicated a willingness to sell additional water when available [2].

The project was originally entitled in Fresno County. It should be noted that the County of Fresno has adopted an ordinance that requires a water supply evaluation of certain subdivision projects. Pursuant to Section II-H of the County's subdivision ordinance, project applicants must conduct a minimum 10-day pump test (with continuous pumping) for public supply wells, and the data thereby gleaned must be used to determine the adequacy of the groundwater supply and impacts due to the proposed development. The Project has complied with the County's subdivision ordinance, and extensive well pump tests have been performed on the Project site. (More details regarding these tests are contained in the Schmidt Report.)

Conversion of Project Lands from Agricultural to Urban Use Will Result in a Net Reduction in Groundwater Use.

At full build-out, the City will manage the Project water demand so that the Project water use will result in a net reduction in groundwater use compared to historical and current practices. In addition, the Project will make use of recycled water and will be conditioned so that it results in no net increase in overall consumptive water use in comparison to current uses. Thus, the Project will essentially be water neutral to the City.

As is discussed in the Project Draft EIR, much of the Project site was used for commercial agriculture (vineyards) for over 70 years. Historically, the Project property was irrigated with groundwater and the extraordinary FID surface water entitlement discussed above. Groundwater was pumped from the easternmost portion of the Kings River groundwater basin. Historical records indicate that approximately 2,200 acre-feet of groundwater, plus 230 acre-feet of FID surface water was used on the Project property for irrigation.

In 1992, a portion of the Project property was converted to a golf course. With the addition of the golf course, irrigation practices have been adjusted so that a larger volume of surface water is obtained from FID, with a resultant decrease in groundwater use. The existing water demand for the total Project area, including the golf course, is 1,740 acre-feet per year for irrigated crops, 1,070 acre-feet per year for the golf course and its associated lakes, and 100 acre-feet per year for the clubhouse, totaling 2,910 acre-feet per year. Of that, approximately 1170 acre feet is supplied from surface water, and the balance, 1740 acre feet is groundwater.

The development of the Project will convert the remaining agricultural land to the post-development uses (residential and commercial uses). Thus, as development proceeds, the land currently in agricultural production will be retired and water formerly used for irrigation will then be used to offset water demand created by the Project.

[2] 10/17/96 FID letter to William Tathem Sr., signed by Robert Mount, General Manager and 12/12/1997 FID letter to Mr. Dirk Poeschel, signed by Robert Mount, General Manager

At the completion of the Project (full build-out of Phases 1, 2, and 3), the total projected gross water demand will be 2,960 acre-feet per year. The Project proposes to use reclaimed water (reclaimed from the treated wastewater stream generated by the Project itself) to provide irrigation for the golf course and to supply its water features. At full Project build-out, 750 acre-feet of recycled water per year will be available to serve these purposes, so that most of the golf course's water needs (other than the water used to serve the clubhouse) will be satisfied using reclaimed water. To supply the remaining Project features, 2,210 acre-feet of water per year will be needed. Of this 2,210 acre-feet per year, 230 acre-feet will be supplied from the extraordinary FID surface water entitlement. Thus, the amount of groundwater that will be pumped to supply the Project will not exceed 1,980 acre-feet annually, which is 220 acre-feet less than the Project historically pumped. Net consumptive demand is projected at 1,250 acre feet per year.

When these Project uses are compared to historical and current water uses, it is anticipated that the Project will result in reduced overall reliance on groundwater and only a nominal increase (50 acre feet) in overall net consumptive use.
To avoid any negative impact on the overall groundwater balance (as compared to historical conditions), it is anticipated that implementation of the final phase of the Project will be conditioned on dedication to the City of an additional 250 acre-feet per year of surface water entitlement. This additional supplemental water supply may be provided through suitable arrangements for additional groundwater recharge/banking, additional recycled water use, City's renewal of its CVP supply contract, banked floodwaters or water purchases.

Physical Infrastructure Needed to Serve the Project

The additional infrastructure needed to supply water to the Project area will be constructed as part of the Project, including community water supply wells, well head treatment and distribution systems. The Project may also be a recipient of water from the City's planned surface water treatment plant. The City is constructing a 30,000,000 gallon per day surface water treatment facility two miles from the Project site. It is anticipated that water from this facility will be delivered to the Project. The City serves water pursuant to a drinking water system permit obtained from the State Department of Health Services.

Letter 9: Fresno County Environmental Health System

The Environmental Health Division's comments on adequacy of the DEIR are noted. No further response is required.

County of Fresno
Department of Community Health
Brad Maggy, Director

November 19, 2004

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Bruce O'Neal, Consultant Planner
City of Fresno
Development Department
2600 Fresno Street, 3rd Floor
Fresno, CA 93721

Letter 9

Dear Mr. O'Neal:

SUBJECT: **Draft Environmental Impact Report (EIR No. 10133)**
PROJECT TITLE: **Fancher Creek Project**

The Fresno County Department of Community Health, Environmental Health System has reviewed the above noted document and concurs with the information contained therein.

This Department would appreciate the opportunity to comment on future CEQA documents pertaining to this project. If you have any questions, you may contact me at (559) 445-3357.

Sincerely,

Kathleen Boyer, REHS
Environmental Health Specialist III
Environmental Health Division

kb

cc: Rick Thaxton, Department of Public Works and Planning

1221 Fulton Mall / P.O. Box 11867 / Fresno, California 93775 / (559) 445-3357 / FAX (559) 445-3379

Letter 10: San Joaquin Valley Air Pollution Control District

1. The introduction has been revised as suggested. Please see Section 3, Changes And Additions To The EIR.

2. Lead is a criteria pollutant established by federal and state ambient air quality standards. Gasoline-powered automobile engines are a major source of airborne lead, although the use of leaded fuel is being reduced. Lead can cause blood effects such as anemia and the inhibition of enzymes involved in blood synthesis. Lead may also affect the central nervous and reproductive systems. Ambient lead levels have dropped dramatically as the percentage of motor vehicles using unleaded gasoline continues to increase. The standards for lead are being met in the SJVAB and the District does not expect that the standards will be exceeded in the future.

3. The Federal EPA has promulgated standards for particulate matter less than 2.5 microns in diameter (PM2.5). For PM2.5, the standards are an annual average of 15 micrograms per cubic meter (ug/m3) and a 24-hour average of 65 ug/m3.

4. Comments on the 1970 Clean Air Act and the 1971 NAAQS are acknowledged.

5. The District adopted the amendments to Regulation VIII incorporating the changes listed on page 2.3.7 of the DEIR. Complete requirements of Regulation VIII can be found on the website listed in the comment.

San Joaquin Valley
Air Pollution Control District

November 24, 2004

Reference No. 20040100

Bruce O'Neal, Consultant Planner
City of Fresno Planning & Development Dept.
2600 Fresno St., Third Floor
Fresno, CA 93721-3604

Letter 10

Subject: Fancher Creek Development Project – DEIR No. 10133
SCH No. 2004021071

Dear Mr. O'Neal:

The San Joaquin Valley Unified Air Pollution Control District (District) has previously commented on this project (District Reference No. 20040013, Sent March 10, 2004, for NOP DEIR No. 10133). The District offers the following comments in addition to previous comments.

1. §2.3 *Introduction* states, "Air quality is described in relation to the ambient air quality standards for ozone precursors." This section should be revised to clarify that; overall, air quality is related to air quality standards for all criteria pollutants. But, as the San Joaquin Valley Air Basin (Valley) is in non-attainment for ozone, ozone precursors are pollutants of concern. Therefore, the air quality impact assessment of the DEIR is related to the District-established Thresholds of Significance for ozone precursors.

2. §2.3, p 2.3.2 *Air Pollution Sources and Current Air Quality, ¶2* states, "Federal and California ambient air quality standards have been established for the following 5 critical pollutants: nitrogen dioxide, sulfur dioxide, particulate, carbon monoxide and ozone." Currently, there are six *criteria* pollutants established by federal and state ambient air quality standards- the five listed above and lead.

3. The title of §2.3, p 2.3.4 *Suspended PM_{10} Emissions* should be revised to Suspended PM Emissions, and the discussion should include PM2.5. PM is the criteria pollutant, while there are separate standards for both PM10 and PM2.5.

4. §2.3, p 2.3.5 *Air Quality Standards* should be amended to show that the current federal air quality regulation is the Clean Air Act, originally passed in 1970. The 1970 Clean Air Act directed the newly established Environmental Protection Agency (EPA) to regulate air quality. The National Ambient Air Quality Standards (NAAQS) were established by the EPA in 1971.
For additional information, see http://www.epa.gov/history/timeline/index.htm.

5. The discussion of Regulation VIII in §2.3, p 2.3.7 *District Rules*, should be revised to reflect the current Regulation VIII requirements. A template of the District's Dust Control Plan is available at http://www.valleyair.org/busind/comply/PM10/forms/DCP-Form%20-%2010-14-2004.pdf. The District's rules and regulations can be viewed at http://www.valleyair.org/rules/1ruleslist.htm. A compliance assistance bulletin for construction activities has been enclosed.

District staff is available to meet with you and/or the applicant to further discuss the regulatory requirements that are associated with this project. If you have any questions or require further information, please call me at (559) 230-5800 or Mr. Hector R. Guerra, Senior Air Quality Planner, at (559) 230-5820 and provide the reference number at the top of this letter.

Sincerely,

Chrystal Meier
Student Intern
Central Region

Don Hunsaker
Supervising Air Quality Planner

Enclosure
c: file

San Joaquin Valley
Air Pollution Control District

COMPLIANCE ASSISTANCE BULLETIN
October 2004

Fugitive Dust Control at Construction Sites: New Requirements

Regulation VIII, Fugitive PM10 Prohibitions, of the District's Rules and Regulations apply to activities that generate fugitive dust. Fugitive dust is emitted into the air by activities that disturb the soil, such as from earthmoving activities and vehicular/equipment traffic on unpaved surfaces. Windblown dust is also of concern at construction sites.

The District adopted Regulation VIII in 1993 and its most recent amendments became effective on October 1, 2004. This is a basic summary of the regulation's requirements as they apply to construction sites.

Visible Dust Emissions (VDE) may not exceed 20% opacity during periods when soil is being disturbed by equipment or by wind at any time. Visible Dust Emissions opacity of 20% means dust that would obstruct an observer's view of an object by 20%. District inspectors are state certified to evaluate visible emissions. Dust control may be achieved by applying water before/during earthwork and onto unpaved traffic areas, phasing work to limit dust, and setting up wind fences to limit wind blown dust.

Soil Stabilization is required at regulated construction sites after normal working hours and on weekends and holidays. This requirement also applies to inactive construction areas such as phased projects where disturbed land is left unattended. Applying water to form a visible crust on the soil and restricting vehicle access are often effective for short-term stabilization of disturbed surface areas. Long-term methods including applying dust suppressants and establishing vegetative cover.

Carryout and Trackout occur when materials from emptied or loaded vehicles falls onto a paved surface or shoulder of a public road or when materials adhere to vehicle tires and are deposited onto a paved surface or shoulder of a public road. Should either occur, the material must be cleaned up at least daily, and immediately if it extends more than 50 feet from the exit point onto a paved road. The appropriate clean-up methods require the complete removal and cleanup of mud and dirt from the paved surface and shoulder. Using a blower device or dry sweeping with any mechanical device other than a PM10-efficient street sweeper is a violation. Larger construction sites must prevent carryout and trackout from occurring by installing gravel pads, grizzlies, wheel washers, paved interior roads, or a combination thereof at each exit point from the site.

Access and Haul Roads that are unpaved, as well as unpaved vehicle and equipment traffic areas at construction sites must have dust control. Speed limit signs limiting vehicle speed to 15 mph or less at construction sites must be posted every 500 feet.

Storage Piles and Bulk Materials have handling, storage, and transportation requirements that include applying water when handling materials, wetting or covering stored materials, and installing wind barriers to limit VDE. Also, limiting vehicle speeds, loading haul trucks with a freeboard of six inches or greater along

Letter 11: City of Fresno Public Works Department

The following table provides a listing of traffic/circulation mitigation measures and which project components or areas should be responsible for installation. The table was not included in the DEIR but will assist in preparation of the mitigation monitoring program.

1. This mitigation measure was identified and analyzed in the *Fancher Creek Traffic Study, September 2004*, as well as the Draft EIR. Concurrence on the mitigation requirement is noted.

2. This mitigation measure was identified and analyzed in the *Fancher Creek Traffic Study, September 2004*, as well as the Draft EIR. Concurrence on the mitigation requirement is noted.

3. With conversion from a signalized intersection to a right-in/right-out/left-in only, it is projected that 53 AM peak hour and 94 PM peak hour trips will shift from the Argyle Avenue southbound left-turn to eastbound Kings Canyon Road to the Fowler Avenue southbound left-turn to eastbound Kings Canyon Road. Of those trips, only seven AM and 47 PM peak hour trips are project-specific, with the balance a result of background traffic. The Kings Canyon/Fowler intersection is projected to operate at LOS "B" in the AM and LOS "C" in the PM peak hour in the Mitigated 2025 Project scenario. The shift of such a minor number of trips would not significantly worsen the LOS of either the Fowler/Kings Canyon intersection or the overall system. It is also projected that with conversion from the signal shown in the Mitigated 2025 Project scenario to a right-in/right-out/left-in only, the intersection of Argyle/Kings Canyon should operate at or above the adopted LOS. The mitigation measure will be changed as stipulated by Engineering Services.

4. This mitigation measure was identified and analyzed in the *Fancher Creek Traffic Study, September 2004*, as well as the Draft EIR. Concurrence on the mitigation requirement is noted.

5. This mitigation measure was identified and analyzed in the *Fancher Creek Traffic Study, September 2004*, as well as the Draft EIR Mitigated 2025 Project scenario and is shown in the appropriate figures and Synchro print outs. Widening McKinley to four through lanes, however, was not identified in the Mitigated 2025 Project scenario text as these lane configurations match the City of Fresno plan line lane configurations. The mitigation measure will be changed as stipulated by Engineering Services.

6. This mitigation measure was identified and analyzed in the *Fancher Creek Traffic Study, September 2004*, as well as the Draft EIR. The southbound approach triple left-turn lanes, however, were only shown in the appropriate figures and Synchro print outs and were not identified in the appropriate text sections. The mitigation measure will be changed as stipulated by Engineering Services.

Traffic/Circulation Mitigation Measure Responsibility Share by Development Area
Fancher Creek EIR

	Traffic/Circulation Mitigation Measure *1	Development Area & Share of Responsibility *2					Pro Rata Share % for Fancher Creek Development as Calculated in TIS
		Areas 1 & 2 - Light Industrial/Business Park	Area 2 - Residential	Area 3 - Residential	Area 3 - Mixed-Use/Offices/Multi-Family	Area 4 - Regional Commercial/Offices/Multifamily - Northern 45 Acres	
WIDENING PROJECTS							
1	Widen Clovis Avenue from Olive to SR 180 from 6 to 8 lanes	21%	3%	21%		26%	12%
2	Widen Fowler Avenue from McKinley to Olive from 2 to 4 lanes	21%	3%	21%		26%	6%
3	Widen Fowler Avenue from Tulare Avenue to Fancher Creek Blvd from 4 to 6 lanes			53%	47%		32%
4	Widen Temperance Avenue from SR 180 to Kings Canyon Road from 6 to 8 lanes	100%					5%
INTERSECTION IMPROVEMENT PROJECTS							
5	Improve Kings Canyon Road/Temperance Avenue Intersection	100%					7%
6	Improve Temperance Avenue/Jensen Avenue Intersection	21%	3%	21%		26%	4%
7	Improve Belmont Avenue/Clovis Avenue Intersection	21%	3%	21%		26%	81%
8	Improve Clovis Avenue/Ashlan Avenue Intersection	21%	3%	21%		26%	2%
9	Improve Kings Canyon Road/Argyle Avenue Intersection - Limit to left turn in and right in and right out only per City Comment Letter dated 10/15/04			27%		35%	48%
10	Improve Temperance Avenue/McKinley Avenue Intersection	21%	3%	21%		26%	3%
11	Improve Belmont Avenue/Fowler Avenue Intersection	18%	3%	18%	15%	22%	69%
12	Improve Belmont Avenue/Temperance Avenue Intersection	21%	3%	21%		26%	18%
13	Improve Ashlan Avenue/Temperance Avenue Intersection	21%	3%	21%		26%	3%
14	Improve Clovis Avenue/SR 180 Eastbound Off-Ramp Intersection			27%		35%	18%
15	Improve Tulare Avenue/Fancher Creek Drive/Regional Commercial Driveway					100%	39%
16	Improve Tulare Avenue/Fancher Creek Drive West Intersection					100%	65%
ROUNDABOUT IMPROVEMENT PROJECTS							
17	Roundabout at Fowler Avenue/Fancher Creek Drive			100%			39%

Traffic/Circulation Mitigation Measure Responsibility Share by Development Area
Fancher Creek EIR

	Traffic/Circulation Mitigation Measure *1	Development Area & Share of Responsibility *2					Pro Rata Share % for Fancher Creek Development as Calculated in TIS
		Areas 1 & 2 - Light Industrial/Business Park	Area 2 - Residential	Area 3 - Residential	Area 3 - Mixed-Use/Offices/Multi-Family	Area 4 - Regional Commercial/Offices/Multifamily - Northern 45 Acres	
SIGNAL IMPROVEMENT PROJECTS							
18	Signalize Tulare Avenue/Argyle Avenue Intersection			44%		56%	68%
19	Signalize Belmont Avenue/Armstrong Avenue Intersection			21%		26%	53%
20	Signalize Kings Canyon Road/Temperance Avenue Intersection	100%					7%
21	Signalize Temperance Avenue/Jensen Avenue Intersection	21%	3%	21%		26%	4%
22	Signalize Belmont Avenue/Fowler Avenue Intersection	18%	3%	18%	15%	22%	69%
23	Signalize Belmont Avenue/Temperance Avenue Intersection	21%	3%	21%		26%	18%
24	Signalize Ashlan Avenue/Temperance Avenue Intersection	21%	3%	21%		26%	3%
25	Signalize Temperance Avenue/McKinley Avenue Intersection	21%	3%	21%		26%	3%
26	Signalize McKinley Avenue/Fowler Avenue Intersection	21%	3%	21%		26%	4%
TRANSIT IMPROVEMENT PROJECTS							
27	Transit Improvements	*3	*3	*3	*3	*3	N/A
BIKE LANE/TRAIL IMPROVEMENT PROJECTS							
28	Bike Lane/Trail Improvements	*3	*3	*3	*3	*3	N/A

Notes:

*1 Source from TIS or based upon information provided in the letter from VRPA Technologies. For all other improvements/mitigation measures not listed in this table, it is assumed that such improvements/measures will be conditions of approval during the Tentative Tract Map process.

*2. Based upon percentage share of acreage or PM Peak Hour Trips. Percentage responsibility for Area 4 Regional Commercial/Office/Multifamily calculated but not shown.

*3. To be identified as Conditions of Approval during CUP, Tract Map, or SPR process.

7. This mitigation measure was identified and analyzed in the *Fancher Creek Traffic Study, September 2004,* as well as the Draft EIR. Concurrence on the mitigation requirement is noted.

8. The mitigation measure identified and analyzed in the *Fancher Creek Traffic Study, September 2004* and the Draft EIR showed the northbound and southbound approaches as two through lanes. With widening from two to four through lanes on the northbound and southbound approaches, the Belmont/ Armstrong intersection would show an improved level of service over what was identified in the September 2004 Study. The mitigation measure will be changed as stipulated by Engineering Services.

9. This mitigation measure was identified and analyzed in the *Fancher Creek Traffic Study, September 2004,* as well as the Draft EIR Mitigated 2025 Project scenario and is shown in the appropriate figures and Synchro print outs. The widening of the Belmont Avenue approaches, however, from one through lane and a shared through-right lane to two through lanes and a separate right-turn lane was not identified in the Mitigated 2025 Project scenario text. The mitigation measure will be changed as stipulated by Engineering Services.

10. This mitigation measure was identified and analyzed in the *Fancher Creek Traffic Study, September 2004,* as well as the Draft EIR. Concurrence on the mitigation requirement is noted.

11. The Tulare/Peach intersection is currently signalized and has separate right turn lanes on all approaches except for the eastbound approach that is a shared through-right. In all future scenarios, the Tulare/Peach intersection is assumed to be actuated with protected left-turn phasing while maintaining current geometrics. With the addition of a separate right-turn lane to the eastbound approach, the Tulare/Peach intersection would show an improved level of service compared to that identified in the September 2004 Study. The addition of a separate right-turn lane to the eastbound approach should also provide for an improved level of service for the entire Study roadway network since the roadway network was optimized as a single system. The mitigation measure will be changed as stipulated by Engineering Services.

12. This mitigation measure was identified and analyzed in the *Fancher Creek Traffic Study, September 2004,* as well as the Draft EIR Mitigated 2025 Project scenario and is shown in the appropriate figures and Synchro print outs. These mitigated lane configurations, however, were not identified in the Mitigated 2025 Project scenario text as these lane configurations match the City of Fresno plan line lane configurations. The mitigation measure will be changed as stipulated by Engineering Services.

13. As identified in the *Fancher Creek Traffic Study, September 2004*, a thorough engineering investigation, including collision history, should be conducted. This engineering investigation should include preparation of all appropriate signal warrants. All intersection analyses in regard to the left and right-turn lane storage were prepared based on the Public Works Standard P-69.

14. The Clovis Avenue at Jensen Avenue intersection was analyzed in the *Fancher Creek Traffic Study, September 2004*, with six through lanes along Jensen, dual left-turn lanes on Jensen, and single left-turn lanes on Clovis. With the addition of dual left-turn lanes on Clovis Avenue, the Clovis/Jensen intersection would show an improved level of service over that identified in the September 2004 Study. The addition of the dual left-turn lanes to Clovis Avenue would also provide for an improved level of service for the entire Study roadway network since the roadway network was optimized as a single system. The Project's fair share for the Clovis/Jensen improvements is 10%.

15. Tables 3, 21, and 27 shown in the *Fancher Creek Traffic Study, September 2004*, incorrectly show the levels of service for the Fowler Avenue at Fancher Creek Drive roundabout in the 2015 Project PM peak hour and the 2025 Project AM and PM peak hours. As shown in the table below, a roundabout at the Fowler /Fancher Creek intersection is projected to operate at LOS "A" in both the 2015 and 2025 Project scenarios in both the AM and PM peak hour. In both the Mitigated 2015 Project and Mitigated 2025 Project scenarios, a signal is projected to operate at LOS "A" in the AM peak hour and LOS "B" in the PM peak hour. The table also shows that the proposed roundabout is projected to have less delay when compared to a signal in all future scenarios and all peak hour time periods.

FOWLER AVENUE AT FANCHER CREEK DRIVE
ROUNDABOUT VS. SIGNAL LEVEL OF SERVICE AND DELAY COMPARISON

	AM		PM	
Scenario	Roundabout (LOS/Delay[1])	Signal (LOS/Delay[1])	Roundabout (LOS/Delay[1])	Signal (LOS/Delay[1])
Mitigated 2015 Project	A/3.3	A/7.6	A/5.1	B/14.2
Mitigated 2025 Project	A/7.1	A/7.7	A/7.8	B/19.8

[1] *Delay is seconds per vehicle*

Compared to signalized intersections or freeway interchanges, roundabouts are multi-modal friendly. It is easier for pedestrians to cross a roundabout intersection as the crossing can be done in two stages with only one-way traffic in each stage and a safe haven in between. Roundabouts have "splitter islands" that provide this temporary refuge. In addition, traffic speed within the roundabout is slow even on

otherwise high-speed thoroughfares as traffic is calmed as it approaches, enters, navigates and exits the roundabout. Urban roundabout pedestrian accident rates are approximately half those at urban traffic signals. Because of the slower speeds in roundabouts, bicyclists can utilize the same travel lane as cars, thereby reducing the likelihood of collisions with automobiles.

Traffic calming techniques include the use of roundabouts/traffic Circles and are widely applied to achieve Smart Growth objectives. Traffic calming does not necessarily impede motorized travel. Roundabouts/Traffic Circles generally provide a decrease in speed but often resulting in reduced travel times. By eliminating delays at stop signs and signals, devices such as traffic circles can decrease travel time even though the average speed of moving vehicles is reduced.

Fiscal Benefits. Roundabouts can often be constructed at significantly lower cost than conventional signalized intersections and have reduced annual maintenance and operational costs when compared to signalized intersections. Unlike traffic signals, roundabouts have no additional maintenance costs other than general road care. They require no electricity, no revised signal timing, and no annual replacements of parts, and suffer no blackouts.

Aesthetic Benefits. Although the primary function of roundabouts is intersection control, their secondary role as a traffic calming element is perfect for creating gateways to communities and main streets as they slow traffic and provide space for a grand entrance statement. Roundabouts are aesthetically pleasing and can become an urban focal point or civic feature with fountains, statues, landscaping or other features creating a focal point. Businesses located on or near newly installed roundabouts often report an increase in business perhaps due to the enhanced aesthetics provided by the roundabout and safety for pedestrians and drivers alike.

Air quality benefits. Roundabouts typically operate at an improved level of service due to reduced delay time, which can provide significant air quality benefits as well.

While signal warrants are required for a number of intersections, the use of traffic circles and roundabouts at several locations would be preferable including the intersections of:

- Argyle Avenue/Fancher Creek Drive or Tulare Street
- Tulare Street /Fancher Creek Drive
- Fancher Creek Drive at 90° bend East of Clovis Avenue
- Tulare Street /Fancher Creek/Regional Commercial Driveway
- Fowler Avenue/Fancher Creek Drive
- Armstrong Avenue/Belmont Avenue

While under typical circumstances, the requirement for traffic signals at these locations are required once warrants are met, other improvements may be applicable that can increase safety and result in meeting the minimum Level of Service (LOS) standard. Because this is an in-fill project, it is unique. The project is designed to address smart growth concepts, which require the use of innovative strategies to address project impacts. Traffic calming techniques such as the use of additional traffic circles and roundabouts, can address both safety and level of service issues. The project has been designed to promote the use of walking, bicycling, and transit. Some techniques that should be considered as alternatives to traffic signal installation include:

- Apply more traffic-calming practices and hardscapes
- Streets as narrow as possible including along Tulare Street
- Promote the use of roundabouts & traffic circles where effective (keeps traffic moving)
- Develop bicycle networks
- Incorporate public transit-oriented design features (e.g.: user waiting areas/canopies, pullovers)
- The development should be required to pay Traffic Signal Impact Fees or install an equivalent of the required signals, but not both.

16. The proposed Fowler Avenue at Fancher Creek Drive roundabout shown in the *Fancher Creek Traffic Study, September 2004* was analyzed as a two-lane approach on Fowler Avenue, a one lane approach on Fancher Creek Drive, and a two lane roundabout and thus complies with the City's request.

17. This response to the City's comments on the Draft EIR constitutes a resubmittal of the Traffic Study with the requested changes.

Fresno
All-America City
2000

City of
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Public Works Department
Mike T. Kirn, P.E. Interim Director

October 15, 2004

Letter 11

TPG Consulting
Jill Gormely
222 N. Garden Avenue, Ste 100
Visalia, CA 93291

SUBJECT: TRAFFIC IMPACT STUDY (TIS) RESPONSE FOR THE PROPOSED FANCHER CREEK PROJECT

This project proposes to construct 1,460 single family residential units, 788 multi-family units, 93 acres Business Park, 14 acres of General Light Industrial, 30,000 square feet of General Office Building, and 1,320,000 square feet shopping center. Based on the ITE Trip Generation manual it is estimated that this project will generate 4763 am and 8624 pm peak hour trips. All projects that are projected to generate 100 or more peak hour trips shall prepare a TIS as identified in the 2025 Fresno General Plan, Mitigation Measure B-4, b.

As a mitigation measure, this project shall:

Tulare at Argyle Avenue

1. 1. Signalize the intersection complete with actuation, signal pre-emption and left turn phasing. The installation of the traffic signal shall be done in conjunction with this project.

Kings Canyon Road at Temperance Avenue

2. 1. Signalize the intersection complete with actuation, signal pre-emption and left turn phasing. The installation of the traffic signal shall be done in conjunction with this project.
   a. Single Left turn lane for the northbound and southbound approaches.
   b. Dual left turn lanes on Kings Canyon Road.
   c. Six (6) through lanes on Temperance Avenue.
   d. Four (4) through lanes on Kings Canyon Road.
   e. Separate right-turn lanes all around.

Kings Canyon Road at Argyle Avenue

3. ~~1. Signalize the intersection.~~
~~2. Re-stripe/widen the southbound approach, north leg, from a shared left-through lane to a separate left-turn lane and a separate right-turn lane.~~

Response: The City does not agree with this mitigation measure. This intersection shall be limited to left turn in and right-in/right-out only. A traffic signal exists at the intersection of Kings Canyon Road at Phillips Avenue approximately 1/8 of mile west of said intersection, per General Plan Policy, signals shall not be installed at less than ¼ mile increments for arterial highway.

Fowler at McKinley Avenue

4. 1. Signalize the intersection complete with actuation, signal pre-emption and left turn phasing. The installation of the traffic signal shall be done in conjunction with this project.

Temperance at McKinley Avenue

5. 1. Signalize the intersection complete with actuation, signal pre-emption and left turn phasing. The installation of the traffic signal shall be done in conjunction with this project.
   a. Dual left-turns on all legs.
   b. Four (4) through lanes on McKinley Avenue.
   c. Separate right-turn lanes on all legs.

Temperance at Jensen Avenue

6. 1. Signalize the intersection complete with actuation, signal pre-emption and left turn phasing. The installation of the traffic signal shall be done in conjunction with this project.
   a. Triple left-turn lanes on southbound approach.
   b. Dual left turns on the northbound, westbound, and eastbound approaches.
   c. Six (6) through lanes all around.
   d. Separate right turn lane all around.

Belmont at Fowler Avenue

7. 1. Signalize the intersection complete with actuation, signal pre-emption and left turn phasing. The installation of the traffic signal shall be done in conjunction with this project.
   a. Dual left turns all around.
   b. Four (4) through lanes all around.
   c. Separate right-turn lanes all around.

Belmont at Armstrong Avenue

8. 1. Signalize the intersection complete with actuation, signal pre-emption and left turn phasing. The installation of the traffic signal shall be done in conjunction with this project.
   a. Dual left-turn lanes for the westbound and eastbound approaches.
   b. Four (4) through lanes all around.
   c. Separate right-turn lanes all around.

Belmont at Temperance Avenue

9. 1. Signalize the intersection complete with actuation, signal pre-emption and left turn phasing. The installation of the traffic signal shall be done in conjunction with this project.
   a. Dual lefts on Belmont Avenue.
   b. ~~One (1) through lane and a shared through-right turn lane on Belmont Avenue~~.
      i. *The City does not agree with this mitigation measure. Belmont Avenue shall be designed with two (2) through lanes in each direction and separate right turn lanes.*

Tulare at Fancher Creek Drive West

10. 1. Signalize the intersection complete with actuation, signal pre-emption and left turn phasing. The installation of the traffic signal shall be done in conjunction with this project.

Tulare and Peach Avenue

11. 1. The developer, as a mitigation measure shall add left turn phasing on all approaches. This proposed construction of the signals shall include, but not limited to the following:
   a. The intersection shall be signalized to City of Fresno Standards complete with actuation, left turn phasing, and signal pre-emption.
   b. Add separate right turn on all approaches.

Tulare at Clovis Avenue

12. 1. Reconstruct the signal and the intersection to accommodate the following geometry:
   a. Single left turns on the westbound and eastbound approach.
   b. Dual left turns on the northbound and southbound approach.
   c. Four (4) lanes on Tulare Avenue.
   d. Six (6) lanes on Clovis Avenue.
   e. Separate right-turn lanes on all approaches.

13. The aforementioned intersections shall be signalized at such time that signal warrants are satisfied or at such time the City Engineer requests its installation be completed, which ever is earlier. If signal warrants are not satisfied upon build out of the single family, multi-family projects, commercial shopping centers, and Business Park, then this condition may be rescinded by the City Engineer. In addition, all intersection geometry shall be constructed to Public Works Standard P-69, unless otherwise noted.

14 As a mitigation measure, Study Intersection-Clovis at Jensen Avenue – Future conditions with or without any construction at the site will require that this intersection be retrofitted with dual lefts at all four approaches and construct three through lanes along Jensen Avenue in both directions. This has been the case with other traffic impact studies which included the intersection of Clovis and Jensen Avenue; therefore, this intersection shall be reevaluated and submit a fair share calculation to Traffic Engineering for review and approval.

Roundabout analysis of Fancher Creek Drive at Fowler Avenue:

15. Based on the findings of this report the proposed roundabout at said location does not function better than a signalized intersection. The Level of Service for the proposed roundabout is slightly worse than that of a signalized intersection. Therefore, a roundabout at this intersection cannot be allowed until further studies are performed. Such further studies will need to compare advantages and disadvantages of a roundabout versus a signalized intersection. Some of the criteria shall be but not limited to the following:

1. Cost
2. Pedestrian accessibility
3. Right-of-way required
4. Capacity of intersection
5. LOS of intersection
6. Bicyclist accessibility
7. Air emissions

16. Number of lanes shown in this study was two (2) on all for four (4) legs. Fowler Avenue is classified as an arterial; therefore the minimum number of lanes would be four (4) lanes for the north and south leg of the intersection. The roundabout was analyzed with one (1) lane on each approach. The analysis needs to be revised to show 2 lanes for the north and south approaches and 1 approach for the east and west approaches along with an updated LOS.

17. The Draft TIS should be revised to include the above comments and/or traffic mitigations prior to acceptance by Traffic Engineering.

If you have any question, please do not hesitate on contacting me at (559)621-8798 or by email: David.Padilla@freesno.gov

Sincerely,

Jose Luis Benavides, P.E., Traffic Engineering Manager
Public Works Department, Engineering Services

C: Traffic Planning Reading File
Louise Monroe, Supervising Engineering Technician, City of Fresno
David Padilla, Senior Engineering Technician, City of Fresno
Mike Sanchez, Planner III, City of Fresno
Darrel Unruh, Planning Manager, City of Fresno

TRAFFIC IMPACT STUDY
FOR THE
FANCHER CREEK PROJECT

EXECUTIVE SUMMARY/INTRODUCTION *[Caltrans Appendix A – I & III]*

This Traffic Impact Study (TIS) was prepared to assess the traffic impacts due to the development of the approximately 476 acre Fancher Creek Project (Project) and will be used in the preparation of a Project Environmental Impact Report (EIR). Of the approximately 476 acres, approximately 139 acres are unincorporated and would require annexation into the City. The entire Project is located within the City of Fresno Sphere of Influence and is consistent with the City of Fresno adopted 2025 General Plan. In addition, approximately 52 acres of the combined proposed Regional Commercial Center and multi-family housing are not under control of the applicant but are being included in this study for cumulative analysis purposes. The Project will be located primarily north of Kings Canyon Road, south of Belmont Avenue, east of Clovis Avenue, and west of Armstrong Avenue in the City of Fresno *[Caltrans Appendix A - III B]*, and will consist of the following *[Caltrans Appendix A - III A]*:

- 107 acres (1,500,000 square feet (sf)) of Light Industrial/Business Park
- 243 acres (1,543 dwelling units (DU)) of Single Family Residential
- 11 acres (120,000 sf) of Community Commercial
- 4 acres (30,000 sf) of Office
- 28 acres (480 DU) of Multi-family
- 83 acres (1,200,000 sf) of Regional Commercial

All 476 acres will ultimately require rezoning. The Project acreage by current and proposed zoning is as follows *[Caltrans Appendix A - III E]*:

- 107 acres from AE-20 (County) to M-1/UGM (City)
- 32 acres from AE-20 (County) to R-1/UGM (City)
- 211 acres from AE-5/UGM (City) to R-1/UGM (City)
- 31 acres from AE-5/UGM to C-2/UGM and C-P/UGM
- 95 acres from AE-5/UGM to M-1/UGM

Please note that the 52 acres not under applicant control are not being rezoned at this time. As noted in the Fancher Creek Initial Study/Notice of Preparation (NOP), the Fresno City Council has initiated amendments to the Fresno Zoning Ordinance that will permit residential mixed development in commercial districts, including C-2 and C-3, by Conditional Use Permit (CUP). Adoption of this ordinance amendment is expected to be complete prior to consideration of Fancher Creek.

Construction and occupation of the Project is expected to be completed by 2015. The applicant does not wish to phase the Project but rather wants to construct all required infrastructure at Project initiation *[Caltrans Appendix A – III F]*. The Project study area for the analysis of traffic impacts extends from Shaw Avenue (north) to Jensen Avenue (south) and from Peach Avenue (west) to Temperance Avenue (east). Appendix B Figure 1 shows the Project location *[Caltrans Appendix A - III D]*. Currently, the Project site is primarily agricultural in use with some vacant non-agricultural land and some agricultural related structures.

This report analyzes 26 existing and nine (9) future intersections, and 45 existing and three (3) future segments. In addition, Project trip assignment information is provided for 52 intersections and 52 segments. Unsignalized intersection levels of service (LOS) were calculated using the *2000 Highway Capacity Software (HCS 2000)*, which is an industry standard and is recognized for use by the City of Fresno, Clovis, Caltrans, and the County of Fresno. The *HCS 2000* software is based on the *2000 Highway Capacity Manual (HCM 2000)* methodology, which is also an industry standard. Signalized intersection levels of service were calculated using *Synchro 6.0* software, which also incorporates the *HCM 2000* methodologies. *Synchro 6.0* is recognized for use by the City of Fresno, Clovis, Caltrans and the County of Fresno.

To analyze the traffic impacts resulting from the build out of the Project, five (5) scenarios were evaluated. Time frames included in the five scenarios are Existing (2004), 2015, and 2025. Since the Project is consistent with the City of Fresno adopted 2025 General Plan, only scenarios with the Project included were analyzed. Growth increments and growth rates developed from the Council of Fresno County Governments (COFCG) Fresno County Traffic Model[1] (Model) were used to develop the 2015 "0" Project and 2025 "0" Project volumes. The model years used to develop the 2015 "0" Project and 2025 "0" Project growth increments and rates were 2004, 2015, and 2025. The 2015 and 2025 "0" Project/background road network improvements were based on the network improvements shown in the Model, and information provided by City and Caltrans staff.

Appendix A Tables 1 and 2 show the level of service summery for the study segments and intersections respectively for the various study scenarios *[Caltrans Appendix A - V A]*. Segments or intersections operating or are projected to operate below the adopted level of service standards are shown bolded in Appendix A Tables 1 and 2. The signalized and all-way stopped-controlled (AWSC) intersection levels of service shown in Appendix A Table 2 are representative of the whole intersection. Individual intersection movements or approaches may operate above or below the signalized and AWSC level of service or delay shown in Appendix A Table 2.

As shown in Appendix A Tables 1 and 2, the following locations by timeframe and time period operate or are projected to operate below the City of Fresno, Clovis, Caltrans or County of Fresno adopted level of service standards:

Existing (Without the Project)

Intersections

- Kings Canyon at Temperance
  - Northbound (NB) Approach –PM peak hour
  - Southbound (SB) Approach – AM peak hour
- Temperance at Jensen
  - NB Approach – AM/PM peak hours
  - SB Approach – AM/PM peak hours
- Belmont at Fowler – AM/PM peak hours
- Clovis at Ashlan – PM peak hour

[1] The land uses in the Fresno County Travel Model consist of:
- County of Fresno 2000 General Plan - adopted
- City of Clovis 1993 General Plan - adopted
- City of Fresno 2025 General Plan - adopted

By the year 2025, the Land Use Plans for the City of Clovis and the City of Fresno will be filled to near capacity. The County of Fresno General Plan has no land use map with which to determine capacity.

2015 Project (With the Project)

Intersections

- Tulare Avenue at Argyle Avenue
  - NB Left-Through-Right – PM peak hour
  - SB Left-Through-Right – PM peak hour
- Kings Canyon Road at Temperance Avenue
  - NB Approach – AM/PM peak hours
  - SB Approach – AM/PM peak hours
- Kings Canyon Road at Argyle Avenue
  - SB Approach – AM/PM peak hours
- Fowler Avenue at McKinley Avenue
  - WB Approach – AM/PM peak hours
  - EB Approach – AM/PM peak hours
- Temperance Avenue at McKinley Avenue
  - WB Approach – AM/PM peak hours
  - EB Approach – AM/PM peak hours
- Temperance Avenue at Jensen Avenue
  - EB Left – AM/PM peak hours
  - NB Approach – AM/PM peak hours
  - SB Approach – AM/PM peak hours
- Belmont Avenue at Fowler Avenue – AM/PM peak hours
- Belmont Avenue at Armstrong Avenue
  - NB Approach – AM/PM peak hours
  - SB Approach – AM/PM peak hours
- Belmont Avenue at Temperance Avenue – AM/PM peak hours
- Clovis Avenue at Ashlan Avenue – PM peak hour
- Ashlan Avenue at Temperance Avenue – AM/PM peak hours
- Tulare at Fancher Drive/Regional Commercial Driveway
  - NB Approach –PM peak hour
  - SB Approach – PM peak hour
- Fancher Creek Drive at Fowler Avenue
  - WB Approach – AM/PM peak hours
  - EB Approach – PM peak hour
- Clovis Avenue at State Route (SR) 180 EB off-ramp –PM peak hour

2025 Project (With the Project)

Segments

- Clovis Avenue from Olive Avenue to SR 180 – PM peak hour – LOS "F"
- Fowler Avenue from McKinley Avenue to Olive Avenue – PM peak hour – LOS "F"
- Fowler Avenue from Tulare Avenue to Fancher Creek Drive – PM peak hour – LOS "E"
- Temperance Avenue from SR 180 to Kings Canyon Road – AM/PM peak hour – LOS "E"/LOS "E"

Intersections

- Kings Canyon Road at Temperance Avenue – PM peak hour
- Temperance Avenue at Jensen Avenue – AM/PM peak hours
- Belmont Avenue at Clovis Avenue – PM peak hour
- Clovis Avenue at Ashlan Avenue – PM peak hour

Rural peak hour volume signal warrants were also met at the following locations by time frame:

Existing

- Kings Canyon Road at Temperance Avenue
- Kings Canyon Road at Argyle Avenue
- Temperance Avenue at Jensen Avenue
- Belmont Avenue at Fowler Avenue
- Belmont Avenue at Temperance Avenue
- Ashlan Avenue at Temperance Avenue

2015 Project

- Tulare Avenue at Argyle Avenue
- Temperance Avenue at McKinley Avenue
- Belmont Avenue at Armstrong Avenue
- McKinley Avenue at Fowler Avenue
- Tulare Avenue at Fancher Creek Drive West
- Tulare at Fancher Drive/Regional Commercial Driveway
- Fowler Avenue at Fancher Creek Drive

The SR 180 off-ramp intersections at both Clovis and Fowler were assumed to be signalized when constructed.

Roundabout analysis was also prepared for the following three study locations:

- Fowler Avenue at Fancher Creek Drive
- Tulare Avenue at Fancher Drive/Regional Commercial Driveway
- Fancher Drive 90° bend in the Regional Commercial Center

Appendix A Table 3 shows the roundabout analysis results including number of entering legs, number of lanes, diameter and level of service. As can be seen in Appendix A Table 3 all three (3) study locations are projected to operate at or above a LOS "B" in both the 2015 and 2025 Project scenarios.

In addition to the segment and intersection analyses, Caltrans staff requested queuing analyses for the following locations:

- Clovis Avenue SB between the SR 180 EB off-ramp and Belmont Avenue
- Fowler Avenue SB between the SR 180 EB off-ramp and Belmont Avenue

Appendix A Table 4 shows the projected 50th and 95th-percentile queue lengths for the various scenarios for these two locations. As shown in Appendix A Table 4, neither of the two locations is projected to exceed the available queue storage lengths. However the Clovis Avenue SB through movement between the SR 180 EB ramp intersection and the Belmont Avenue intersection is projected to exceed capacity of the movement and the resulting queues may be longer. However there is approximately 90 to 160 feet remaining storage distance between the two intersections that this movement could utilize. Please note that existing and non-signalized future queue lengths for the

Fowler Avenue SB movement between the SR 180 EB off-ramp and Belmont Avenue intersection could not be determined since the intersection is currently an AWSC and there is no methodology for an AWSC queue length determination.

To mitigate the locations operating or projected to operate below the adopted level of service standards (as shown in Appendix A Tables 1 & 2), and meet the rural peak hour volume signal warrants, the following improvements by estimated timeframe are recommended *[Caltrans Appendix A – VB]*:

2015 Project (With the Project)

Tulare Avenue at Argyle Avenue

- Signalize the intersection

Kings Canyon Road at Temperance Avenue

- Signalize the intersection
- Restripe/widen the northbound approach, south leg, from a separate left-turn lane, two (2) through lanes and a shared through-right lane to a separate left-turn lane, three (3) through lanes and a separate right-turn lane
- Restripe/widen the southbound approach, north leg, from a separate left-turn lane, two (2) through lanes and a shared through-right lane to a separate left-turn lane, three (3) through lanes and a separate right-turn lane
- Restripe/widen the westbound approach, east leg, from a separate left-turn lane, one (1) through lane and a shared through-right lane to dual (2) left-turn lanes, two (2) through lanes and a separate right turn lane
- Restripe/widen the eastbound approach, west leg, from a separate left-turn lane, one (1) through lane and a shared through-right lane to dual (2) left-turn lanes, two (2) through lanes and a separate right turn lane

Kings Canyon Road at Argyle Avenue

- Signalize the intersection
- Restripe/widen the southbound approach, north leg, from a shared left-through lane to a separate left-turn lane and a separate right-turn lane

Fowler Avenue at McKinley Avenue

- Signalize the intersection

Temperance Avenue at McKinley Avenue

- Signalize the intersection
- Restripe/widen the westbound approach, east leg, from a separate left-turn lane, two (2) through lanes and a separate right-turn lane to dual (2) left-turn lanes, two (2) through lanes and a separate right turn lane
- Restripe/widen the eastbound approach, west leg, from a separate left-turn lane, two (2) through lanes and a separate right-turn lane to dual (2) left-turn lanes, two (2) through lanes and a separate right turn lane

Temperance Avenue at Jensen Avenue

- Signalize the intersection
- Restripe/widen the northbound approach, south leg, from a separate left-turn lane, two (2) through lanes and a shared through-right lane to dual (2) left-turn lanes, three (3) through lanes and a separate right-turn lane

- Restripe/widen the southbound approach, north leg, from a separate left-turn lane, two (2) through lanes and a shared through-right lane to dual (2) left-turn lanes, three (3) through lanes and a separate right-turn lane
- Restripe/widen the westbound approach, east leg, from a separate left-turn lane, two (2) through lanes and a shared through-right lane to dual (2) left-turn lanes, three (3) through lanes and a separate right turn lane
- Restripe/widen the eastbound approach, west leg, from a separate left-turn lane, two (2) through lanes and a shared through-right lane to dual (2) left-turn lanes, three (3) through lanes and a separate right turn lane

Belmont Avenue at Fowler Avenue

- Signalize the intersection
- Restripe/widen the northbound approach, south leg, from a separate left-turn lane, one (1) through lane and a shared through-right lane to dual (2) left-turn lanes, two (2) through lanes and a separate right-turn lane
- Restripe/widen the southbound approach, north leg, from a separate left-turn lane, one (1) through lane and a shared through-right lane to dual (2) left-turn lanes, two (2) through lanes and a separate right-turn lane
- Restripe/widen the westbound approach, east leg, from a separate left-turn lane, one (1) through lane and a shared through-right lane to dual (2) left-turn lanes, two (2) through lanes and a separate right-turn lane
- Restripe/widen the eastbound approach, west leg, from a separate left-turn lane, one (1) through lane and a shared through-right lane to dual (2) left-turn lanes, two (2) through lanes and a separate right-turn lane

Belmont Avenue at Armstrong Avenue

- Signalize the intersection

Belmont Avenue at Temperance Avenue

- Signalize the intersection
- Restripe/widen the westbound approach, east leg, from a separate left-turn lane, one (1) through lane and a shared through-right lane dual (2) left-turn lanes, one (1) through lane and a shared through-right lane
- Restripe/widen the eastbound approach, west leg, from a separate left-turn lane, one (1) through lane and a shared through-right lane dual (2) left-turn lanes, one (1) through lane and a shared through-right lane

Clovis Avenue at Ashlan Avenue

- Restripe/widen the northbound approach, south leg, from a separate left-turn lane, two (2) through lanes and a shared through-right lane to a separate left-turn lane, three (3) through lanes and a separate right-turn lane
- Restripe/widen the southbound approach, north leg, from a separate left-turn lane, two (2) through lanes and a shared through-right lane to a separate left-turn lane, three (3) through lanes and a separate right-turn lane

Ashlan Avenue at Temperance Avenue

- Signalize the intersection
- Restripe/widen the westbound approach, east leg, from a separate left-turn lane, one (1) through lane and a shared through-right lane dual (2) left-turn lanes, one (1) through lane and a shared through-right lane

- Restripe/widen the eastbound approach, west leg, from a separate left-turn lane, one (1) through lane and a shared through-right lane dual (2) left-turn lanes, one (1) through lane and a shared through-right lane

Tulare Avenue at Fancher Creek Drive West

- Signalize the intersection

Please note that this intersection is projected to operate at an acceptable level of service without signalization. However since it warranted a signal based on the rural peak hour volume warrant, signalization was included in the recommended mitigations.

Tulare Avenue at Fancher Drive/Regional Commercial Driveway

- Signalize the intersection
- Restripe/widen the northbound approach, south leg, from a separate left-turn lane, one (1) through lane and a separate right-turn lane to dual (2) left-turn lanes, one (1) through lane and a separate right turn lane
- Restripe/widen the southbound approach, north leg, from a separate left-turn lane, one (1) through lane and a separate right-turn lane to dual (2) left-turn lanes, one (1) through lane and a separate right turn lane

Fancher Creek Drive at Fowler Avenue

- Signalize the intersection

Clovis Avenue at SR 180 EB off-ramp

- Restripe/widen the eastbound approach, west leg, from dual (2) left-turn lanes and dual (2) right-turn lanes to three (3) left-turn lanes and three (3) right-turn lanes

All signalized intersections that are coordinated or will be coordinated with the various study intersections will need to be coordinated and reoptimized to determine the least amount of delay across all corridors.

2025 Project (With the Project)

Segments

Clovis Avenue from Olive Avenue to SR 180

- Widen from 6- to 8-lanes

Fowler Avenue from McKinley Avenue to Olive Avenue

- Widen from 2- to 4-lanes

Fowler Avenue from Tulare Avenue to Fancher Creek Drive

- Widen from 4- to 6-lanes

Temperance Avenue from SR 180 to Kings Canyon Road

- Widen from 6- to 8-lanes

Please note that three (3) of the four (4) failing segments were projected to fail in the City of Fresno adopted 2025 General Plan and that the recommended mitigations correspond to the recommendations in the General Plan. Only one of the segments, Fowler between Tulare and Fancher Creek, was not projected to operationally fail in the adopted 2025 General Plan. However the intersection of Tulare at Fowler and Fancher Creek at Fowler are both forecasted to operate at an acceptable level of service without the recommended road widening.

Intersections

Kings Canyon Road at Temperance Avenue

- Restripe/widen the northbound approach, south leg, from a separate left-turn lane, three (3) through lanes and a separate right-turn lane to a separate left-turn lane, three (3) through lanes and a shared through-right lane
- Restripe/widen the southbound approach, north leg, from a separate left-turn lane, three (3) through lanes and a separate right-turn lane to a separate left-turn lane, three (3) through lanes and a shared through-right lane

Temperance Avenue at Jensen Avenue

- Restripe/widen the westbound approach, east leg, from dual (2) left-turn lanes, three (3) through lanes and a separate right-turn lane to dual (2) left-turn lanes, three (3) through lanes and a shared through-right
- Restripe/widen the eastbound approach, west leg from dual (2) left-turn lanes, three (3) through lanes and a separate right-turn lane to dual (2) left-turn lanes, three (3) through lanes and a shared through-right

Belmont Avenue at Clovis Avenue

- Restripe/widen the northbound approach, south leg, from a separate left-turn lane, three (3) through lanes and a separate right-turn lane to dual (2) left-turn lanes, three (3) through lanes and a shared through-right lane

Clovis Avenue at Ashlan Avenue

- Restripe/widen the northbound approach, south leg, from a separate left-turn lane, three (3) through lanes and a separate right-turn lane to dual (2) left-turn lanes, three (3) through lanes and a separate right-turn lane
- Restripe/widen the southbound approach, north leg, from a separate left-turn lane, three (3) through lanes and a separate right-turn lane to dual (2) left-turn lanes, three (3) through lanes and a separate right-turn lane
- Restripe/widen the westbound approach, east leg, from a separate left-turn lane, one (1) through lane and a shared through-right lane to dual (2) left-turn lanes, two (2) through lanes and a separate right-turn lane
- Restripe/widen the eastbound approach, west leg, from a separate left-turn lane, one (1) through lane and a separate right-turn lane to dual (2) left-turn lanes, two (2) through lanes and a separate right-turn lane

Again, all signalized intersections that are coordinated or will be coordinated with the various study intersections will need to be coordinated and reoptimized to determine the least amount of delay across all corridors.

The City of Fresno's Traffic Signal Mitigation Impact Fee program indicates that a new development will be assessed a fee of $47.81 per average daily trip. For a proposed Project of this size including the 14 acres of light industrial, 93 acres of business park, 1,543 single family, 408 multi-family, 30,000 sf of general office and 960,000 sf of retail commercial, the fees would be approximately $3,513,100 *[Caltrans Appendix A – V C]*. These fees were calculated based the projected trip generation of 73,481 daily trips with no reduction for capture or pass-by. Also please note that these fees were calculated based on only the applicant controlled parcels.

Appendix A Table 5 shows the Project's Fair Share Percentages for the proposed improvements detailed previously using the City's, Caltrans' or the County's formula *[Caltrans Appendix A – V C]*. The City of Clovis does not use a Fair Share Percentage formula since they have an Impact Fee Program therefore any Fair Share Percentages shown for proposed improvements at Clovis intersections utilizes the City of Fresno's formula. The traffic growth that is projected for each of the study segments and intersections is due not only to this Project but to all background growth projected to occur in the City of Fresno and surrounding areas. Therefore, the Fair Share percentages shown in Appendix A Table 5 are provided as information only and it is up to the City as lead agency to determine what mitigations, if any, they will require the applicant to fund. Also please note that several of the intersections included in Table 5 require signalization as part of the mitigation. If the City of Fresno Traffic Signal Mitigation Impact Fee is assessed toward this Project, then signalization costs should be removed from consideration in regards to the Project's Fair Share fees.

The Fair Share Percentages, per City of Fresno and Caltrans requirements, were calculated by taking the Project trips (applicant controlled) minus the Project Trips (Non-applicant controlled) and dividing by the total 2025 Project volumes minus the Existing volumes for the given intersection. The formula used in calculating the City of Fresno and Caltrans Fair Share Percentages is:

Fair Share Percentage = (Project Only Trips (Applicant) – Project Only Trips (Non-applicant)) / (2025 Project Volumes – Existing Volumes)

The Fair Share Percentages, per County of Fresno requirements, were calculated by taking the Project trips (applicant controlled) minus the Project Trips (Non-applicant controlled) and dividing by the total 2025 Project volumes for the given intersection. The formula used in calculating the County of Fresno Fair Share Percentages is:

Fair Share Percentage = (Project Only Trips (Applicant) – Project Only Trips (Non-applicant)) / 2025 Project Volumes

Letter 12: California Department of Transportation (Caltrans), District 6

1. The Clovis Avenue at SR 180 eastbound ramps analysis was re-evaluated both as a single intersection and as part of the entire study roadway network. With the volumes projected to occur in 2015 and 2025, it appears that triple left- and triple right-turn lanes will be required in order for this intersection to operate at or above the appropriate level of service standard.

   The Belmont Avenue at Clovis Avenue southbound lane configurations for 2015 shown in the September 2004 Traffic Study were developed based on discussions with Caltrans staff that indicated that no improvements were planned for the Belmont Avenue at Clovis Avenue intersection as part of the SR 180 Project. Therefore, the existing lane configurations of dual left-turns, two through lanes and a separate right turn lane were modified to show the widening of Clovis Avenue from four to six lanes by 2015. With the modification to dual left-turns, three through lanes, and a shared through-right lane, the Belmont/Clovis intersection would show an improved level of service compared to that identified in the September 2004 Study. The addition of the shared through-right lane to the Clovis Avenue at Belmont Avenue southbound approach should also provide an improved level of service for the entire study roadway network since the roadway network was optimized as a single system.

2. The City will be working with the applicants and with the Department of Transportation/FAX to ensure that maximum feasible transit opportunities will be available to the project. Please see responses to Letter 12: Fresno Area Express.

3. Right-of-way dedications and encroachment permit issues will be dealt with as part of the site plan review process.

4. As part of the Final EIR certification process, a mitigation monitoring report will be prepared for adoption that will include mitigation, the party responsible for mitigation, and the timing of the mitigation per CEQA requirements. Please see responses to Letter 11: City of Fresno Public Works Department that contains a monitoring matrix assigning mitigation responsibility to various portions of the project.

5. The City recognizes the requirements of PRC Sections 21081.4, 21081.6, and 21081.7 and has developed a filing format acceptable to Caltrans District 06. That same format will be used for the Fancher Creek project following certification of the Final EIR on the project and adoption of the mitigation monitoring report.

STATE OF CALIFORNIA—BUSINESS, TRANSPORTATION AND HOUSING AGENCY ARNOLD SCHWARZENEGGER, Governor

DEPARTMENT OF TRANSPORTATION
1352 WEST OLIVE AVENUE
P.O. BOX 12616
FRESNO, CA 93778-2616
PHONE (559) 445-6666
FAX (559) 488-4088
TTY (559) 488-4066

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November 29, 2004

NOV 23
Development Department
CITY OF FRESNO

2131-IGR/CEQA
6-FRE-180-64.41+/-
FANCHER CREEK DEIR
SCH # 2004021071
C-04-79 & T-5232

Mr. Mike Sanchez
City of Fresno Development Department
Planning Division
2600 Fresno Street
Fresno, CA 93721

Letter 12

Dear Mr. Sanchez:

We have reviewed the Draft Environmental Impact Report (DEIR) for the development known as Fancher Creek. The project consists of four major project areas and is generally located between North Clovis, North Armstrong, East Kings Canyon (State Route 180) and East Harvey Avenues. Caltrans has the following comments:

Utilizing the Council of Fresno County Government's traffic forecasting model and ITE trip generation, it has been established that trips generated by this development would impact the future State Route (SR) 180 interchanges at Clovis and Fowler Avenues.

A comparison of the 2015 and 2025 turning movements at the SR 180 eastbound ramp intersection at Clovis Avenue indicates that there would be little or no change in volumes over the ten-year period. A similar comparison of the intersections at Clovis and Belmont, Fowler and Belmont, and the SR 180 eastbound ramp intersection at Fowler Avenue indicates a similar moderate change in volumes over the ten-year period.

1. At the SR 180 eastbound ramp intersection at Clovis Avenue, the initial off-ramp configuration will have two right-turn lanes and two left-turn lanes. Based on the 2015 volumes, the analyst is indicating that three right-turn lanes and three left-turn lanes would be required in the future; however, an analysis by this office concluded that the initial configuration should be sufficient until the year 2025. At the nearby intersection of Clovis and Belmont, the analyst indicated that the initial southbound movement configuration would contain a right-turn lane, three through lanes, and two left-turn lanes. Due to the very high number of projected southbound through movements at the Clovis and Belmont intersection and the limited capacity for the southbound left-turn movements, the study indicated that some of the southbound left-turn movements would bleed over and block some of the southbound through movements. However, this office discovered that the initial configuration would actually contain a shared right/through line, three through lanes, and two left-turn lanes. Based on the correct initial configuration, this office concludes that the Clovis at Belmont intersection should operate sufficiently through the year 2025. This office does concur with the analyst that a dedicated right-turn lane would be required from westbound Belmont to northbound Clovis. This improvement is not currently planned as part of the SR 180 freeway project.

At the SR 180 eastbound ramp intersection at Fowler Avenue, the analyst is indicating that the initial configuration should be satisfactory through the year 2025. At the nearby intersection of Fowler and Belmont, the initial southbound movement configuration will have a shared right/through lane, a single through lane, and a single left-turn lane. Due to the high number of projected left-turn movements and borderline through movements at the Fowler and Belmont intersection, the study is recommending that the southbound movement configuration should be modified to a right-turn movement, two through movements, and two left-turn movements. Due to the close proximity of these two intersections and based on the projected volumes in the study, this office concurs with the study's recommendation regarding improvements to the southbound movement configuration at the intersection of Fowler and Belmont. These improvements would be required prior to 2015 in order to address congestion that would impact the SR 180 interchange at Fowler Avenue.

2. The EIR identifies two Fresno Area Express fixed-routes within the project area. The EIR also indicates that the developer may propose a Mello-Roos district for the project area. If such a district is formed, the City should consider using this assessment district to fund transit service for the development.

According to our Transportation Concept Report (TCR), this segment of the existing SR 180 is planned for 124 feet with an offset alignment to accommodate dual left-turn lanes. Caltrans right-of-way shows this segment existing at 106 feet. An irrevocable offer of dedication will be needed to accommodate the ultimate configuration of SR 180. Due to the offset alignment, the two sections of the project, separated by Fowler Avenue, will have different requirements. The section of the project on the northwest corner of the existing SR 180 and Fowler will require 6 feet; the section on the northeast corner will require 12 feet. Dedications required by the Lead Agency need to be shown on a revised site plan and forwarded for our review. A summary of the requirements for right-of-way dedications is enclosed.

3. An encroachment permit must be obtained for all proposed activities for placement of encroachments within, under or over the State highway rights- of-way. Activity and work planned in the State right-of-way shall be performed to State standards and specifications, at no cost to the State. Engineering plans, calculations, specifications, and reports (documents) shall be stamped and signed by a licensed Engineer or Architect. Engineering documents for activity and work in the State right-of-way shall be submitted using Metric Units. However, dual units may be used for activity and work in the right-of-way costing $1,000,000 or less, or by an exception approved by the Director. The preferred method of delineating dual units is by showing the English unit first then the Metric unit next to it in parenthesis. The Permit Department and the Environmental Planning Branch will review and approve the activity and work in the State right-of-way before an encroachment permit is issued. Encroachment permits will be issued in accordance with Streets and Highway Codes, Section 671.5, "Time Limitations." Questions regarding the encroachment permit process need to be referred to Kirk Anderson, Transportation Engineer, at (559) 445-6483.

4. While it is indicated that the development will pay a traffic signal fee, it is not clear if the applicant or someone else is responsible for the other mitigation measures recommended in the DEIR, nor is there any clear indication as to when said mitigation would be required. The DEIR also states that the fair share percentages are provided as information only and the City as lead agency will determine what mitigation measures, if any, will be required of the applicant. Leaving this to a later date does not provide the decision-making body or the general public with a clear picture of what mitigation will be implemented and what impacts from this project will remain unmitigated. The FEIR should clearly state what mitigation will be required, who will be responsible for the mitigation, and at what project phase that the mitigation will be required. The timing of the mitigation could be based on a specific year (i.e.: 2015), a

specific project phase, or on specific conditions, such as traffic monitoring at critical locations. This should be spelled out in the DEIR. Not only will this make the project and its responsibilities clearer to the decision-makers and to the general public, but it will prevent problems arising at the required Mitigation Monitoring stage of the project (please see the next two paragraphs).

5. Recent 2001 legislation, (Assembly Bill (AB) 1807, amending CEQA, PRC Sect. 21081.4, 21081.6 and 21081.7), required that the California Department of Transportation (Department) establish mitigation monitoring submittal guidelines for public agencies. The guidelines affect agencies that have approved development projects which may have had an impact of statewide, regional, or area-wide significance, and are required under CEQA to provide the Department reports on transportation related mitigation monitoring measures. The *"Guidelines for Submitting Transportation Information from a Reporting or Monitoring Program to the Department of Transportation"* (TMM Submittal Guidelines) are enclosed. The TMM Submittal Guidelines discuss the scope, purpose and legal requirements for mitigation monitoring reporting and submittal, specify the generic content for reports, and explain procedures for timing, certification and submittal of reports.

To aid local agencies in fulfilling their CEQA reporting requirement, the enclosed Mitigation Monitoring Certification Checklist form is being provided. Please complete and sign a Certification Checklist form for each approved development project that includes transportation related mitigation measures and return it to this office once the mitigation measures are approved, and again when they are completed. Additional copies of the TMM Submittal Guidelines and the Certification Checklist are downloadable from the Department's Division of Transportation Planning, Office of Community Planning, Intergovernmental Review Guidelines website: (http://www.dot.ca.gov/hq/tpp/offices/ocp/igr_guidelines_procedures.htm).

Please be advised that any future development adjacent to a State Route, whether the entitlement is deemed by the lead agency to be discretionary or ministerial should be sent to Caltrans for review. If you have any questions, please call me at (559) 445-6666.

Sincerely,

Moses Stites

MOSES STITES
Office of Transportation Planning
District 6

Enclosures

C: Ms. Barbara Goodwin, Council of Fresno County Governments
State Clearinghouse

STATE OF CALIFORNIA—BUSINESS, TRANSPORTATION AND HOUSING AGENCY ARNOLD SCHWARZENEGGER, Governor

DEPARTMENT OF TRANSPORTATION
855 "M" STREET
SUITE 200
FRESNO, CA. 93721
PHONE (559) 445-6573
FAX (559) 445-6560

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CALTRANS DISTRICT 6
CENTRAL REGION SURVEYS OFFICE

REQUIRED INFORMATION FOR R/W DEDICATIONS

1) A Copy of the vesting deed(s) for the subject property.

2) Either a copy of a Title Report, or a Lot Book Report/Guarantee of the subject property, **dated within 30 days of submittal** of submittal of the Dedication Package.

3) Copy of the Assessor's Map.

4) Assessor's Parcel Number (APN) of the property, if not stated in the Title Report.

5) State whether the property is within city limits or in an unincorporated area, if not stated in the Title Report.

6) If the property is a lot of a Tract or a parcel of a Parcel Map, provide the lot or parcel number and a copy of the recorded map(s).

7) Provide copies of any record map or deed cited in the documents provided.

8) If unsubdivided land, note the Section, Township, and Range where the property is located.

9) A Legal description of the dedication parcel signed and sealed by a Licensed Professional Land Surveyor or a Civil Engineer registered prior to 1982 on 81/2" X 11" paper. Please write EXHIBIT "A" at the top of the legal description (see attached sample legal).

10) A Platt showing pertinent survey data, such as bearings, distances, and curve data, where applicable, and the area of the dedication parcel on 81/2" X 11" paper. If the parcel is located in unsubdivided land, show ties to the nearest 2 section corner(s) and/or quarter-section corner(s). Please write EXHIBIT "B" at the top of the Plat (see attached sample plat).

11) A Copy of the traverse calculations, for the dedication parcel, that includes error of closure and area.

12) Specify if an Offer of Dedication or a dedication in which Caltrans will take title to the parcel.

13) A Copy of the **CALTRANS REQUIREMENTS** describing the location and amount of right-of-way to be dedicated.

If there are any questions, please contact Jerry Prigmore at 559-445-6573.

Mail packet of information to:

California Department of Transportation
Surveys Department
855 "M" Street.
Suite 200
Fresno, CA. 93721

Attn. Jerry Prigmore

EXHIBIT "A"

Commencing at a railroad spike with a cut cross for the Northeast corner of Sec.24, T.32S., R. 23E., M.D.M., in the County of Kern, State of California as shown on Parcel Map No. 3057 recorded in Parcel Map Book. 13, at Page 162, in the office of the County Recorder of said County, said corner lies 50 feet South of a 4" L.G.B Mac Dowell brass cap marked "Witness Corner 50'N ", said witness corner lies on the East line of Sec. 13, T. 32S., R. 23E., M.D.M. in said County as shown on the Record of Survey Map recorded in Record of Survey Book 8, at Page 155 in said County Recorders office; thence N89°51'06"W, along the North line of said Section 24 and along the centerline of Main Street (County Road No. 1100-A and County Road No. 1120), a distance of 332.91 feet to the Westerly Right-of-Way line of State Highway 33 (VI-Ker-33), as shown on State Highway Map VI-Ker-119, sheet 1, dated Nov. 1956; thence S00°08'54"W, along said West line of State Highway 33, a distance of 30.00 feet to a 5/8" rebar with a plastic cap stamped L.S. 3779 and the TRUE POINT OF BEGINNING;

1) Thence S 60°18'56"E along said Westerly line of State Highway 33, a distance of 56.30 feet;
2) Thence S 15° 03'30"E continuing along said Westerly line, a distance of 997.53 feet to the East line of said Section 24;
3) Thence S 00°54'24"W, along the East line of said Section 24, a distance of 54.54 feet to a 5/8" rebar with a plastic cap stamped L.S. 3779;
4) Thence N 15°03'30"W, a distance of 105.04 feet to the beginning of the South end of a 30.00 foot access opening;
5) Thence continuing N 15°03'30"W, a distance of 30.00 feet to the North end of said access opening;
6) Thence continuing N 15°03'30"W, a distance of 899.16 feet to a 5/8" rebar with a plastic cap stamped L.S. 3779;
7) Thence N 60°18'56"W, a distance of 54.41 feet to a 5/8" rebar with a plastic cap stamped L.S. 3779;
8) Thence N 00°08'54"E, a distance of 25.00 feet to TRUE POINT OF BEGINNING.

CONTAINING 0.38 ACRES MORE OR LESS.

This real property description was prepared by me, or under my direction, in conformance with the Professional Land Surveyors Act.

NOV. 29. 2004 5:04PM CAL TRANS PLANNING NO. 447 P. 6/14

EXHIBIT "A"

THE SOUTH 55.00 FEET OF PARCEL 2 OF PARCEL MAP NO. 9975 PER MAP RECORDED IN PARCEL MAP BOOK 47 AT PAGE 23 IN THE KERN COUNTY RECORDER'S OFFICE. BEING IN A PORTION OF THE SOUTHEAST ¼ OF THE SOUTHWEST ¼ OF SECTION 24, T.29S., R.25E., M.D.B.&M., IN THE UNINCORPORATED AREA OF THE COUNTY OF KERN, STATE OF CALIFORNIA.

THIS REAL PROPERTY DESCRIPTION WAS PREPARED BY ME, OR UNDER MY DIRECTION, IN CONFORMANCE WITH THE PROFESSIONAL LAND SURVEYOR'S ACT.

_____ _____

NAME DATE

RCE or LS

CALTRANS PARCEL NO. _____

REGISTERED PROFESSIONAL ENGINEER
No. Exp.
CIVIL
STATE OF CALIFORNIA

NOV. 29. 2004 5:04PM CAL TRANS PLANNING NO. 447 P. 7/14

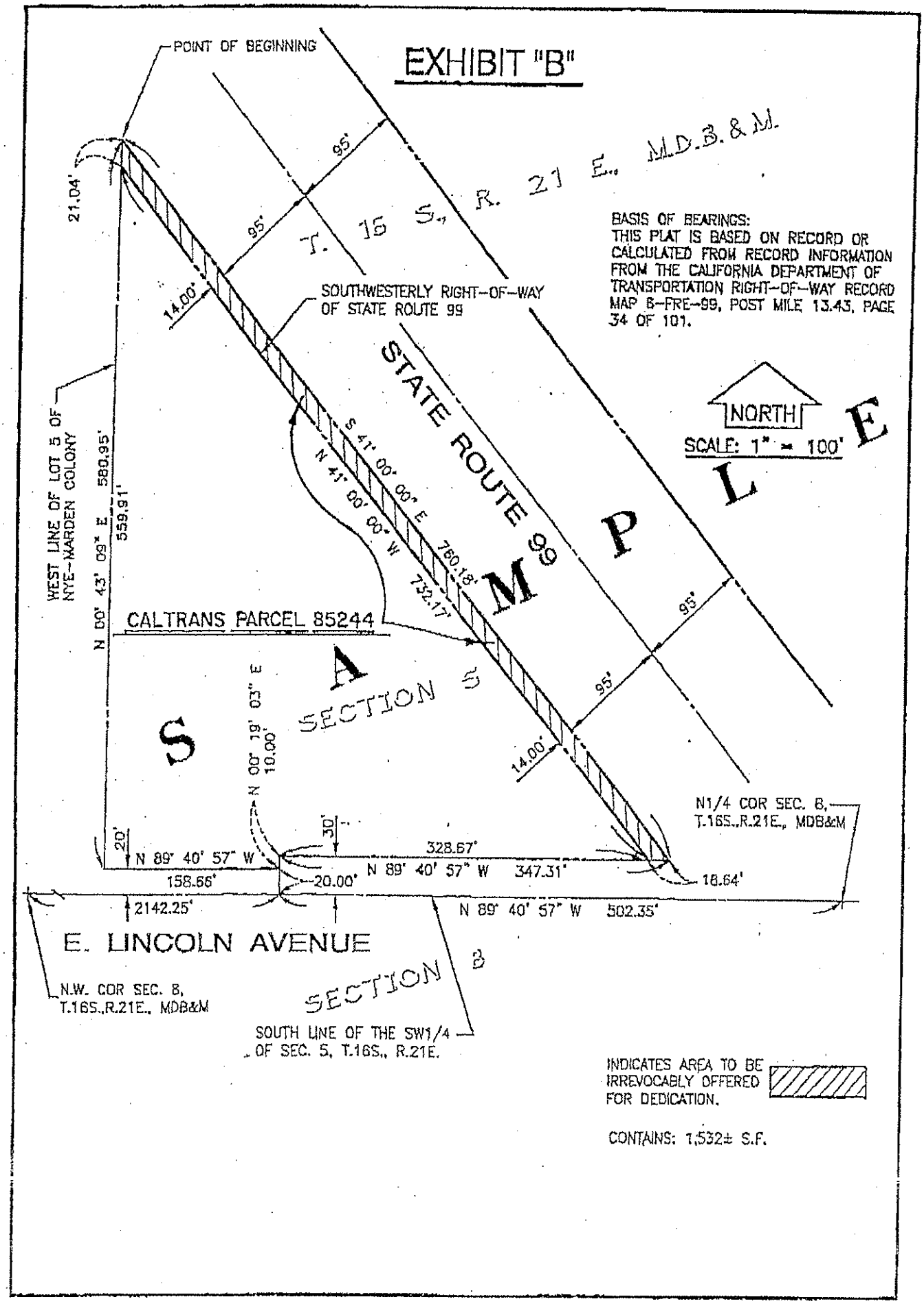


EXHIBIT "B"
POINT OF BEGINNING
T. 16 S., R. 21 E., M.D.B. & M.
BASIS OF BEARINGS:
THIS PLAT IS BASED ON RECORD OR CALCULATED FROM RECORD INFORMATION FROM THE CALIFORNIA DEPARTMENT OF TRANSPORTATION RIGHT-OF-WAY RECORD MAP 6-FRE-99, POST MILE 13.43, PAGE 34 OF 101.
NORTH
SCALE: 1" = 100'
SOUTHWESTERLY RIGHT-OF-WAY OF STATE ROUTE 99
STATE ROUTE 99
21.04'
95'
14.00'
WEST LINE OF LOT 5 OF NYE-MARDEN COLONY
N 00° 43' 09" E 559.91'
580.95'
S 41° 00' 00" E 760.18'
N 41° 00' 00" W 732.17'
CALTRANS PARCEL 85244
SECTION 5
N 00° 19' 03" E 10.00'
20'
30'
N 89° 40' 57" W 158.66'
20.00'
328.67'
N 89° 40' 57" W 347.31'
16.64'
N1/4 COR SEC. 8, T.16S., R.21E., MDB&M
2142.25'
N 89° 40' 57" W 502.35'
E. LINCOLN AVENUE
N.W. COR SEC. 8, T.16S., R.21E., MDB&M
SECTION 8
SOUTH LINE OF THE SW1/4 OF SEC. 5, T.16S., R.21E.
INDICATES AREA TO BE IRREVOCABLY OFFERED FOR DEDICATION.
CONTAINS: 1,532± S.F.

Caltrans

Guidelines for Submitting Transportation Information from a Reporting or Monitoring Program to the California Department of Transportation

for a

Project of Statewide, Regional, or Areawide Significance

California Department of Transportation

July 9, 2004

California Department of Transportation (Department)

GUIDELINES FOR SUBMITTING TRANSPORTATION INFORMATION FROM A REPORTING OR MONITORING PROGRAM TO THE CALIFORNIA DEPARTMENT OF TRANSPORTATION (DEPARTMENT)

INTRODUCTION

The California Environmental Quality Act (CEQA) requires, under Public Resources Code (PRC) Section 21081.6, the adoption of reporting or monitoring programs when public agencies include environmental impact mitigation as a condition of project approval. Reporting or monitoring takes place after project approval to ensure implementation of the project in accordance with mitigation adopted during the CEQA review process.

Assembly Bill 1807 (effective January 1, 2001) amended the PRC in a number of ways. Section 21080.4 was amended to add a requirement that lead agencies submit Notices of Preparation (NOPs) to the Governor's Office of Planning and Research when they determine that an environmental impact report will be required to approve a project.

Section 21081.7 was amended with two additional provisions. The first provision required that transportation information resulting from a reporting or monitoring program adopted by a public agency in accordance with Section 21081.6 be submitted to the Department of Transportation (Department) when a project has impacts that are of statewide, regional, or area-wide significance. The second provision required that the Department adopt guidelines for the submittal of those reporting or monitoring programs.

PURPOSE

The purpose of these guidelines is to establish clear and consistent statewide procedures to be used by both Department District Intergovernmental Review (IGR) Program Coordinators to identify the scope and timing of transportation information needed from lead agencies, and public agencies when submitting transportation information to the Department, in accordance with Section 21081.7.

PROCEDURES A. The District IGR Program Managers and/or Coordinators shall:

1. Prior to implementation of mitigation measures:

   a. Notify the CEQA lead agency by letter during "early consultation," the Notice of Preparation (NOP) stage, or the Initial Study (IS) phase of the CEQA review process that the transportation information included in the reporting or monitoring program will need to be provided to the Department following project mitigation agreement.

   b. Provide the name, address, and telephone number of the District IGR contact to the lead agency.

   c. Provide, as an enclosure to the notification letter, a copy of these "Guidelines" and the Department's "CEQA Lead Agency Checklist/Certification" form. (Part 1 of the form, *Checklist*, is to be signed by the lead agency following project approval, and a copy submitted to the District along with the transportation reporting or monitoring information. Part 2 of the form, *Certification*, is to be signed by the lead agency and the District upon implementation of all agreed-upon mitigation measures.)

2. Following implementation of mitigation measures as identified in Part 1, *Checklist*, of the CEQA Lead Agency Checklist/Certification form, and certification of implementation by the lead agency in Part 2, *Certification*:

   Ensure sign off of Part 2, indicating that the mitigation measures have been implemented.

   1) If the project required encroachment onto a state highway, obtain the District Permit Engineer's signature in Part 2.

   2) If the project did not involve encroachment onto a state highway, the District IGR Coordinator shall sign Part 2.

3) The District IGR Coordinator shall: (a) Retain the original document; (b) forward a copy to the District Permit Engineer (if the Permit Engineer signed Part 2); (c) forward a copy to the Department's Headquarters IGR Program Manager; and, (d) send a copy to the lead agency.

B. The CEQA lead agency shall:

1. Following project approval:

Submit the following information to the Department District IGR contact:

1) Name, address, and telephone number of the CEQA lead agency contact responsible for the mitigation reporting or monitoring program.

2) Location and custodian of the documents or other material, which constitute the record of proceedings upon which the lead agency's decision to approve the project is based.

3) Assurances that the Department can obtain copies of the aforementioned documents and materials, if needed, to clarify details or resolve issues related to the mitigation adopted.

4) Detailed information on impact assessment methods, the type of mitigation, specific location, and implementation schedule for each transportation impact mitigation measure included in the reporting or monitoring program.

5) A copy of the "CEQA Lead Agency Checklist/Certification" form, with Part 1, *Checklist*, signed and dated, and the reporting or monitoring program transportation information attached or enclosed. The CEQA lead agency, at its discretion, may submit the complete reporting or monitoring program with the required transportation information highlighted.

2. Following implementation of mitigation measures:

   a. Sign and date Part 2, *Certification,* of the "CEQA Lead Agency Checklist/Certification" form.

   b. Forward the "CEQA Lead Agency Checklist/Certification" form, with appropriate completion documents attached, to the District IGR contact, certifying that the mitigation measures agreed upon and identified in the reporting or monitoring program have been implemented, and that all other reporting requirements have been adhered to, in accordance with PRC Sections 21081.6 and 21081.7.

APPROVED:

Brian J. Smith 8 July 04
BRIAN J. SMITH Date
Deputy Director
Planning and Modal Programs

L.H. Orcutt 7-9-04
LARRY ORCUTT Date
Acting Deputy Director
Maintenance and Operations

CEQA LEAD AGENCY CHECKLIST/CERTIFICATION *
TRANSPORTATION INFORMATION FROM A REPORTING OR MONITORING PROGRAM

Part 1 - Checklist

Project Name: _____
Lead Agency: _____
Lead Agency Contact (Name, Title, Agency, Address & Phone): _____

State Clearinghouse (SCH) File #/s: _____
Document Type/s: _____
Findings & Approval Date/s: _____

Project Proponent (Name, Title, Company, Address & Phone): _____

For each specific Transportation Related Mitigation Measure associated with this Project, The following information items are included in the attached materials:

Yes	No	
☐	☐	**Location/Custodian Of CEQA Documents, Proceedings, Records**
☐	☐	**Description Of How To Obtain Copies Of Above Documents**
☐	☐	**Mitigation Measure Name & Identifying Number**
☐	☐	**Detailed Description of Measure & its Purpose (attach blueprints if necessary)**
☐	☐	**Measure Location Description, Latitude/Longitude, & Vicinity Map**
☐	☐	**Location of Impacted State Highway Component (County, Route, Postmile)**
☐	☐	**Caltrans Encroachment Permit Number (if one was needed)**
☐	☐	**Copy of Other Agency Permits required for this Measure (if needed)**
☐	☐	**Completion Criteria (including detailed performance objectives)**
☐	☐	**Implementation Schedule**
☐	☐	**Estimated Monetary Value of Completed Measure & % Local Agency Funded**
☐	☐	**Responsible Contractor (Name, Company, Address & Phone)**

The above project mitigation measures will be implemented as indicated in the adopted reporting or monitoring program, and the California Department of Transportation will be notified upon implementation.

_____ _____
CEQA Lead Agency Date

Part 2 - Certification

We certify that the agreed upon mitigation measures have been implemented, and all other requirements have been adhered to, in accordance with PRC Sections 21081.6 and 21081.7. Attached: 1. Completion evaluation (including field inspection reports); 2. Photograph of completed measure.

Signature & Date: _____ _____

Name: _____ _____

Title: _____ _____
CEQA Lead Agency California Department of Transportation

* This form is to be used by public agencies to submit their mitigation reporting or monitoring programs to the California Department of Transportation (Department) when a CEQA project has been found to have transportation or circulation impacts that are of statewide, regional, or area-wide significance. Copies of this form, and the Department Guidelines developed pursuant to PRC Section 21081.7, can be downloaded from our website (http://www.dot.ca.gov/hq/tpp/offices/ocp/igr_guidelines_procedures.htm). Completed form with attached materials may be post-mailed, e-mailed, or faxed to the appropriate Department District Planning Office, Attention: Intergovernmental Review (IGR) Coordinator. (Form Version 07/2004)

Letter 13: City of Fresno, Fresno Area Express

1. The requested rezoning has been determined to be consistent with the 2025 Fresno General Plan by the Planning and Development Department. It is the proposed tentative tract map for approximately 850 units that implements a density less than the 1,360 allowed by zoning. Denying the zoning, as suggested by the writer, would be counter-productive to general plan implementation. The applicant has been working with City staff to implement mixed-use provisions of the general plan and will provide transit-oriented development within the mixed-use areas of the project, as well as transit friendly features, including open-ended cul-de-sacs, a trail system, and transit stops throughout the balance of the project. The project applicant is also willing to work with Fresno Area Express to identify and provide viable transit amenities and services that would increase transit usage within the project area. Such amenities and services would include transit stops, transfer points at key locations, etc.

2. The mode split base and future year forecast data utilized in the currently adopted COFCG Peak Hour Model is the same as that utilized in the currently adopted Mode Split Model. Since the mode split base and future year forecast data is the same in both Models, the number of vehicle trips generated by both Models are the same. Therefore, there is no need to revise the traffic and circulation evaluation.

3. The applicants have worked with and are continuing to work with City staff, the ADA Advisory Council, and others to ensure that the proposed project roundabouts are designed to the highest and safest standards.

4. Comments on air quality measures are noted.

5. The City of Fresno, as lead agency, will include Department of Transportation/FAX staff, the ADA Advisory Council and the Bicycle Work Group in the site plan review of the various project components. The applicants also want these various groups to be involved in the site plan review process in order to enhance the ultimate design of the project.

6. The modeling tools developed through the San Joaquin Valley Growth Response Study are based on the currently adopted COFCG Peak Hour and/or Mode Split Model. As indicated in Response to Comment No. 2, above, the COFCG Peak Hour and/or Mode Split Model generates a certain percentage of non-automotive trips and an adjustment of land use will not alter this percentage. Therefore, shifting land uses will not necessarily provide more insight into alternative transit options. In addition, the modeling tools have been developed for regional alternative analysis and are not yet refined for small-scale land use analysis.

7. FAX recommends a study of "the general accommodation and provision of mass transit in the area to provide insight on ways of increasing transit usage." It is noted that, according to the General Plan, transit route alignments are determined by Fresno Area Express in accordance with transit planning, operational, and funding requirements. Implementation of transit corridors and routes are dependent upon available funding. The recommended study is therefore the responsibility of FAX and should be appropriately budgeted.

8. See Response to Comment No. 4, above. The City will include the Department of Transportation/FAX staff in the site plan review process in order to ensure that transit opportunities are incorporated to the maximum extent possible in the project.

City of
FRESNO

2223 "G" Street • 559-621-1393
Fresno, California 93706-1600
www.fresno.gov

FAX
FRESNO AREA EXPRESS

Bruce A. Rudd
Director of Transportation

November 10, 2004

Bruce O'Neal, Consultant Planner
City of Fresno/Planning and Development Department
2600 Fresno Street, Third Floor
Fresno, CA 93721-3604

Letter 13

Dear Mr. O'Neal:

SUBJECT: DRAFT ENVIRONMENTAL IMPACT REPORT (DEIR) #1033 FOR THE FANCHER CREEK PROJECT

The Department of Transportation/FAX has reviewed the DEIR #1033 for the Fancher Creek Project and appreciates the opportunity to provide comments. Currently, the Department of Transportation/FAX provides public fixed-route transit service, demand-response paratransit service, and Vanpool services for the City of Fresno. Fixed-route services are operated as far east as Armstrong Avenue on Route 12. Route 12 is a deviated fixed-route service providing limited service on weekdays between 8:00 AM and 6:25 PM. Standard fixed-route Service is provided as far east as Phillip on Kings Canyon via Route 22. In addition, paratransit services are provided by the Handy Ride demand-responsive service. Vanpools are operated from as far away as Visalia and Madera.

The Department of Transportation/FAX initiated a Pre-Major Investment Study (Pre-MIS) in April 2003 which has identified the Ventura/Kings Canyon corridor as the corridor with the best potential to become a High Capacity Transit Corridor. To this end, the City of Fresno is in the process of developing property located near Kings Canyon and Peach Avenues as a Transit Oriented Development/Intermodal Facility. During Fiscal Year 2005, service along this corridor will be increased from its current 30-minute frequencies to 15-minute frequencies. In the future this corridor will become a Bus Rapid Transit corridor. Because the southern edge of the Fancher Creek Development lies along Kings Canyon (Area 3) opportunities for an important interface with public transportation are of great interest to the Department of Transportation/FAX.

1. The mixed-use development planned for Area 3 provides an ideal opportunity to create Transit Oriented Development that with the appropriate intermodal infrastructure can play a vital role in the successful implementation of a High Capacity Transit Corridor service along Kings Canyon. However, the requested rezone leading to a reduction of 490 units (1,340 to 850) is counter productive to the best interests of a Transit Oriented Development and to the significant air quality and congestions benefits it offers. Concerns raised by adjacent area residents should be mitigated by other means. The Department of Transportation/FAX recommends that this requested rezone not be approved.

2. The traffic and circulation impacts discussed are based on trip generation analysis prepared using the Council of Fresno County Governments (COFCG) traffic forecasting model. Unfortunately, the model run did not include the mode split element which will not be operational until mid-year 2005. Using the mode split element of the COFCG's traffic model would contribute significantly to the discussion of public transit as it relates to the Fancher Creek Development. The Department of Transportation/FAX recommends that the traffic and circulation elements be updated to include mode split modeling and analysis when possible.

3. The use of roundabout intersections as a traffic flow control and calming measure provides many positive features; however, the adverse impacts of roundabout intersections on pedestrian traffic, especially among disabled pedestrians, may reduce the effectiveness of other pedestrian and transit supportive elements. Because traffic entering a roundabout is not required to stop, pedestrians needing to cross intersections must wait for traffic to clear sufficiently to allow safe passage. In times of high traffic volume, this can be quite a lengthy wait. Further, disabled pedestrians may take significantly longer to cross an intersection, and pedestrian with visual impairments can be placed at significant risk. The Department of Transportation/FAX, therefore, recommends that you include the City of Fresno's Americans with Disabilities Act (ADA) Advisory Council on the list of site plan reviewing bodies, and that that mitigation measures are taken to insure safe and convenient pedestrian paths through roundabout intersections.

4. The Department of Transportation/FAX is pleased to see under Air Quality Mitigation, the following measures identified on page 2.3.13:

   a. Item 12, Carpooling will be encouraged among constructions workers through contractor bid specifications and project orientation for workers;
   b. Item 21, Provide pedestrian/transit oriented project design;
   c. Item 23, Commit to on-site improvements; bikeways, transit infrastructure, pedestrian enhancements;
   d. Item 24, For non-residential development include secure bicycle parking and paths connected to the bikeway system from the development; and
   e. Item 25, For reducing VMT, consider Park and Ride Lots and Satellite Telecommuting Center.

5. Recognizing the importance that design plays in creating an accessible, convenient, and successful pedestrian and transit oriented environment, the Department of Transportation/FAX recommends that its Planning staff be involved in all preliminary plan review and approval. As previously stated, the Department of Transportation/FAX further recommends that members of the City of Fresno's Americans with Disabilities Act (ADA) Advisory Council be invited to review and comment on preliminary project designs. Additionally, comments and recommendations from the City of Fresno's Bicycle Work Group should be sought.

6. In using pedestrian and transit-oriented design and enhancements as mitigation measures for the significant air quality impacts of this project, we must not overlook the obvious need to provide convenient public transit services that will allow the pedestrian and transit-oriented development to realize its intended purpose. At this time, the Department of Transportation/FAX does provide limited service to the development site; however, the level of service provided is not sufficient to serve commuter needs. Further, as stated above, the Department of Transportation/FAX considers the Kings Canyon corridor to be a primary candidate for a future High Capacity Transit Corridor, and significant efforts should be placed on developing a Transit Oriented land use along this corridor. This is a perfect opportunity to employ the modeling tools developed through the efforts of the recently completed San Joaquin Valley Growth Response Study (GRS). These modeling tools can provide valuable insights about opportunities to enhance the effectiveness of the land uses planned for this project. The Department of Transportation/FAX recommends that the GRS Model be used to help develop land uses scenarios, specifically for Area 3, which will lead to optimum use of public transportation

In reviewing the DEIR, we note that an attachment to the California Department of Transportation (Caltrans) comment letter dated March 12, 2004, and identified as Attachment Number 1, Caltrans Recommendations for Transportation Alternatives, lists six potential strategies for evaluating and implementing alternative transportation strategies. The Department of Transportation/FAX recommends the exploration of all six strategies, and more specifically, strategy number two, ***a study of the general accommodation and provision of mass transit in the area to provide insight on ways of increasing transit usage***.

7.

The scope of this study should include an assessment of the viability of various transit service designs including fixed-route, express, circulator, and car/vanpool systems. In addition to an evaluation of transit service design, the study needs to identify funding mechanisms for implementing preferred services. Again, this is a perfect opportunity to employ the GRS Modeling tools to understand and optimize the linkages between transportation and land use decisions.

Finally, demand for fixed-route service may not initially be expected. However, as the community grows, school-aged children of working parents will want public transportation for school and entertainment. Workers will need to commute to Fresno for jobs, and public transit will become an issue. The Department of Transportation/FAX believes that these services should be anticipated and planned for. We are concerned about the cumulative effects of the various proposed projects for this area and recommend that a cumulative analysis be undertaken to assess the need for transit services and to develop mechanisms for funding needed service. The Department of Transportation/FAX staff should be included in the evaluation and review of the development plans to ensure that appropriate allowances are made for proper bus and pedestrian facilities to accommodate future public transit needs. We believe that this development will eventually lead to significant demand for public transit services. In addition, the location of the project along the Kings Canyon corridor is an ideal opportunity to include Transit Oriented Development strategies which can lead to significant, positive impacts on regional air quality and congestion.

8.

The Department of Transportation/FAX appreciates the opportunity to comment on the Fancher Creek Project DEIR. Should you have any questions or need clarification, please call me at 559-621-1502, or via e-mail at john.downs@fresno.gov.

Sincerely,

John Downs

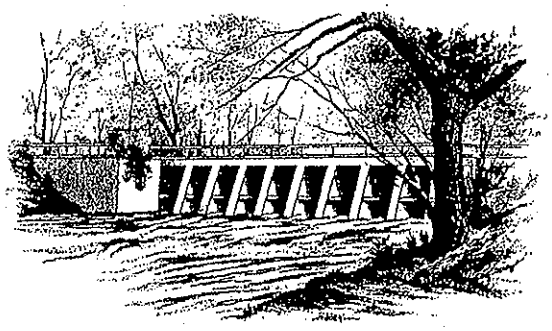
John Downs, Planning Manager
Department of Transportation/FAX

C: Bruce Rudd, Department of Transportation/FAX
John Elam, Public Works Administration
Darrell Unruh, Planning and Development Department

w:\planning\04_10 Fancher Creek DEIR Comments.doc

Letter 14: Fresno Irrigation District

The comment letter lists requirements of FID in regards to easement dedication and other conditions. Of concern is comment No. 2 calling for the concrete lining of the canal, encasement in a box culvert, "or other approved means to protect canal integrity." The lining of Fancher Creek is not consistent with the long-term environmental goals of water recharge and environmental enhancement. According to FID officials, the primary mitigation is to bring the surrounding land up to the level of the high water mark in the canal to ensure that flooding does not occur during high water due to a breach in the canal bank. With such measures in place, no lining or encasement will be required. The City and developer will work with FID during project planning to comply with FID requirements.



Your Most Valuable Resource - Water

OFFICES OF
FRESNO IRRIGATION DISTRICT
PHONE (559) 233-7161
FAX (559) 233-8227
2907 SOUTH MAPLE AVENUE
FRESNO, CALIFORNIA 93725-2218

Letter 14

RECEIVED
NOV 05 2004

November 3, 2004

Mr. Bruce O'Neal
City of Fresno
Planning and Development Dept.
2600 Fresno Street, Third Floor
Fresno, CA 93721-3604

RE: Draft EIR No. 10133 – FID's Fancher Creek No. 6 Canal

Dear Mr. O'Neal:

FID's comments and requests are as follows:

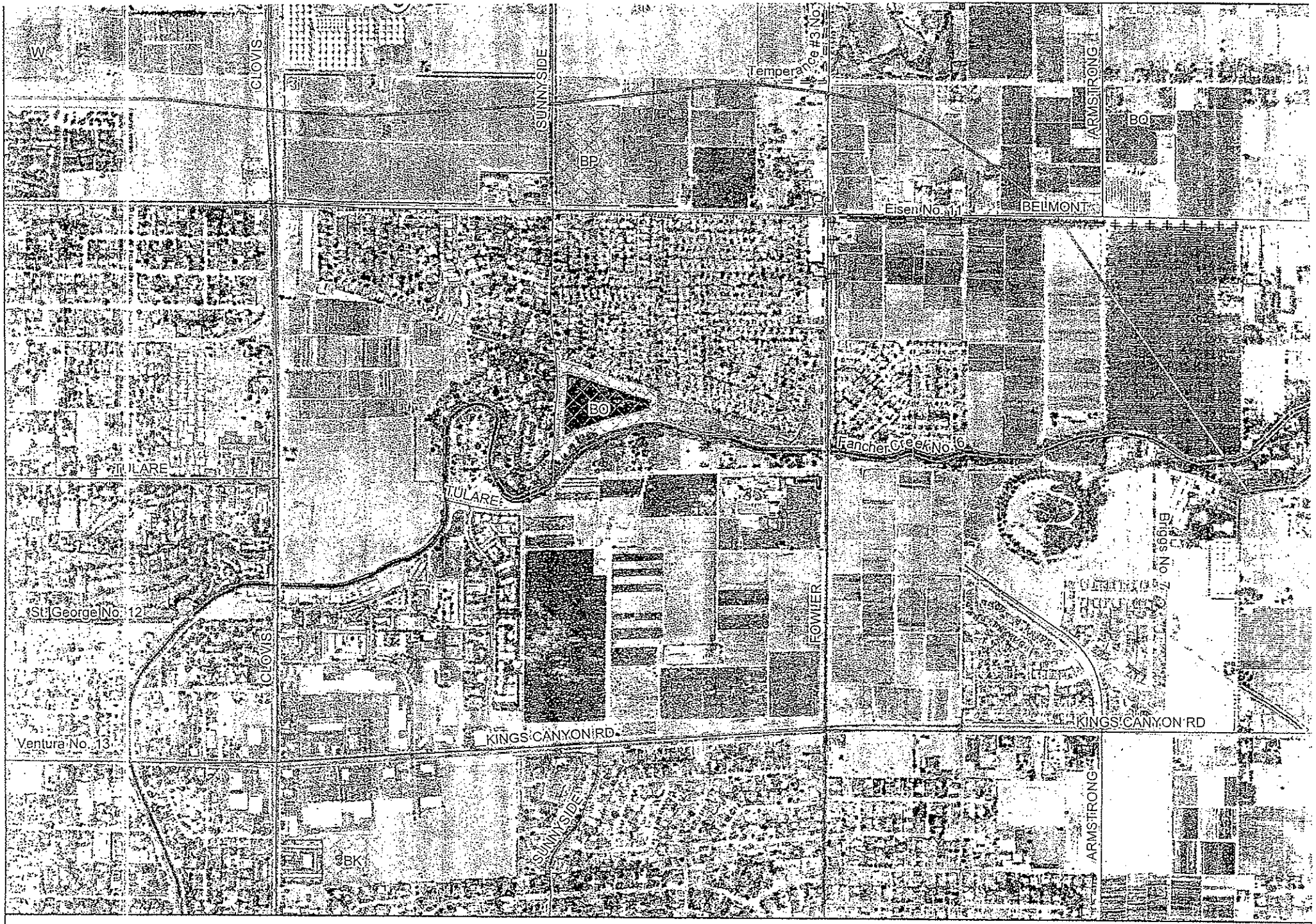
1. FID's Fancher Creek No. 6 Canal traverses the subject area as shown on the enclosed map.
2. FID requires the applicant grant an exclusive canal easement to FID and concrete line, encase in box culvert or other approved means to protect canal integrity, the Fancher Creek No. 6 Canal across the proposed development in accordance with FID standards, and that the applicant enter into an agreement with FID for that purpose. The applicant will need to meet with FID to determine the canal alignment and required canal dimensions.
3. FID requires its easement be shown on the map with proper recording information, and that FID be made a party to signing all plans which affect its easement and canal/pipeline facility and also be made party to signing the final map.
4. FID requires the applicant submit a grading and drainage plan for FID approval which shows that the proposed development will not endanger the structural integrity of the pipeline, or result in drainage patterns that will adversely affect FID or the applicant.
5. FID requests the applicant be exempted from any condition that would require the construction of public facilities or conveyance of deeds or easements within FID's canal easement to any other party without FID's written consent.

Thank you for submitting this for our review. Please feel free to contact me with any questions or concerns at 233-7161 extension 317 or bjohnson@fresnoirrigation.com.

Sincerely,
FRESNO IRRIGATION DISTRICT

Bret Johnson
Engineering Technician I

Agencies\City\EIR 10133



FRESNO IRRIGATION DISTRICT

Legend

- FID Canal
- Private Canal
- Abandoned Canal
- FID Pipeline
- Private Pipeline
- Abandoned Pipeline
- Other-Creek/River
- Other-Pipeline
- Major Streets
- FMFCD Basins

0 150300 Feet

SCALE: 1:14,237

Letter 15: City of Fresno Fire Department

The changes recommended to the text by the Fire Department are included in Section 3: Changes and Additions to the EIR.

Letter 15

This wording replaces the **Fire Protection** section on pages 2.8.3 and 2.8.4:

FIRE PROTECTION

Presently, fire and emergency medical services are provided both by the City of Fresno Fire Department and Fresno County Fire. Fresno City Fire Station #15 at Clovis Ave. and Park Circle Drive is under construction and will be staffed March 31, 2005. By prior written agreement Fresno County Station 88 at Minnewawa and Tulare Ave will close and all fire protection and emergency services to the project area will be provided by Fresno City Fire alone after that date.

IMPACTS

Analysis of fire protection services is based on consultation with Fresno Fire Department staff. The standard of service is based on response time and running distances as determined by national standards and the requirements of the Fresno City's Urban Growth Management Ordinance. The project area presently has no public water main/fire hydrant infrastructure to provide fire flow for fire suppression purposes.

Standards for Significance

A significant impact occurs when response distances exceed 2.0 miles which roughly corresponds to a 4 minute response time based on national standards. Reliable fire flow of 2500 gpm for commercial and multi-family over 4 units per building and 1500 gpm is required for other residential development over and above domestic water demand.

Impact

The project will result in the need for additional fire protection services. The impact of the project on fire protection is a potentially significant impact.

The project areas #3 and #4 are within the 2.0 mile primary response area for Fire Station #15 at Park Circle Drive and Clovis Ave. This station will house a single fire engine. Additional units on a first alarm assignment will respond from *Fire Station #10* (one engine) @ Aircorp Drive and Clovis Ave, *Station #1* (one engine/one truck) @ Maple and Olive Aves, *Station #8* (one engine) @ Cedar and Butler, and *Station #3* (one truck) @ Fresno and "E" Streets.

Project areas #3 and #4 are between 2.0 and 3.0 miles from Fire Station #15 which will result in a response time of over 4 minutes. This condition is considered acceptable as

provided for in the UGM Ordinance. All commercial buildings and residential development over 4 units per building in areas #1 and #2 must have fire sprinklers.

Fire Station #20 is planned for construction near the intersection of Temperance and Belmont Aves to serve the new Southeast Growth Area identifies in the 2025 Fresno General Plan. Construction of this station in the future will bring areas #1 and #2 within the 4 minute response standard.

Project areas #3 and #4 are within the Bakman Water District and #1 and #2 will be within the City of Fresno Water Division Service Areas. As mentioned above, the areas do not currently have wells and water mains. Bakman Water District has provided plans to the Fire Department for extension of their infrastructure to provide needed fire flow. City of Fresno Public Works will require implementation of planning for extension of City Services to Areas #1 and #2 with development of those areas.

Mitigation

The developer(s) shall be responsible for the following mitigation measures:

1. Payment of UGM Fire Service Fees for future fire station construction
2. Development of public streets in accordance with Public Works Standards. Non-standard proposals such as traffic circles or other traffic calming designs are subject to review and approval by Fire and Public Works.
3. Water supply and distribution systems including fire hydrant infrastructure as approved by the Fire and Public Works
4. Fire sprinkler allcommercial and 5 or more unit residential buildings beyond 2.0 miles from Fire Station #15.

Level of Significance After Mitigation

Implementation of the proposed mitigation measures will reduce fire protections impacts to a less than significant level.

Letter 16: Fresno Metropolitan Flood Control District

The District's comments on adequacy of the DEIR are noted. No further response is required.

FRESNO METROPOLITAN FLOOD CONTROL DISTRICT

File 550.30 "Y", "BM", "BO", "BQ"

Letter 16

November 29, 2004

Mr. Bruce O'Neal, Consultant Planner
City of Fresno
Planning and Development Department
2600 Fresno Street, Third Floor
Fresno, CA 93721-3604

Dear Mr. O'Neal,

Draft Environmental Impact Report (EIR No. 10133),
Fancher Creek Development Project
Drainage Areas "Y", "BM", "BO" and "BQ"

The Fresno Metropolitan Flood Control District previously provided comments on the proposed project through letters dated August 31, 2001, October 3, 2001, and March 23, 2004. Those letters are contained within Appendix A of the Draft EIR. Discussion, requirements, and mitigation measures contained within the body of the Draft EIR, particularly Section 2.7, fully address District concerns and are adequate.

Thank you for the opportunity to review the DEIR. Please keep our office informed on the progress of this project and supply the District with a copy of any Final EIR adopted by the City. If you should have any questions or comments, please contact the District at (559) 456-3292.

Respectfully,

Dan Gilbert
Design Technician IV

DG/lrl

wprocess\dag\2004\letters\oneal-fancher creek development project deir

Letter 17: Sunnyside Property Owners Association

1. The project will increase traffic on area roadways, but will be only a part of the overall traffic increase to the year 2025. The noise impact assessment shows receptor locations on Fowler Avenue both north and south of Tulare Street. The location north of Tulare Street represents a neighborhood setting as residential subdivisions are on both sides of the road at this location. The site south of Tulare Street is strongly influenced by traffic noise near the planned mixed-use center at Tulare Street and Fancher Creek Boulevard. Noise at both locations is at or above the City's 60 dB day-night level considered acceptable for residential uses, although the receptor site north of Tulare Street is only slightly above that level. As a result of the project and cumulative traffic, noise levels are expected to increase 2.5 to 3.6 dB at these locations. Although sound levels will be above the 60 dB standard, an increase of 3 db or less is not considered perceptible to the majority of residents.

   Existing traffic levels on Fowler Avenue south of Kings Canyon Road are currently less than 50% of levels north of Kings Canyon Road (8,500 vs. 3,800). With future development to 2025, traffic levels on Fowler Avenue south of Kings Canyon Road will rise to an estimated 13,000 vehicles per day, still significantly less than the 20-25,000 daily trips expected on Fowler Avenue north of Kings Canyon Road. It is expected that day-night noise levels at residential locations on Fowler Avenue south of Kings Canyon Road will be similar to receptor location 4, that is, at or slightly above 60 dB. Only a portion of this noise increase, estimated at 0.5 to 1 dB, would be from project traffic.

   Because the project would be responsible for only a small portion of expected noise increases in nearby residential neighborhoods, a requirement for noise mitigation measures in these areas does not appear to be justified. Individual homeowners may install mitigation measures and the City should investigate speed reductions and alternative truck routes as methods to reduce traffic noise in these neighborhoods.

2. The reduced unit alternative was specifically targeted at the number of residential units rather than the project as a whole. This is because the assumptions for floor area ratios for the commercial property are already considered conservative. Current planning standards encourage floor area ratios of between 0.5 and 1.0 for commercial development and 0.75 for mixed-use development, resulting in more efficient use of land, including multi-story commercial and parking structures. In comparison, the proposed C-3 area has an assumed floor area ratio of 0.34 and the C-2 area, 0.25 FAR. To further reduce floor area ratios would result in even greater inefficiency of land use and would not be consistent with the goals and objectives of the general plan.

The traffic report used shopping center trip generation rates rather than individual uses to estimate total trips. It is not appropriate to calculate the trips for each possible use within a shopping center or zone district as the cumulative number of trips would far exceed the actual shopping center generation rate. The operational characteristics of shopping centers are such that a single trip may be used to visit multiple uses. In addition, there are many "captured" trips, or those already on the roadway for another purpose. The Institute of Traffic Engineers (ITE) publication, *Trip Generation, 7th Edition,* provides the following information for Shopping Centers (ITE Land Use Category 820):

"A shopping center is an integrated group of commercial establishments that is planned, developed, owned and managed as a unit. A shopping center's composition is related to its market area in terms of size, location and type of store.. A shopping center also provides on-site parking facilities sufficient to serve its own parking demands. The vehicle trips generated at a shopping center are based upon the gross leaseable area (GLA) of the center. "

Given the above, utilization of GLA, not the individual uses within the shopping center, is the more appropriate approach to calculate vehicle trips.

The City's preliminary mixed-use ordinance would require approval of a CUP for approval of a mixed-use development.

3. The five-acre park adjacent to Fancher Creek Elementary School is a UGM park site and the Fancher Creek linear park is a proposal of the Centex tentative tract map and will be implemented by the developer. Since these facilities are secured by the existing UGM process and tentative tract map process, they are not included as specific mitigation measures. The DEIR adequately addresses park standards of the City of Fresno. Also please see Letter No. 5, City of Fresno Parks, Recreation & Community Services Department

4. Comments on the existing palm trees along Harvey Avenue are noted and will be forwarded to the developer for consideration.

5. Support for PG&E alternative alignment "B" is noted. No further response is required.

6. The location of bathrooms along the parkway will be included in project design, but should consider access, safety, security, and lighting effects. Placing bathrooms only in the mixed-use commercial and business park areas would place the facilities ¼ to ½ mile from the linear park and would not be convenient for park users.

Objective F-11 of the General Plan Open Space and Recreation Element provides policies to minimize impacts from parkway recreational facilities and uses upon adjacent private property. This policy-set should be considered by Planning and Development Department staff for application to the Fancher Creek linear park.

7. Existing multifamily uses are located along Argyll Avenue north of Kings Canyon Road and surrounding the commercial uses at the northeast corner of Kings Canyon Road and Clovis Avenue. These multifamily uses were built in the 1960s, '70s, and '80s and many suffer from lack of maintenance. These types of units are often characterized by higher crime rates, blight, and neglect.

   The proposed multifamily uses within the project will be constructed as part of mixed-use projects and could contain a mix of housing types, including traditional apartments, senior units, and townhouses. There is no evidence to suggest that these types of units share the high crime rates and blight of older, poorly maintained apartment units. There are many examples of higher density projects in the Fresno-Clovis area that have maintained their value, provide an important housing alternative, and are an asset to the community.

   The Fresno Police Department, which has reviewed the Fancher Creek project, has placed no special policing requirements on the project nor has the department requested a police sub-station as part of the project.

SUNNYSIDE
PROPERTY OWNERS ASSOCIATION
Sunnyside - Fresno's Secret Garden

November 23, 2004

Letter 17

Bruce O'Neal, Consultant Planner
City of Fresno Planning Department
2600 Fresno Street, Third Floor
Fresno, California 93721-3604

RE: Draft EIR No. 10133

ATT: Bruce O'Neal

The board members of the Sunnyside Property Owners Association appreciate the opportunity to comment on the above referenced draft EIR for the Fancher Creek Properties. We would like to thank the City for requiring an EIR as it is obvious that without appropriate mitigation the project would result in numerous adverse environmental impacts.

Overall, the draft document was very thorough in dealing with the associated impacts from a project of this size. We do however, have some concerns that we feel should be evaluated further.

1. Noise- The draft EIR suggests mitigation such as sound walls and dual pane windows for future planned residential uses adjacent to roadways, identifies less intensive and limits commercial uses for the business park when those uses are in close proximity to residential, and further details the location and construction of sound inducing structures such as loading docks for the commercial area. *However, the report fails to offer mitigation for increased noise due to traffic for existing noise sensitive uses.* Daily traffic trips will increase by 73,481 and trip distribution percentages will increase on Fowler, Clovis, Armstrong, Temperance and Belmont, and Kings Canyon Avenues. Truck traffic will increase accordingly. Clearly this project will lead to adverse impacts above and beyond existing uses as it relates to noise. We would ask that further study be included to mitigate noise concerns for existing residential uses; and suggest speed reductions, additional roundabouts, traffic barriers, frontage roads, sound walls for houses that do not front roadways, vegetation, and the limitation of trucks exceeding certain weight limitations on roadways that impact residential. While traffic warrants may not indicate the need for road widening or additional signals, the increased noise from this traffic should necessitate further study and included mitigation. We continue to stress the need for some type of noise mitigation on Fowler Avenue, as the EIR indicates an increase in traffic of six (6 %) due to this project. The section of Fowler south of the project area is wholly residentially, with homes facing the street. We would ask that further study be included on the effects of the increase of truck traffic on Fowler Avenue and how changing the classification of Fowler as a truck route or down grading the street from an arterial to a collector would mitigate noise concerns.

CA 93747-8096 • Ph. (559) 255-1357

2. Reduced Unit Alternative-The reduced intensity alternative only evaluates a decrease in the number of residential units, when this project proposes a wide variety of uses beyond residential, including a business park, community and regional commercial. While we appreciate the inclusion of the Centex tract maps showing a reduction in residential units from 1340 to 850, we would ask that further evaluation be completed on the C-3 uses in Site Area 4 and the C-2 uses in Site Area 3. We would recommend that the report identify the allowable uses and compare the increase in traffic due to those specific uses and various combinations thereof. We would also ask that any future mixed zoning ordinance require a Conditional Use Permit (CUP) as criteria for approval, which would invite public participation.

3. Park Space-The draft EIR indicates that the proposed project is expected to generate a population of approximately 5,000 residents and if the City of Fresno parks standard is applied that the project would require fifteen (15) acres of park space for residents within the project. The Roosevelt Community Plan (RCP) requires that all single family residential developments exceeding eight (8) acres in total project area shall be required to designate and develop at least five (5) percent of their project area for open space or contribute an equivalent amount of area in conjunction with approved public or quasi-public open space within ¼ mile of the development. There are 243 acres designated for single family residential uses within the project. Five percent of that project area would result in the need for twelve (12) acres of park space. The report explores the possibilities of the RCP planned park south of Fancher Creek Elementary School (7.5 acres), the potential for the project to incorporate a smaller neighborhood park (5 acres) adjacent to and contiguous to the Fancher Creek Elementary School, and the "Linear Park" proposal for Fancher Creek. The mitigation only calls for the applicant to work with Clovis Unified School District in securing an agreement to share their facilities. We would ask that the EIR explore mitigation and positively identify future open space within the project area that would fulfill the open space policy in the RCP and the park standards for the City of Fresno. All open space should be shown on vesting tentative tract maps.

4. Historical Significance-There are numerous palm trees located to the north of Site Area 1 on Harvey Avenue. Caltrans has indicated they would be willing to relocate those trees. The trees are in excess of fifty years old and would therefore fit the criteria of potentially historically significant. We would ask that the project applicant be encouraged to work with Caltrans in relocating those palms to the public right of way within the project area preferably lining the proposed Fancher Creek Boulevard.

5. PGE alignment-We would agree with the report and ask that PGE use the environmentally superior alternative, Alternative Alignment "B".

6. Fancher Creek Parkway-We appreciate the building setback requirements stipulated as mitigation to protect the Great Valley Cottonwood Riparian Forest located adjacent to a section of the Fancher Creek canal. The report identifies the need for rest rooms along the proposed linear parkway but does not identify the location. We would suggest that any restroom facilities be located in the commercial areas of the mixed-use projects and the business park. We would further suggest that implementation of the Fancher Creek Parkway follow the policies adopted in the 2025 General Plan for the San Joaquin River Parkway as they relate to impacts from

recreational facilities and uses upon adjacent private property. All discussions should include and encourage input from property owners in the area.

7. Public Services-The draft EIR identified the need for additional law enforcement services as a potentially significant impact. The study also indicates that currently there is no impact fee to provide and equip new police facilities and that the closest police substation is 3.5 miles away. The study does not evaluate the cumulative impacts of police protection for existing multi-family in the area together with the proposed increase of 480 additional multi-family units. We would ask that a study of calls for service for existing multi-family units surrounding the project be incorporated in the EIR so that the cumulative impacts of additional multi-family residential uses can be explored. We would also ask that alternative high density uses such as housing for seniors and owner occupied town homes and condos be studied as comparisons to traditional rental units. The southeast growth area is not currently within the City's sphere of influence, nor does it have an adopted community or specific plan guiding its development, and therefore any actions that would provide for additional police substations in the new growth area is premature. We would ask that the EIR study the cumulative impacts of multi-family as it relates to calls for service, compare that to the alternative high density uses suggested above, and the resulting impacts on crime when a police substation is located within the development. Any additional muti-family should be conditioned upon a new police sub-station.

Thank you for this opportunity to provide comment. We look forward to viewing the final draft of the EIR for the Fancher Creek Project.

Sue Williams
For the board members of the Sunnyside Property Owners Association

Letter 18: Medical Advocates for Healthy Air

1. There is no information presented in the comment letter to demonstrate that the DEIR is deficient. On page 2.3.9, the DEIR states that the project will exceed San Joaquin Valley Air Pollution Control District thresholds of significance for ROG and NOx, the primary precursors of ozone. The DEIR also states the project emissions are expected to be significant and unavoidable. In terms of particulates, the DEIR states on page 2.3.11 that construction impacts are considered by the SJVAPCD to mitigate to a less than significant level by compliance with District Regulation VIII.

   The DEIR contains mitigation measures to reduce emissions, including measures to supplement Regulation VIII to further control construction emissions. For operational particulate emissions, wood burning fireplaces are restricted which is the primary source of particulates. The DEIR concludes that operational and area emissions are expected to remain significant and unavoidable with project implementation.

   In terms of additional air quality benefits, the project is providing for significant retail and employment opportunities within Southeast Fresno. Currently, residents in the area must drive to Clovis (Shaw and Sunnyside Avenues) or to other areas in Fresno (Downtown, Riverpark or Fashion Fair) to access regional retail services. In addition, residents must travel to major employment centers within Fresno, Clovis and the remainder of the County and Central San Joaquin Valley to access employment opportunities. With development of the project, the residents need only travel within the project area to access such services and employment opportunities. This will significantly reduce VMT and trips within the Fresno region and thereby reduce mobile source air pollution on a regional scale.

   Roundabouts as proposed by the project typically operate at an improved level of service due to reduced delay time, which can provide significant air quality benefits as well. When vehicles idle in a queue they emit approximately seven times as much carbon monoxide as vehicles traveling at 10 mph. When delays are low at roundabouts, the emissions from roundabouts are very small as traffic rarely stops, whereas traffic always stops at signals regardless of the amount of traffic. Studies in the U.K. indicate that if delays at a roundabout and a signal are similar, the emissions from the signalized intersection are always greater because the stop time at signals is longer than at roundabouts. Emissions from a stopped vehicle are approximately 4.5 times greater than a vehicle moving at 5 mph.

The project applicants understand the importance of designing and implementing the Fancher Creek development so that vehicle trips and VMT are reduced to the extent possible. This can be done through the implementation of narrower streets, viable connections between neighborhoods and retail and employment areas, roundabouts to provide for smooth traffic flow and reduced emissions, etc.

Wayne Elson, U.S. Environmental Protection Agency, compiled a summary of seven studies in regards to the findings for air quality components and vehicle emissions. In the studies that reported quantitative results, roundabouts reduced vehicle emissions for hydrocarbons in five studies averaging 33%, carbon monoxide in six studies averaging 36%, and oxides of nitrogen in six studies averaging 21%. To that end, the San Joaquin Valley Air Pollution Control District (Air District) is in favor of roundabouts/traffic circles as methods to provide smooth traffic flow, significantly reduced idling, and improved air quality at intersections experiencing significant traffic flows.

The project proposes to provide pedestrian and bicycle access from residential cul-de-sacs to collector and arterial facilities in keeping with livable communities and smart growth practices. Open-ended cul-de-sacs throughout the project area will encourage shorter walking and biking trips to services, schools, etc. versus longer more indirect trips that will likely result in the use of an automobile.

The Air District is currently in the process of developing a regional air quality mitigation impact fee program, which may not be approved and implemented for some time to come. As a result, the project has identified viable air quality mitigation measures with proven air quality reductions (in the form of off-sets such as alternative fueled fleet vehicles [garbage trucks, school buses, etc. providing services within the development]) versus commitment to a regional fee that has not been defined.

2. The adverse health effects of air pollution are acknowledged. The comments listed are an expansion of the adverse health effects discussed in the DEIR on pages 2.3.3 and 2.3.4.

3. Please see response to comment No. 1, above. The DEIR concludes that operational and area emissions are expected to remain significant and unavoidable with project implementation.

Medical **A**dvocates for **H**ealthy **A**ir
5555 N. West Ave. #127
Fresno, CA 93711
559 439 6637

RECEIVED
NOV 29 2004

Nov. 22, 2004

Mr. Mike Sanchez
City of Fresno Planning Division
2600 Fresno St.
Fresno, CA 93721

Letter 18

Dear Mr. Sanchez:

On behalf of Medical Advocates of Healthy Air, I wish to express our grave concern regarding the effect of the proposed Fancher Creek Project on air quality and public health in Fresno. The Draft EIR #10133 is inadequate in many critical respects and any decision with regard to this project, before these deficiencies are corrected would, in our opinion, be irresponsible.

We are sure that you are aware of the serious situation that exists in our area with respect to air quality. It has been dramatic enough to make national news. This is not only detrimental to the health of the people who have made this valley their home but eventually will be detrimental to the valley's economy as well.

1. The air quality impact data in this EIR is grossly deficient in that it fails to adequately quantify anticipated air quality impacts: data that is critical for making an informed decision. It is apparent to any knowledgeable person, however, from the size of this project and its estimated automobile trips per day that the project will create substantial increases in the two critical air pollution correlates of heart and lung disease, i.e. ozone precursors and particulate matter.

2. We also call your attention to the fact that very recently the adverse health effects of these two pollutants (particulates and ozone) have been documented even more thoroughly than before. It is now apparent that these pollutants are responsible for the following adverse health effects:

1. Increased reactivity of the air passages that control the flow of air into and out of the lung. This leads to asthma and bronchitis. It is estimated that asthma now affects one-sixth of school children in Fresno County. We emphasize children because they are the most vulnerable and, according to very recent data, may suffer permanent damage to the lungs as a result of this exposure.[1] But air pollution affects all ages and is responsible for a significant number of visits to E.Rs, hospitalizations and deaths in the community.

2. Health damage from air pollution is not limited to the lungs. Several recent studies have shown a strong link between air pollution and cardiovascular disease, such as heart attacks and strokes. Since cardiovascular disease is even more common than chronic lung disease, this is very important new information. In this instance the correlation is primarily with very fine particulates (2.5 microns) that can gain access to the circulation through the microscopic blood vessels in the lung.[2]

3. The contribution of ozone to the adverse effects on health has recently been documented by one of the largest statistical studies attempted to date.[3] This study correlated mortality rates with ozone levels in 95 large urban centers in the U.S.A. It involved approximately 40% of the U.S. population and included Fresno. The investigators found a significant increase in mortality with only a 10 part per billion increase in ozone concentration above an average of 26 parts per billion. Fresno exceeded the national 80 parts per billion limit almost one-third of the days in the past year.

3. It is clear from the scientific studies that have been published and the knowledge that we currently have with regard to air pollution in the Fresno area, that this project, as proposed, will almost certainly exacerbate our problems, unless sufficient mitigation measures are included.

It is essential, therefore, that a new EIR be prepared that includes a careful assessment of the anticipated effect of the project on ozone and particulate levels within the effected area. Without that information, the EIR should be considered incomplete.

---

[1] New England Journal of Medicine Vol. 351 pp. 1057-1067: Sept. 9, 2004
[2] Circulation Vol. 107 pp.1202-1208 Mar. 4, 2003 Environ. Health Perspective Vol. 109 pp 487-94
[3] Journal of the Am. Med. Assoc. Vol. 292 pp. 2372-2377

Finally, I would like to explain why I am interested in this problem at the age of 80, when I should be sitting in my rocking chair and watching TV. I came to the valley from UCLA in 1957 at the invitation of Valley Children's Hospital to start their cardiac catheterization laboratory. At that time there was no such facility in the entire Central Valley. In addition to doing most of the cardiac studies, I also started a pulmonary function laboratory in my office. It did not take long before I recognized the association between cigarette smoking and the increasingly common chronic obstructive lung disease. With the help of the local chapter of the American Lung Association I was able to do an extensive study that proved beyond reasonable doubt that chronic exposure to cigarette smoke damaged lungs significantly and was the probable cause of most of the cases of chronic obstructive lung disease. The results of this study (one of the earliest to prove the role of smoking) was published in a major medical journal and received national attention. The results were, of course, not well accepted by the tobacco industry, but time and additional studies have so corroborated my published work that they have now reversed their position and officially acknowledge the relationship. For this and many other published studies, as well as my career as Chief of Medicine at Valley/Community Medical Center for thirty years, I have been honored by the Laureate award of the California chapter of the American College of Physicians, a Professorship at UCSF and a Visiting Professorship established in my honor. I tell you this not to boast but with the hope that it will help to persuade you to take this letter seriously as a plea from a knowledgeable professional and a devoted member of this community for 47 years.

Thank you for your careful consideration.

Sincerely,

Roger K. Larson

Roger K. Larson, M.D., FACP

Letter 19: City of Clovis Department of Planning and Development Services

1. No Market Study was prepared and utilized for the traffic study. Instead, the COFCG Regional Traffic Model was used to determine the geographic range of traffic effects of the project. The COFCG Regional Traffic Model is designed to distribute traffic based on project characteristics. In some cases the Model may even overstate project traffic impacts since it will show trips attracted to commercial/retail/service activities beyond what would typically be considered both primary and secondary commercial markets.

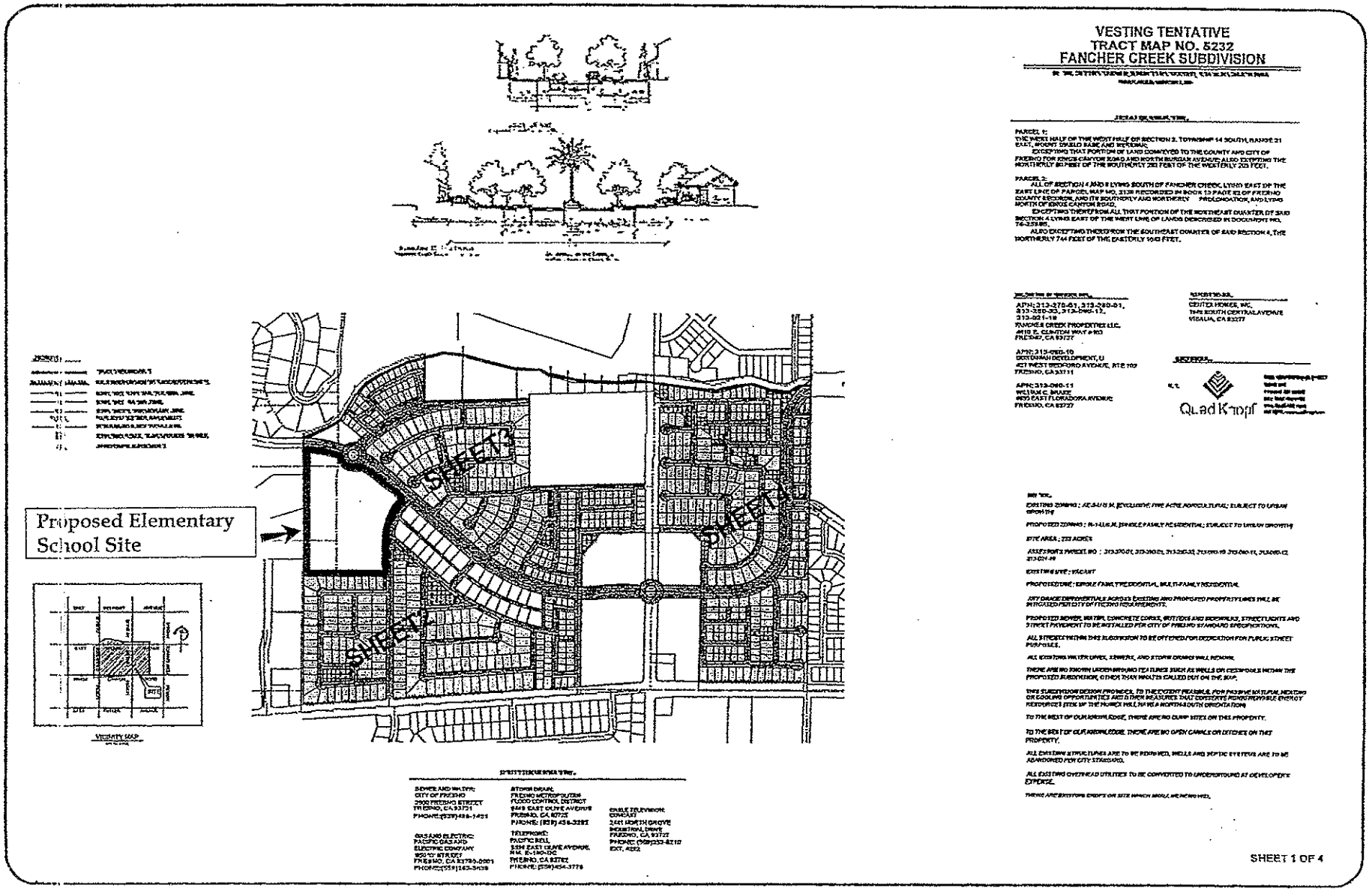
2. The mitigation measures considered infeasible include:

   - Clovis Avenue at Ashlan Avenue- widening on all four approaches
   - Clovis Avenue from Olive Avenue to SR 180 - widening from 6- to 8-lanes
   - Temperance Avenue from SR 180 to Kings Canyon Road - widening from 6- to 8-lanes

   These mitigation measures are considered infeasible because the roadway widening that is required as part of these mitigation measures exceed the plan line roadway widths. The Clovis Avenue segment from Olive Avenue to SR 180 and the Temperance Avenue segment from SR 180 to Kings Canyon Road were identified in the *Master EIR for the 2025 Fresno General Plan,* Table VB-4, as requiring mitigation beyond the current plan line roadway widths and that levels of service "E" or "F" were acceptable for these roadways. Per the MEIR, Table I-3, Summary of Potential Impacts Which Cannot be Fully Mitigated, "Future development projects are projected by the City's Traffic Model to cause congested levels of traffic along key identified major street segments". The Clovis/Ashlan intersection improvements were not identified in the City of Fresno 2025 General Plan MEIR since it is outside the jurisdiction of the City.

3. The relocated elementary school site is shown on Figure 1-5 in the DEIR but not labeled. A revised figure is included. The school location is discussed on page 2.8.5 of the DEIR.

Figure 1-5: Preliminary Subdivision Map (Revised)



City of Clovis

Department of Planning and Development Services

CITY HALL · 1033 FIFTH STREET · CLOVIS, CA 93612

Letter 19

November 30, 2004

Bruce O'Neal, Consultant Planner
City of Fresno Planning and Development Department
2600 Fresno Street, Third Floor
Fresno, California 93721-3604

Dear Mr. O'Neal,

SUBJECT: COMMENTS ON FANCHER CREEK PROJECT DRAFT EIR NO. 10133/SCH NO. 2004021071

I am in receipt of the subject DEIR and have the following comments.

Traffic and Trip Generation

In my NOP comment I suggested that a Market Study be used to determine the geographic range of potential traffic/trip generation effects and indirect significant effects of the project. There was no mention in the DEIR whether this approach was used in the traffic study. Will you please describe how these factors were considered in the traffic study without a Market Study.

1.

The summary identifies mitigation measures to reduce all traffic impacts to a less than significant level, but also states that some mitigation measures are infeasible. I understand from discussion with staff that this conclusion can be found in Fresno's 2025 General Plan MEIR. However, it is not clear in the DEIR which of those traffic mitigations are infeasible and how this conclusion in the summary is linked to the MEIR; this is especially important for Clovis' evaluation of the DEIR in light of the mitigation measures that lie within the Clovis Sphere of Influence or have an impact on streets in and around Clovis. Will you please identify where this information is included in the DEIR.

2.

Public Services

The DEIR states that Fresno Planning staff has determined that the project is consistent with the Fresno General Plan. This plan depicts a large Public Facility(Elementary School) on the south side of Tulare Avenue west of Fowler Avenue, approximately half of which is currently developed with a CUSD elementary school. I understand from discussion with staff that the balance of

3.

the PF use will consist of a revised school site lying east of the Sunnyside Avenue alignment. Will you please identify where this is described in the DEIR. I also suggest that Figure 1-5 be revised to clearly show the location of the new school site.

Thank you for the opportunity to comment on this DEIR and for accommodating my request to extend the comment period by a day. If you have any questions, please contact me at 559 324-2338.

Sincerely,

David E. Fey AICP
Deputy City Planner

cc: Kathy Millison
John Wright

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SANCHEZ

WORKING DOCUMENT

Draft Environmental Impact Report No. 10133

Fancher Creek Development Project

Rezoning Application No. R-04-14

SCH No. 2004021071

Prepared by:

The City of Fresno
Development Department

Environmental Consultant:

Land Use Associates

October 2004

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Appendix A: *Responses to the Notice of Preparation*

SUMMARY

This Environmental Impact Report (EIR) is prepared by the City of Fresno for the proposed Fancher Creek Development Project. The EIR is prepared in conformance with the California Environmental Quality Act (CEQA) and the CEQA Guidelines. The applicant is Fancher Creek Properties, LLC, of Fresno. The project area is located in southeast Fresno and generally bounded by N. Clovis Avenue on the west, E. Kings Canyon Road on the south, N. Armstrong Avenue on the east, and E. Belmont Avenue on the north.

Project Description. The entitlement applications for the project include rezoning of the entire site consistent with the 2025 Fresno General Plan, approval of a vesting tentative tract map for single family residential units, approval of a tentative parcel map for industrial development, and annexation of unincorporated areas to the City of Fresno. The project area includes 476 acres, of which 425 acres are controlled by Fancher Creek Properties, LLC. Fifty-two acres within the Regional Commercial area (MEGG properties) are not under the applicant's control and will not be zoned, but are included in the EIR for cumulative analysis.

Totals of areas controlled by Fancher Creek Properties, LLC, to be rezoned are:

M-1/UGM (Light Manufacturing/Urban Growth Management)	107 acres
R-1/UGM (Single Family Residential/Urban Growth Management)	243 acres
C-2/UGM (Community Shopping Center/Urban Growth Management)	31 acres
C-3/UGM (Regional Shopping Center/Urban Growth Management)	43 acres
	425 acres

Zoning for 139 acres that are currently unincorporated would only become effective upon annexation. In addition to annexation, pursuant to Section 53311 of the Government Code, the applicant also proposes the formation of an Infrastructure Mello-Roos district. This code section provides the ability to utilize voter approved special districts to construct, operate, and maintain public facilities within a project area. Therefore, the applicant may also propose the parallel formation of a Benefit Assessment district for landscape maintenance with the project area.

LAND USE, PLANNING, AND AGRICULTURE

IMPACT **The project is generally consistent with the principals and policies of the *A Landscape of Choice.* This is a *less-than-significant impact.***

Mitigation None required.

IMPACT **The proposed project is generally consistent with the policies and standards of the Local Agency Formation Commission. This is a *less-than-significant impact.***

Mitigation No additional mitigation is required. When an annexation is applied for, LAFCo will determine the extent to which the particular annexation meets LAFCo requirements.

IMPACT **Approval of the project would substantially modify the current use of the land from agriculture to urban use and would result in the conversion of prime agricultural land. This is a *significant, unavoidable impact.***

Mitigation

1. The developer shall ensure that the project is designed with limited driveway access, back-on treatment of residential uses, and adequate landscaped buffers.

2. The City shall pursue appropriate measures, including recordation of right to farm covenants, to ensure that agricultural uses of land may continue within those areas of transition where planned urban areas interface with planned agricultural areas.

Level of Significance After Mitigation: Mitigation would reduce the potential for conflict between agricultural uses and existing rural residential uses and the proposed project to a less-than-significant level. Although impacts to regional agriculture would be reduced, loss of agricultural land on the site itself represents a significant, unavoidable impact.

IMPACT **The project may conflict with objectives of the Fresno Yosemite International Airport master plan and be affected by operations at the airport. This is a *significant impact.***

Mitigation Beyond existing regulatory requirements, no additional mitigation is required.

IMPACT **Adverse land use impacts may occur where project land uses adjoin existing development. This is a *significant impact.***

Mitigation

1. At the time of tentative tract map or site plan review, special consideration shall be given to potential visual, noise, and traffic impacts at the interface of project and existing surrounding uses.

2. Multifamily areas should be designed as an integral part of a mixed-use development and should be sensitive to surrounding residential land use. Free standing multi-story construction, especially adjacent to existing single family uses, shall not be permitted.

3. The proposed business park should encourage a mix of light industrial and office uses that are compatible with surrounding existing and planned residential neighborhoods. Industrial uses that are inappropriate for the business park include, but are not limited to,

food/meat processing, heavy chemical uses, solid waste recycling, auto repair and paint shops. Uses that do not create noise or nighttime activities shall be placed adjacent to residential areas when feasible, with heavier uses in the business park focused near the center or major street frontages.

4. The City shall apply consistent performance standards for commercial development on the Fancher Creek site to include, but not be limited to the following:

   a. All development associated with the project shall be consistent with all pertinent zoning conditions, policies, development standards, and mitigation measures addressing site design, visual resources, and aesthetics approved with the 2025 Fresno General Plan and the Fresno Zoning Ordinance.

   b. Outdoor areas for shipping and receiving operations shall be located to avoid adverse noise, visual, and illumination impacts on existing and planned and residential areas.

   c. Parking areas shall be well landscaped with trees provided along the perimeter and interior of multi-aisle parking areas such that the trees form an overhead canopy providing sun and rain protection for the majority of the parking spaces.

   e. Area lighting shall be directed predominantly downward and placed to prevent glare or excessive spray of light on neighboring sites.

   f. A loading dock barrier shall be provided to mitigate noise impacts from shipping and receiving activities. The loading dock barrier shall be constructed of a noise attenuation product such as "FASTWALL" or Sound Box absorptive concrete block wall systems. As an alternative, loading docks adjacent to residential development should be covered.

   g. Special orientation or design treatment of loading docks located in proximity to residential areas shall be required to reduce noise impacts to less-than-significant levels.

   h. All mechanical equipment placed on rooftops and exhaust ducts for rooftop mechanical equipment shall be oriented away from existing and planned residential uses.

5. On properties adjacent to residential development, all trash collection areas and compactors shall be completely screened from adjacent property.

6. The City shall apply consistent design standards for development of the regional commercial site, to include, but not be limited to the following:

a. The architectural style of structures shall utilize elements that complement the existing character of this area of southeast Fresno. Buildings shall have an attractive appearance on all sides, not just the front elevation.

d. Building arrangements shall discourage a continuous facade; instead, several pedestrian links should be created that connect the street, sidewalks, and parking areas to various buildings and uses.

c. Large, continuous facade surface treatments using a single material should be minimized. In the event this is done, textural changes or relief techniques must be utilized.

d. Buildings are to be designed with a distinct ground floor facade treatment that allows for signs, awnings or canopies to be varied within an overall architectural character.

e. Special attention is to be paid to pedestrian movement through parking lots and connecting to adjacent residential areas. Accommodation for the pedestrian in the way of paths or sidewalks should be included in the layout of the project. Trees which shade these paths should be incorporated into the landscape plan.

f. For exterior lighting, both the fixtures and the overall lighting scheme shall be conceived as an integral part of the architectural and landscape design for a project.

g. Internal vehicular circulation between parcels shall be maintained to provide for a unified circulation pattern between developments.

Level of Significance After Mitigation: Implementation of the mitigation measures would reduce the potential for land use conflicts resulting from the development of the Fancher Creek project to a less-than-significant level.

IMPACT **Adverse land use impacts may occur in association with the development of the proposed Fancher Creek multi-purpose trail. This is a *significant impact.***

Mitigation

1. Where portions of the on-site open space system and trail are adjacent to existing residential areas, the developer shall provide landscaping and other buffering measures to reduce potential visual, noise, and land use impacts to adjacent residents.

2. The project shall provide facilities to allow project and area residents access to open space developed adjacent to Fancher Creek on properties controlled by Fancher Creek Properties, LLC. Supporting facilities, to be coordinated with the City of Fresno, should include internal pathways leading to and from the trail, benches, drinking fountains, and restrooms, as appropriate.

Level of Significance After Mitigation: Implementation of the mitigation measures would reduce the potential for impacts resulting from development of an open space system along Fancher Creek on the Fancher Creek Properties, LLC, properties, including a trail, to a less-than-significant level.

TRANSPORTATION AND CIRCULATION

IMPACT **Development of the project will significantly increase traffic on local streets and state highways. This is a significant impact.**

Mitigation: To mitigate the locations projected to operate below adopted level of service standards, the following improvements are recommended for the Mitigated 2025 Project scenario:

Segments

Clovis Avenue from Olive Avenue to SR 180
- Widen from 6- to 8-lanes

Fowler Avenue from McKinley Avenue to Olive Avenue
- Widen from 2- to 4-lanes

Fowler Avenue from Tulare Avenue to Fancher Creek Drive
- Widen from 4- to 6-lanes

Temperance Avenue from SR 180 to Kings Canyon Road
- Widen from 6- to 8-lanes

Intersections

Kings Canyon Road at Temperance Avenue
- Restripe/widen the northbound approach, south leg, from a separate left-turn lane, three (3) through lanes and a separate right-turn lane to a separate left-turn lane, three (3) through lanes and a shared through-right lane
- Restripe/widen the southbound approach, north leg, from a separate left-turn lane, three (3) through lanes and a separate right-turn lane to a separate left-turn lane, three (3) through lanes and a shared through-right lane

Temperance Avenue at Jensen Avenue
- Restripe/widen the westbound approach, east leg, from dual (2) left-turn lanes, three (3) through lanes and a separate right-turn lane to dual (2) left-turn lanes, three (3) through lanes and a shared through-right
- Restripe/widen the eastbound approach, west leg from dual (2) left-turn lanes, three (3) through lanes and a separate right-turn lane to dual (2) left-turn lanes, three (3) through lanes and a shared through-right

Belmont Avenue at Clovis Avenue

- Restripe/widen the northbound approach, south leg, from a separate left-turn lane, three (3) through lanes and a separate right-turn lane to dual (2) left-turn lanes, three (3) through lanes and a shared through-right lane

Clovis Avenue at Ashlan Avenue

- Restripe/widen the northbound approach, south leg, from a separate left-turn lane, three (3) through lanes and a separate right-turn lane to dual (2) left-turn lanes, three (3) through lanes and a separate right-turn lane
- Restripe/widen the southbound approach, north leg, from a separate left-turn lane, three (3) through lanes and a separate right-turn lane to dual (2) left-turn lanes, three (3) through lanes and a separate right-turn lane
- Restripe/widen the westbound approach, east leg, from a separate left-turn lane, one (1) through lane and a shared through-right lane to dual (2) left-turn lanes, two (2) through lanes and a separate right-turn lane
- Restripe/widen the eastbound approach, west leg, from a separate left-turn lane, one (1) through lane and a separate right-turn lane to dual (2) left-turn lanes, two (2) through lanes and a separate right-turn lane

The City of Fresno's Traffic Signal Mitigation Impact Fee program indicates that a new development will be assessed a fee of $47.81 per average daily trip. For a proposed Project of this size including the 14 acres of light industrial, 93 acres of business park, 1,543 single family, 408 multi-family, 30,000 sf of general office and 960,000 sf of retail commercial, the fees would be approximately $3,513,100 . These fees were calculated based the projected trip generation of 73,481 daily trips with no reduction for capture or pass-by. Also please note that these fees were calculated based on only the applicant controlled parcels.

Level of Significance After Mitigation: Mitigation would reduce the potential traffic impacts to a less-than- significant level. Securing sufficient right-of-way for a limited number of roadway segments and intersections to implement recommended mitigation, however, may be infeasible. For these segments and intersections, traffic impacts would be significant and unavoidable.

AIR QUALITY

IMPACT **Project emissions will exceed the significance thresholds established by the San Joaquin Valley Air Pollution Control District**

Mitigation

Compliance with Regulation VIII under the San Joaquin Valley Air District for all construction sites will constitute sufficient mitigation to reduce PM_{10} impacts to a level considered less-than significant.

In addition, the following measures are designed to minimize localized fugitive dust during grading and construction activities of the project, and to reduce emissions from long-term project operation:

1. All personnel working on the project will be trained prior to starting work on methods for minimizing air quality impacts during construction.

2. All active portions of construction sites, earthen access roads, and material excavated or graded shall be sufficiently watered to prevent excessive amounts of dust. Watering shall occur at least twice a day with complete coverage, preferably in the late morning and after work is done for the day. Where feasible, reclaimed water shall be used.

3. All clearing, grading, earth moving, or excavation activities shall cease during periods of winds greater than 20 miles per hour averaged over one hour.

4. All material transported off site shall be either sufficiently watered or securely covered to prevent excessive amounts of dust.

5. The area disturbed by clearing, earth moving, or excavation activities shall be minimized at all times. This can be accomplished by mowing instead of discing for weed control and seeding and watering inactive portions of the construction site until grass is evident.

6. Construction site vehicle speeds shall be limited to 15 miles per hour.

7. If used, petroleum-based dust palliatives shall meet the road oil requirements of the District's rule regarding Cutback Asphalt Paving Materials.

8. Streets adjacent to the Project site shall be swept as needed to remove silt that may have accumulated from construction activities. The streets are required to be wet prior to or in conjunction with rotary sweeping.

9. All internal combustion engine driven equipment shall be properly maintained and well tuned according to the manufacturer's specifications.

10. Exposed stockpiles of soil and other excavated materials will be enclosed, covered, watered twice daily, or applied with soil binders.

11. During the smog season (May through October) the construction period shall be lengthened to minimize the number of vehicles and equipment operating at the same time.

12. Carpooling will be encouraged among construction workers through contractor bid specifications and project orientation for workers.

13. When available, electric equipment shall be utilized in lieu of gasoline powered engines.

14. Vehicle idling time will be minimized (e.g., 5 minute maximum).

15. Construction activities shall minimize obstruction of through traffic lanes adjacent to the site and a flag person shall be retained to maintain safety adjacent to existing roadways.

16. The use of energy efficient street lighting and parking lot lighting shall be considered to reduce emissions.

17. Less polluting alternatives to wood stoves shall be required, in accordance to Rule 4901, where feasible, e.g. CEC certified natural gas fireplace appliances, which are 70% efficient and create far less pollution than wood stoves.

18. Landscaping shall include water efficient plant species and irrigation to reduce water consumption and provide passive solar benefits.

19. Require that space and water heaters comply with District Stationary Source Rules and Uniform Mechanical Code requirements, and encourage the installation of energy efficient lighting beyond Title 24 requirements for all commercial/residential developments.

20. Use of HVAC equipment with a SEER of 12 or greater.

21. Provide pedestrian/transit oriented project design.

22. Restrict residential traditional wood fireplaces and install only natural gas fireplaces or inserts.

23. Commit to on-site improvements; bikeways, transit infrastructure, pedestrian enhancements.

24. For non-residential development include secure bicycle parking and paths connected to the bikeway system from the development.

25. For reducing VMT, consider Park and Ride Lots and a Satellite Telecommuting Center.

Level of Significance Following Mitigation

With implementation of the construction-related mitigation measures listed above, air quality impacts of the project are expected to be insignificant. Operational and area emissions, however, are expected to remain significant and unavoidable with project implementation.

GEOLOGY AND SOILS

IMPACT **Seismic activity along any of the regional faults could result in moderate damage to structures in the proposed project. This would be a *less-than-significant impact.***

Mitigation No additional mitigation is required.

IMPACT **The project would be developed on soils which have development constraints which could cause structural damage. This would be a *less-than-significant impact.***

Mitigation No additional mitigation is required.

IMPACT **Development of the proposed project would require excavation, grading, and other construction operations. Slope and soil disturbance could result in soil erosion. This would be a *potentially significant impact.***

Mitigation The developer shall be responsible for the following mitigation measure to be included as a condition of approval on each conditional use permit, tentative tract map, or site plan:

1. A qualified geologist or consultant shall prepare and submit an erosion control plan for approval by the City of Fresno Public Works Department demonstrating compliance with water quality standards. Elements of this plan shall address both the potential for soil erosion and non-point source pollution.

Level of Significance After Mitigation: Mitigation would reduce impacts to a less-than-significant level.

BIOTIC RESOURCES

IMPACT **Special status wildlife species could be adversely affected by implementation of the Fancher Creek project. This would be a *significant impact.***

Mitigation

1. The Fancher Creek project shall maintain a minimum 100-foot building setback from Fancher Creek in order to maintain the Great Valley Cottonwood Riparian Forest. Any disturbance of the habitat shall be based on a management and monitoring plan prepared by a biological consultant and accepted by the California Department of Fish and Game.

Level of Significance After Mitigation: Mitigation would reduce impacts to a less-than-significant level.

IMPACT **Special status plant species could be affected by implementation of the Fancher Creek Project. This would be a *less- than-significant impact.***

Mitigation None required.

NOISE

IMPACT **The project will expose future residents to traffic noise levels that exceed adopted standards. This is a *significant impact.***

Mitigation

1. A 6-foot high sound wall should be constructed along the project site where homes are located adjacent to roadways. The sound wall must be continuous and constructed of a dense material such as masonry blocks or stucco on both sides of a wood/steel frame.
2. The applicant shall follow the State Noise Insulation Standards (California Code of Regulations, Title 24) and Chapter 35 of the Uniform Building Code (UBC) concerning interior noise exposure for multi-family housing, hotels and motels.
3. Double pained windows shall be installed in all buildings at the project site. Exterior doors, excluding glass doors, should be solid-core wood or insulated steel with perimeter weather-stripping and threshold seals.
4. Mechanical ventilation or air conditioning must be provided for all homes so that windows and doors may remain closed for the required acoustical insulation.

Level of Significance with Mitigation: With incorporation of recommended mitigation measures, potential traffic noise impacts will be reduced to a less-than-significant level.

IMPACT **The project will expose future residents and employees to noise levels from operations at the Fresno-Yosemite International Airport. This is a *less-than-significant impact.***

Mitigation None required beyond existing regulatory requirements.

DRAINAGE

IMPACT **Increased runoff generated by the proposed project will require new flood control facilities. This is a *less than significant impact.***

Mitigation No additional mitigation is required.

IMPACT **Increased runoff could result in erosion, sedimentation, and increased levels of contaminants, including nutrients, resulting in possible water quality impacts associated with detention facilities. This is a *significant impact.***

Mitigation The developer shall be responsible for the following mitigation measure to be included as a condition of approval on each conditional use permit, tentative tract map, or site plan:

1. The master storm water plan developed and implemented for the project shall include all applicable best management practices identified in the Construction and Post-Construction Guidelines to ensure that pollutants are controlled to standards required by the City of Fresno and the State of California.

Level of Significance After Mitigation: Implementation of the above mitigation measure would reduce impacts to a less-than-significant level.

PUBLIC SERVICES

IMPACT **The project would result in the need for additional law enforcement services. The impact on law enforcement is a *potentially significant impact.***

Mitigation The developer shall be responsible for the following mitigation measures:

1. Maximize visibility and natural surveillance abilities through the placement and design of physical features including building orientation, windows, entrances and exits, parking lots, walkways, guard gates, low-maintenance landscaping (trees and shrubs), fences or walls, signage and any other physical obstructions.

2. Implement design features to clearly identify public/private spaces and to facilitate natural access control and territorial reinforcement, to include, but not limited to, the following measures:

   a. Identify public entrances and exits through the implementation of sidewalks, pavement, lighting and landscaping to clearly guide the public.

   b. Discourage/prevent public access to and from dark and/or un-monitored areas through the use of fences, walls or landscaping.

   c. Implement exterior nighttime lighting of display areas, parking lots, walkways, entrances, and exits. These areas should be illuminated, at a minimum, one-half-hour after sunset and one-half-hour before sunrise during hours of operation.

   d. Incorporate measures such as graffiti-resistant paints and surfaces, landscaping along bare surfaces, and view fences.

   e. Provide clearly identifiable public access to emergency services-emergency and pay telephone locations, clearly identifiable streets, roads and paths, and clearly identifiable addresses.

3. The Police Department shall be consulted during site planning and design to insure that adequate provisions for crime prevention are designed into the project.

is a new substation warranded?,

Level of Significance After Mitigation: With implementation of the proposed mitigation measures impacts to law enforcement shall be mitigated to a less than significant level.

17 **IMPACT** **The project would result in the need for additional fire protection services. The impact of the project on fire protection is a *potentially significant impact.***

Mitigation The developer shall be responsible for the following mitigation measures:

1. The geometric sections of all interior roads shall, at a minimum, be improved to City of Fresno standards to adequately provide for emergency vehicles. Any deviations from the City standards shall be accomplished through modifications or exceptions requested at the site plan review stage.

2. A water supply and distribution system including fire hydrants shall be designed and constructed to meet the minimum specifications of the Fresno Fire Department for fire protection purposes.

3. As a condition of annexation, the City shall enter into a fire transition agreement with the Fresno County Fire Protection District.

Level of Significance After Mitigation: Implementation of the proposed mitigation measures will reduce project fire protection impacts to a less than significant level.

18 **IMPACT** **Using CUSD generation factors, the project has the potential to generate approximately 734 K-6 students; 218 7-8 students; and 401 9-12 students, for a total of 1,353 students from proposed residential uses that would be part of the project. This is a *potentially significant impact.***

Mitigation

1. Any tentative subdivision map submitted for the portion of development Area 3 to be zoned R-1/UGM shall include an elementary school site at a location acceptable to the Clovis Unified School District.

Level of Significance After Mitigation: Implementation of the proposed mitigation measure will reduce project impacts on school facilities to a less than significant level.

19 **IMPACT** **Approval of the project will generate the need for additional park space. This is *a significant impact.***

Mitigation Space Need. Park + mini parks

1. Participate with the City and the Clovis Unified School District in securing an agreement that will permit the use of the active recreational areas (athletic ball fields, basketball courts, gymnasium, and other appropriate facilities) at Fancher Creek Elementary and the nearby proposed new elementary school site.

Level of Significance After Mitigation: Implementation of the proposed mitigation measure will reduce project impacts to parks to a less than significant level.

20 **IMPACT** **The project will generate wastewater flows to the regional WWTF. This is a *significant impact.***

Mitigation As development entitlements (tract map, parcel map, conditional use permit, etc.) are submitted, more detailed requirements will be developed. In the interim, following is a partial list of potential requirements for this project:

1. The developer shall participate in the construction of necessary sewer mains as required by the City to serve the project in accordance with the UGM process and adopted City standards.

2. Specific sewer main extensions required will be made at the time of each specific entitlement submitted to serve that portion of the project.

3. The developer shall be responsible for payment of sewer connection fees in accordance with adopted City ordinances and the UGM process for each specific entitlement submitted at the time of approval or issuance of permits.

Level of Significance After Mitigation: Implementation of the proposed mitigation measures will reduce project impacts to sewer service and facilities to a less than significant level.

21 **IMPACT** **Approval of the project will generate the need for additional transit service. This is *a significant impact.***

Mitigation

1. FAX staff shall be included in the project review for the proposed project, including subsequent tract maps, site plans, and conditional use permits. Measures shall be included in project design to facilitate transit, including transit stops and shelters, linkage of transit to the internal trail systems, and the funding for future transit improvements.

Level of Significance After Mitigation: Implementation of the proposed mitigation measure will reduce project impacts to transit services to a less than significant level.

HYDROLOGY

22 **IMPACT** **Approval of the project will require pumping from the groundwater aquifer. This is a *significant impact.***

Mitigation The developer shall be responsible for the following mitigation measures:

1. The project shall commit to a water conservation program which shall include low-flow water fixtures, water conserving landscaping of public spaces, and water conserving practices for golf course irrigation.

2. Technical water supply information shall be submitted which demonstrates residential and commercial uses and corresponding water requirements.

3. The developer shall prepare a water master plan for approval by the City in accordance with City requirements.

4. The project should attain a water budget by using or recharging an average of about 1,500 acre-feet per year of canal water in the vicinity.

5. New public supply wells shall be designed and constructed to tap good quality water, which would not require treatment and would result in a low TDS effluent.

Level of Significance After Mitigation: Implementation of mitigation measures would reduce impacts to a less-than-significant level.

IMPACT **Approval of the project could result in domestic water wells with contaminants exceeding State MCLs. This is a *significant impact.***

Mitigation The developer shall be responsible for the following mitigation measures based on required water-well monitoring:

1. Should any existing community water supply well exceed the DBCP MCL as detected in regular monitoring, granular activated carbon treatment or other acceptable technology shall be required consistent with CCR Title 22 requirements.

2. Should other contaminants be identified in the future, remediation shall be resolved in accordance with CCR Title 22 requirements.

Level of Significance After Mitigation: Implementation of mitigation measures would reduce impacts to a less-than-significant level.

IMPACT **Groundwater quality degradation from stormwater runoff associated with urban development is a *significant impact.***

Mitigation The developer shall be responsible for the following mitigation measure to be included as a condition of approval for all conditional use permits, tentative tract maps, or site plans:

1. Grading plans shall demonstrate that all areas of irrigated turf or other open space drain away from FMFCD basins, except in extraordinary wet years (10-year frequency storms).

Level of Significance After Mitigation: Implementation of the mitigation measure would reduce impacts to a less-than-significant level.

AESTHETICS

IMPACT **Development of Fancher Creek would alter the character and appearance of the project area. This conversion is considered to be a *significant impact.***

Mitigation The developer shall ensure that the following measures are incorporated in the design of the project:

1. The developer shall incorporate landscape, wall treatment, signage, and architectural standards for the development of residential, commercial, and recreation/open space.

2. A minimum 20-foot landscaped area shall parallel the northerly side of Kings Canyon Road. A berm and/or combination berm/sound wall shall parallel this roadway where residential lots are proposed.

3. Project entries along Fowler Avenue shall incorporate special entry features, such as extensive landscaping and low profile entry signs.

Level of Significance After Mitigation: With incorporation of mitigation measures, visual and aesthetic impacts will be reduced to a less-than-significant level.

26 **IMPACT** **Development of the project would introduce new light and glare. This is a *less-than-significant impact.***

Mitigation None required.

CULTURAL RESOURCES

27 **IMPACT** **Implementation of the Fancher Creek project could result in the loss of important archaeological resources. This is a *potentially significant impact.***

Mitigation Developers shall include the following mitigation measure in all construction contracts for earthwork/excavation:

1. If material that may be human remains, animal fossils, or archaeological material is encountered during project grading, excavating, or construction, work shall stop in the immediate area.

   a. If the material is suspected human remains, the Fresno County Coroner shall be immediately contacted for determination as to whether the material is prehistoric in nature. If the remains or other archaeological material is possibly Native American, the Native American Heritage Commission shall be immediately contacted and a recognized archaeologist retained to conduct an assessment. The site shall be formally recorded and recommendations made to the City of Fresno as to any further site investigations or site avoidance/preservation.

   b. If the material is human-related, but not human remains, and possibly Native American, the Native American Heritage Commission shall be immediately contacted and a recognized archaeologist retained to conduct an assessment. The site shall be formally recorded and recommendations made to the City of Fresno as to any further site investigations or site avoidance/preservation.

   c. If animal fossils are uncovered, the Museum of Paleontology, U.C. Berkeley shall be contacted to obtain a referral list of recognized paleontologists. An assessment shall be conducted by a paleontologist and, if the paleontologist determines the material to be significant, it shall be preserved.

2. Archaeological resources shall be evaluated through a "consolidated approach" in which the three phases of discovery and identification, evaluation and assessment, and mitigation are streamlined into a single operation. This affords the opportunity to treat the resources appropriately while eliminating potential project delays.

Level of Significance After Mitigation: Implementation of the above mitigation measures will ensure that potential impacts to archaeological resources are less-than-significant.

IMPACT **Implementation of the Fancher Creek project could result in the loss of important historical structural resources. This is a *less than significant impact.***

Mitigation No additional mitigation is required.

PG& E SUBSTATION

IMPACT **Construction of the substation and power line route will result in significant environmental impacts that can be reduced to a level less than significant with incorporation of mitigation measures.**

Mitigation

1. All personnel working on the project will be trained prior to starting work on methods for minimizing air quality impacts during construction.

2. All active portions of construction sites, earthen access roads, and material excavated or graded shall be sufficiently watered to prevent excessive amounts of dust. Watering shall occur at least twice a day with complete coverage, preferably in the late morning and after work is done for the day. Where feasible, reclaimed water shall be used.

3. All clearing, grading, earth moving, or excavation activities shall cease during periods of winds greater than 20 miles per hour averaged over one hour.

4. Al material transported off site shall be either sufficiently watered or securely covered to prevent excessive amounts of dust.

5. The area disturbed by clearing, earth moving, or excavation activities shall be minimized at all times. This can be accomplished by mowing instead of discing for weed control and seeding and watering inactive portions of the construction site until grass is evident.

6. Construction site vehicle speeds shall be limited to 15 miles per hour.

7. If used, petroleum-based dust palliatives shall meet the road oil requirements of the District's rule regarding Cutback Asphalt Paving Materials.

8. Streets adjacent to the Project site shall be swept as needed to remove silt that may have accumulated from construction activities. The streets are required to be wet prior to or in conjunction with rotary sweeping.

9. All internal combustion engine driven equipment shall be properly maintained and well tuned according to the manufacturer's specifications.

10. Exposed stockpiles of soil and other excavated materials will be enclosed, covered, watered twice daily, or applied with soil binders.

11. During the smog season (May through October) the construction period shall be lengthened to minimize the number of vehicles and equipment operating at the same time.

12. Carpooling will be encouraged among construction workers through contractor bid specifications and project orientation for workers.

13. When available, electric equipment shall be utilized in lieu of gasoline powered engines.

14. Vehicle idling time will be minimized (e.g., 5 minute maximum).

15. Construction activities shall minimize obstruction of through traffic lanes adjacent to the site and a flag person shall be retained to maintain safety adjacent to existing roadways.

16. Where necessary, construction activities shall be scheduled for the dry season to allow safe and reliable truck and equipment access. Where the potential of unsafe soil exists, near surface soft and loose soils can be replaced with engineered backfill.

17. An erosion and sediment control plan shall be developed and implemented by PG&E throughout the project construction period.

18. To further reduce potential impacts to the habitat along Fancher Creek, the width of the clearing required will be minimized. After construction, the area disturbed will be revegetated with native plant species. The revegetation will be designed, conducted and monitored by a qualified botanist or revegetation specialist.

19. To prevent destruction of active nests of bird species that are either special status or protected by the Migratory Bird Treaty Act, all trees and shrubs should be removed outside the nesting season, generally between August and February.

20. During construction, compressors and other small stationary equipment will be shielded with portable barriers.

21. "Quiet" equipment that incorporates noise control elements will be used during construction.

22. Equipment exhaust stacks/vents will be directed away from buildings.

23. Truck traffic will be routed away from noise-sensitive areas where feasible.

24. Temporary sound barriers will be employed, if necessary, when construction will occur within 100 feet of residences or businesses or if sensitive receptors will be exposed to construction noise for more than one day.

25. Pre-drilled piles and/or other methods will be used, where possible, to reduce duration of impact pile driving and reduce the noise and vibration impacts.

26. Vibration levels will be monitored at the beginning of the project and when construction is occurring near sensitive equipment to ensure that vibration criteria will not be exceeded at these sensitive locations.

27. Construction techniques, including but not limited to, the use of non-vibratory means of soil compression, will be used where possible to ensure that the determined construction criteria are not exceeded.

28. Design specifications for the proposed transformers must meet or exceed the following:
    - 45 MVA 215/21kV transformers will meet 79 dBA, at 45 MVA (full capacity) FA rating.

29. The substation will be designed to maintain a minimum 50-foot distance between the transformers and the nearest fence line. This separation will maintain noise levels below the 55 dBA ordinance during day time full-load operation.

30. All transformers must be operated at reduced loading and without fan cooling between the hours of 10:00 pm and 7:00 am.

31. If material that may be human remains, animal fossils, or archaeological material is encountered during project grading, excavating, or construction, work shall stop in the immediate area.

    a. If the material is suspected human remains, the Fresno County Coroner shall be immediately contacted for determination as to whether the material is prehistoric in nature. If the remains or other archaeological material is possibly Native American, the Native American Heritage Commission shall be immediately contacted and a recognized archaeologist retained to conduct an assessment. The site shall be formally recorded and recommendations made to the City of Fresno as to any further site investigations or site avoidance/preservation.

    b. If the material is human-related, but not human remains, and possibly Native American, the Native American Heritage Commission shall be immediately contacted and a recognized archaeologist retained to conduct an assessment. The site shall be formally recorded and recommendations made to the City of Fresno as to any further site investigations or site avoidance/preservation.

    c. If animal fossils are uncovered, the Museum of Paleontology, U.C. Berkeley shall be contacted to obtain a referral list of recognized paleontologists. An assessment shall be conducted by a paleontologist and, if the paleontologist determines the material to be significant, it shall be preserved.

32. Archaeological resources shall be evaluated through a "consolidated approach" in which the three phases of discovery and identification, evaluation and assessment, and mitigation are streamlined into a single operation. This affords the opportunity to treat the resources appropriately while eliminating potential project delays.

Level of Significance After Mitigation: Implementation of the above mitigation measures will reduce potential impacts of the PG&E substation and power lines to less-than-significant levels.

Alternative Power Line Alignments

Other than no project, Alternative alignment "B" is the environmentally superior alternative. The alignment will mitigate potential visual impacts to existing residents in the Fowler/Armstrong corridor and follow a route along the freeway north of Belmont that will not be disruptive to existing or future residents. In addition, no crossing of Fancher Creek will be required with attendant potential vegetation and wildlife impacts.

PROJECT ALTERNATIVES

Summary of Alternatives

Issue	No Project	Increased Density	Reduced Units
Land Use/Agricultural	o	-	+
Traffic	-	+	-
Air Quality	-	o	o
Geology, Soils	-	o	-
Noise	-	o	-
Wastewater	-	+	-
Hydrology	-	+	-
Public Facilities	-	+	o
Aesthetics	-	o	o
Cultural Resources	-	o	o

o = Similar impact to proposed project
+ = Greater impact than proposed project
- = Less impact than proposed project

No Project. The No Project alternative would create fewer impacts compared to the project. The No Project alternative, however, does not meet the primary objectives of the project which is the development of the project site with a planned commercial, mixed-use, and residential development. While the No Project alternative is environmentally superior to the proposed project, it is considered infeasible given the land uses for the project site on the 2025 Fresno General Plan.

Increased Density. The Increased Density alternative is not environmentally superior to the proposed project. It would not eliminate any of the significant adverse environmental impacts associated with the proposed project and could result in greater impacts in several areas. By virtue of its more intense nature, the Increased Density alternative would create greater traffic, wastewater, water, and public facility impacts than the proposed project. More intense development could, however, reduce the amount and pace of agricultural land taken out of production elsewhere by development. The Increased Density alternative would increase the diversity in housing opportunities in the project by encouraging construction of smaller lot attached units and multi-family rental housing; large lot development would occur in other locations.

Reduced Units. The Reduced Unit alternative would reduce land use impacts and also reduce impacts to traffic, noise, and public facilities. The Reduced Unit alternative, however, would not achieve the developer's project objectives. Less than 85 percent of the residential units proposed by the developer would be allowed on the project site. The costs of infrastructure remain high even with the Reduced Density Alternative, including impact fees for streets and highways, well development, and other facilities.

Environmentally Superior Alternative

The Reduced Units alternative reduces overall environmental impacts compared to the proposed project. By virtue of its impacts to traffic, noise, and public services, the Reduced Units alternative is considered the environmentally superior alternative for the project site.

The Reduced Units alternative, however, would reduce overall densities; as a result, more land off-site will be necessary to accommodate a given population base. It can therefore be argued that the Reduced Units alternative could force growth to other areas, further impacting agricultural production and increasing urban sprawl. In the long term, any growth alternative that directs growth further to the east and southeast of the urban area would ultimately have a greater impact on prime and productive agricultural lands due to the existence of more of such lands at the edge of the metropolitan area.

AREAS OF CONTROVERSY KNOWN TO THE CITY OF FRESNO

Based on comments received to the Notice of Preparation and discussions with neighborhood representatives, the following areas of controversy are known:

- traffic impacts to the street system and the surrounding neighborhood
- air quality
- noise
- land use impacts at the interface of existing development
- circulation system consistency with the adopted 2025 General Plan
- development of the proposed Fancher Creek trail

ISSUES TO BE RESOLVED

The primary issues to be resolved include determining consistency with adopted plans and policies and approving mitigation measures to reduce identified significant impacts where feasible. Where such mitigation is determined not to be feasible, or where no suitable mitigation is available, impacts are considered unavoidable with project development. In this instance, the project must be denied, changed so that resulting impacts are less than significant, or the City must make specific findings of overriding social and/or economic considerations in order to approve the project. An important aspect of this determination is the consideration of alternatives, including the ability of any alternative to avoid or reduce identified significant project effects.

1.0 INTRODUCTION AND PROJECT DESCRIPTION

Introduction

This Environmental Impact Report (EIR) is prepared by the City of Fresno for the proposed Fancher Creek Development Project. The EIR is prepared in conformance with the California Environmental Quality Act (CEQA) and the CEQA Guidelines. The Fancher Creek EIR is prepared as a Project EIR as defined in Section 15161 of the CEQA Guidelines. The City intends to streamline the CEQA process for subsequent projects that are found consistent with the Fancher Creek EIR and will proposed the "incorporation by reference" of environmental analysis as defined in Section 15150 of the CEQA Guidelines.

The applicant is Fancher Creek Properties, LLC, of Fresno. The project area is located in southeast Fresno and generally bounded by N. Clovis Avenue on the west, E. Kings Canyon Road on the south, N. Armstrong Avenue on the east, and E. Belmont Avenue on the north.

Project Description

The entitlement applications for the project include rezoning of the entire site consistent with the 2025 Fresno General Plan, approval of a vesting tentative tract map for single family residential units, approval of a tentative parcel map for industrial development, and annexation of unincorporated areas to the City of Fresno. The project area includes 476 acres, of which 425 acres are controlled by Fancher Creek Properties, LLC. Fifty-two acres within the Regional Commercial area (MEGG properties) are not under the applicant's control and will not be zoned, but are included in the EIR for cumulative analysis. The project site is located within Fresno's Sphere of Influence. Figure 1-1 shows the regional location and Figure 1-2 shows the specific location, including project areas, and proposed zoning. Figure 1-3 shows the proposed annexation area.

Totals of areas controlled by Fancher Creek Properties, LLC, to be rezoned are:

M-1/UGM (Light Manufacturing/Urban Growth Management)	107 acres
R-1/UGM (Single Family Residential/Urban Growth Management)	243 acres
C-2/UGM (Community Shopping Center/Urban Growth Management)	31 acres
C-3/UGM (Regional Shopping Center/Urban Growth Management)	43 acres
	425 acres

Zoning for 139 acres that are currently unincorporated would only become effective upon annexation. Any annexation would occur subsequent to the rezoning and would be subject to the requirements of the Local Agency Formation Commission (LAFCO) and standards of Fresno County. In addition to annexation, pursuant to Section 53311 of the Government Code, the applicant also proposes the formation of an Infrastructure Mello-Roos district. This code section provides the ability to utilize voter approved special districts to construct, operate, and maintain public facilities within a project area. Therefore, the applicant may also propose the parallel formation of a Benefit Assessment district for landscape maintenance with the project area.

Table 1-1 shows the parcels within the project, current zoning, and requested zoning.

Figure 1-1: Regional Location

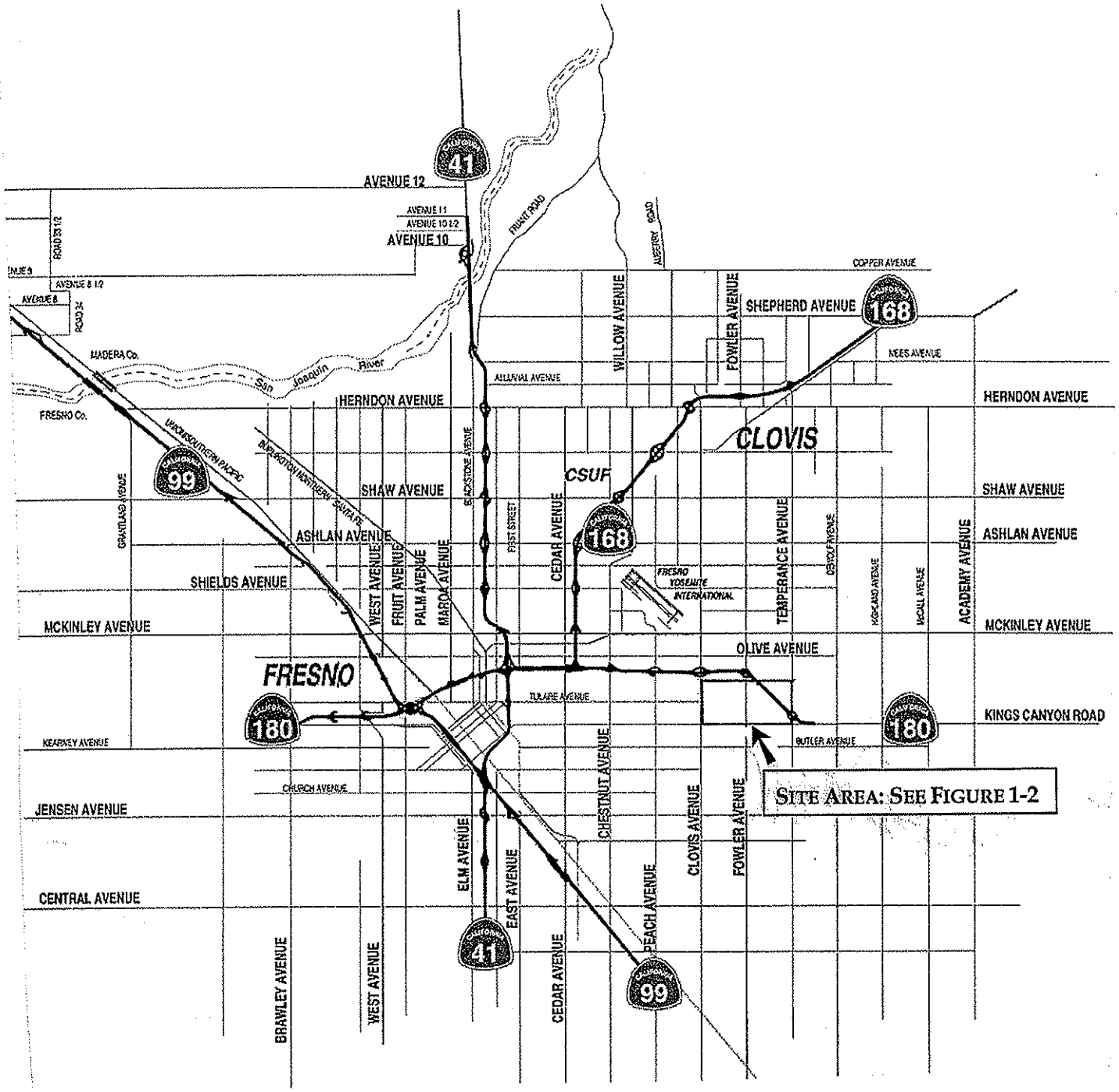


Figure 1-2: Specific Location, Project Areas, Proposed Zoning

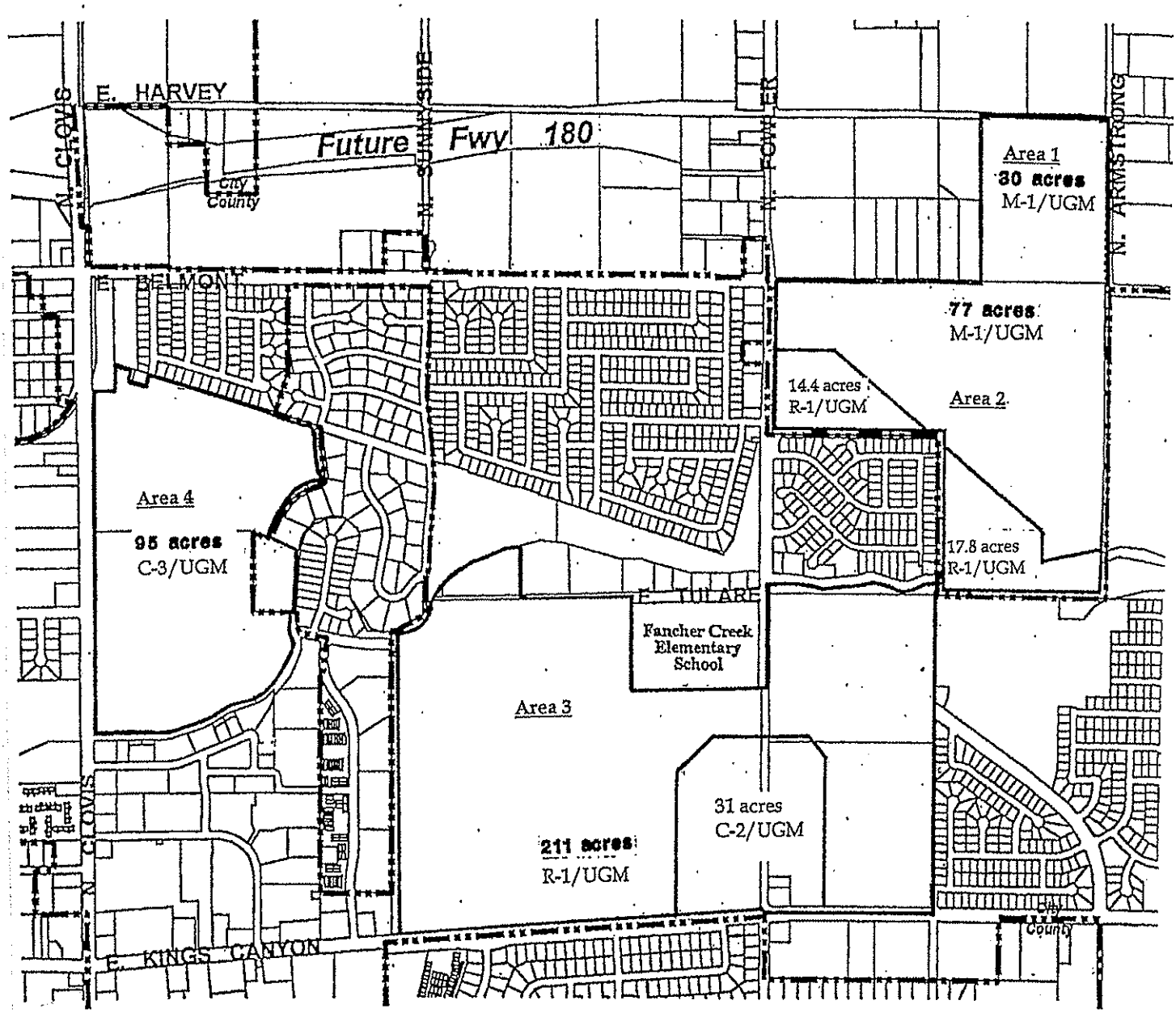


Figure 1-3: Proposed Annexation Area

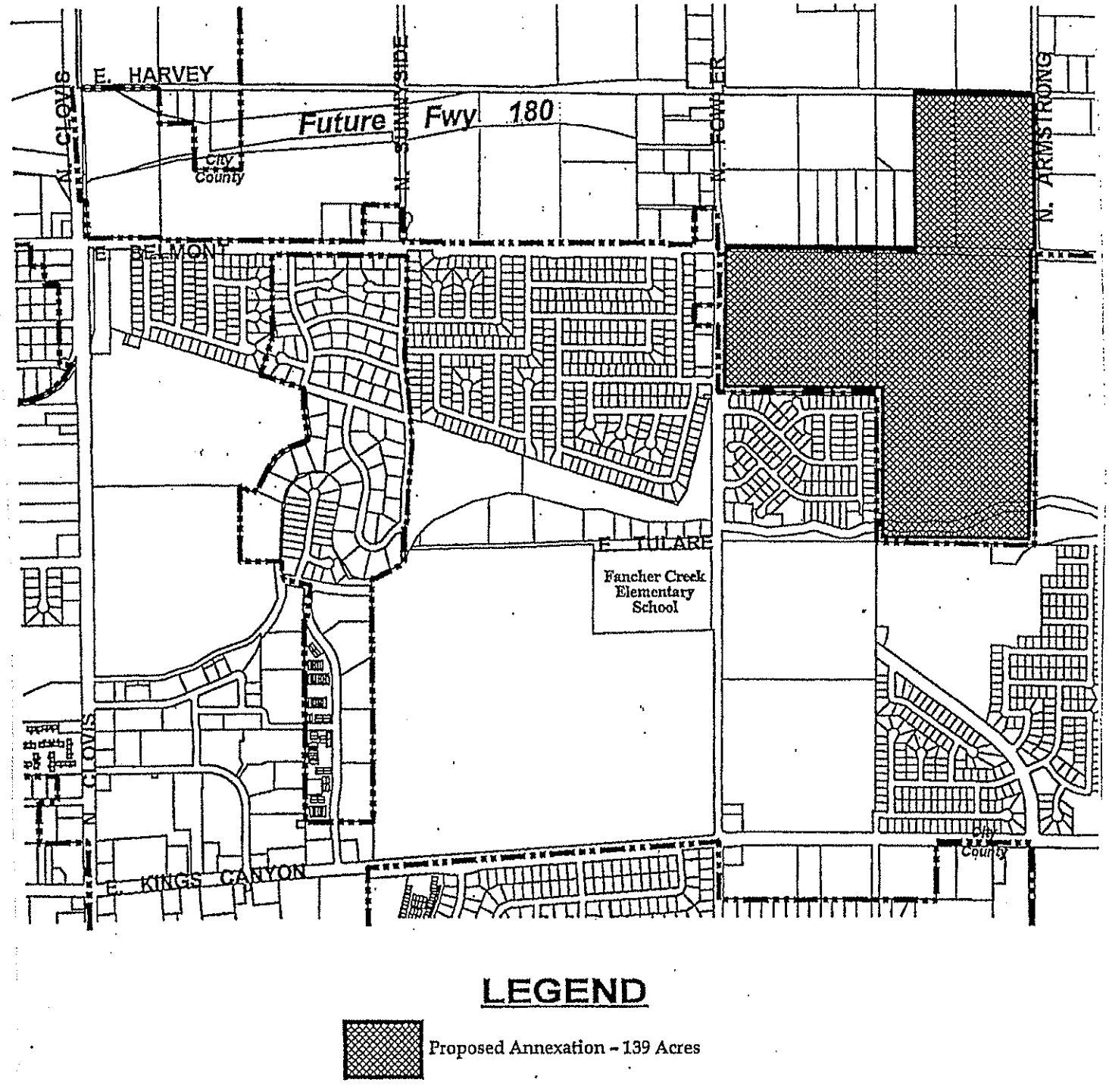


Table 1-1
Proposed Zoning, Fancher Creek Project

Location[1]	Approximate Acres	Parcels (APNs)	Zoning	
			From	To
1	30	310-130-35 310-130-60	AE-20 (County)[2]	M-1/UGM
2	77	313-270-05s (portion) 313-270-06 (portion)	AE-20 (County)[2]	M-1/UGM
	32	313-270-05s (portion) 313-270-06 (portion)	AE-20 (County)[2]	R-1/UGM
3	211	313-021-19 (portion) 313-280-33 (portion) 313-280-01 313-270-01 313-060-12	AE-5/UGM	R-1/UGM
	31	313-280-33 (portion) 313-280-32 313-280-03 313-021-19 (portion)	AE-5/UGM	C-2/UGM C-P/UGM
4	52 43	313-021-01 (MEGG) 313-021-24 313-021-22	AE-5/UGM[4]	C-3/UGM
Total	476 acres			

1 See Figure 2 for location of project areas.
2 Unincorporated parcels requiring annexation.
3 The Fresno City Council has initiated amendments to the Fresno Zoning Ordinance that will permit residential mixed development in commercial districts, including C-2 and C-3, by CUP. Adoption of the ordinance amendment is expected to be complete prior to consideration of Fancher Creek.
4 52 acres of Area 4 are not under the control of the project applicant and will not be zoned at this time, but are included in the EIR for cumulative analysis.

The project consists of four major project areas as shown on Figure 1-2:

Area 1: The rezoning involves approximately 30 acres at the northwest corner of Armstrong and Belmont Avenues to be rezoned from AE-20 (County) to M-1/UGM (Light Manufacturing/Urban Growth Management). The property will be developed with a mix of office, industrial, and commercial uses consistent with the M-1/UGM zone district. The property is currently under row crop cultivation. It is anticipated that the property will be integrated in a business park with approximately 77 acres on the south side of Belmont Avenue between Armstrong and Fowler Avenues.

Area 2: The rezoning involves approximately 109 acres generally bound by East Belmont Avenue on the north, South Fowler Avenue on the west, Fancher Creek on the south, and South Armstrong Avenue on the east. Area 2 will be rezoned from AE-20 (County) to the M-1/UGM (Light Manufacturing/Urban Growth Management) and R-1/UGM (Single Family Residential/Urban Growth Management) zone districts. The M-1/UGM requested property (approximately 77 acres) will be developed with a mix of office, industrial and commercial uses consistent with the M-1/UGM zone district and integrated with the 30 acres to the north in Area 1. Figure 1-4 shows preliminary circulation and lotting patterns for the business park and residential areas.

The R-1/UGM portion of the will consist of approximately 32 acres, is located adjacent on the north and east sides of an existing R-1 zoned subdivision, thus buffering the M-1/UGM uses, and is assumed to develop at an average density of 6.35 units/acre. The northwesterly portion of the proposed R-1/UGM zoning will have direct access to Fowler Avenue while the property located on the southeast portion of the subject request will have access to Armstrong Avenue and surface streets. The property is currently used for row crops and has two single family houses and outbuildings either unused or supporting farming operations.

Area 3: The parcels are located north of East Kings Canyon Road, south of Fancher Creek, approximately 200 feet east of South Argyle Avenue and west of the Burgan Avenue alignment. Approximately 31 acres at the northeast and northwest corners of Kings Canyon Road and South Fowler Avenue are requested to be zoned C-2/UGM. Proposed are retail, commercial, community services, and multifamily residential uses in a town center environment consistent with the recent mixed use ordinance initiated by the Fresno City Council for office, commercial, and industrial zone districts. The initiated amendments would permit residential mixed development in commercial zone districts, including C-2 and C-3, by a conditional use permit (CUP). Adoption of the ordinance amendments is expected to be complete prior to the consideration of the Fancher Creek development project.

The remaining 211 acres is requested to be rezoned R-1/UGM with an average density of 6.35 units per acre (1,340 units). The parcels are currently in part unused and in part cultivated for row crops and limited tree fruit farming. A preliminary subdivision map is shown on Figure 1-5 for Centex Homes that proposes to develop the residential portion of Area 3 with approximately 580 single family lots and two larger lots totaling approximately 17 acres for low density multifamily or PUD single family development. If approved, the subdivision map would reduce the number of units within Area 3 from 1340 to an estimated 850.

Figure 1-4: Proposed Tentative Parcel Map

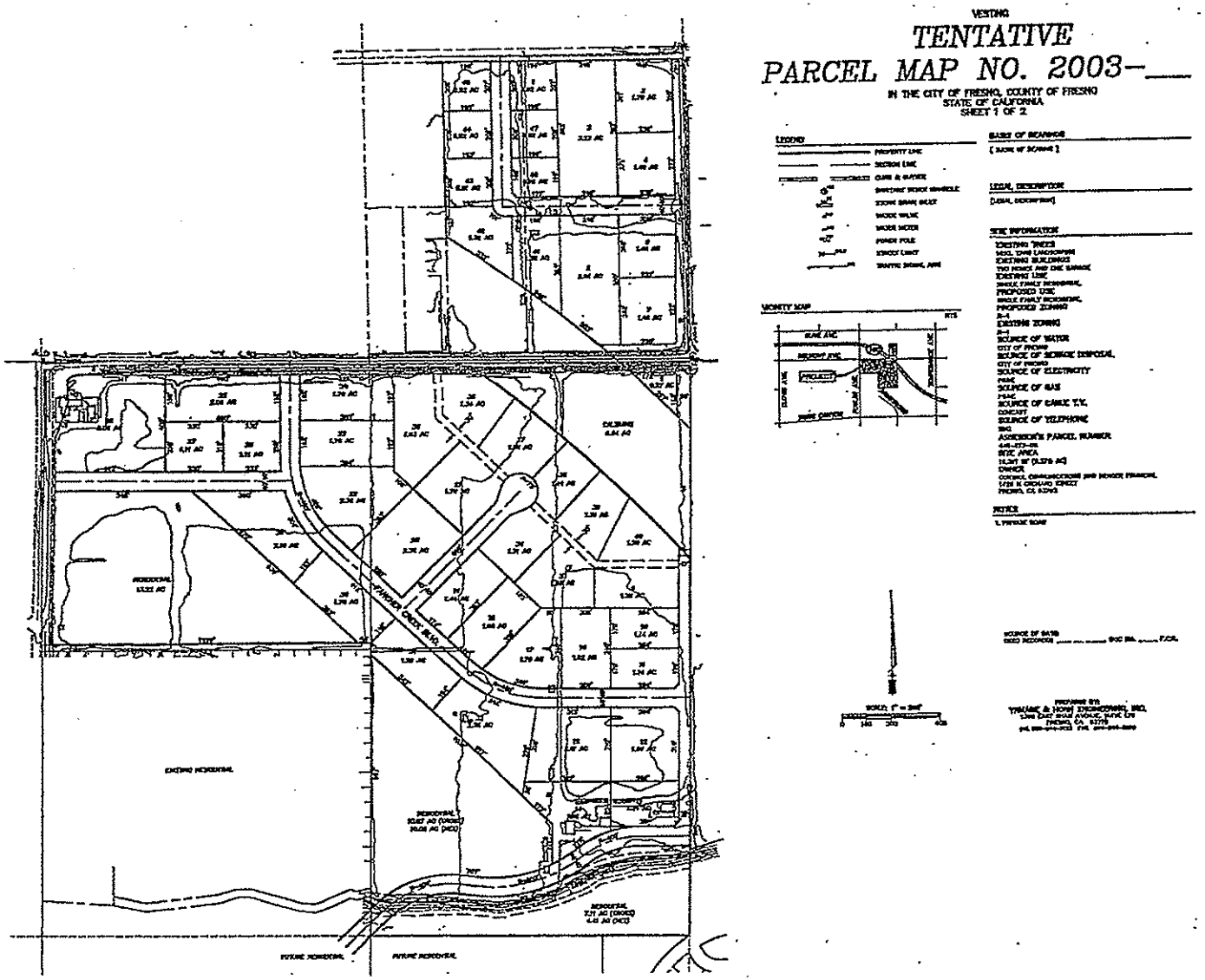
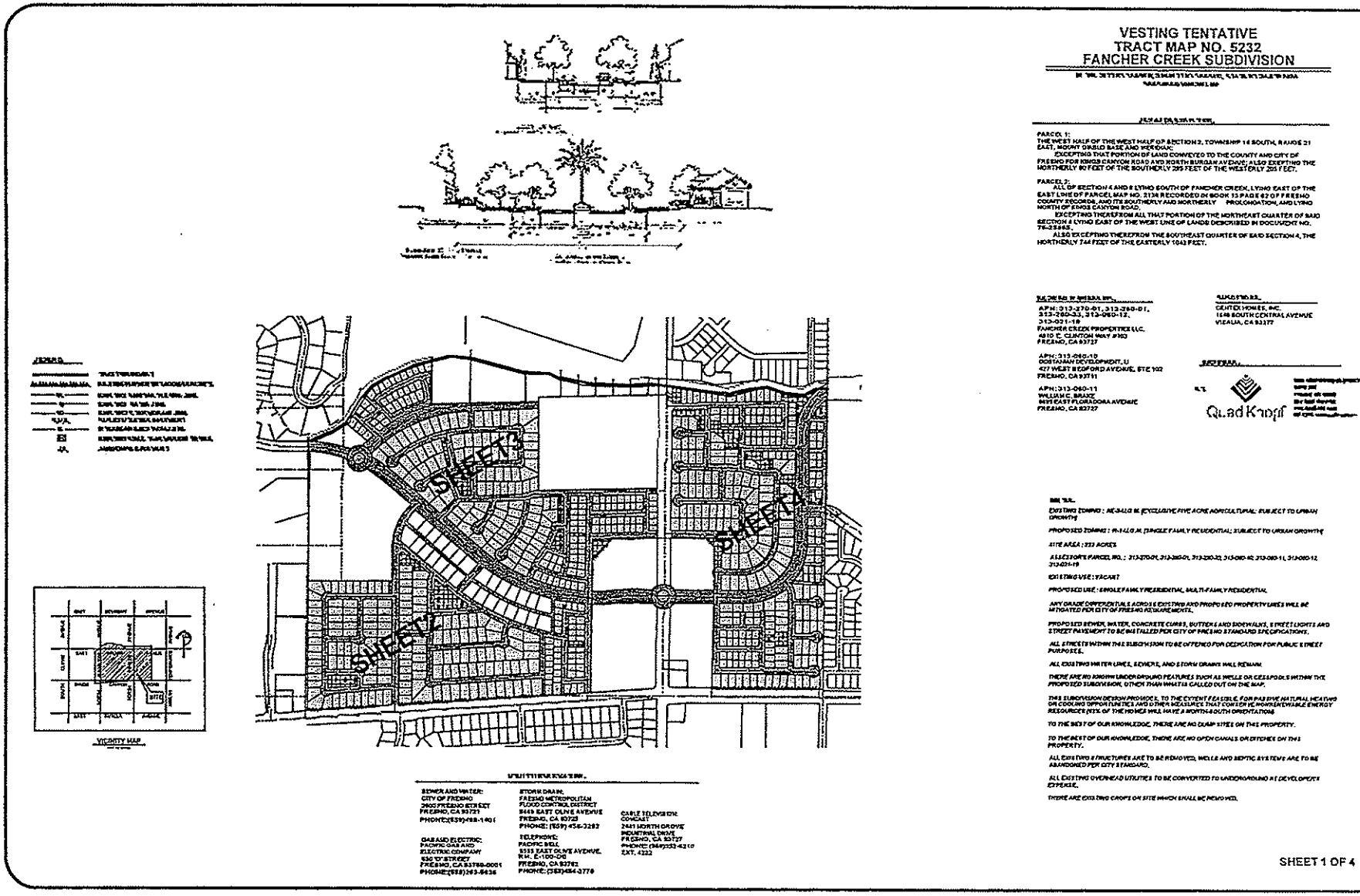


Figure 1-5: Preliminary Subdivision Map



The Clovis Unified School District will develop an elementary school site on 16 acres located on the southwest corner of the proposed Fancher Creek Boulevard and the East Tulare Avenue alignment. In addition, a five-acre neighborhood park site located immediately south of Fancher Creek Elementary School is scheduled to be acquired by the city.

Armstrong Avenue currently terminates at the Burgan Avenue alignment. The applicant is proposing that this roadway be extended to the west to terminate at the Fancher Creek Boulevard alignment. Fancher Creek Boulevard then continues north to connect with the Armstrong Avenue alignment north of Fancher Creek (see Figure 1-5).

Area 4: The parcels are located adjacent to South Clovis Avenue at its intersection with East Tulare Avenue and total 95 acres. The parcels are intended for the development of a regional commercial center with retail and associated commercial uses. In addition, multifamily development would be permitted consistent with the recent mixed use ordinance initiated by the Fresno City Council for office, commercial, and industrial zone districts. Approximately 43 acres are under the control of the applicant and are requested to be rezoned to C-3/UGM.

Table 1-2 shows the estimated number of residential units and square footage o industrial and commercial space for the Fancher Creek Development Project.

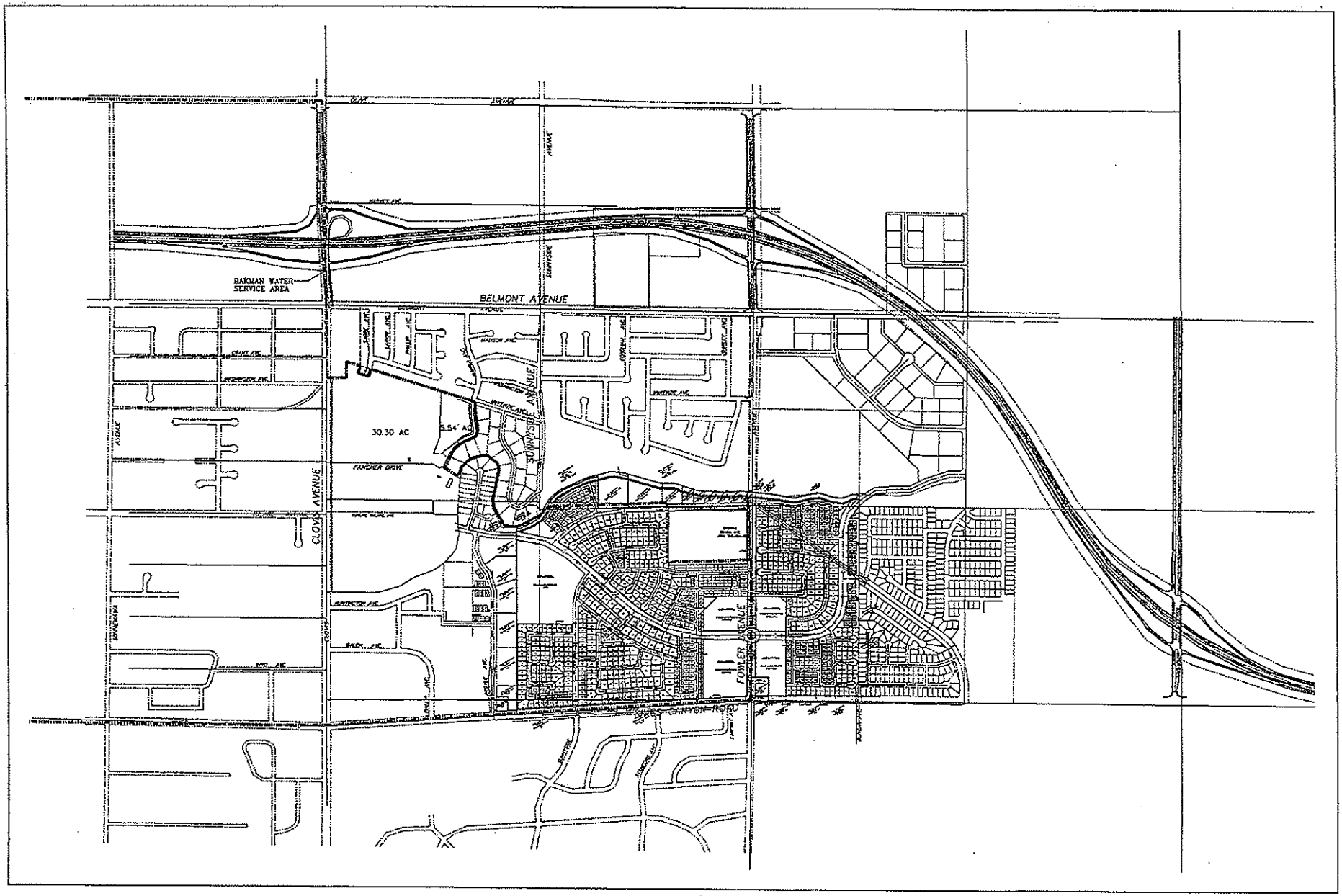
TABLE 1- 2
Estimated Units and Square Footage, Fancher Creek Project

Zoning	Acres	Units or Square Feet/Acre	Total
M-1/UGM	107	14,000 sq. ft. @ .32 FAR [1]	1,500,000 sq. ft.
R-1/UGM	243	6.35 units per acre	1,543 units
C-2/UGM	11 ac. Commercial 4 ac. Offices 16 ac. Multifamily	10,890 sq. ft. @ .25 FAR 8710 sq. ft. @ .20 FAR 15 units/acre	120,000 sq. ft. 30,000 sq. ft. 240 MF units
C-3/UGM	82 ac commercial 12 ac. Multifamily 3.5 multiple family	14,810 sq. ft. @ .34 FAR 20 units/acre	1,200,000 sq. ft. 240 MF units
Totals	**476 acres**		

[1] FAR = Floor Area Ratio

Figure 1-6 is a site composite and shows proposed maps as well as the future alignment of SR 180.

Figure 1-6: Composite Site Plan



The project is proposed to be developed as follows:

Office/business park, industrial:	1,530,000 square feet
Commercial:	1,320,000 square feet
Residential:	2,023 residential units

Other Permits. Permits other than those granted by the City of Fresno would be required of the developer from various regulatory agencies. Those permits include, but are not limited to, final discharge permits from the Regional Water Quality Control Board, pollution discharge permits from the Fresno Metropolitan Flood Control Agency, air quality permits from the San Joaquin Valley Air Pollution Control District, and encroachment permits from Fresno County and Caltrans.

The project will be served by the City of Fresno and the Bakman Water Company for basic services. Separate homeowners associations will also be formed and may be responsible for such services as long-term maintenance of roads within gated neighborhoods, open space, landscaped areas, street lights, trails/walking paths, and various neighborhood security gates within the project. Covenants, conditions, and restrictions (CC&Rs) will be enforced by the homeowners association and adopted bylaws. Homeowners associations and CC&Rs will be formed according to standards created and enforced by the California Department of Real Estate.

Future Applications. The applicant will be required to submit and process additional applications with the City of Fresno that will include, but not be limited to, development agreements; Conditional Use Permits (these applications will provide additional review of such projects as commercial development, mixed-use development, water wells, and planned unit developments); parcel maps; site plan review; and variances. "Project level" environmental review documents will be processed concurrently with the above applications.

Special District Formation. Pursuant to Section 53311 of the Government Code, the applicant also proposes the formation of an Infrastructure Mello-Roos district. This code section provides the ability to utilize voter approved special districts to construct, operate, and maintain public facilities within a project area. In 1978, California enacted Proposition 13 which limited many local public agencies ability to finance new projects. In response, the State adopted the Community Facilities District Act in 1982. This act authorized local governments and developers to create CFDs for the purpose of selling tax exempt bonds to fund public improvements. Subsequently, property owners that participate in the CFD pay a special tax to repay the bonds.

The Act allows any county, city, special district, or joint powers authority to establish a Community Facilities District which allows the financing of public services and facilities. The services and facilities that can be provided includes streets, police and fire protection, schools, parks, libraries, and cultural facilities.

A requisite for establishment of the district is that it be approved by two-thirds of the voters in the district. If there are fewer than 12 registered voters within the proposed district, the vote may be passed by current landowners. Property owners within the district are responsible for payment of the special tax. The amount of the special tax is not directly based on the value of the property, but on mathematically formulas that take into account property characteristics such as the square footage of use and parcel size. The special tax is typically included in the annual County tax bill, however it can also be paid off on a monthly basis.

Should the district be formed, it will construct public facilities within the project boundaries to be paid for by future residents and businesses. The benefits of the district are that it allows the early construction of full improvements (such as parks and roads) rather than incremental improvements over time as fees are assessed and development occurs. The physical impacts to the environment of the construction of such improvements do not differ in substantial ways from construction of such improvements financed by more traditional methods.

PG&E Substation. The EIR also discusses the future location of a PG& E substation at a site located north of the Fancher Creek project. The sub-station is required to serve later phases of the Fancher Creek project as well as growth in the southeast area of Fresno. In addition, alternative locations for high-tension power lines connecting to the sub-station that may cross the project site are also discussed (see Section 2.12, *PG&E Substation*).

Intended Uses of the EIR

The Fancher Creek Development Project EIR is prepared as a project EIR, as defined in Section 15161 of the CEQA Guidelines. The City, as Lead Agency under CEQA, will rely on the EIR to analyze the project's environmental effects, mitigation measures, and alternatives in considering the proposed project. The City intends to streamline the CEQA process for subsequent projects that are found to be consistent with the Fancher Creek EIR.

If the project is approved, the City will submit the EIR to various local, state, and federal agencies for their consideration of, and in connection with, various discretionary permits and approvals necessary to implement the project. These agencies include, but are not limited to, the California Regional Water Quality Control Board (RWQCB); the California State Department of Health Services, Office of Drinking Water; the California Department of Fish and Game; the Fresno Irrigation District (FID); the Fresno Metropolitan Flood Control District (FMFCD); the Fresno Local Agency Formation Commission (LAFCo); the San Joaquin Valley Unified Air Pollution Control District (SJVAPCD); and the Clovis Unified School District (CUSD).

Various other agencies with jurisdiction over specific resources or those with interests potentially affected by the project, such as Caltrans, may also consider and rely on the EIR either as a party interested in the project or in the context of their own future actions that may be necessary to implement the project.

Preparers of the EIR

The Draft EIR was prepared by Land Use Associates of Fresno, California. Subcontractors, and their areas of expertise, include:

TPG Consultants	Traffic and Circulation
Kenneth D. Schmidt and Associates	Hydrology and Water Supply
Jon L. Brady, J & R Environmental Services	Cultural Resources

Subcontractor reports are summarized in the Draft EIR and contained in their entirety within the *Fancher Creek Traffic Impact Study* and *Technical Appendices to the Fancher Creek Development Project EIR* on file with the City of Fresno Planning and Development Department. The technical appendices should be consulted for additional detail on computer modeling and print-outs, supporting documentation, and complete references to information and data contained in the reports.

2.1 LAND USE, PLANNING, AND AGRICULTURE

Introduction

This section analyzes conformance with existing and proposed land use policy, as well as compatibility between the proposed project and neighboring existing land use. The section also reviews the project's impact on prime agricultural land and existing agriculture.

Setting

Land Use

The following uses are located on the site:

- The majority of the site has been used for agriculture, although the historical orchards have decreased in size and replaced with truck crops or fallow land. Portions of the remaining orchards west of Fowler Avenue are not being actively farmed and are being removed on a piecemeal basis. Estimated agricultural/fallow land use is:

Truck Crops	116 acres
Orchards/deciduous fruit	205 acres
Fallow	155 acres

  A large portion of the fallow land is located adjacent to Clovis Avenue on land designated for commercial uses. Truck farming of vegetables on several non-adjacent parcels within the site appears to be the most viable existing agricultural use.

- The development site contains 18 separate assessors parcels. In association with historical farming, the site contains approximately 5 single family homes and accessory buildings.

Figure 2.1-1 is an aerial photo showing existing land use. Along the northerly site border single family residential uses within the City of Fresno extending to Belmont Avenue. North of Belmont Avenue are scattered residential uses, farmland, and the right-of-way for the Highway 180 extension, now under construction. South of the planned regional commercial area on the project site are residential uses and a commercial shopping center at the northeast corner of Clovis Avenue and Kings Canyon Road. An existing single family subdivision also borders the project on the east. An existing 40-acre single family subdivision on the east side of Fowler Avenue at Fancher Creek is surrounded on three sides by the proposed project.

Important land uses in the project area include the Fresno Yosemite International Airport, located 1 ½ mile north of the project on Clovis Avenue, the Highway 180 extension now under construction north of Belmont Avenue, the Gallo winery located on the east side of Clovis Avenue between Olive and Belmont Avenues, and the Sunnyside community located south of the project site. The project site is bounded by urban uses on the west and south. A single family subdivision, agriculture uses, and scattered rural residential uses border the site on the east.

Figure 2.1-1: Existing Land Use

Fancher Creek is an open water way extending through the site in an east-west direction approximately on the Tulare Avenue alignment. The Fancher Creek Elementary School is located in the site interior at the southwest corner of Fowler and Tulare Avenues. ON the north side of Fancher Creek are drainage facilities and open space owned by the Fresno Metropolitan Flood Control District.

Planning Policy

City of Fresno 2025 General Plan. The 2025 Fresno General Plan update was adopted in 2003 and shows a variety of residential, commercial, and public facility designations on the site, as well as open space designations. The general plan land use map for the site is shown on Figure 2.2-2. The general plan also includes other provisions that affect the project site, including scenic roadway designations, trail proposals, and policies of the Fresno Yosemite International Airport. The staff of the Planning and Development Department has determined that the proposed project is consistent with the 2025 Fresno General Plan and that no amendments to the General Plan are necessary to implement the project. This determination of consistency includes, but is not limited to, all land use designations, the planned circulation system, open space designations, densities, land use intensities, and mixed-use provisions of the General Plan.

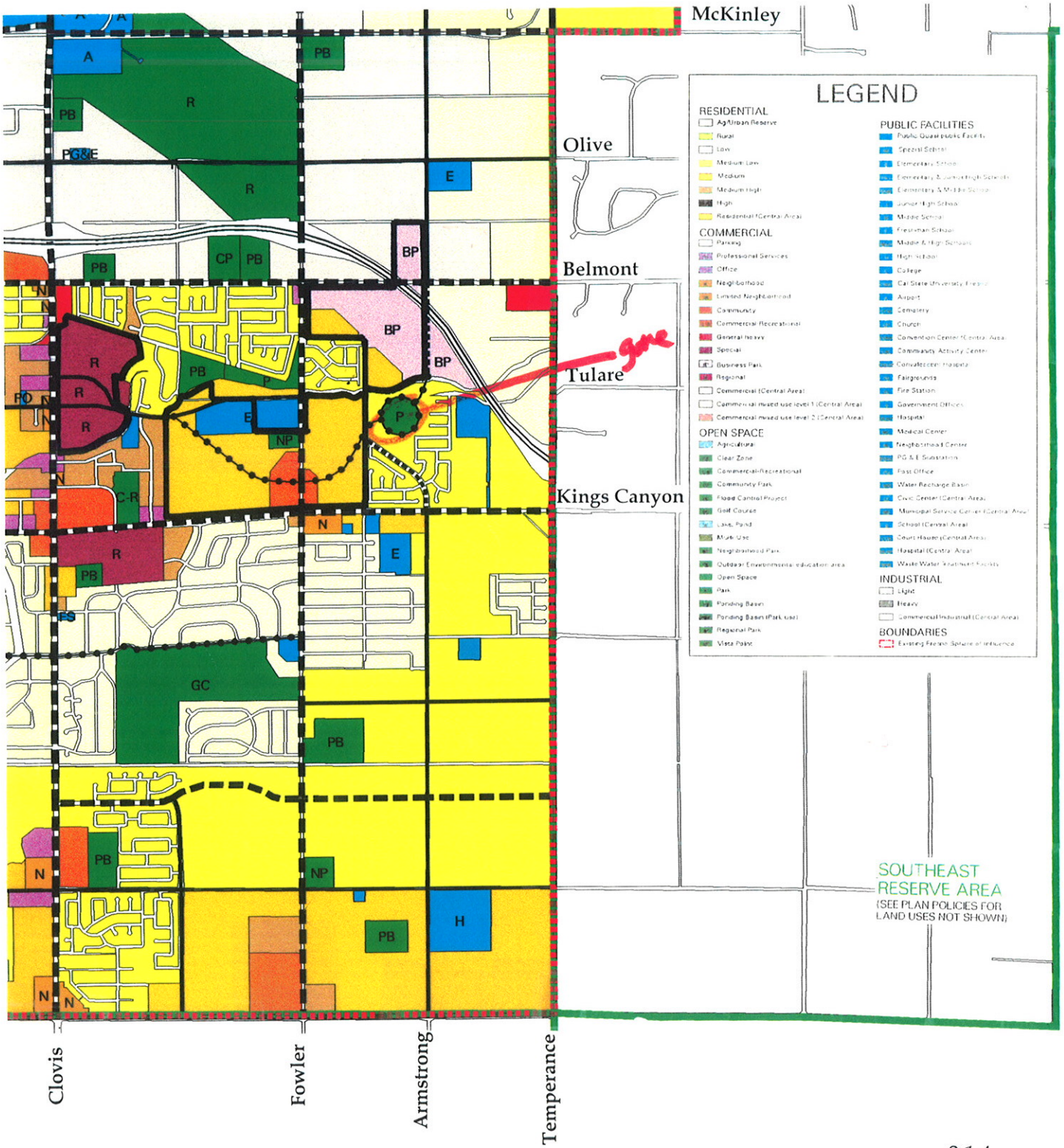
It is noted that the Fancher Creek project area is depicted in its entirety on the 2025 Fresno General Plan land use map and that policies within the plan clearly identify the intent of the 2025 Fresno General Plan to include the Fancher Creek project area within the City of Fresno.

The 2025 Fresno General Plan supports development of master planned/mixed use communities such as the Fancher Creek project. The rezone applications filed for Fancher Creek display a range of residential and commercial uses and further refine the general plan's land use and circulation map. The filing of the subdivision tract map further refines the location and intensity of proposed uses within the project site.

The 2025 Fresno General Plan depicts a regional recreation trail along the Fancher Creek Canal alignment connecting the urban area to the west with the site and areas to the east. The trail generally follows the canal alignment diagonally across the site from Armstrong Avenue west to Clovis Avenue. The Fresno Irrigation District has not yet seen plans for a proposed trail along this segment of the canal. As with other developments with trails along canals, FID will not allow the trail to encroach or overlap FID's canal easement.

A Landscape of Choice. In 1998, the Growth Alternatives Alliance prepared *A Landscape of Choice,* a policy document outlining proposals for improving patterns of community growth while accommodating expected population growth in the Central Valley. The alliance presented a document with policies intended to use urban land as efficiently as possible, develop livable communities that emphasize pedestrian or transit-oriented design, and recognize the importance of agriculture and the need to protect productive farmland. Each city in Fresno County adopted a resolution supporting the principles in *A Landscape of Choice,* and both the City of Fresno and Fresno County have incorporated these principles into their general plan updates.

Figure 2.2-1: 2025 Fresno General Plan



The principles within *A Landscape of Choice* are intended as a guide to development and encourage increased residential densities, support for inner-city revitalization, and the conservation of agricultural land.

Fresno County General Plan and Zoning. The Fresno County General Plan designates the Valley floor between the Friant-Kern Canal and the western boundaries of the San Luis, Pleasant Valley, and Westlands Water Districts, exclusive of areas designated on the General Plan for another use, for agriculture. Policies within the plan support the concept of referring urban development projects to the nearest city.

Local Agency Formation Commission. The Fresno County LAFCo was established by State law to review and make determinations on all changes of organization or reorganization, determinations of spheres of influence, review general plans of cities and the county and to do studies of local agencies, recommending governmental reorganizations. LAFCo has developed policies to assist in the review of proposals and plans. These policies encourage orderly formation and development of agencies, encourage orderly urban development and preservation of open space patterns, and encourage conservation of prime agricultural lands and open space areas. Generally, proposals should meet all standards to be approved. However, when appropriate, the Commission may waive a standard where evidence of overriding circumstances presented in the application and at the hearing warrant such a waiver.

Agricultural Resources

Section 2.4, Geology and Soils, defines soil types present on the site, including the soil capability class according to the Natural Resources Conservation Service . There are also several soil types on the project site considered prime farmland by the State Department of Conservation Farmland Mapping and Monitoring Program. Additionally, soil types on the project site are also considered productive agricultural land and potentially productive agricultural land. Within the metropolitan area, the primary areas of agricultural concentration occur in the southeast, west and limited areas to the north of the City .

Williamson Act Contracts. No parcels within the project site are subject to the Williamson Act, although several parcels to the northeast and east are under contract. There are two options to remove land from a Williamson Act Contract; a land owner can file a Notice of Non-Renewal, or apply for contract cancellation. Once a notice of non-renewal is filed, the contract is phased out over a 10-year period. Over the 10-year phasing-out period, the tax benefit granted to the Williamson Act property is gradually reduced until the property is no longer subject to the contract and reaches its full assessed value.

If the property owner desires to cancel a contract before expiration under the non-renewal process, certain findings must be made and specific criteria met. Findings that must be made are contained in Government Code Section 51282 as follows:

1. That the cancellation is consistent with the purpose of the Williamson Act subject to all of the following findings:

a. That the cancellation is for land on which a notice of non-renewal has been served pursuant to Section 51245 of the California Government Code.
b. That cancellation is not likely to result in the removal of adjacent lands for agricultural use.
c. That cancellation is for an alternative use which is consistent with the applicable provisions of the County General Plan.
d. That cancellation will not result in discontinuous patterns of urban development.
e. That there is no proximate non-contracted lands which is both available and suitable for the use which is proposed the contracted land be put, or, that development of the contracted land would provide more contiguous patterns of urban development than development of proximate non-contracted land; or

2. That cancellation is in the public interest subject to all of the following findings:

a. That other public concerns substantially outweigh the objectives of the Williamson Act.
b. That there is no proximate non-contracted land which is both available and suitable for the use which is proposed the contract land be put, or, that development of the contracted land would provide more contiguous patterns of urban development than development of the proximate non-contracted land.

IMPACTS

Standards of Significance

As defined by CEQA, a significant effect on the environment means a substantial or potentially substantial adverse change in any of the physical conditions within the area affected by the project. Within this guideline, the following standards have been used in this EIR to identify a significant land use impact.

1. A significant impact is identified if the proposed project is incompatible with adjacent land uses or would cause a potentially substantial adverse change in the type or intensity of existing land use.

2. A significant impact is identified where the project is not consistent with approved land use policies, or would require a change in policies in order to achieve consistency.

3. A significant impact is identified where the project would convert prime agricultural land to non-agricultural use, or impair the agricultural productivity of prime agricultural land, or contribute to a cumulative loss of agricultural lands. According to the State Department of Conservation, cancellation of a Williamson Act contract for a parcel of 100 or more acres is deemed to be of statewide, regional, and area wide significance.

Impact

- **The project is generally consistent with the principals and policies of the *A Landscape of Choice*. This is a *less-than-significant impact.***

A Landscape of Choice is a policy document outlining proposals for improving patterns of community growth and these objectives have been incorporated into both the Fresno City and Fresno County general plan updates. The principles within *A Landscape of Choice* are intended as a guide to development. As recommended in *A Landscape of Choice,* Fancher Creek would be a mixed-use master planned community with a variety of housing opportunities, shopping, open space, and services.

The guiding principal of *A Landscape of Choice* is that the land use element of a general plan should utilize urban land as efficiently as possible while providing an adequate supply of a broad range of housing types and densities to meet market demand. Measures to facilitate and encourage compact growth should be applied to all urban land uses including commercial, industrial, and institutional uses.

The Fancher Creek project proposes up to 1,543 residential units on 243 acres in the R-1 zone, or an overall density of 6.3 units to the acre. In addition, up to 480 multifamily units would be constructed on 28 acres within mixed use retail/residential areas. The average density in these areas would be 17.1 units to the acre. These designations represents a variety of potential housing types, including more traditional single family detached homes, attached townhouses, condominiums, as well as more conventional apartments and senior housing.

A Landscape of Choice supports overall residential densities of 5-6 units per acre. The proposed project meets this objective, and facilitates housing and associated commercial uses on a site convenient to the downtown area. The project is well served by transportation facilities and is planned for an area that is appropriate for urban development. It therefore has the potential to reduce overall vehicle miles traveled by its residents, encourage the revitalization of the downtown area, and preserve valuable agricultural resources outside the City's Sphere of Influence.

Mitigation

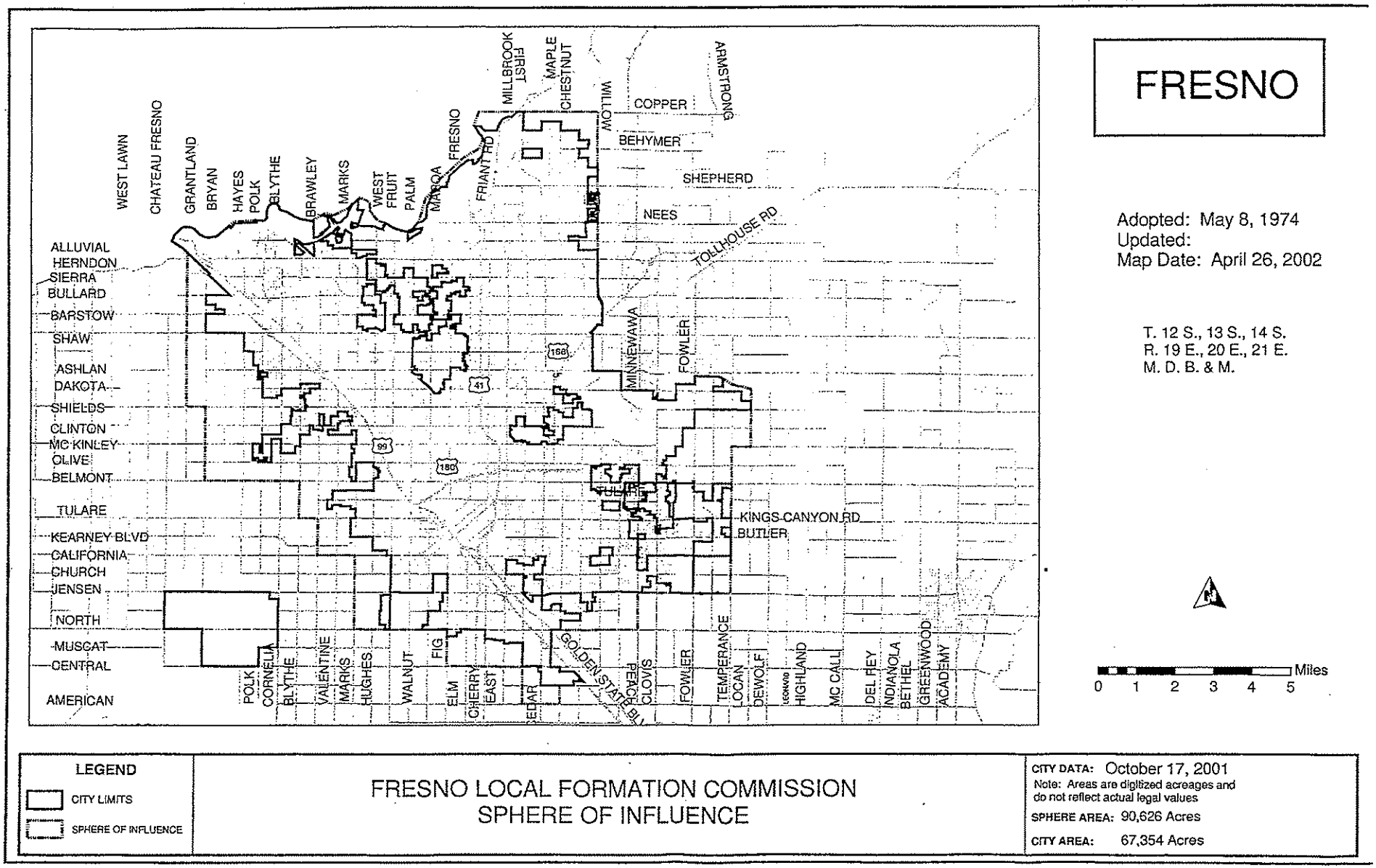
None required.

Impact

- **The proposed project is generally consistent with the policies and standards of the Local Agency Formation Commission. This is a *less-than-significant impact.***

The project site is within the City of Fresno' s Sphere of Influence as shown on Figure 2.2-3. The proposed project is compared below to LAFCo Standards for Annexation to Cities and Urban Service Districts.

Figure 2.2-3: The City of Fresno Sphere of Influence



01 Proposal is consistent with the adopted sphere of influence and does not conflict with the goals and policies of the commission.

The project site is within the City of Fresno Sphere of Influence. If approved, the annexation proposal would be consistent with the City's Sphere of Influence.

02 Proposal is consistent with the city or county general and specific plans, including adopted goals and policies.

Land uses within the proposed annexation area are consistent with the applicable general plan.

03 Proposal shows that there is insufficient available land within the community plan area, consistent with the community plan, to accommodate the proposed development.

The project is located east of downtown Fresno along Kings Canyon Road and the extension of Highway 180. The 2025 General Plan includes the project site as necessary to meet overall growth projections for the City. Although there are other available residential sites in the southeast Fresno area, the proposed site is well-suited for a large-scale master planned community supported by General Plan policy.

04 Proposal mitigates any significant adverse affect on the continuing agricultural operations on adjacent properties.

As stipulated later in this section, mitigation measures are incorporated in the project to reduce impacts on continuing agricultural operations on adjacent properties.

05 Proposal would result in planned, well ordered, efficient development patterns and service areas, and does not encourage urban sprawl.

The project is located within the path of development in southeast Fresno and is adjacent to urban development on the west, south, and east. The project therefore fosters well ordered, efficient development patterns.

06 Proposal shows that there is existing substantial development or gives indication of future development, thereby requiring urban services. If no existing substantial development, a condition assuring that substantial development will occur upon annexation shall be made a part of the proposal.

Annexation of the project will require approval of a development entitlement (i.e. Tentative Subdivision Map, Tentative Parcel Map) in order to demonstrate future development potential; the project will be required to comply with other annexation standards as well.

07 Proposal shows that development can be provided all urban services and improvement or facilities necessary, as shown by the service plan and application.

All urban services can or will be provided by the project as evidenced by analysis within the EIR.

08 Proposal would not create islands. Boundaries minimize creation of peninsulas and corridors, or other distortion of boundaries, and should included any developed islands or substantially surrounded areas with the proposed developing area.

The annexation would not create islands.

09 Proposal includes mitigation of any significant adverse affect to subject or affected agencies through transition agreement or other means.

No impacts to urban services as provided by the City of Fresno or Bakman Water Company are anticipated.

The proposed project is compared to LAFCo Policies Encouraging Orderly Urban Development and Preservation of Open Space Patterns.

01 The Commission encourages well planned, orderly, and compact urban development patterns for all developing areas. Also, the county, cities, and those districts providing urban services, are encouraged to develop and implement plans and policies which will provide for well-planned, orderly and compact urban development patterns, with consideration of preserving permanent open space lands within those urban patterns.

The project provides for a orderly and compact urban development patterns by virtue of its location adjacent to existing development in the City of Fresno.

02 Development of existing vacant non-open space, and non-prime agricultural land within an agency's boundaries is encouraged prior to further annexation and development.

Although there are lands containing non-prime soils in southeast Fresno, none are of a size large enough to accommodate the proposed project. Although the growth expected for the proposed project could be accommodated in a piecemeal fashion on several smaller parcels, the objectives of the project to develop the site as part of a planned development in several phases over time could not be met by such piecemeal development.

03 Annexation proposals to cities or districts providing urban services of undeveloped or agricultural parcels shall show: that urban development is imminent for all or a substantial portion of the proposal areas; that urban development will be contiguous with existing or proposed development; and that a planned, orderly, and compact urban development pattern will result. Proposals resulting in a leap frog, non-contiguous urban development pattern shall be discouraged.

The Tentative Parcel Map required prior to annexation will provide evidence of imminent development potential for the business park portion of the project. The project is contiguous to existing development on the west and south and leap frog development will not occur.

The proposed project is compared to LAFCo Policies to Encourage Conservation of Prime Agricultural Lands and Open Space Areas:

01 *Proposals which would conflict with the goals of maintaining the physical and economic integrity of open space lands, agricultural lands, or agricultural preserve areas in open space uses, as indicated on the city or county general plan, shall be discouraged.*

The site is adjacent to the Fresno urban area and is a logical extension of that area. As such, development of the site would not conflict with maintaining the physical and economic integrity of open space or agricultural lands.

02 *Annexation and development of existing vacant non-open space lands, and non-prime agricultural land within an agency's sphere of influence should occur prior to development outside of an existing sphere of influence.*

Although there are lands containing non-prime soils in southeast Fresno, none are of a size large enough to accommodate the proposed project.

Mitigation

No additional mitigation is required. When an annexation is applied for, LAFCo will determine the extent to which the particular annexation meets LAFCo requirements.

Impact

- **Approval of the project would substantially modify the current use of the land from agriculture to urban use and would result in the conversion of prime agricultural land. This is a *significant, unavoidable impact.***

Table 2.1-1 presents an analysis of the classification of soil types on the site using both the State and Fresno County classification method. Table 2.1-2 presents an estimate of the value of the existing agricultural production on the proposed site based on acres in production by crop type and estimated value.

Table 2.1-1
Agricultural Soils-- State Farmland Classification

	Prime	Statewide Importance	Local Importance	Non-Ag
Acres in Project	275	80	96	25
Percent of Project	58%	17%	20%	5%

Source: *Fresno County Important Farmland 2000 Map*

Table 2.1-2
Current Agricultural Production

Acres in Production	Type of Crop	Estimated Annual Value
205	Orchards	$450,000
116	Truck crops/vegetables	$232,000
321 acres		$682,000

Source: *Fresno County 2003 Agricultural Crop and Livestock Report*

Although the project is phased over 8-10 years, the ultimate conversion of the land to urban use would constitute the direct loss of approximately 321 acres of productive agriculture. The estimated loss to County agricultural production is $682,000 annually, or about 0.02% of the County's total agricultural production, valued at approximately $3 billion annually.

Development projects toward the east and southeast of downtown Fresno will undoubtedly convert prime farmland and productive and potentially productive agricultural land to urban use. Urbanization of the Fancher Creek project, however, could reduce pressure to convert productive land elsewhere which would otherwise remain in economically viable agricultural production. The consumption of potentially productive agricultural lands has been previously acknowledged and addressed by Fresno County's recently adopted Fresno County General Plan and by the 2025 City of Fresno General Plan. The Fresno County General Plan and accompanying Final EIR address the consumption of agricultural land necessary to accommodate Fresno County population of 1.4 million by the year 2020.

The Fresno County General Plan and the County's economic development policies acknowledge that a substantial diversification of the local economy is necessary to reduce the area's chronically high rate of unemployment (typically 12 to 15 percent). The 2025 Fresno General Plan proposes the long-range protection of agricultural land and expansion of the agricultural business cluster these lands support by implementing new urban development patterns and strategies and focusing most of the population growth into the existing sphere of influence. The Final EIR on the 2025 Fresno General Plan, however, determined that the conversion of agricultural soils is a significant, unavoidable impact with implementation of the general plan.

The California Department of Conservation has suggested that mitigation for prime agricultural land loss be required, such as developer purchase or easement of an equivalent amount of agricultural land to that converted with project development. The City has considered a "Farmland Mitigation Fee," and found it infeasible for a number of reasons. The preservation of productive agricultural farmland is a region-wide concern. Presumptively, the fee would be used to acquire farmland in the region which is threatened by development. If not, simply acquiring agricultural property so far removed from urban growth would have little effect on mitigating the impact of development on productive farmland in the urban area. However, if a regional or even county-wide farmland loss mitigation fee is developed, the Planning and Development Department has committed to bring it to the Fresno City Council for consideration.

The project can reduce its impact on agriculture both on-site and in the region. By development within the City's Sphere of Influence on lands planned for urbanization, pressure to convert viable agricultural areas elsewhere is reduced. In addition, the project can implement "good neighborhood" policies to reduce impacts to adjacent lands remaining in agriculture.

Potential land use conflicts that could result include those from soil tillage, spraying, and equipment noise to future project residents. Urban uses typically increase vandalism to crops. Setbacks and buffers can minimize land use interface conflicts. The design of the project with the widening of Marks Avenue would minimize direct contact with agricultural property to the west. Single family residential development would back onto surrounding streets with sound walls and landscaping that would provide additional elements to minimize interface conflicts.
There are a number of existing residential homes located on lots surrounding the project site, primarily to the north and east. The potential exists for impacts to existing residents from project development and operation. These impacts include traffic, aesthetics, and noise. Various sections of the EIR discuss these potential impacts and include mitigation to reduce impacts to the maximum extent feasible.

Although no parcels within the project site are subject to the Williamson Act, parcels to the east and northeast are subject to contracts. Development of the project and its growth inducing effects may lead to the filing of notices of non-renewal or applications for contract cancellation on some contracted lands in anticipation of development, but such discussion is conjecture at this time. Temperance Avenue south of McKinley Avenue is the Sphere of Influence boundary for the City of Fresno and urban growth east of this boundary would not be approved without amendments to the general plan and Sphere of Influence as well as separate environmental analysis.

Mitigation

1. The developer shall ensure that the project is designed with limited driveway access, back-on treatment of residential uses, and adequate landscaped buffers.

2. The City shall pursue appropriate measures, including recordation of right to farm covenants, to ensure that agricultural uses of land may continue within those areas of transition where planned urban areas interface with planned agricultural areas.

Level of Significance After Mitigation

Mitigation would reduce the potential for conflict between agricultural uses and existing rural residential uses and the proposed project to a less-than-significant level. Although impacts to regional agriculture would be reduced, loss of agricultural land on the site itself represents a significant, unavoidable impact.

Impact

- **The project may conflict with objectives of the Fresno Yosemite International Airport master plan and be affected by operations at the airport. This is a *significant impact.***

The project lies within the environs of the Fresno Yosemite International Airport (FYI) as shown on Figure 2.1-3.. The current airport environs plan is being updated to be consistent with the California Airport Land Use Planning Handbook (CALUPH). As such, the criteria identified by the CALUPH is used in evaluating the subject project. It is understood that as the airport master plan is changed, there could be further effects on project land uses and compatible, but such effects are unknown at this time.

Need map of zone 6

Project areas 1, 2, and 4 lie within the California Safety Zone 6: Traffic Pattern Zone as defined in the CALUPH. As stated in Tables 9B and 9C of the handbook, there is a low likelihood of accidental occurrence. This traffic zone allows residential uses with no density limit and most non-residential uses. Children's schools, large day care centers, hospitals, and nursing homes should be avoided. Outdoor stadiums and similar uses with very high intensities are prohibited.

Areas 1 and 2 are within the Airport Review area as defined by the FYI environs plan. The airport review area contains all land within the 60 or greater CNEL contours and/or within Approach Protection Zones I though IV. If a parcel is partially within the Airport Review Area, the entire parcel is considered to be subject to the land use consistency requirements of the environs plan.

Areas 1 and 2 are within Approach Protection Zones (APZ) III and IV. The delineation of the residential areas to be zoned R-1/UGM within Area 2 were based on the identified boundaries of APZ IV. Areas 1 and 2 are subject to the following land use safety compatibility criteria:

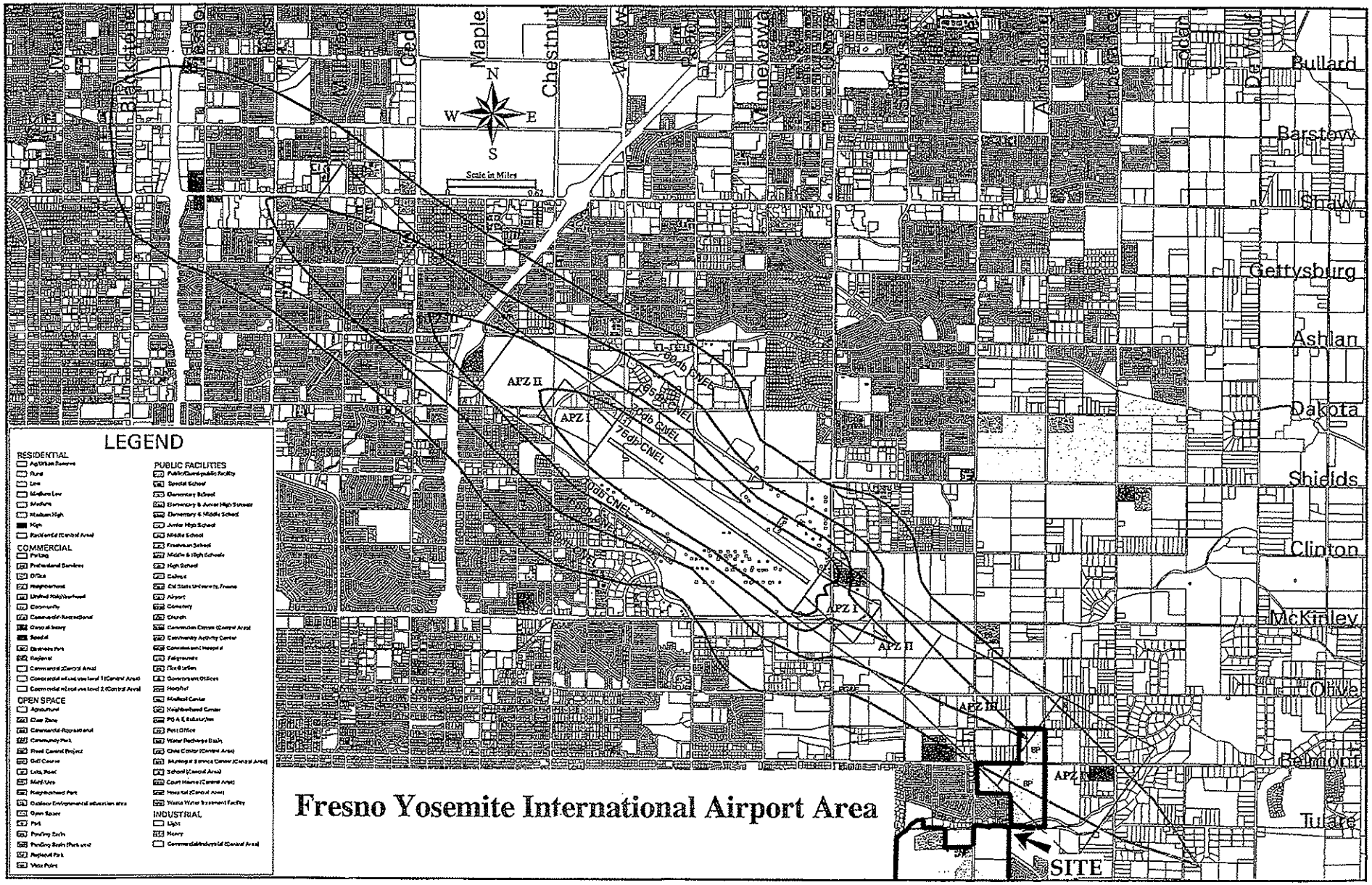
- APZ III - Residential density no greater than two dwelling units per acre.
- APZ IV - Residential density no greater than five dwelling units per acre.
- APZs III and IV - No schools, hospitals, nursing homes, churches, auditoriums, concert halls, amphitheaters, or other uses that would concentrate a large number of people.
- That it is understood that the property in question is close to the Fresno Yosemite International Airport and that the operation of the airport and land and take-off of aircraft may generate moderate interference with outdoor activities and with indoor activities if windows are open.
- Recommended residential construction include features that provide sufficient noise attenuation (e.g., installation of air conditioning to that windows may be kept closed).
- Buyer notification shall include real estate disclosures for property within the Airport Review Area. The disclosure statement shall notify the buyer of the proximity of the airport and that aircraft overflights may affect the habitability and quiet enjoyment of the property.

The Clovis Unified School District proposes to construct a new elementary school in Area 3 just north Kings Canyon Road. If a school is proposed within two miles of a runway, an evaluation by the State Division of Aeronautics is required.

Local General Plans and any amendments must be consistent with the adopted airport land use compatibility plans adopted by the Fresno County Airport Land Use Commission (ALUC). The proposal will be submitted to the ALUC for review and be coordinated with airport staff to ensure that the proposal is compatible with future as well as existing airport operations.

Need to go to ALUC prior to 12/28/04

Figure 2.2-3: Fresno Yosemite International Airport Area



Mitigation

Beyond existing regulatory requirements, no additional mitigation is required.

Impact

- **Adverse land use impacts may occur where project land uses adjoin existing development. This is a *significant impact.***

Multifamily uses are planned in the mixed-use "town center" at Kings Canyon and Fowler Avenue proposed to be zoned C-2/UGM, and within the regional commercial area proposed to be zoned C-3/UGM. A total of 440 multifamily units are proposed, ½ in each location. The construction of multifamily units in these commercial zone districts would be dependent on adoption by the City of a proposed mixed-use ordinance that would allow multifamily development in commercial zones by conditional use permit. In the event the mixed-use ordinance is not adopted by the City, no multifamily construction would be allowed in these areas without first securing a rezone to a consistent multifamily zone district.

The southeast area of Fresno currently has several large apartment complexes on Clovis Avenue, Kings Canyon, and areas behind the shopping centers at the Clovis/Kings Canyon intersection. Existing area residents have voiced concerns about the high concentration of apartments in southeast Fresno. Areas of concern near the project include the existing single family subdivision at the northeast corner of Fowler Avenue and Fancher Creek bounded by Area 2, and existing single family homes on the northern boundary of the proposed C-3/UGM retail area. Multistory apartment development along these common property boundaries can lead to impacts at the interface, including security, privacy to the single family users, noise, and unwanted light and glare.

The business park/light industrial area in Areas 1 and 2 is proposed to be zoned M-1/UGM. The City of Fresno M-1 zone district includes a wide variety of uses allowed by right and use permit which may not be appropriate within a neighborhood setting. Heavier industrial users and service commercial uses have the potential to generate traffic, noise, and odor, as well as to create negative aesthetic impacts without property development standards.

The proposed regional commercial center on Clovis Avenue, of which the northern portion is proposed to be zoned C-3/UGM, is intended to be developed as a shopping area similar in scale to the River Park center in north Fresno, and to a lesser extent, older mall developments such as Fashion Fair at Shaw and First Streets in Fresno, or the Sierra View shopping center in Clovis. Although the site currently is in two separate ownerships, it is intended that the entire site consider the need for a unified design, including circulation, transit and pedestrian activity, and landscaping. Without such considerations, there is the potential for disparities in design, lack of cross-access easements, and different design standards.

In addition, commercial uses could have adverse impacts on existing or planned adjacent uses, including noise from loading docks, truck traffic conflicts, and other visual effects.

Mitigation

1. At the time of tentative tract map or site plan review, special consideration shall be given to potential visual, noise, and traffic impacts at the interface of project and existing surrounding uses.

2. Multifamily areas should be designed as an integral part of a mixed-use development and should be sensitive to surrounding residential land use. Free standing multi-story construction, especially adjacent to existing single family uses, shall not be permitted.

3. The proposed business park should encourage a mix of light industrial and office uses that are compatible with surrounding existing and planned residential neighborhoods. Industrial uses that are inappropriate for the business park include, but are not limited to, food/meat processing, heavy chemical uses, solid waste recycling, auto repair and paint shops. Uses that do not create noise or nighttime activities shall be placed adjacent to residential areas when feasible, with heavier uses in the business park focused near the center or major street frontages.

4. The City shall apply consistent performance standards for commercial development on the Fancher Creek site to include, but not be limited to the following:

    a. All development associated with the project shall be consistent with all pertinent zoning conditions, policies, development standards, and mitigation measures addressing site design, visual resources, and aesthetics approved with the 2025 Fresno General Plan and the Fresno Zoning Ordinance.

    b. Outdoor areas for shipping and receiving operations shall be located to avoid adverse noise, visual, and illumination impacts on existing and planned and residential areas.

    c. Parking areas shall be well landscaped with trees provided along the perimeter and interior of multi-aisle parking areas such that the trees form an overhead canopy providing sun and rain protection for the majority of the parking spaces.

    e. Area lighting shall be directed predominantly downward and placed to prevent glare or excessive spray of light on neighboring sites.

    f. A loading dock barrier shall be provided to mitigate noise impacts from shipping and receiving activities. The loading dock barrier shall be constructed of a noise attenuation product such as "FASTWALL" or Sound Box absorptive concrete block wall systems. As an alternative, loading docks adjacent to residential development should be covered.

g. Special orientation or design treatment of loading docks located in proximity to residential areas shall be required to reduce noise impacts to less-than-significant levels.

h. All mechanical equipment placed on rooftops and exhaust ducts for rooftop mechanical equipment shall be oriented away from existing and planned residential uses.

5. On properties adjacent to residential development, all trash collection areas and compactors shall be completely screened from adjacent property.

6. The City shall apply consistent design standards for development of the regional commercial site, to include, but not be limited to the following:

a. The architectural style of structures shall utilize elements that complement the existing character of this area of southeast Fresno. Buildings shall have an attractive appearance on all sides, not just the front elevation.

d. Building arrangements shall discourage a continuous facade; instead, several pedestrian links should be created that connect the street, sidewalks, and parking areas to various buildings and uses.

c. Large, continuous facade surface treatments using a single material should be minimized. In the event this is done, textural changes or relief techniques must be utilized.

d. Buildings are to be designed with a distinct ground floor facade treatment that allows for signs, awnings or canopies to be varied within an overall architectural character.

e. Special attention is to be paid to pedestrian movement through parking lots and connecting to adjacent residential areas. Accommodation for the pedestrian in the way of paths or sidewalks should be included in the layout of the project. Trees which shade these paths should be incorporated into the landscape plan.

f. For exterior lighting, both the fixtures and the overall lighting scheme shall be conceived as an integral part of the architectural and landscape design for a project.

g. Internal vehicular circulation between parcels shall be maintained to provide for a unified circulation pattern between developments.

Level of Significance After Mitigation

Implementation of the mitigation measures would reduce the potential for land use conflicts resulting from the development of the Fancher Creek project to a less-than-significant level.

Impact

- **Adverse land use impacts may occur in association with the development of the proposed Fancher Creek multi-purpose trail. This is a *significant impact.***

In 1992, the Roosevelt Community Plan proposed the development of the Fancher Creek multi-purpose trail extending from Tulare and Temperance Avenues to Jensen and Chestnut Avenues. A multipurpose trail would provide an improved trail along the canal bank consisting of a 10-12 foot wide right-of-way with improvements for pedestrians, bicyclists, and equestrians. Development of such a trial requires multi-jurisdictional cooperation and joint adoption of a trail plan, including extensive community and property owner involvement. Agencies involved include, but are not limited to, the City of Fresno, Fresno County, the Fresno Irrigation District, the Fresno Metropolitan Flood Control District, and various state agencies including the Department of Fish and Game. No such plan has been developed by any regulatory agency and is beyond the scope of this DEIR.

The applicant has prepared preliminary plans for the development of an open space and trail system on the Fancher Creek property which would include trails along the creek only on that property controlled by Fancher Creek Properties, LLC; that is, primarily south of the creek. This open space system would be open for public use to surrounding residents and could connect with a regional trail in the future, if such a trail was planned, adopted, and developed by the multiple jurisdictions discussed above.

Important questions which must be addressed in future trail planning include the extent of the parkway; trail design standards; methods to secure additional property required for the trail; security, privacy, and vandalism; and landscape standards. Only a comprehensive trial planning effort can address these and other issues.

Mitigation

1. Where portions of the on-site open space system and trail are adjacent to existing residential areas, the developer shall provide landscaping and other buffering measures to reduce potential visual, noise, and land use impacts to adjacent residents.

2. The project shall provide facilities to allow project and area residents access to open space developed adjacent to Fancher Creek on properties controlled by Fancher Creek Properties, LLC. Supporting facilities, to be coordinated with the City of Fresno, should include internal pathways leading to and from the trail, benches, drinking fountains, and restrooms, as appropriate.

Level of Significance After Mitigation

Implementation of the mitigation measures would reduce the potential for impacts resulting from development of an open space system along Fancher Creek, including a trail, to a less-than-significant level.

2.2 TRAFFIC AND CIRCULATION

Introduction

The traffic impact analysis was prepared by TPG Consultants of Visalia, California. The complete report and all appendices are on file with the City of Fresno Planning and Development Department and should be consulted for technical detail. Please also see Section 1.0, Introduction and Project Description, for additional detail on the project and street layout. The traffic impact analysis assesses the traffic impacts due to development of the Fancher Creek Project (Project) that will consist of the following:

- 107 acres (1,500,000 square feet (sf)) of Light Industrial/Business Park
- 243 acres (1,543 dwelling units (DU)) of Single Family Residential
- 11 acres (120,000 sf) of Community Commercial
- 4 acres (30,000 sf) of Office
- 28 acres (480 DU) of Multi-family
- 83 acres (1,200,000 sf) of Regional Commercial

Please note that the 52 acres not under applicant control are not being rezoned at this time. Construction and occupation of the Project is expected to be completed by 2015. The Project study area for the analysis of traffic impacts extends from Shaw Avenue (north) to Jensen Avenue (south) and from Peach Avenue (west) to Temperance Avenue (east). Appendix B Figure 1 shows the Project location.

This report analyzes 26 existing and nine future intersections, and 45 existing and three future segments. In addition, Project trip assignment information is provided for 52 intersections and 52 segments.

Methodology

In order to prepare the traffic evaluation , a variety of data and technical assumptions had to be developed. Unsignalized intersection levels of service (LOS) were calculated using the *2000 Highway Capacity Software (HCS 2000)*, which is an industry standard and is recognized for use by the City of Fresno, Clovis, Caltrans, and the County of Fresno. The *HCS 2000* software is based on the *2000 Highway Capacity Manual (HCM 2000)* methodology, which is also an industry standard. Signalized intersection levels of service were calculated using *Synchro 6.0* software, which also incorporates the *HCM 2000* methodologies. *Synchro 6.0* is recognized for use by the City of Fresno, Clovis, Caltrans and the County of Fresno.

Scenarios

The scenarios analyzed for this study include:

Existing (2004) Traffic Conditions (Without Project)
2015 Project Traffic Conditions (With Project)
Mitigated 2015 Project Traffic Conditions (With Project)
2025 Project Traffic Conditions (With Project)
Mitigated 2025 Project Traffic Conditions (With Project)

The 2015 Project and 2025 Project scenarios reflect cumulative conditions analysis as required by CEQA.

Study Locations

This study analyzed the following study segments:

- Kings Canyon Road from Peach Avenue to Minnewawa Avenue (City/County of Fresno)
- Kings Canyon Road from Minnewawa Avenue to Clovis Avenue (County of Fresno)
- Kings Canyon Road from Clovis Avenue to Argyle Avenue (City of Fresno)
- Kings Canyon Road from Argyle Avenue to Fowler Avenue (City/County of Fresno)
- Kings Canyon Road from Fowler Avenue to Armstrong Avenue (City/County of Fresno)
- Kings Canyon Road from Armstrong Avenue to Temperance Avenue (City/County of Fresno)
- Tulare Avenue from Peach Avenue to Minnewawa Avenue (City/County of Fresno)
- Tulare Avenue from Minnewawa Avenue to Clovis Avenue (City/County of Fresno)
- Tulare Avenue from Clovis Avenue to Fancher Creek (City/County of Fresno)
- Tulare Avenue from Fancher Creek to Fowler Avenue (City of Fresno)
- Clovis Avenue from Shaw Avenue to Santa Ana Avenue (Clovis)
- Clovis Avenue from Santa Ana Avenue to Gettysburg Avenue (Clovis)
- Clovis Avenue from Gettysburg Avenue to Ashlan Avenue (Clovis)
- Clovis Avenue from Ashlan Avenue to Shields Avenue (City of Fresno/Clovis)
- Clovis Avenue from Shields Avenue to McKinley Avenue (City of Fresno)
- Clovis Avenue from McKinley Avenue to Olive Avenue (City of Fresno)
- Clovis Avenue from Olive Avenue to Belmont Avenue (City/County of Fresno) (Existing Conditions only)
- Clovis Avenue from Olive Avenue to SR 180 (City/County of Fresno) (2015 Project and 2025 Project Conditions only)
- Clovis Avenue from SR 180 to Belmont Avenue (City/County of Fresno) (2015 Project and 2025 Project Conditions only)
- Clovis Avenue from Belmont Avenue to Tulare Avenue (City of Fresno) (Existing Conditions only)
- Clovis Avenue from Belmont Avenue to Fancher Drive/Regional Commercial Driveway (City of Fresno) (2015 Project and 2025 Project Conditions only)
- Clovis Avenue from Fancher Drive/Regional Commercial Driveway to Tulare Avenue (City of Fresno) (2015 Project and 2025 Project Conditions only)
- Clovis Avenue from Tulare Avenue to Kings Canyon Road (City/County of Fresno)
- Clovis Avenue from Kings Canyon Road to Butler Avenue (City/County of Fresno)
- Clovis Avenue from Butler Avenue to California Avenue (County of Fresno)

- Clovis Avenue from California Avenue to Jensen Avenue (City/County of Fresno)
- Fowler Avenue from Shields Avenue to McKinley Avenue (City/County of Fresno)
- Fowler Avenue from McKinley Avenue to Olive Avenue (County of Fresno)
- Fowler Avenue from Olive Avenue to Belmont Avenue (County of Fresno) (Existing Conditions only)
- Fowler Avenue from Olive Avenue to SR 180 (County of Fresno) (2015 Project and 2025 Project Conditions only)
- Fowler Avenue from SR 180 to Belmont Avenue (County of Fresno) (2015 Project and 2025 Project Conditions only)
- Fowler Avenue from Belmont Avenue to Tulare Avenue (City/County of Fresno)
- Fowler Avenue from Tulare Avenue to Kings Canyon Road (City of Fresno) (Existing Conditions only)
- Fowler Avenue from Tulare Avenue to Fancher Creek Drive (City of Fresno) (2015 Project and 2025 Project Conditions only)
- Fowler Avenue from Fancher Creek Drive to Kings Canyon Road (City of Fresno) (2015 Project and 2025 Project Conditions only)
- Fowler Avenue from Kings Canyon Road to California Avenue (City/County of Fresno)
- Fowler Avenue from California Avenue to Jensen Avenue (City/County of Fresno)
- Armstrong Avenue from Olive Avenue to Belmont Avenue (County of Fresno)
- Armstrong Avenue from Belmont Avenue to Fancher Creek Boulevard (City/County of Fresno) (2015 Project and 2025 Project Conditions only)
- Armstrong Avenue from Kings Canyon Road to Butler Avenue (City/County of Fresno)
- Temperance Avenue from Clinton Avenue to McKinley Avenue (County of Fresno)
- Temperance Avenue from McKinley Avenue to Olive Avenue (County of Fresno)
- Temperance Avenue from Olive Avenue to Belmont Avenue (County of Fresno)
- Temperance Avenue from Belmont Avenue to Kings Canyon Road (City/County of Fresno) (Existing Conditions only)
- Temperance Avenue from Belmont Avenue to SR 180 (City/County of Fresno) (2015 Project and 2025 Project Conditions only)
- Temperance Avenue from SR 180 to Kings Canyon Road (County of Fresno) (2015 Project and 2025 Project Conditions only)
- Temperance Avenue from Kings Canyon Road to California Avenue (City/County of Fresno)
- Temperance Avenue from California Avenue to Jensen Avenue (County of Fresno)
- Belmont Avenue from Temperance Avenue to Locan Avenue (County of Fresno)

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The majority of the study segments are analyzed in all scenarios. However, there are some existing segments that will be split into two segments in the future due to either the completion of the SR 180 freeway or to the addition of Project related intersections. These sub-segments will only exist in future scenarios and are designated as future conditions only in parentheses.

This study analyzed the following study intersections:

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- Tulare Avenue at Fowler Avenue (City of Fresno)
- Tulare Avenue at Argyle Avenue (City/County of Fresno)
- Tulare Avenue at Clovis Avenue (City of Fresno)
- Tulare Avenue at Peach Avenue (City/County of Fresno)
- Kings Canyon Road at Temperance Avenue (City/County of Fresno)
- Kings Canyon Road at Armstrong Avenue (City/County of Fresno)
- Kings Canyon Road at Fowler Avenue (City/County of Fresno)
- Kings Canyon Road at Argyle Avenue (City of Fresno)
- Kings Canyon Road at Clovis Avenue (City/County of Fresno)
- Kings Canyon Road at Peach Avenue (City of Fresno)
- Clovis Avenue at McKinley Avenue (City of Fresno)
- Clovis Avenue at Shields Avenue (City of Fresno)
- Clovis Avenue at Butler Avenue (County of Fresno)
- Clovis Avenue at Jensen Avenue (County of Fresno)
- Fowler Avenue at McKinley Avenue (County of Fresno)
- Temperance Avenue at McKinley Avenue (County of Fresno)
- Temperance Avenue at Jensen Avenue (County of Fresno)
- Jensen Avenue at Fowler Avenue (City/County of Fresno)
- Belmont Avenue at Clovis Avenue (City/County of Fresno)
- Belmont Avenue at Fowler Avenue (City/County of Fresno)
- Belmont Avenue at Armstrong Avenue (City/County of Fresno)
- Belmont Avenue at Temperance Avenue (City/County of Fresno)
- Clovis Avenue at Ashlan Avenue (County of Fresno)
- Clovis Avenue at Shaw Avenue (Clovis)
- Clovis Avenue at Santa Ana Avenue (Clovis)
- Ashlan Avenue at Temperance Avenue (County of Fresno/Clovis)
- Tulare Avenue at Fancher Creek Drive West (City of Fresno) (2015 Project and 2025 Project Conditions only)
- Tulare Avenue at Fancher Creek Drive East (City of Fresno) (2015 Project and 2025 Project Conditions only)
- Tulare Avenue at Fancher Drive/Regional Commercial Driveway (City of Fresno) (2015 Project and 2025 Project Conditions only)
- Fancher Creek Drive at Fowler Avenue (City of Fresno) (2015 Project and 2025 Project Conditions only)
- Clovis Avenue at SR 180 EB off-ramp (Caltrans) (2015 Project and 2025 Project Conditions only)
- Clovis Avenue at SR 180 WB off-ramp (Caltrans) (2015 Project and 2025 Project Conditions only)
- Fowler Avenue at SR 180 EB off-ramp (Caltrans) (2015 Project and 2025 Project Conditions only)
- Fowler Avenue at SR 180 WB off-ramp (Caltrans) (2015 Project and 2025 Project Conditions only)

Agency jurisdiction is shown in parentheses next to the various study intersections. The majority of the intersections will be analyzed in all scenarios. However there are some Project related intersections that will only exist in the future scenarios and are designated as such in parentheses.

Roundabout analysis was also conducted for the following study locations:

- Fowler Avenue at Fancher Creek Drive
- Tulare Avenue at Fancher Drive/Regional Commercial Driveway
- Fancher Drive 90° bend in the Regional Commercial Center

In addition to the segment, intersection, and roundabout analyses, Caltrans staff also requested queue length analysis for the following locations:

- Clovis Avenue SB between the SR 180 EB off-ramp and Belmont Avenue
- Fowler Avenue SB between the SR 180 EB off-ramp and Belmont Avenue

The various segment, intersection, roundabout, and queuing analysis locations are shown in Figure 1 of the complete traffic report on file with the City of Fresno.

Analysis Time Periods

According to Traffic Access and Impact Studies for Site Development, the overall purpose of a traffic impact study is to determine the project impacts likely to occur to the surrounding street system. Of primary importance is determining when the peak of project-generated traffic overlays the peak of street traffic. Traffic Access and Impact Studies for Site Development states "the peak periods [of the adjacent street and highway system] are generally the weekday morning (7-9 a.m.) and evening (4-6 p.m.) peak hours, although local area characteristics occasionally result in other peaks (e.g., at major shopping or recreational centers)". The peak hours of 7:00 to 9:00 AM and 4:00 to 6:00 PM were analyzed as part of this study. These are the typical peak hours used for analysis in the City of Fresno and approved by Caltrans.

Fresno County Traffic Model

The Council of Fresno County Governments (COFCG) is the State Regional Transportation Planning Agency and the federal Metropolitan Planning Organization for Fresno County. As a transportation planning agency, COFCG is responsible for developing and maintaining a microcomputer-based traffic simulation model that represents Fresno County.

Modeling activities are monitored by the Model Steering Committee. This Committee includes representatives from local agencies, private consultants, and others interested in the development and application of the Model to local traffic analysis issues. The Committee provides a focused forum for presentation of traffic related issues to local agency planning and traffic engineering staffs as well as project proponents. Since being formed in 1986, the Committee has developed into a valuable resource to both monitor modeling applications and to provide ongoing direction for continued Model development.

The current Model was adopted by the Model Steering Committee in April 12, 2001 and was developed to analyze proposed land uses, circulation systems, and air quality. This Model covers the entire Fresno County area, and meets or exceeds all State and Federal modeling requirements. It is constantly being updated to insure incorporation of the latest planning assumptions. Land uses contained in the Model were developed using the land use elements from the County of Fresno 2000 General Plan, the City of Clovis 1993 General Plan , and the City of Fresno 2025 General Plan.

According to Kathy Chung, COFCG Demographer, based on these General Plan Land Use elements and associated Land Use maps, it is anticipated that by 2025 the Land Use Plans for the City of Clovis and the City of Fresno will be built out to near capacity. The County of Fresno General Plan has no land use map with which to determine ultimate holding capacity for any given location.

Project Model Use

The Model was used in this study to develop three pieces of information:

- Project trip distribution
- 2015 without the ("0") Project/background growth increments/rates
- 2025 without the ("0") Project/background growth increments/rates

The Project primary (new) trip distributions were created using the 2025 model year. The use of the 2025 model year versus a 2015 model year for creating the 2015 Project primary (new) trip distribution was discussed with and approved by COFCG staff prior to preparation of the Model trip distribution data. COFCG staff does not believe there will be sufficient land use or street network changes likely to occur between 2025 and 2015 to warrant creation of a separate 2015 trip distribution Model run. The 2004, 2015, and 2025 model years were also used to create the 2015 and 2025 "0" Project/background growth increments/rates per the COFCG adopted methodology.

Network Improvements

Several roadway improvement projects are projected to be built in the study area by 2015. The roadway improvements that are to be in place per the COFCG Model include:

- Ashlan from Fowler to Armstrong – Widen from 2-lane undivided to 4-lane divided
- Ashlan from Armstrong to Temperance – Widen from 3-lane divided to 4-lane divided
- Ashlan from Temperance to Locan – Widen from 2-lane undivided to 4-lane divided
- Belmont from Clovis to Fowler – Widen from 2-lane divided to 4-lane divided
- Belmont from Fowler to Temperance – Widen from 2-lane undivided to 4-lane divided
- Fowler from Kings Canyon to Gould Canal – Widen from 2-lane undivided to 4-lane divided
- Jensen from Cherry to McCall – Widen from 4-lane divided to 6-lane divided
- Peach from Jensen to Butler – Widen from 2-lane undivided to 4-lane divided
- Shaw from Clovis to Temperance – Widen from 4-lane divided to 6-lane divided

- Shields from Clovis to Temperance – Widen from 2-lane divided to 4-lane divided
- SR 180 East from Chestnut to Temperance – Construct 6- and 4-lane freeway with interchanges at Clovis, Fowler and Temperance
- Temperance from Jensen to Belmont – Widen from 2-lane undivided to 6-lane divided
- Temperance from Belmont to Dakota – Widen from 2-lane undivided to 6-lane divided
- Temperance from Ashlan to Gettysburg – Widen from 2-lane divided to 4-lane divided
- Tulare from Clovis to Fowler – Construct 4-lane undivided
- Tulare from Fowler to Armstrong – Construct 4-lane divided

Roadways constructed to the ultimate planned width in the City of Fresno will also include separate lefts (single or dual) and rights.

2015 and 2025 "0" Project/Background Volumes

Typically, "0" Project/background forecasted volumes used in City of Fresno traffic evaluations are developed using the "*Recommended Procedures for Using Traffic Projections from the Fresno COG Travel Model*" adopted by the COFCG Model Steering Committee. If, however, the Model does not contain an existing street segment being evaluated or if the Model does not show an expected increase in volumes for the incremental time period, then it is standard practice to use either a straight line or compounded growth rate factor to create a forecasted volume. For street segments that are not yet constructed it is standard practice to use the model volumes as shown in the forecast year.

TPG initially calculated 2015 and 2025 "0" Project/background growth increments for the study intersections using the 2004, 2015 and 2025 model years. The 2015 and 2025 "0" Project/background forecasted volumes were developed using a growth increment developed from the 2004 and the 2015 and 2025 "0" Project Model runs per the adopted methodology. The resulting 2015 "0" Project/background intersection volumes were compared to the Existing counts to verify that the 2015 "0" Project/background volumes were larger than the Existing volumes and represented an appropriate amount of background traffic volume growth for the study area. Likewise the 2025 "0" Project/background intersection volumes were compared to the 2015 "0" Project/background to confirm an appropriate amount of background growth. Please note that with the construction of the proposed SR 180 East extension, there is projected to be a large shift in traffic from various streets within the SR 180 East corridor to the new freeway and therefore volumes are likely to decrease on various surface streets in the study area between Existing conditions and 2015 Project conditions. For other segments where negative growth increments were calculated but could not be attributed to the SR 180 East traffic shift, a 1% growth per year growth rate was applied.

Project Trip Generation

Project trip generation was developed from the acreages, square footages, and dwelling units as contained in the project description using the Institute of Transportation Engineers (ITE) *Trip Generation* manual and the corresponding software.

Table 2.2-1 lists the daily, AM peak of the street, and PM peak of the street average rates for all the uses, and the directional distribution used in this Project assessment. Project trips were actually calculated using the *Trip Generation* software and therefore there may be some rounding differences in the data used in the analysis and data prepared using the rates shown in Table 2.2-1. It should be noted that the trip generation information prepared from either the use of the manual or the software is raw data to be used as a basis for further evaluation by the traffic impact study preparer.

The rates shown are based on the number of acres, square feet or the number of dwelling units as the independent variables. No reduction in primary (new) trips were taken to account for use of either bus transit or bike opportunities, and therefore this analysis should represent a worst case scenario.

Table 2.2-2 shows the projected number of daily, AM and PM peak hour trips that would be generated by the various Project components based on the average rate and distributional data shown in Table 2.2-1. The project description proposes a total of 1,340 single family homes on 211 acres and this number is included in the trip generation information. However, a preliminary subdivision map has been proposed that would reduce the 1,340 dwelling units to an estimated 850 dwelling units. Therefore, the analysis of 1,340 dwelling units should be considered a worst case.

Captured Trips

Captured trips are trips between two or more uses that stay internal to the project. *Traffic Impact Analysis* states:

> "There can be a sharing of trips within a mixed-use center, which is defined as a development with several types of land uses served by one access system connected to the public roadway. Typical mixed-use centers are shopping centers that have additional land uses on the perimeter of the site: banks, restaurants, photo processing stands, auto centers, theaters, etc. An assumption is made that some trips to the site likely will stop at one or more of these peripheral land uses in addition to stopping at the shopping center. Although no major documentation exists, some analysts use...10 percent or more (to account for this sharing of trips), depending on the project and local area characteristics."

According to the ITE *Trip Generation Handbook* (*ITE Handbook*), widely considered an industry standard for preparation of traffic evaluations, a "multi-use development is typically a single real-estate project that consists of two or more ITE land use classifications between which trips can be made without using the off-site road system". The proposed "Apartment", "Shopping Center", and "General Office Building" are all ITE land use classifications and could capture some trips on-site as opposed to all vehicular trips entering/exiting the site as primary (new) or pass-by trips. The methodology shown in the *ITE Handbook* for determining captured trips was used in this study to develop captured trips for the proposed "Apartments", "Shopping Center", and "General Office Building" as appropriate.

TABLE 2.2-1
ITE TRIP GENERATION DATA
AVERAGE RATE AND DIRECTIONAL DISTRIBUTION DATA *[CALTRANS APPENDIX A – IV C]*

Land Use	Period	Average Rate[1]	Directional Distribution (%)	
			Enter	Exit
General Light Industrial[1]	Daily	51.80	50	50
	AM Peak of Street	7.51	83	17
	PM Peak of Street	7.26	22	78
Business Park[1]	Daily	149.79	50	50
	AM Peak of Street	18.86	85	15
	PM Peak of Street	16.84	20	80
Single Family Detached Housing[3]	Daily	9.57	50	50
	AM Peak of Street	0.75	25	75
	PM Peak of Street	1.01	63	37
Apartment[3]	Daily	6.72	50	50
	AM Peak of Street	0.51	20	80
	PM Peak of Street	0.62	65	35
General Office Building[2]	Daily	11.01	50	50
	AM Peak of Street	1.55	88	12
	PM Peak of Street	1.49	17	83
Shopping Center[2]	Daily	42.94	50	50
	AM Peak of Street	1.03	61	39
	PM Peak of Street	3.75	48	52

[1] Trip Ends Per Acre *[2] Trip Ends Per 1,000 sf* *[3] Trip Ends Per Dwelling Unit*

TABLE 2.2-2
PROJECT TRIP GENERATION DATA *[CALTRANS APPENDIX A IV – C]*

Uses	Size	Daily (trips)[1]	AM		PM	
			Enter (trips)	Exit (trips)	Enter (trips)	Exit (trips)
General Light Industrial	14 acres	725	87	18	22	79
Business Park	93 acres	13,931	1,490	263	313	1,253
Single Family Detached Housing	1,460 du[2]	13,972	276	818	934	541
Apartment	563 du[3, 4]	3,784	56	231	226	125
Shopping Center	1,320,000 sf[4]	56,681	831	528	2,376	2,574
General Office	30,000 sf	330	40	6	8	38
Total		**89,423**	**2,780**	**1,864**	**3,879**	**4,610**

[1] 2-directional 24-hour *du = dwelling units* *sf = square feet*
[2] NOP shows 1,543 of which approximately 83 are at a higher density and were analyzed as multi-family
[3] NOP shows 480 but the analysis includes the additional 83 higher density single family homes as multi-family
[4] Includes the 52 acre parcel that is not controlled by the applicant

The capture rates used in this study were 6% for both the AM and PM peak hours per the City of Fresno Guidelines. For further information on the application of the captured trip methodology, please refer to the *ITE Handbook*, Chapter 7, pages 79 to 97.

Table 2.2-3 shows the resulting captured trip reductions by component and in total when the captured trip rate methodology is applied to the trip generation data in Table 2.2-8. The captured trip reductions shown in Table 2.2-3 were then subtracted from the trips by component by time period shown in Table 2.2-2. Table 2.2-4 shows the resulting number of primary (new) trips that are projected to be generated by the Project after application of the captured trip reductions.

With the application of the captured trip methodology to the gross trip generation data, the resulting overall internal capture rate is 0.5%. This overall internal capture rate of 0.5% was calculated "by dividing the net external trip generation estimate (13,067) by the original total trip generation estimate (13,133), and subtracting the quotient from 100 percent".

Pass-by Trips

Pass-by trips are trips attracted to Project land uses from the existing traffic stream on roadways that have direct access to the Project site. Pass-by trips were calculated for the Regional Commercial Center (shopping center uses only) on Clovis Avenue and the mixed-use commercial (shopping center uses only) on both Fowler Avenue and Kings Canyon. A maximum pass-by percentage of 15%, per City Guidelines, was used for all retail land uses (shopping center only). The Project land uses and their corresponding pass-by reductions are shown in Table 2.2-5. Table 2.2-6 shows the total number of trips reduced to account for Project captured and pass-by trips used in this analysis by component and in total.

Primary (new) Project Trips

The Project captured and pass-by trip reductions shown in Table 2.2-6 were then subtracted from the trips shown in Table 2.2-2. Table 2.2-7 shows the resulting number of primary (new) Project trips projected to be generated by the Project by component and in total. These primary (new) trips in the AM and PM peak hours were then distributed over the various study segments and intersections.

Project Trip Distribution

Trip distribution for the Project primary (new) trips was based on Model generated trip distribution data. The Model determines the locations of jobs or service opportunities that the Project home owners are likely to travel to and from the Project as well as the locations of workers or consumers likely to access the Project site. The Model then estimates the roadways that these home owners, workers or consumers would likely use to travel to the site, and calculates the number of Model generated vehicle trips projected to occur on each roadway.

TABLE 2.2-3
PROJECT CAPTURED TRIP REDUCTIONS *[CALTRANS APPENDIX A – IV C]*

Uses	AM		PM	
	Enter (trips)	Exit (trips)	Enter (trips)	Exit (trips)
Apartment	2	11	11	5
Shopping Center	9	4	7	9
General Office	4	0	0	4
Total	**15**	**15**	**18**	**18**

TABLE 2.2-4
PROJECT TRIP GENERATION DATA REDUCED FOR CAPTURED TRIPS *[CALTRANS APPENDIX A – IV C]*

Uses	Size	AM		PM	
		Enter (trips)	Exit (trips)	Enter (trips)	Exit (trips)
General Light Industrial	14 acres	87	18	22	79
Business Park	93 acres	1,490	263	313	1,253
Single Family Detached Housing	1,460 du[1]	276	818	934	541
Apartment	563 du[2, 3]	54	220	215	120
Shopping Center	1,320,000 sf[3]	822	524	2,369	2,565
General Office	30,000 sf	36	6	8	34
Total		**2,765**	**1,849**	**3,861**	**4,592**

du = dwelling units *sf = square feet*
[1] NOP shows 1,543 of which approximately 83 are at a higher density and were analyzed as multi-family
[2] NOP shows 480 but the analysis includes the additional 83 higher density single family homes as multi-family
[3] Includes the 52 acre parcel that is not controlled by the applicant

TABLE 2.2-5
PROJECT PASS-BY TRIP REDUCTIONS *[CALTRANS APPENDIX A – IV C]*

Uses	Size	AM		PM	
		Enter (trips)	Exit (trips)	Enter (trips)	Exit (trips)
Shopping Center	1,320,000 sf[1]	0	0	356	385
Total		**0**	**0**	**356**	**385**

sf = square feet *[1] Includes the 52 acre parcel that is not controlled by the applicant*

TABLE 2.2-6
TOTAL PROJECT CAPTURED AND PASS-BY TRIP REDUCTIONS *[CALTRANS APPENDIX A – IV C]*

Uses	Size	AM		PM	
		Enter (trips)	Exit (trips)	Enter (trips)	Exit (trips)
Apartment	563 du[1, 2]	2	11	11	5
Shopping Center	1,320,000 sf[3]	9	4	363	394
General Office	30,000 sf	4	0	0	4
Total		**15**	**15**	**374**	**403**

du = dwelling units *sf = square feet*
[1] NOP shows 480 but the analysis includes the additional 83 higher density single family homes as multi-family
[2] Includes the 52 acre parcel that is not controlled by the applicant

TABLE 2.2-7
PROJECT PRIMARY (NEW) TRIPS *(CALTRANS APPENDIX A – IV C)*

Uses	Size	AM		PM	
		Enter (trips)	Exit (trips)	Enter (trips)	Exit (trips)
General Light Industrial	14 acres	87	18	22	79
Business Park	93 acres	1,490	263	313	1,253
Single Family Detached Housing	1,460 du[1]	276	818	934	541
Apartment	563 du[2, 3]	54	220	215	120
Shopping Center	1,320,000 sf[3]	822	524	2,013	2,180
General Office	30,000 sf	36	6	8	34
Total		**2,765**	**1,849**	**3,505**	**4,207**

du = dwelling units *sf = square feet*
[1] NOP shows 1,543 of which approximately 83 are at a higher density and were analyzed as multi-family
[2] NOP shows 480 but the analysis includes the additional 83 higher density single family homes as multi-family
[3] Includes the 52 acre parcel that is not controlled by the applicant

This roadway trip data is then converted to match the ITE based primary (new) trip generation data developed for the Project. Per *Traffic Access and Impact Studies for Site Development*, use of a Model is one of the most commonly accepted methods for estimating trip distribution. As stated previously, the Project primary (new) trip distribution data was prepared using the Model. Figure 2.2-1 shows the primary (new) trip distribution percentages. Project primary (new) segment and intersection assignments are contained in Appendix B, Figure 3 of the complete traffic report on file with the City of Fresno Planning and Development Department.

Intersection Analysis and Volume Adjustments

Intersection heavy vehicle percentages were developed from the Existing conditions count data. A minimum default of 2% trucks was used on all intersections. These percentages were used in all study scenarios. A peak hour factor of 0.92 as provided in the *HCM 2000* was used in all intersection analyses. Typically, peak hour intersection volumes are adjusted, or balanced, to show a "smooth" progression of traffic volumes up and down the corridor. However, for this analysis the intersection peak hour volumes were not balanced between intersections due to intervening opportunities located between the study intersections. Instead the actual counted peak hour volumes of each intersection were used. This allows for an analysis of the actual peak condition at each intersection.

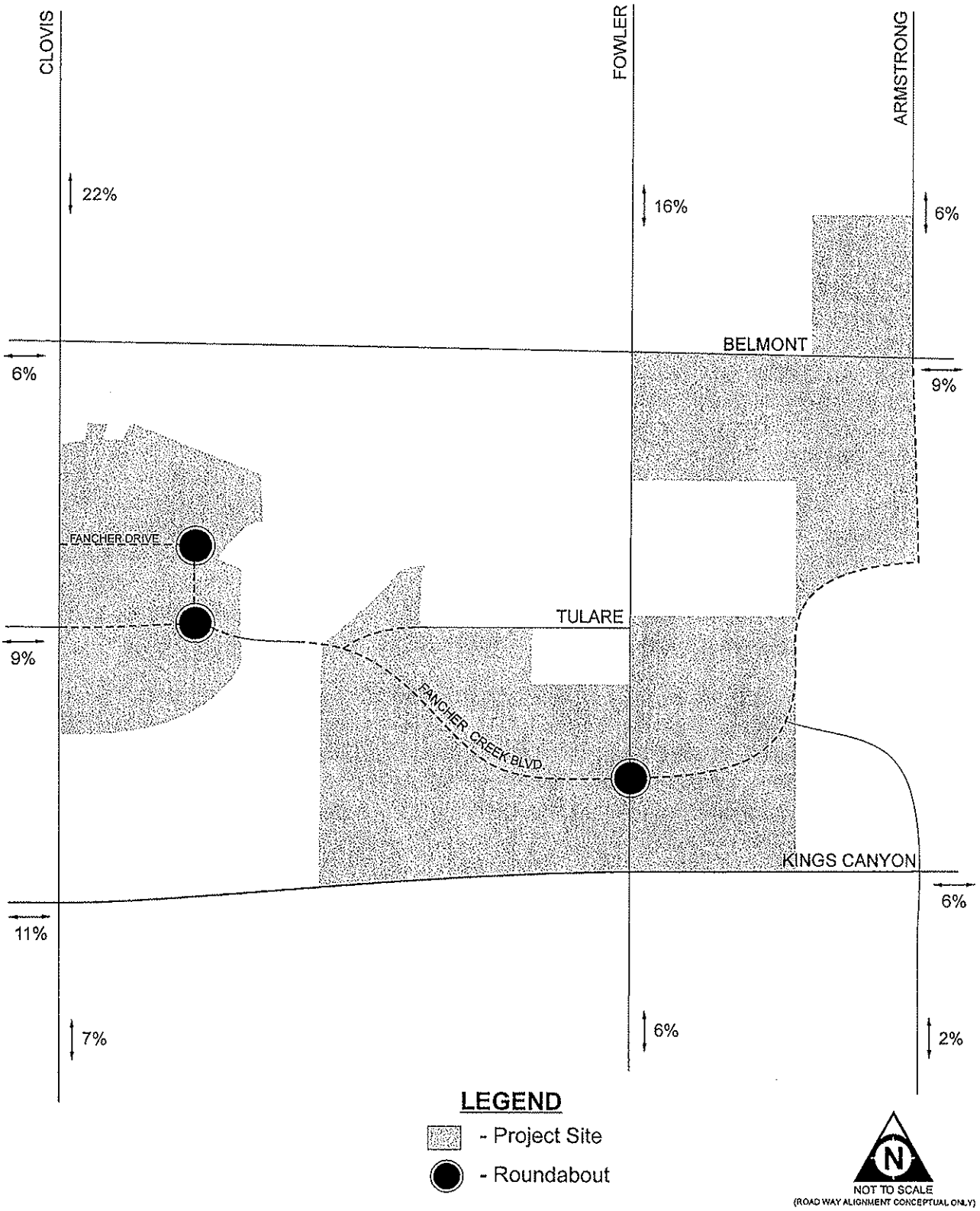
For unsignalized (AWSC and two-way stop-controlled (TWSC)) level of service analysis, some study intersections exceeded the number of lane movements allowed in the *HCS 2000* software. Therefore the analyses shown should be representative of a worst case condition.

Fancher Creek Elementary School, located on the southwest corner of Tulare and Fowler, was not open at the time of the intersection counts. In order to account for the school in session, trips were developed using the current enrollment figures and the *Trip Generation* software. The school trips were then distributed to the various study intersections found within the school attendance boundaries.

All signal timing used in the Existing scenario signalized intersection analysis was coordinated based on City provided information and optimized to provide the best level of service and least amount of delay across all signalized study intersections. All of the signalized intersections were analyzed as actuated. Actuated signals use vehicle detectors and an actuated controller unit to assign the right of way based on changing traffic demand. Coordination between the signals can either be based on pre-timed coordination or hardwire coordination.

Left-turns at signalized intersections are currently either "permitted" or "protected" in the study area. Permitted lefts are left turns that are allowed to complete their turns at the same time that the opposing direction through and right-turn traffic is allowed to complete their movements. Protected lefts are left-turns that are only allowed to go during their "protected" phase of the signal, and the left-turns are not allowed to go at the same time as the opposing direction through and right-turn movements. All intersections with left-turn pockets that are "permitted" in the Existing conditions scenario were converted to "protected" lefts in all future scenarios.

Figure 2.2-1: Primary (New) Trip Distribution Percentages



For this study, if the unsignalized intersection was projected to operate below the adopted level of service standard or have movements or approaches that were projected to operate below the adopted level of service standard and it did not warrant a signal based on the rural peak hour volume warrant, then modifications to the Existing lane configurations were tested to determine if the intersection could be mitigated. If the intersection did not warrant a signal as a two-way stop-controlled (TWSC), then an AWSC was also evaluated where modified lane configurations could not mitigate the intersection.

Signal Warrant Analysis

Rural peak hour volume warrants (Warrant 3) were prepared for all unsignalized intersections, as appropriate, based on the methodology presented in the *Manual on Uniform Traffic Control Devices (MUTCD)*, pages 4C-4, 4C-6 and 4C-7 and the *MUTCD California Supplement*, page 4C-1. According to the *Manual on Uniform Traffic Control Devices*, "the satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal." Therefore prior to making a final determination on installation of a proposed signal, a thorough engineering investigation, including collision history, should be conducted.

Queuing Analysis

Queuing analysis was completed using *Synchro 6.0* (signalized) and *HCS 2000* (unsignalized) output information. *Synchro 6.0* printouts provide both the 50th (mean) and 95th percentile maximum queue lengths in feet. According to the *Synchro 6.0* manual, "the 50th percentile maximum queue is the maximum back of queue on a typical cycle and the 95th percentile queue is the maximum back of queue with 95th percentile traffic volumes." The queue lengths shown on the printouts are the queues for each lane movement.

The *HCS 2000* output provides the 95th percentile queue length in number of vehicles, which then is multiplied by 25 feet to obtain the length. The unsignalized mean queue length is calculated from the control delay and flow rate, which are provided on the *HCS 2000* printouts. The *HCS 2000* does take heavy vehicle percentages into account when calculating the number of vehicles for both the mean and 95th percentile queue length. No queue length methodology is provided for AWSC intersections in the *HCM 2000*.

Based on information developed from plan lines provided by Caltrans District 6 Traffic Operations Branch, queue length storage for SB Clovis Avenue between the SR 180 EB off-ramp and Belmont is approximately 566 feet. Likewise the queue storage length for SB Fowler Avenue between the SR 180 EB off-ramp and Belmont is approximately 707 feet. Therefore the queue length analysis will compare the projected queues to the available queue length storage to determine if the queues are backing up from Belmont to and possibly through the SR 180 EB off-ramp intersections.

Roundabouts

Roundabouts are circular intersections designed to control traffic flow without the use of stop signs or signals and have specific design features such as:

- Yield-At-Entry - entering vehicles must yield to those already in the circle
- Deflection - entering vehicles are generally deflected around the circle
- High Capacity - vehicles entering the intersection do not always have to stop
- Splitter Islands - provide refuge for pedestrians and direct entering vehicles around the circle

These features distinguish the modern roundabout from older traffic circles or rotaries.

Roundabouts are generally viewed as safer than traditional intersections because they create slower speeds, fewer conflict points between vehicles and pedestrians, and reduced collision angles. A study of 24 intersections converted to roundabouts showed that collisions of all types were reduced by 39%; injury collisions were reduced by 76%; and fatal/incapacitating collisions were reduced by about 90%. Roundabouts also provide for reduced delay since vehicles do not always have to stop, which can reduce noise, air pollution and fuel consumption.

There are basically six types of roundabouts which are distinguished by the inscribed circle diameter (ICD) or size of the roundabout. These six (6) types and their characteristics are:

- Mini-Roundabouts - typically built in areas with restricted right-of-way and slow speed environments (speeds of 30 mph or less). The ICD is typically 45 to 95 feet.
- Urban Compact Roundabouts - typically built for local or residential streets with a maximum speed of 20 mph. The ICD is typically 100 to 120 feet.
- Urban Single-Lane Roundabouts - designed for higher volumes of traffic with a maximum speed of 25 mph and ICD of 110 to 150 feet.
- Urban Multi-Lane Roundabouts - designed for higher traffic volumes with a least one entry of two or more lanes. Maximum speeds are again 25 mph with ICDs ranging from 140 to 300 feet.
- Rural Single-Lane and Multi-Lane Roundabouts - designed for speeds up to 30 mph with larger ICDs and may not include pedestrian features when pedestrians are not expected.

Single lane roundabouts can typically handle traffic flows in the range of 500 to 2,000 vehicles per hour while multi-lane roundabouts can handle 1,000 to 5,000 vehicles per hour. Proposed locations of project roundabouts are shown on Figure 2.2-1.

Level of Service Analysis Methods

Segments were analyzed using the unadjusted *2002 Florida Level of Service Handbook (Florida Tables)*, which incorporates the *HCM 2000* methodologies. Unsignalized intersection analyses were completed using *HCS 2000*, which is an industry standard for calculating unsignalized intersections. Signalized intersection analyses were completed using *Synchro 6.0*, which also incorporates the *HCM 2000* methodologies. *Synchro 6.0* allows for optimization of signals to provide for the greatest reduction in overall intersection delay. This optimization process can result in different signal cycle lengths for both the AM and PM peak hours of a given scenario and across all scenarios. The changing of the signal cycle length somewhat reflects the agency process whereby the agency will adjust intersection signal cycle lengths for differing traffic conditions based on current count data.

Level of Service

For analysis purposes, the *HCM 2000* defines six levels of service for various facility types. The six levels are given letter designations ranging from "A" to "F", with "A" representing the best operating conditions and "F" the worst. Quantifiable measures of effectiveness that best describe the quality of operation on the subject facility type are used to determine the facilities level of service. For segments, the quantifiable measure of effectiveness is volume to capacity measurements. For signalized and unsignalized intersections, the quantifiable measure of effectiveness is average control delay.

Segments

The *Florida Tables* are generalized planning tables based on the definitions and measurement techniques of the *HCM 2000*. This methodology incorporates both signalization characteristics (number of signals per mile) and roadway characteristics (number of lanes, left-turn pockets, divided/undivided) into the level of service determination. The *Florida Tables* separate facility types into freeways, state arterials with both interrupted (signalized) and uninterrupted (non-signalized) flow, and non-state roadways. Within these various classifications, the facilities are separated by number of lanes and divided versus undivided. There are also adjustments for facility types not given in the tables. For each facility type under each classification are levels of service "A" through "F" with corresponding traffic volumes. These volumes are the maximum amount of traffic that a given facility with given characteristics can carry and maintain a given level of service. This maximum volume per level of service is also called the capacity of the facility.

As can be seen on the *Florida Tables* shown in Appendix C-3, higher level of service values may not be achieved on interrupted flow facilities even with extremely low traffic volumes. As stated in the manual, these higher quality levels of service cannot be achieved primarily because the roadway characteristics will not allow vehicles to attain relatively high average travel speeds. The Florida Table used in this analysis was the generalized peak hour two-way volumes for urbanized areas, state two-way arterials, Class I and II.

Intersections

For signalized intersections, "the average control delay per vehicle is estimated for each lane group and aggregated for each approach and for the intersections as a whole". Level of service for the signalized intersection is then based on the aggregated intersection delay. AWSC intersections, which have stop signs on all corners of the intersection and are considered unsignalized, function similarly to a signalized intersection in that control delay per vehicle is estimated for each lane group and aggregated for each approach and for the intersection as a whole. Level of service for the AWSC intersection is likewise based on the aggregated intersection delay. Control delay for TWSC intersections, which have stop signs on only the minor street approaches, is also per vehicle but is computed for the stop-controlled or minor street movements only since theoretically the through movements on the major street are not experiencing any delay. Since there is no aggregation of delay for a TWSC intersection, there is no intersection level of service as a whole, only levels of service for the individual minor movements.

The minor movements generally consist of separate lefts on the major street approaches and all movements on both minor street approaches. Delay values at level of service thresholds for TWSC and AWSC intersections will have a plus (+) or minus (-) appended to the delay value if the calculated delay value at full precision is greater (+) or less (-) than the rounded displayed delay value.

Table 2.2-8 shows the six levels of service and their corresponding ranges of average control delay for both signalized and unsignalized intersections. The table also contains a brief traffic flow description for signalized intersections for each level of service category.

Level of Service Standards

The City of Fresno has adopted LOS "D" as their standard for traffic impact study purposes except in high volume corridors where LOS "E" or "F" might be acceptable.

Caltrans endeavors to maintain a target LOS at the transition between LOS "C" and LOS "D" on State highway facilities, however, Caltrans acknowledges that this may not always be feasible and recommends that the lead agency consult with Caltrans to determine the appropriate target LOS. If an existing State highway facility is operating at less than the appropriate target LOS, the existing measures of effectiveness should be maintained.

Clovis has adopted a level of service standard of "D" for roadway operations within their jurisdiction.

Fresno County's level of service policy "strives to meet LOS "D" on urban roadways and LOS "C" on all other roadways"

As such, all City/County controlled roadway segments and intersections will be evaluated against a LOS "D" policy and all Caltrans controlled intersections will be evaluated against their policy.

EXISTING CONDITIONS

Transit

Fresno Area Express (FAX) operates two fixed routes in the Project study area. Route 12, Southeast Circulation, operates from 8:00 AM to 6:30 PM, Monday through Friday with approximately 30 minute headways. This route operates along Kings Canyon Road and Phillip Avenue. Route 22, North West Avenue/East Tulare Avenue, operates from 5:30 AM to 10:30 PM, Monday through Friday with approximately 30 minute headways, and 6:15 AM to 7:15 PM on weekends with approximately 50 minute headways. This route operates along Tulare, Clovis, Kings Canyon, Phillip and Balch during all hours and along Fowler, Butler, Burgan, and Liberty during peak hours.

TABLE 2.2-8 INTERSECTION LEVEL OF SERVICE DESCRIPTION			Intersections	
			Signalized	Unsignalized[1]
Level of Service	Conditions	Signalized Intersection Description	Delay (secs/veh)	Delay (secs/veh)
"A"	Free Flow	*Users experience very low delay. Progression is favorable and most vehicles do not stop at all.*	≤ 10.0	≤ 10.0
"B"	Stable Operations	*Vehicles travel with good progression. Some vehicles stop, causing slight delay.*	> 10.0 to 20.0	> 10.0 to 15.0
"C"	Stable Operations	*Higher delays result from fair progression. A significant number of vehicles stop, although many continue to pass through the intersection without stopping.*	> 20.0 to 35.0	> 15.0 to 25.0
"D"	Approaching Unstable	*Congestion is noticeable. Progression is unfavorable, with more vehicles stopping rather than passing through the intersection.*	> 35.0 to 55.0	> 25.0 to 35.0
"E"	Unstable Operations	*Traffic volumes are at capacity. Users experience poor progression and long delays.*	> 55.0 to 80.0	> 35.0 to 50.0
"F"	Forced Flow	*Intersection's capacity is oversaturated, causing poor progression and unusually long delays.*	> 80.0	> 50.0

Source: 2000 Highway Capacity Manual, Transportation Research Board.
[1] Unsignalized intersections include TWSC and AWSC

Bicycles

Within the study area, the City of Fresno has a designated multi-purpose trail that follows McKenzie between Willow and Clovis. The City of Fresno also has a bike lane located on Belmont east of Clovis. The County of Fresno General Plan shows planned bikeways for both Belmont and Kings Canyon east of Temperance.

Roadways

Table 2.2-9 describes the Existing street system in the study area including the street classification, number of lanes, and the posted speed limits. Table 2.2-10 lists the study intersections and their associated intersection control.

Existing intersection lane configurations and intersection controls are shown on Appendix B, Figure 4 of the complete traffic study on file with the City of Fresno. Existing segment and intersection peak hour traffic volumes are shown on Appendix B, Figure 5, of the complete traffic study. Using these lane configurations and volumes, the segments and intersections were analyzed for Existing levels of service. Table 2.2-11 and Table 2.2-12 show the Existing levels of service for the study segments and intersections respectively. The signalized and AWSC intersection levels of service shown in Table 2.2-12 are representative of the whole intersection. Individual intersection movements or approaches may operate above or below the signalized or AWSC level of service or delay shown in Table 2.2-12. The Existing segment and intersection levels of service calculations are included in Appendix C-4 and C-5, respectively of the complete traffic study on file with the City of Fresno.

All segments within the study area are currently operating at or above the adopted level of service standard in the Existing Conditions scenario as shown in Table 2.2-11.

Intersections within the study area currently operating below the adopted level of service standards are shown **bolded** in Table 2.2-12. The following four intersections are currently operating below adopted standards:

- Kings Canyon at Temperance
  - NB Approach -PM peak hour – LOS "E"
  - SB Approach – AM peak hour – LOS "E"
- Temperance at Jensen
  - NB Approach – AM/PM peak hours LOS"E"/LOS "F"
  - SB Approach – AM/PM peak hours- LOS "E"/LOS "E"
- Belmont at Fowler – AM/PM peak hours – LOS "F"/LOS "F"
- Clovis at Ashlan – PM peak hour – LOS "E"

All remaining intersections are operating at or above the adopted level of service standard in the Existing Conditions scenario.

TABLE 2.2-9
Description Of Existing Street System

Street	Classification	No. of Lanes (2-dir)	Posted Speed Limit (mph)
Argyle Avenue	Local	2	NPS
Armstrong Avenue	Collector/Scenic Collector	2	40
Ashlan Avenue	Arterial	2	40-45
Belmont Avenue	Arterial	2 - 4	45-50
Butler Avenue	Collector/Scenic Drive/Local	2	30-40
California Avenue	Local	2	NPS
Church Avenue	Collector	2	NPS
Clinton Avenue	Collector	2	NPS
Clovis Avenue	Arterial	4 – 6	40-65
Fowler Avenue	Arterial	2	45
Gettysburg Avenue	Collector	2 – 4	NPS
Jensen Avenue	Expressway	4	65
Kings Canyon Road	Arterial	2 – 4	45-55
McKinley Avenue	Arterial	2 – 4	50
Minnewawa Avenue	Scenic Collector/Scenic Drive	2	NPS
Olive Avenue	Collector	2 – 4	NPS
Peach Avenue	Arterial/Scenic Arterial	2 – 4	40
Santa Ana Avenue	Local	2	25-40
Shaw Avenue	Arterial	2 – 6	NPS
Shields Avenue	Arterial	2 – 4	45-50
Temperance Avenue	Expressway/Arterial	2 – 4	40-50
Tulare Avenue	Collector	2 – 4	40

NPS = no posted speed

TABLE 2.2-10
EXISTING INTERSECTION CONTROL

Intersection	Signalized/Unsignalized	Type
Tulare Avenue at Fowler Avenue	Signalized	na
Tulare Avenue at Argyle Avenue	Unsignalized	NC
Tulare Avenue at Clovis Avenue	Signalized	na
Tulare Avenue at Peach Avenue	Signalized	na
Kings Canyon Road at Temperance Avenue	Unsignalized	TWSC
Kings Canyon Road at Armstrong Avenue	Signalized	na
Kings Canyon Road at Fowler Avenue	Signalized	na
Kings Canyon Road at Argyle Avenue	Unsignalized	TWSC
Kings Canyon Road at Clovis Avenue	Signalized	na
Kings Canyon Road at Peach Avenue	Signalized	na
Clovis Avenue at McKinley Avenue	Signalized	na
Clovis Avenue at Shields Avenue	Signalized	na
Clovis Avenue at Butler Avenue	Signalized	na
Clovis Avenue at Jensen Avenue	Signalized	na
Fowler Avenue at McKinley Avenue	NC	NC
Temperance Avenue at McKinley Avenue	Unsignalized	TWSC
Temperance Avenue at Jensen Avenue	Unsignalized	TWSC
Jensen Avenue at Fowler Avenue	Signalized	na
Belmont Avenue at Clovis Avenue	Signalized	na
Belmont Avenue at Fowler Avenue	Unsignalized	AWSC
Belmont Avenue at Armstrong Avenue	Unsignalized	TWSC
Belmont Avenue at Temperance Avenue	Unsignalized	AWSC
Clovis Avenue at Ashlan Avenue	Signalized	na
Clovis Avenue at Shaw Avenue	Signalized	na
Clovis Avenue at Santa Anna Avenue	Signalized	na
Ashlan Avenue at Temperance Avenue	Unsignalized	AWSC

SB =southbound *NB = northbound* *AWSC = all-way stop-controlled*
TWCS = two-way stop-controlled *NC = no control* *na = unknown*

TABLE 2.2-11
EXISTING CONDITIONS ANALYSIS
SEGMENT WEEKDAY LEVELS OF SERVICE *[CALTRANS APPENDIX A - IV E;V A].*

Segments	Existing LOS	
	AM	PM
Kings Canyon Road from Peach Avenue to Minnewawa Avenue	C	C
Kings Canyon Road from Minnewawa Avenue to Clovis Avenue	C	C
Kings Canyon Road from Clovis Avenue to Argyle Avenue	C	C
Kings Canyon Road from Argyle Avenue to Fowler Avenue	C	C
Kings Canyon Road from Fowler Avenue to Armstrong Avenue	C	C
Kings Canyon Road from Armstrong Avenue to Temperance Avenue	C	C
Tulare Avenue from Peach Avenue to Minnewawa Avenue	C	C
Tulare Avenue from Minnewawa Avenue to Clovis Avenue	C	C
Tulare Avenue from Clovis Avenue to Fancher Creek Drive	na	na
Tulare Avenue from Fancher Creek Drive to Fowler Avenue	C	B
Clovis Avenue from Shaw Avenue to Santa Ana Avenue	C	C
Clovis Avenue from Santa Ana Avenue to Gettysburg Avenue	C	C
Clovis Avenue from Gettysburg Avenue to Ashlan Avenue	C	C
Clovis Avenue from Ashlan Avenue to Shields Avenue	C	C
Clovis Avenue from Shields Avenue to McKinley Avenue	C	D
Clovis Avenue from McKinley Avenue to Olive Avenue	C	C
Clovis Avenue from Olive Avenue to Belmont	C	C
Clovis Avenue from Olive Avenue to SR 180	na	na
Clovis Avenue from SR 180 to Belmont	na	na
Clovis Avenue from Belmont to Tulare Avenue	C	D
Clovis Avenue from Belmont to Fancher Drive/Regional Commercial Driveway	na	na
Clovis Avenue from Fancher Drive/Regional Commercial Drive to Tulare Avenue	na	na
Clovis Avenue from Tulare Avenue to Kings Canyon Road	C	D
Clovis Avenue from Kings Canyon Road to Butler Avenue	C	C
Clovis Avenue from Butler Avenue to California Avenue	C	C
Clovis Avenue from California Avenue to Jensen Avenue	C	C
Fowler Avenue from Shields Avenue to McKinley Avenue	C	C
Fowler Avenue from McKinley Avenue to Olive Avenue	C	C
Fowler Avenue from Olive Avenue to Belmont Avenue	C	C
Fowler Avenue from Olive Avenue to SR 180	na	na
Fowler Avenue from SR 180 to Belmont Avenue	na	na
Fowler Avenue from Belmont Avenue to Tulare Avenue	D	C
Fowler Avenue from Tulare Avenue to Kings Canyon Road	C	C
Fowler Avenue from Tulare Avenue to Fancher Creek Drive	na	na
Fowler Avenue from Fancher Creek Drive to Kings Canyon Road	na	na

TABLE 2.2-11
EXISTING CONDITIONS ANALYSIS
SEGMENT WEEKDAY LEVELS OF SERVICE *[CALTRANS APPENDIX A - IV E;V A].*

Segments	Existing LOS	
	AM	PM
Fowler Avenue from Kings Canyon Road to California	C	C
Fowler Avenue from California Avenue to Jensen Avenue	A	C
Armstrong Avenue from Olive Avenue to Belmont Avenue	C	B
Armstrong Avenue from Belmont Avenue to Fancher Creek Boulevard	na	na
Armstrong Avenue from Kings Canyon Road to Butler Avenue	A	B
Temperance Avenue from Clinton Avenue to McKinley Avenue	B	C
Temperance Avenue from McKinley Avenue to Olive Avenue	C	C
Temperance Avenue from Olive Avenue to Belmont Avenue	C	C
Temperance Avenue from Belmont Avenue to Kings Canyon Road	C	B
Temperance Avenue from Belmont Avenue to SR 180	na	na
Temperance Avenue from SR 180 to Kings Canyon Road	na	na
Temperance Avenue from Kings Canyon Road to California Avenue	B	B
Temperance Avenue from California Avenue to Jensen Avenue	B	B
Belmont Avenue from Temperance Avenue to Locan Avenue	C	C

na = did not exist in this scenario

TABLE 2.2-12
EXISTING CONDITIONS ANALYSIS
INTERSECTION WEEKDAY LEVELS OF SERVICE *[CALTRANS APPENDIX A - IV E; V A]*

Intersection	AM Peak Hour		PM Peak Hour	
	LOS	Delay[1] (secs)	LOS	Delay[1] (secs)
Tulare Avenue at Fowler Avenue	B	11.9	A	1.4
Tulare Avenue at Argyle Avenue				
• NB Left-Through-Right	A	7.2	A	7.2
• SB Left-Through-Right	A	7.2	A	7.3
• WB Approach	A	8.7	A	8.7
• EB Approach	A	8.7	A	8.8
Tulare Avenue at Clovis Avenue	A	7.2	B	10.1
Tulare Avenue at Peach Avenue	B	11.3	B	12.8
Kings Canyon Road at Temperance Avenue				
• EB Left	A	8.4	A	8.2
• WB Left	A	7.9	A	8.2
• **NB Approach**	D	32.4	E	44.6
• **SB Approach**	E	38.7	D	32.7
Kings Canyon Road at Armstrong Avenue	B	16.8	A	9.4
Kings Canyon Road at Fowler Avenue	B	18.4	C	21.6
Kings Canyon Road at Argyle Avenue				
• EB Left	A	9.3	A	9.5
• SB Approach	C	21.3	C	23.4
Kings Canyon Road at Clovis Avenue	C	24.3	D	37.5
Kings Canyon Road at Peach Avenue	C	22.5	C	22.5
Clovis Avenue at McKinley Avenue	B	12.2	B	13.8
Clovis Avenue at Shields Avenue	B	19.6	B	18.1
Clovis Avenue at Butler Avenue	B	12.7	A	6.6
Clovis Avenue at Jensen Avenue	C	26.3	C	26.2
Fowler Avenue at McKinley Avenue	na	na	na	na
Temperance Avenue at McKinley Avenue				
• SB Left-Through	A	7.7	A	8.2
• WB Approach	B	12.4	B	13.8
Temperance Avenue at Jensen Avenue				
• EB Left	A	9.9	A	8.9
• WB Left	A	8.5	A	9.4
• **NB Approach**	E	41.2	F	56.3
• **SB Approach**	E	48.3	E	47.0
Jensen Avenue at Fowler Avenue	C	20.1	B	15.3
Belmont Avenue at Clovis Avenue	C	22.4	C	25.1
Belmont Avenue at Fowler Avenue	F	62.97	F	97.00
Belmont Avenue at Armstrong Avenue				
• EB Left-Through	A	8.3	A	8.0
• SB Approach	B	12.2	B	12.6
Belmont Avenue at Temperance Avenue	C	24.65	D	26.98
Clovis Avenue at Ashlan Avenue	C	29.0	E	56.6
Clovis Avenue at Shaw Avenue	C	21.5	C	26.4
Clovis Avenue at Santa Ana Avenue	A	4.8	A	7.5
Ashlan Avenue at Temperance Avenue	B	13.11	D	26.51

[1] *Delay per vehicle* *secs = seconds* *NB = northbound* *SB = southbound*
EB = eastbound *WB = westbound* *na = does not exist in this scenario*

Signal Warrants

Rural peak hour volume signal warrants were prepared for the following nine unsignalized intersections:

- Tulare Avenue at Argyle Avenue
- Kings Canyon Road at Temperance Avenue
- Kings Canyon Road at Argyle Avenue
- Temperance Avenue at McKinley Avenue
- Temperance Avenue at Jensen Avenue
- Belmont Avenue at Fowler Avenue
- Belmont Avenue at Armstrong Avenue
- Belmont Avenue at Temperance Avenue
- Ashlan Avenue at Temperance Avenue

Based on the rural peak hour volume warrant, the warrant is met in the Existing Conditions scenario at the following six locations:

- Kings Canyon Road at Temperance Avenue
- Kings Canyon Road at Argyle Avenue
- Temperance Avenue at Jensen Avenue
- Belmont Avenue at Fowler Avenue
- Belmont Avenue at Temperance Avenue
- Ashlan Avenue at Temperance Avenue

The rural warrants are not met at the remaining three unsignalized intersections. These warrant analyses are limited to the peak hour volume warrant only and other conditions may exist which meet other traffic signal warrants. Copies of the warrant analyses are included in Appendix C-6 of the complete traffic study on file with the City of Fresno.

Roundabout Analyses

when is this going to occur

The proposed roundabouts do not yet exist and no roundabout analyses were conducted for the Existing Conditions Scenario.

Queue Lengths

The SR 180 Clovis and Fowler interchanges do not yet exist and no queue length analyses were conducted for the Existing Conditions Scenario.

IMPACTS

Standards of Significance

Significant traffic and circulation impacts would occur if the project would cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system; exceed, either individually or cumulatively, adopted level of service standards; or substantially increase hazards due to a design feature.

2015 PROJECT CONDITIONS

The 2015 Project lane configurations and intersection controls are shown on Appendix B Figure 7 of the complete traffic study on file with the City of Fresno. The SR 180 off-ramp intersections at both Clovis and Fowler were assumed to be signalized when constructed. The 2015 Project segment and intersection peak hour traffic volumes are shown on Appendix B Figure 8 of the complete traffic study. Using these lane configurations and volumes, segments and intersections were analyzed for 2015 Project levels of service. Tables 2.2-13 and Table 2.2-14 show the 2015 Project levels of service for the study segments and intersections. The 2015 Project segment and intersection levels of service calculations are included in Appendix C-7 and C-8 respectively of the complete traffic study on file with the City of Fresno.

All segments are projected to operate at or above adopted level of service standards. Study intersections projected to operate below level of service standards are shown **bolded** in Table 2.2-14. The following fifteen intersections are projected to operate below adopted level of service standards or have approaches projected to operate below the level of service standard:

- Tulare Avenue at Argyle Avenue
  - NB Left-Through-Right - PM peak hour - LOS "F"
  - SB Left-Through-Right - PM peak hour - LOS "E"
- Kings Canyon Road at Temperance Avenue
  - NB Approach - AM/PM peak hours - LOS"F"/LOS "F"
  - SB Approach - AM/PM peak hours - LOS "F"/LOS"F"
- Kings Canyon Road at Argyle Avenue
  - SB Approach - AM/PM peak hours - LOS"E"/LOS"F"
- Fowler Avenue at McKinley Avenue
  - WB Approach - AM/PM peak hours - LOS "F"/LOS "F"
  - EB Approach - AM/PM peak hours - LOS "F"/LOS "F"
- Temperance Avenue at McKinley Avenue
  - WB Approach - AM/PM peak hours - LOS "F"/LOS "F"
  - EB Approach - AM/PM peak hours - LOS "F"/LOS "F"
- Temperance Avenue at Jensen Avenue
  - EB Left - AM/PM peak hours LOS "E"/LOS "E"
  - NB Approach - AM/PM peak hours - LOS "F"/LOS "F"
  - SB Approach - AM/PM peak hours - LOS "F"/LOS "F"
- Belmont Avenue at Fowler Avenue - AM/PM peak hours - LOS "F"/LOS "F"
- Belmont Avenue at Armstrong Avenue

TABLE 2.2-13
2015 PROJECT CONDITIONS ANALYSIS
SEGMENT WEEKDAY LEVELS OF SERVICE *[CALTRANS APPENDIX A - IV E;V A].*

Segments	2015 Project LOS	
	AM	PM
Kings Canyon Road from Peach Avenue to Minnewawa Avenue	C	C
Kings Canyon Road from Minnewawa Avenue to Clovis Avenue	C	C
Kings Canyon Road from Clovis Avenue to Argyle Avenue	C	C
Kings Canyon Road from Argyle Avenue to Fowler Avenue	C	C
Kings Canyon Road from Fowler Avenue to Armstrong Avenue	C	C
Kings Canyon Road from Armstrong Avenue to Temperance Avenue	C	C
Tulare Avenue from Peach Avenue to Minnewawa Avenue	C	C
Tulare Avenue from Minnewawa Avenue to Clovis Avenue	C	C
Tulare Avenue from Clovis Avenue to Fancher Creek Drive	C	C
Tulare Avenue from Fancher Creek Drive to Fowler Avenue	C	C
Clovis Avenue from Shaw Avenue to Santa Ana Avenue	C	C
Clovis Avenue from Santa Ana Avenue to C		C
Clovis Avenue from Gettysburg Avenue to A		C
Clovis Avenue from Ashlan Avenue to Shiel		C
Clovis Avenue from Shields Avenue to McK		C
Clovis Avenue from McKinley Avenue to O		D
Clovis Avenue from Olive Avenue to Belmo		na
Clovis Avenue from Olive Avenue to SR 18(		C
Clovis Avenue from SR 180 to Belmont		D
Clovis Avenue from Belmont to Tulare Aven		na
Clovis Avenue from Belmont to Fancher Driv		D
Clovis Avenue from Fancher Drive/Regional		C
Clovis Avenue from Tulare Avenue to Kings		C
Clovis Avenue from Kings Canyon Road to B		C
Clovis Avenue from Butler Avenue to Califor		C
Clovis Avenue from California Avenue to Jen		C
Fowler Avenue from Shields Avenue to McKinley Avenue	D	D
Fowler Avenue from McKinley Avenue to Olive Avenue	D	D
Fowler Avenue from Olive Avenue to Belmont Avenue	na	na
Fowler Avenue from Olive Avenue to SR 180	D	D
Fowler Avenue from SR 180 to Belmont Avenue	C	C
Fowler Avenue from Belmont Avenue to Tulare Avenue	C	D
Fowler Avenue from Tulare Avenue to Kings Canyon Road	na	na
Fowler Avenue from Tulare Avenue to Fancher Creek Drive	D	D
Fowler Avenue from Fancher Creek Drive to Kings Canyon Road	C	C
Fowler Avenue from Kings Canyon Road to California	D	D

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Russ Widener/Dav Cal

TABLE 2.2-13
2015 PROJECT CONDITIONS ANALYSIS
SEGMENT WEEKDAY LEVELS OF SERVICE *[CALTRANS APPENDIX A - IV E;V A].*

Segments	2015 Project LOS	
	AM	PM
Fowler Avenue from California Avenue to Jensen Avenue	C	C
Armstrong Avenue from Olive Avenue to Belmont Avenue	C	C
Armstrong Avenue from Belmont Avenue to Fancher Creek Boulevard	C	C
Armstrong Avenue from Kings Canyon Road to Butler Avenue	B	C
Temperance Avenue from Clinton Avenue to McKinley Avenue	B	B
Temperance Avenue from McKinley Avenue to Olive Avenue	B	B
Temperance Avenue from Olive Avenue to Belmont Avenue	B	B
Temperance Avenue from Belmont Avenue to Kings Canyon Road	na	na
Temperance Avenue from Belmont Avenue to SR 180	B	B
Temperance Avenue from SR 180 to Kings Canyon Road	B	C
Temperance Avenue from Kings Canyon Road to California Avenue	B	B
Temperance Avenue from California Avenue to Jensen Avenue	B	B
Belmont Avenue from Temperance Avenue to Locan Avenue	C	D

na = did not exist in this scenario

TABLE 2.2-14
2015 PROJECT CONDITIONS ANALYSIS
INTERSECTION WEEKDAY LEVELS OF SERVICE *[APPENDIX A - IV.E; V.A]*

Intersection	AM Peak Hour		PM Peak Hour	
	LOS	Delay[1] (secs)	LOS	Delay[1] (secs)
Tulare Avenue at Fowler Avenue	B	13.9	B	12.9
Tulare Avenue at Argyle Avenue				
• **NB Left-Through-Right**	A	7.3	**F**	**112.7**
• **SB Left-Through-Right**	A	7.3	**E**	**36.4**
• WB Approach	B	11.1	A	9.9
• EB Approach	B	10.4	A	8.3
Tulare Avenue at Clovis Avenue	B	11.4	C	26.9
Tulare Avenue at Peach Avenue	C	24.1	B	18.5
Kings Canyon Road at Temperance Avenue				
• EB Left	A	10.0	B	10.1
• WB Left	A	8.2	A	8.4
• **NB Approach**	---	---	---	---
• **SB Approach**	---	---	---	---
Kings Canyon Road at Armstrong Avenue	B	19.9	B	14.8
Kings Canyon Road at Fowler Avenue	C	22.8	D	335.7
Kings Canyon Road at Argyle Avenue				
• EB Left	B	11.3	B	12.5
• **SB Approach**	**E**	**47.6**	**F**	**647.4**
Kings Canyon Road at Clovis Avenue	C	22.9	D	42.2
Kings Canyon Road at Peach Avenue	B	18.9	C	31.9
Clovis Avenue at McKinley Avenue	C	23.4	C	31.2
Clovis Avenue at Shields Avenue	B	20.0	B	17.7
Clovis Avenue at Butler Avenue	B	13.5	A	8.6
Clovis Avenue at Jensen Avenue	C	27.0	D	45.9
Fowler Avenue at McKinley Avenue				
• NB Left	A	9.2	A	9.1
• SB Left	A	9.0	A	9.5
• **WB Approach**	---	---	---	---
• **EB Approach**	---	---	---	---
Temperance Avenue at McKinley Avenue				
• NB Left	B	13.4	B	11.2
• SB Left	A	8.3	C	24.3
• **WB Approach**	---	---	---	---
• **EB Approach**	---	---	---	---
Temperance Avenue at Jensen Avenue				
• **EB Left**	**E**	40.6	**E**	44.3
• WB Left	A	8.9	B	13.9
• **NB Approach**	---	---	---	---
• **SB Approach**	---	---	---	---
Jensen Avenue at Fowler Avenue	C	21.6	B	17.8

TABLE 2.2-14
2015 PROJECT CONDITIONS ANALYSIS
INTERSECTION WEEKDAY LEVELS OF SERVICE *[APPENDIX A - IV.E; V.A]*

Intersection	AM Peak Hour		PM Peak Hour	
	LOS	Delay[1] (secs)	LOS	Delay[1] (secs)
Belmont Avenue at Clovis Avenue	C	21.1	D	38.1
Belmont Avenue at Fowler Avenue	**F**	**436.44**	**F**	**497.22**
Belmont Avenue at Armstrong Avenue				
• EB Left	A	9.9	A	8.8
• WB Left	A	8.4	B	12.0
• **NB Approach**	---	---	---	---
• **SB Approach**	**F**	**211.4**	---	---
Belmont Avenue at Temperance Avenue	**F**	**316.83**	**F**	**309.68**
Clovis Avenue at Ashlan Avenue	D	35.9	**E**	**67.3**
Clovis Avenue at Shaw Avenue	C	23.3	C	31.8
Clovis Avenue at Santa Ana Avenue	A	4.8	A	9.2
Ashlan Avenue at Temperance Avenue	**F**	**226.94**	**F**	**616.78**
Tulare Avenue at Fancher Creek Drive West				
• WB Left	A	7.7	A	9.3
• NB Approach	B	11.5	C	21.0
Tulare/Armstrong Avenue at Fancher Creek Drive East				
• SB Left	A	7.3	A	7.6
• WB Approach	A	8.7	A	9.3
Tulare at Fancher Drive/Regional Shopping Center				
• EB Left	A	8.4	A	9.4
• WB Left	A	7.7	A	8.4
• **NB Approach**	C	19.3	---	---
• **SB Approach**	C	15.9	---	---
Fancher Creek Drive at Fowler Avenue				
• NB Left	B	10.5	B	12.7
• SB Left	A	9.4	B	10.4
• **WB Approach**	**F**	**63.0**	---	---
• **EB Approach**	C	24.2	---	---
Clovis Avenue at SR 180 EB off-ramp	B	18.7	**E**	**77.8**
Clovis Avenue at SR 180 WB off-ramp	B	11.6	A	8.6
Fowler Avenue at SR 180 EB off-ramp	B	15.1	B	16.7
Fowler Avenue at SR 180 WB off-ramp	A	6.5	A	5.5

[1] *Delay per vehicle* *secs = seconds* *NB = northbound*
SB = southbound *EB = eastbound* *WB = westbound*
--- = exceeds parameters

  - NB Approach – AM/PM peak hours – LOS "F"/LOS "F"
  - SB Approach – AM/PM peak hours - LOS "F"/LOS "F"
- Belmont Avenue at Temperance Avenue – AM/PM peak hours - LOS "F"/LOS "F"
- Clovis Avenue at Ashlan Avenue – PM peak hour – LOS "E"
- Ashlan Avenue at Temperance Avenue – AM/PM peak hours - LOS "F"/LOS "F"
- Tulare at Fancher Drive/Regional Commercial Driveway
  - NB Approach –PM peak hour – LOS "F"
  - SB Approach – PM peak hour – LOS "F"
- Fancher Creek Drive at Fowler Avenue
  - WB Approach – AM/PM peak hours - LOS "F"/LOS "F"
  - EB Approach – PM peak hour LOS "F"
- Clovis Avenue at State Route (SR) 180 Eastbound off-ramp –PM peak hour – LOS "E"

All remaining study intersections are projected to operate at or above the adopted of level of service standard in the 2015 Project conditions.

Signal Warrants

Rural peak hour volume signal warrants were prepared for the following eight unsignalized intersections:

- Tulare Avenue at Argyle Avenue
- Temperance Avenue at McKinley Avenue
- Belmont Avenue at Armstrong Avenue
- McKinley Avenue at Fowler Avenue
- Tulare Avenue at Fancher Creek Drive West
- Tulare Avenue at Fancher Creek Drive East
- Fowler Avenue at Fancher Creek Drive
- Tulare Avenue at Fancher Drive/Regional Commercial Driveway

The rural warrants are met at all intersections with the exception of the Tulare Avenue at Fancher Creek Drive East intersection. The remaining six unsignalized intersections that met the peak hour volume warrant in the Existing Conditions scenario were assumed to continue to meet the warrant since the peak hour volumes are projected to increase between 2004 and 2015. These warrant analyses are limited to the peak hour volume warrant only and other conditions may exist which meet other traffic signal warrants. Copies of the warrant analyses are included in Appendix C-9 of the complete traffic study on file with the City of Fresno.

Roundabout Analyses

The Project applicant is proposing the use of roundabouts as opposed to signalization at the following locations:

- Fowler Avenue at Fancher Creek Drive
- Tulare Avenue at Fancher Drive/Regional Commercial Driveway

- Fancher Drive 90°bend within the northern portion of the Regional Commercial Center

Table 2.2-15 shows the number of legs, number of lanes, diameter of the proposed roundabout and corresponding level of service at these three locations in the 2015 Project scenario. Please note that the Tulare at Fancher Drive/Regional Commercial Driveway intersection is shown as both a 3-leg and a 4-leg roundabout. The 3-leg roundabout assessment was included to show that a roundabout would function at an acceptable level of service even if the 52-acre portion of the Regional Commercial Center to the south of Tulare was not developed. As shown in Table 2.2-15, all three proposed roundabouts would operate at or above a LOS "B" in the 2015 Project scenario. The analysis sheets for the various roundabouts are provided in Appendix C-10 of the complete traffic study on file with the City of Fresno.

Queue Lengths

Table 2.2-16 shows the projected 2015 Project conditions queue lengths developed from the level of service analyses. Please note that there is no methodology with which to determine the queues potentially occurring at the Fowler Avenue SB between the SR 180 EB ramps and the Belmont intersection since it is an AWSC. As shown in Table 2.2-16, the Clovis at Belmont intersection is not projected to generate a SB queue that would potentially impact the freeway ramp intersections. However, the Clovis Avenue at Belmont Avenue SB through movements in the PM peak hour are projected to exceed capacity in both the 50th and 95th percentile. The projected length of queue for the 50th percentile PM peak hour is 450 feet, while the 95th percentile PM peak hour queue length is 442 feet, both of which are approximately 100 feet less than the distance between the two intersections.

MITIGATED 2015 PROJECT CONDITIONS

To mitigate projected operational failures including signalization, the following improvements are recommended:

Tulare Avenue at Argyle Avenue

- Signalize the intersection

Kings Canyon Road at Temperance Avenue

- Signalize the intersection
- Restripe/widen the northbound approach, south leg, from a separate left-turn lane, two (2) through lanes and a shared through-right lane to a separate left-turn lane, three (3) through lanes and a separate right-turn lane
- Restripe/widen the southbound approach, north leg, from a separate left-turn lane, two (2) through lanes and a shared through-right lane to a separate left-turn lane, three (3) through lanes and a separate right-turn lane
- Restripe/widen the westbound approach, east leg, from a separate left-turn lane, one (1) through lane and a shared through-right lane to dual (2) left-turn lanes, two (2) through lanes and a separate right turn lane

TABLE 2.2-15
2015 PROJECT CONDITIONS ANALYSIS
ROUNDABOUT WEEKDAY LEVELS OF SERVICE *[CALTRANS APPENDIX A – IV E; V A].*

Intersection	2015 Project			
	No. of Legs	No. of Lanes	Diameter (ft)	LOS AM/PM
Fowler Avenue at Fancher Creek Drive	4	2	135	A/B
Tulare Avenue at Fancher Drive/	3	2	135	A/A
Regional Commercial Driveway	4	2	135	A/B
Fancher Drive 90° bend in the Regional Commercial Center	2	1	110	A/B

ft = feet

TABLE 2.2-16
2015 PROJECT CONDITIONS ANALYSIS
WEEKDAY 50TH AND 95TH PERCENTILE QUEUE LENGTH *[CALTRANS APPENDIX A - IV E; V A]*

Intersection Approach	Queue Storage Length (ft)	50th Percentile Queue Length (ft) (AM/PM)	95th Percentile Queue Length (ft) (AM/PM)
Clovis Avenue at Belmont Avenue	566[1]		
• SB Left	na	100/96	m140/m112
• SB Through	na	278/~450	343/m#442
• SB Right	na	4/1	m13/m4
Fowler Avenue at Belmont Avenue	707[1]		
• SB Left	na	***	***
• SB Through	na	***	***
• SB Right	na	***	***

[1] = Total storage distance between intersections based on measurements taken from Caltrans supplied plans
ft = feet SB = southbound na = not available or does not exist in this scenario
**** = data not available # = 95th percentile volume exceeds capacity, queue may be longer*
~ = Volume exceeds capacity, queue is theoretically infinite m = Volume for 95th percentile queue is metered by upstream signal

- Restripe/widen the eastbound approach, west leg, from a separate left-turn lane, one (1) through lane and a shared through-right lane to dual (2) left-turn lanes, two (2) through lanes and a separate right turn lane

Kings Canyon Road at Argyle Avenue

- Signalize the intersection
- Restripe/widen the southbound approach, north leg, from a shared left-through lane to a separate left-turn lane and a separate right-turn lane

Fowler Avenue at McKinley Avenue

- Signalize the intersection

Temperance Avenue at McKinley Avenue

- Signalize the intersection
- Restripe/widen the westbound approach, east leg, from a separate left-turn lane, two (2) through lanes and a separate right-turn lane to dual (2) left-turn lanes, two (2) through lanes and a separate right turn lane
- Restripe/widen the eastbound approach, west leg, from a separate left-turn lane, two (2) through lanes and a separate right-turn lane to dual (2) left-turn lanes, two (2) through lanes and a separate right turn lane

Temperance Avenue at Jensen Avenue

- Signalize the intersection
- Restripe/widen the northbound approach, south leg, from a separate left-turn lane, two (2) through lanes and a shared through-right lane to dual (2) left-turn lanes, three (3) through lanes and a separate right-turn lane
- Restripe/widen the southbound approach, north leg, from a separate left-turn lane, two (2) through lanes and a shared through-right lane to dual (2) left-turn lanes, three (3) through lanes and a separate right-turn lane
- Restripe/widen the westbound approach, east leg, from a separate left-turn lane, two (2) through lanes and a shared through-right lane to dual (2) left-turn lanes, three (3) through lanes and a separate right turn lane
- Restripe/widen the eastbound approach, west leg, from a separate left-turn lane, two (2) through lanes and a shared through-right lane to dual (2) left-turn lanes, three (3) through lanes and a separate right turn lane

Belmont Avenue at Fowler Avenue

- Signalize the intersection
- Restripe/widen the northbound approach, south leg, from a separate left-turn lane, one (1) through lane and a shared through-right lane to dual (2) left-turn lanes, two (2) through lanes and a separate right-turn lane
- Restripe/widen the southbound approach, north leg, from a separate left-turn lane, one (1) through lane and a shared through-right lane to dual (2) left-turn lanes, two (2) through lanes and a separate right-turn lane

- Restripe/widen the westbound approach, east leg, from a separate left-turn lane, one (1) through lane and a shared through-right lane to dual (2) left-turn lanes, two (2) through lanes and a separate right-turn lane
- Restripe/widen the eastbound approach, west leg, from a separate left-turn lane, one (1) through lane and a shared through-right lane to dual (2) left-turn lanes, two (2) through lanes and a separate right-turn lane

Belmont Avenue at Armstrong Avenue

- Signalize the intersection

Belmont Avenue at Temperance Avenue

- Signalize the intersection
- Restripe/widen the westbound approach, east leg, from a separate left-turn lane, one (1) through lane and a shared through-right lane dual (2) left-turn lanes, one (1) through lane and a shared through-right lane
- Restripe/widen the eastbound approach, west leg, from a separate left-turn lane, one (1) through lane and a shared through-right lane dual (2) left-turn lanes, one (1) through lane and a shared through-right lane

Clovis Avenue at Ashlan Avenue

- Restripe/widen the northbound approach, south leg, from a separate left-turn lane, two (2) through lanes and a shared through-right lane to a separate left-turn lane, three (3) through lanes and a separate right-turn lane
- Restripe/widen the southbound approach, north leg, from a separate left-turn lane, two (2) through lanes and a shared through-right lane to a separate left-turn lane, three (3) through lanes and a separate right-turn lane

Ashlan Avenue at Temperance Avenue

- Signalize the intersection
- Restripe/widen the westbound approach, east leg, from a separate left-turn lane, one (1) through lane and a shared through-right lane dual (2) left-turn lanes, one (1) through lane and a shared through-right lane
- Restripe/widen the eastbound approach, west leg, from a separate left-turn lane, one (1) through lane and a shared through-right lane dual (2) left-turn lanes, one (1) through lane and a shared through-right lane

Tulare Avenue at Fancher Creek Drive West

- Signalize the intersection (Please note that this intersection is projected to operate at an acceptable level of service without signalization. However, since it warranted a signal based on the rural peak hour volume warrant, signalization was included in the recommended mitigation measures)

Tulare Avenue at Fancher Drive/Regional Commercial Driveway

- Signalize the intersection

- Restripe/widen the northbound approach, south leg, from a separate left-turn lane, one (1) through lane and a separate right-turn lane to dual (2) left-turn lanes, one (1) through lane and a separate right turn lane
- Restripe/widen the southbound approach, north leg, from a separate left-turn lane, one (1) through lane and a separate right-turn lane to dual (2) left-turn lanes, one (1) through lane and a separate right turn lane

Fancher Creek Drive at Fowler Avenue

- Signalize the intersection

Clovis Avenue at SR 180 Eastbound off-ramp

- Restripe/widen the eastbound approach, west leg, from dual (2) left-turn lanes and dual (2) right-turn lanes to three (3) left-turn lanes and three (3) right-turn lanes

All signalized intersections that are coordinated or will be coordinated with the various study intersections will need to be coordinated and re-optimized to determine the least amount of delay across all corridors.

The Mitigated 2015 Project lane configurations and intersection controls are shown on Appendix B Figure 9 of the complete traffic study on file with the City of Fresno. The 2015 Project segment and intersection peak hour traffic volumes are shown on Appendix B Figure 8 of the complete traffic study. Using these lane configurations and volumes, the intersections were analyzed for Mitigated 2015 Project levels of service. Table 2.2-17 shows the Mitigated 2015 Project levels of service for the study intersections. The signalized intersection levels of service shown are representative of the whole intersection. Individual intersection movements or approaches may operate above or below the signalized level of service or delay shown in the table.

Since all study segments are projected to operate at or above the adopted level of service standard, no mitigation measures are required for the 2015 Project condition. With the above recommended improvements all study segments and intersections are projected to operate at or above the adopted level of service standard in the Mitigated 2015 Project scenario.

Roundabout Analyses

Since all proposed roundabouts were projected to operate at or above adopted levels of service, no mitigation measures are required for the 2015 Project condition.

Queue Lengths

Table 2.2-18 shows the projected Mitigated 2015 Project conditions queue lengths developed from the level of service analyses. Neither of the two study intersections is projected to show queues that would potentially impact the freeway ramp intersections. However, the Clovis Avenue at Belmont Avenue SB through movement in the PM peak hour is projected to exceed capacity in the 95th percentile. The projected length of queue for the 95th percentile PM peak hour is 433 feet, which is approximately 130 feet less than the distance between the two intersections.

TABLE 2.2-17
MITIGATED 2015 PROJECT CONDITIONS ANALYSIS
INTERSECTION WEEKDAY LEVELS OF SERVICE *[CALTRANS APPENDIX A - IV E; V A]*

Intersection	AM Peak Hour		PM Peak Hour	
	LOS	Delay[1] (secs)	LOS	Delay[1] (secs)
Tulare Avenue at Fowler Avenue	B	11.8	A	9.9
Tulare Avenue at Argyle Avenue	A	8.0	A	9.0
Tulare Avenue at Clovis Avenue	B	14.6	C	24.5
Tulare Avenue at Peach Avenue	C	23.1	B	17.6
Kings Canyon Road at Temperance Avenue	C	21.3	C	27.0
Kings Canyon Road at Armstrong Avenue	B	15.4	B	18.2
Kings Canyon Road at Fowler Avenue	C	23.9	D	35.9
Kings Canyon Road at Argyle Avenue	A	5.0	A	6.5
Kings Canyon Road at Clovis Avenue	C	21.3	D	42.2
Kings Canyon Road at Peach Avenue	B	19.1	C	32.1
Clovis Avenue at McKinley Avenue	C	33.2	D	45.9
Clovis Avenue at Shields Avenue	C	24.8	B	19.1
Clovis Avenue at Butler Avenue	B	17.3	A	8.4
Clovis Avenue at Jensen Avenue	C	28.6	D	44.0
Fowler Avenue at McKinley Avenue	C	22.1	C	24.5
Temperance Avenue at McKinley Avenue	B	17.3	C	26.0
Temperance Avenue at Jensen Avenue	B	17.8	C	21.2
Jensen Avenue at Fowler Avenue	B	16.0	B	13.4
Belmont Avenue at Clovis Avenue	B	18.2	C	30.9
Belmont Avenue at Fowler Avenue	C	23.9	C	25.0
Belmont Avenue at Armstrong Avenue	C	20.2	C	20.6
Belmont Avenue at Temperance Avenue	C	26.0	C	21.2
Clovis Avenue at Ashlan Avenue	C	30.7	D	49.9
Clovis Avenue at Shaw Avenue	C	23.3	C	32.0
Clovis Avenue at Santa Ana Avenue	A	4.7	A	9.6
Ashlan Avenue at Temperance Avenue	C	25.2	C	25.6
Tulare Avenue at Fancher Creek Drive West	A	9.3	A	3.8
Tulare/Armstrong Avenue at Fancher Creek Drive East				
• SB Left	A	7.3	A	7.6
• WB Approach	A	8.7	A	9.3
Tulare at Fancher Drive/Regional Shopping Center	B	17.8	B	18.1
Fancher Creek Drive at Fowler Avenue	A	7.6	B	14.2
Clovis Avenue at SR 180 EB off-ramp	B	15.0	D	48.6
Clovis Avenue at SR 180 WB off-ramp	B	12.8	A	7.6
Fowler Avenue at SR 180 EB off-ramp	B	12.4	B	15.3
Fowler Avenue at SR 180 WB off-ramp	A	6.9	A	5.5

[1] *Delay per vehicle* *secs = seconds* *NB = northbound* *SB = southbound*
EB = eastbound *WB = westbound* *+ = greater than the rounded displayed value*
- = less than the rounded displayed value *--- = exceeds parameters* *na = does not exist in this scenario*

TABLE 2.2-18
MITIGATED 2015 PROJECT CONDITIONS ANALYSIS
WEEKDAY 50TH AND 95TH PERCENTILE QUEUE LENGTH *[APPENDIX A - IV.E; V.A]*

Intersection Approach	Queue Storage Length (ft)	50th Percentile Queue Length (ft) (AM/PM)	95th Percentile Queue Length (ft) (AM/PM)
Clovis Avenue at Belmont Avenue	566[1]		
• SB Left	na	88/95	#143/m112
• SB Through	na	160/30	206/m#433
• SB Right	na	3/5	m13/m12
Fowler Avenue at Belmont Avenue	707[1]		
• SB Left	na	141/160	#265/#250
• SB Through	na	82/166	105/257
• SB Right	na	1/1	m4/m5

[1] = Total storage distance between intersections based on measurements taken from Caltrans supplied plans
ft = feet SB = southbound na = not available or does not exist in this scenario
**** = data not available # = 95th percentile volume exceeds capacity, queue may be longer*
~ = Volume exceeds capacity, queue is theoretically infinite m = Volume for 95th percentile queue is metered by upstream signal

2025 PROJECT CONDITIONS

The 2025 Project lane configurations and intersection controls are shown on Appendix B Figure 10 of the complete traffic study on file with the City of Fresno. The 2025 Project lane configurations include not only the network improvements identified in the Methodology section but also all the recommended improvements determined in the Mitigated 2015 Project scenario. The 2025 Project segment and intersection peak hour traffic volumes are shown on Appendix B Figure 11 of the complete traffic study. Using these lane configurations and volumes, the study segments and intersections were analyzed for 2025 Project levels of service. Tables 2.2-19 and 2.2-20 show the 2025 Project levels of service for the study segments and intersections respectively. The signalized intersection levels of service shown in Table 2.2-20 are representative of the whole intersection. Individual intersection movements or approaches may operate above or below the signalized level of service or delay shown in Table 2.2-20.

Study segments projected to operate below the adopted level of service standards are shown **bolded** in Table 2.2-19. The following four segments are projected to operate below adopted level of service standards in the 2025 Project scenario:

- Clovis Avenue from Olive Avenue to SR 180 – PM peak hour – LOS "F"
- Fowler Avenue from McKinley Avenue to Olive Avenue – PM peak hour – LOS "F"
- Fowler Avenue from Tulare Avenue to Fancher Creek Drive – PM peak hour – LOS "E"
- Temperance Avenue from SR 180 to Kings Canyon Road – AM/PM peak hour – LOS "E"/LOS "E"

It is noted that in the City of Fresno 2025 General Plan, Clovis from Olive to SR 180 was projected to operate at a LOS "F"; Fowler from McKinley to Olive was projected to operate at a LOS "F"; and, Temperance from SR 180 to Kings Canyon was projected to operate at a LOS "F" with the currently proposed roadway widths. Therefore, the majority of these segment failures are consistent with the adopted General Plan. Only the Fowler from Tulare Avenue to Fancher Creek Drive segment was projected to operate at or above the adopted level of service standard in the 2025 General Plan.

Study intersections projected to operate below the adopted level of service standard are shown **bolded** in Table 2.2-20. The following four intersections are projected to operate below adopted level of service standards or have approaches projected to operate below the level of service standard in the 2025 Project scenario:

- Kings Canyon Road at Temperance Avenue – PM peak hour – LOS "F"
- Temperance Avenue at Jensen Avenue – AM/PM peak hours – LOS "E"/LOS "F"
- Belmont Avenue at Clovis Avenue – PM peak hour – LOS "E"
- Clovis Avenue at Ashlan Avenue – PM peak hour – LOS "F"

TABLE 2.2-19
2025 PROJECT CONDITIONS ANALYSIS
SEGMENT WEEKDAY LEVELS OF SERVICE *[CALTRANS APPENDIX A - IV E; V A]*.

Segments	2025 Project LOS	
	AM	PM
Kings Canyon Road from Peach Avenue to Minnewawa Avenue	C	C
Kings Canyon Road from Minnewawa Avenue to Clovis Avenue	C	C
Kings Canyon Road from Clovis Avenue to Argyle Avenue	C	C
Kings Canyon Road from Argyle Avenue to Fowler Avenue	C	C
Kings Canyon Road from Fowler Avenue to Armstrong Avenue	C	C
Kings Canyon Road from Armstrong Avenue to Temperance Avenue	C	C
Tulare Avenue from Peach Avenue to Minnewawa Avenue	C	C
Tulare Avenue from Minnewawa Avenue to Clovis Avenue	C	C
Tulare Avenue from Clovis Avenue to Fancher Creek Drive	C	C
Tulare Avenue from Fancher Creek Drive to Fowler Avenue	C	C
Clovis Avenue from Shaw Avenue to Santa Ana Avenue	C	C
Clovis Avenue from Santa Ana Avenue to Gettysburg Avenue	C	C
Clovis Avenue from Gettysburg Avenue to Ashlan Avenue	C	C
Clovis Avenue from Ashlan Avenue to Shields Avenue	C	C
Clovis Avenue from Shields Avenue to McKinley Avenue	C	C
Clovis Avenue from McKinley Avenue to Olive Avenue	C	D
Clovis Avenue from Olive Avenue to Belmont	na	na
Clovis Avenue from Olive Avenue to SR 180	D	F
Clovis Avenue from SR 180 to Belmont	C	D
Clovis Avenue from Belmont to Tulare Avenue	na	na
Clovis Avenue from Belmont to Fancher Drive/Regional Commercial Driveway	C	D
Clovis Avenue from Fancher Drive/Regional Commercial Drive to Tulare Avenue	C	C
Clovis Avenue from Tulare Avenue to Kings Canyon Road	C	C
Clovis Avenue from Kings Canyon Road to Butler Avenue	C	C
Clovis Avenue from Butler Avenue to California Avenue	C	C
Clovis Avenue from California Avenue to Jensen Avenue	C	C
Fowler Avenue from Shields Avenue to McKinley Avenue	D	D
Fowler Avenue from McKinley Avenue to Olive Avenue	D	F
Fowler Avenue from Olive Avenue to Belmont Avenue	na	na
Fowler Avenue from Olive Avenue to SR 180	D	D
Fowler Avenue from SR 180 to Belmont Avenue	C	C
Fowler Avenue from Belmont Avenue to Tulare Avenue	D	D
Fowler Avenue from Tulare Avenue to Kings Canyon Road	na	na
Fowler Avenue from Tulare Avenue to Fancher Creek Drive	D	E
Fowler Avenue from Fancher Creek Drive to Kings Canyon Road	C	C
Fowler Avenue from Kings Canyon Road to California	D	D

TABLE 2.2-19
2025 PROJECT CONDITIONS ANALYSIS
SEGMENT WEEKDAY LEVELS OF SERVICE *[CALTRANS APPENDIX A - IV E; V A].*

Segments	2025 Project LOS	
	AM	PM
Fowler Avenue from California Avenue to Jensen Avenue	C	C
Armstrong Avenue from Olive Avenue to Belmont Avenue	C	C
Armstrong Avenue from Belmont Avenue to Fancher Creek Boulevard	C	C
Armstrong Avenue from Kings Canyon Road to Butler Avenue	B	C
Temperance Avenue from Clinton Avenue to McKinley Avenue	B	C
Temperance Avenue from McKinley Avenue to Olive Avenue	B	B
Temperance Avenue from Olive Avenue to Belmont Avenue	B	B
Temperance Avenue from Belmont Avenue to Kings Canyon Road	na	na
Temperance Avenue from Belmont Avenue to SR 180	B	B
Temperance Avenue from SR 180 to Kings Canyon Road	**E**	**E**
Temperance Avenue from Kings Canyon Road to California Avenue	C	C
Temperance Avenue from California Avenue to Jensen Avenue	B	B
Belmont Avenue from Temperance Avenue to Locan Avenue	D	D

na = did not exist in this scenario

TABLE 2.2-20
2025 PROJECT CONDITIONS ANALYSIS
INTERSECTION WEEKDAY LEVELS OF SERVICE *[APPENDIX A - IV.E; V.A]*

Intersection	AM Peak Hour		PM Peak Hour	
	LOS	Delay[1] (secs)	LOS	Delay[1] (secs)
Tulare Avenue at Fowler Avenue	B	11.5	B	12.9
Tulare Avenue at Argyle Avenue	B	10.7	B	10.5
Tulare Avenue at Clovis Avenue	B	15.4	C	31.4
Tulare Avenue at Peach Avenue	C	27.6	C	27.1
Kings Canyon Road at Temperance Avenue	D	41.6	**F**	**83.7**
Kings Canyon Road at Armstrong Avenue	C	22.3	C	27.7
Kings Canyon Road at Fowler Avenue	B	19.1	C	22.3
Kings Canyon Road at Argyle Avenue	A	6.1	A	6.9
Kings Canyon Road at Clovis Avenue	C	26.7	C	27.1
Kings Canyon Road at Peach Avenue	C	20.3	D	37.1
Clovis Avenue at McKinley Avenue	C	29.1	D	81.6
Clovis Avenue at Shields Avenue	C	20.3	C	72.3
Clovis Avenue at Butler Avenue	B	17.9	B	12.9
Clovis Avenue at Jensen Avenue	D	41.1	D	42.9
Fowler Avenue at McKinley Avenue	C	24.4	C	30.1
Temperance Avenue at McKinley Avenue	B	19.4	C	31.2
Temperance Avenue at Jensen Avenue	**E**	**80.0**	**F**	**83.6**
Jensen Avenue at Fowler Avenue	B	14.9	B	12.3
Belmont Avenue at Clovis Avenue	C	26.2	**E**	**57.5**
Belmont Avenue at Fowler Avenue	C	26.7	D	35.7
Belmont Avenue at Armstrong Avenue	B	19.1	C	32.2
Belmont Avenue at Temperance Avenue	C	22.0	C	25.8
Clovis Avenue at Ashlan Avenue	D	40.5	**F**	**164.4**
Clovis Avenue at Shaw Avenue	C	24.6	D	42.2
Clovis Avenue at Santa Ana Avenue	A	5.9	B	14.0
Ashlan Avenue at Temperance Avenue	C	27.7	C	33.8
Tulare Avenue at Fancher Creek Drive West	A	6.1	A	7.0
Tulare/Armstrong Avenue at Fancher Creek Drive East				
• SB Left	A	7.3	A	8.6
• WB Approach	A	8.7	B	11.1
Tulare at Fancher Drive/Regional Shopping Center	B	16.8	C	27.1
Fancher Creek Drive at Fowler Avenue	A	7.5	B	18.1
Clovis Avenue at SR 180 EB off-ramp	B	18.7	D	51.9
Clovis Avenue at SR 180 WB off-ramp	C	23.4	C	27.7
Fowler Avenue at SR 180 EB off-ramp	B	17.1	B	16.3
Fowler Avenue at SR 180 WB off-ramp	A	8.1	A	6.1

[1] *Delay per vehicle* *secs = seconds* *NB = northbound* *SB = southbound*
EB = eastbound *WB = westbound*

Signal Warrants

Rural peak hour volume signal warrants were prepared for the following unsignalized intersection:

- Tulare Avenue at Fancher Creek Drive East

Based on the rural peak hour volume warrants, the warrant is not met at this unsignalized intersection in the 2025 Project conditions scenario. This warrant analysis is limited to the peak hour volume warrant only and other conditions may exist which meet other traffic signal warrants. A copy of the warrant analysis is included in Appendix C-14 of the complete traffic study on file with the City of Fresno.

Roundabout Analyses

Table 2.2-21 shows the number of legs, number of lanes, diameter of the proposed roundabouts and corresponding level of service for the three proposed locations for the 2025 Project scenario. As stated previously, the Tulare at Fancher Drive/Regional Commercial Driveway intersection is shown as both a 3-leg and a 4-leg roundabout. All three proposed roundabouts would operate at or above a LOS "B" in the 2025 Project scenario.

Queue Lengths

Table 2.2-22 shows the projected 2025 Project conditions queue lengths developed from the level of service analyses. Neither of the two study intersections is projected to show queues that would potentially impact the freeway ramp intersections. However, the Clovis Avenue at Belmont Avenue SB through movements in the PM peak hour are projected to exceed capacity in both the 50th and 95th percentile. The projected length of queue for the 50th percentile PM peak hour is 473 feet, while the 95th percentile PM peak hour queue length is 454 feet, both of which are approximately 90 to 100 feet less than the distance between the two intersections.

MITIGATED 2025 PROJECT CONDITIONS

To mitigate the locations projected to operate below the adopted level of service standards, the following improvements are recommended for the Mitigated 2025 Project scenario:

Segments

Clovis Avenue from Olive Avenue to SR 180
- Widen from 6- to 8-lanes

Fowler Avenue from McKinley Avenue to Olive Avenue
- Widen from 2- to 4-lanes

Fowler Avenue from Tulare Avenue to Fancher Creek Drive
- Widen from 4- to 6-lanes

TABLE 2.2-21
2025 PROJECT CONDITIONS ANALYSIS
ROUNDABOUT WEEKDAY LEVELS OF SERVICE *[CALTRANS APPENDIX A- IV E; V A].*

Intersection	2025 Project			
	No. of Legs	No. of Lanes	Diameter (ft)	LOS AM/PM
Fowler Avenue at Fancher Creek Drive	4	2	135	B/B
Tulare Avenue at Fancher Drive/	3	2	135	A/A
Regional Commercial Driveway	4	2	135	A/B
Fancher Drive 90° bend in the Regional Commercial Center	2	1	110	A/B

ft = feet

TABLE 2.2-22
2025 PROJECT CONDITIONS ANALYSIS
WEEKDAY 50TH AND 95TH PERCENTILE QUEUE LENGTH *[APPENDIX A - IV E; V-A]*

Intersection Approach	Queue Storage Length (ft)	50th Percentile Queue Length (ft) (AM/PM)	95th Percentile Queue Length (ft) (AM/PM)
Clovis Avenue at Belmont Avenue	566[1]		
• SB Left	na	72/94	m99/m108
• SB Through	na	324/~473	382/m#454
• SB Right	na	14/20	m40/m32
Fowler Avenue at Belmont Avenue	707[1]		
• SB Left	na	207/166	#293/#272
• SB Through	na	107/190	147/275
• SB Right	na	6/2	m18/m10

[1] = Total storage distance between intersections based on measurements taken from Caltrans supplied plans
ft = feet SB = southbound na = not available or does not exist in this scenario
**** = data not available # = 95th percentile volume exceeds capacity, queue may be longer*
~ = Volume exceeds capacity, queue is theoretically infinite m = Volume for 95th percentile queue is metered by upstream signal

Temperance Avenue from SR 180 to Kings Canyon Road
- Widen from 6- to 8-lanes

Intersections

Kings Canyon Road at Temperance Avenue
- Restripe/widen the northbound approach, south leg, from a separate left-turn lane, three (3) through lanes and a separate right-turn lane to a separate left-turn lane, three (3) through lanes and a shared through-right lane
- Restripe/widen the southbound approach, north leg, from a separate left-turn lane, three (3) through lanes and a separate right-turn lane to a separate left-turn lane, three (3) through lanes and a shared through-right lane

Temperance Avenue at Jensen Avenue
- Restripe/widen the westbound approach, east leg, from dual (2) left-turn lanes, three (3) through lanes and a separate right-turn lane to dual (2) left-turn lanes, three (3) through lanes and a shared through-right
- Restripe/widen the eastbound approach, west leg from dual (2) left-turn lanes, three (3) through lanes and a separate right-turn lane to dual (2) left-turn lanes, three (3) through lanes and a shared through-right

Belmont Avenue at Clovis Avenue
- Restripe/widen the northbound approach, south leg, from a separate left-turn lane, three (3) through lanes and a separate right-turn lane to dual (2) left-turn lanes, three (3) through lanes and a shared through-right lane

Clovis Avenue at Ashlan Avenue
- Restripe/widen the northbound approach, south leg, from a separate left-turn lane, three (3) through lanes and a separate right-turn lane to dual (2) left-turn lanes, three (3) through lanes and a separate right-turn lane
- Restripe/widen the southbound approach, north leg, from a separate left-turn lane, three (3) through lanes and a separate right-turn lane to dual (2) left-turn lanes, three (3) through lanes and a separate right-turn lane
- Restripe/widen the westbound approach, east leg, from a separate left-turn lane, one (1) through lane and a shared through-right lane to dual (2) left-turn lanes, two (2) through lanes and a separate right-turn lane
- Restripe/widen the eastbound approach, west leg, from a separate left-turn lane, one (1) through lane and a separate right-turn lane to dual (2) left-turn lanes, two (2) through lanes and a separate right-turn lane

All signalized intersections that are coordinated or will be coordinated with the various study intersections will need to be coordinated and re-optimized to determine the least amount of delay across all corridors.

The resulting Mitigated 2025 Project segment and intersection lane configurations and intersection controls are shown on Appendix B Figure 12 of the complete traffic study on file with the City of Fresno. The 2025 Project segment and intersection peak hour traffic volumes are shown on Appendix B Figure 11 of the complete traffic study. Using these lane configurations and volumes, the study segments and intersections were analyzed for Mitigated 2025 Project levels of service. Tables 2.2-23 and 2.2-24 show the Mitigated 2025 Project levels of service for the study segments and intersections. The signalized intersection levels of service shown in Table 2.2-24 are representative of the whole intersection. Individual intersection movements or approaches may operate above or below the signalized level of service or delay shown.

As shown in Table 2.2-23, with the above recommended improvements all study segments are projected to operate at or above the adopted level of service standard in the Mitigated 2025 Project scenario. Please note that three of the four failing segments were projected to fail in the City of Fresno 2025 General Plan and that the recommended mitigation measures correspond to the recommendations in the General Plan. Only one of the segments, Fowler between Tulare and Fancher Creek, was not projected to operationally fail in the 2025 General Plan. However, the intersection of Tulare at Fowler and Fancher Creek at Fowler are both projected to operate at an acceptable level of service without the recommended road widening.

With the above recommended improvements all study intersections are projected to operate at or above adopted level of service standards in the Mitigated 2025 Project scenario.

Roundabout Analyses

Since all proposed roundabouts were projected to operate at or above the adopted level of service, no mitigation measures are required for the 2025 Project conditions scenario.

Queue Lengths

Table 2.2-25 shows the projected Mitigated 2025 Project conditions queue lengths developed from the level of service analyses. Neither of the two study intersections is projected to show queues that would potentially impact the freeway ramp intersections. However, the Clovis Avenue at Belmont Avenue SB through movements in the PM peak hour are projected to exceed capacity in both the 50th and 95th percentile. The projected length of queue for the 50th percentile PM peak hour is 417 feet, while the 95th percentile PM peak hour queue length is 401 feet, both of which are approximately 150 to 160 feet less than the distance between the two intersections.

Summary And Conclusions

Tables 2.2.-26 and 2.2-27 show the level of service summary for the study segments and intersections for the various study scenarios. Segments or intersections operating or are projected to operate below the adopted level of service standards are shown **bolded**. The signalized and all-way stopped-controlled (AWSC) intersection levels of service shown are representative of the whole intersection. Individual intersection movements or approaches may operate above or below the signalized and AWSC level of service or delay shown.

TABLE 2.2-23
MITIGATED 2025 PROJECT CONDITIONS ANALYSIS
SEGMENT WEEKDAY LEVELS OF SERVICE *[CALTRANS APPENDIX A - IV E; V A].*

Segments	Mitigated 2025 Project LOS	
	AM	AM
Kings Canyon Road from Peach Avenue to Minnewawa Avenue	C	C
Kings Canyon Road from Minnewawa Avenue to Clovis Avenue	C	C
Kings Canyon Road from Clovis Avenue to Argyle Avenue	C	C
Kings Canyon Road from Argyle Avenue to Fowler Avenue	C	C
Kings Canyon Road from Fowler Avenue to Armstrong Avenue	C	C
Kings Canyon Road from Armstrong Avenue to Temperance Avenue	C	C
Tulare Avenue from Peach Avenue to Minnewawa Avenue	C	C
Tulare Avenue from Minnewawa Avenue to Clovis Avenue	C	C
Tulare Avenue from Clovis Avenue to Fancher Creek Drive	C	C
Tulare Avenue from Fancher Creek Drive to Fowler Avenue	C	C
Clovis Avenue from Shaw Avenue to Santa Ana Avenue	C	C
Clovis Avenue from Santa Ana Avenue to Gettysburg Avenue	C	C
Clovis Avenue from Gettysburg Avenue to Ashlan Avenue	C	C
Clovis Avenue from Ashlan Avenue to Shields Avenue	C	C
Clovis Avenue from Shields Avenue to McKinley Avenue	C	C
Clovis Avenue from McKinley Avenue to Olive Avenue	C	D
Clovis Avenue from Olive Avenue to Belmont	na	na
Clovis Avenue from Olive Avenue to SR 180	D	C
Clovis Avenue from SR 180 to Belmont	C	D
Clovis Avenue from Belmont to Tulare Avenue	na	na
Clovis Avenue from Belmont to Fancher Drive/Regional Commercial Driveway	C	D
Clovis Avenue from Fancher Drive/Regional Commercial Drive to Tulare Avenue	C	C
Clovis Avenue from Tulare Avenue to Kings Canyon Road	C	C
Clovis Avenue from Kings Canyon Road to Butler Avenue	C	C
Clovis Avenue from Butler Avenue to California Avenue	C	C
Clovis Avenue from California Avenue to Jensen Avenue	C	C
Fowler Avenue from Shields Avenue to McKinley Avenue	D	D
Fowler Avenue from McKinley Avenue to Olive Avenue	D	C
Fowler Avenue from Olive Avenue to Belmont Avenue	na	na
Fowler Avenue from Olive Avenue to SR 180	D	D
Fowler Avenue from SR 180 to Belmont Avenue	C	C
Fowler Avenue from Belmont Avenue to Tulare Avenue	D	D
Fowler Avenue from Tulare Avenue to Kings Canyon Road	na	na
Fowler Avenue from Tulare Avenue to Fancher Creek Drive	D	C
Fowler Avenue from Fancher Creek Drive to Kings Canyon Road	C	C

TABLE 2.2-23
MITIGATED 2025 PROJECT CONDITIONS ANALYSIS
SEGMENT WEEKDAY LEVELS OF SERVICE *[CALTRANS APPENDIX A - IV E; V A].*

Segments	Mitigated 2025 Project LOS AM	Mitigated 2025 Project LOS AM
Fowler Avenue from Kings Canyon Road to California	D	D
Fowler Avenue from California Avenue to Jensen Avenue	C	C
Armstrong Avenue from Olive Avenue to Belmont Avenue	C	C
Armstrong Avenue from Belmont Avenue to Fancher Creek Boulevard	C	C
Armstrong Avenue from Kings Canyon Road to Butler Avenue	B	C
Temperance Avenue from Clinton Avenue to McKinley Avenue	B	C
Temperance Avenue from McKinley Avenue to Olive Avenue	B	B
Temperance Avenue from Olive Avenue to Belmont Avenue	B	B
Temperance Avenue from Belmont Avenue to Kings Canyon Road	na	na
Temperance Avenue from Belmont Avenue to SR 180	B	B
Temperance Avenue from SR 180 to Kings Canyon Road	B	C
Temperance Avenue from Kings Canyon Road to California Avenue	C	C
Temperance Avenue from California Avenue to Jensen Avenue	B	B
Belmont Avenue from Temperance Avenue to Locan Avenue	D	D

na = did not exist in this scenario

TABLE 2.2-24
MITIGATED 2025 PROJECT CONDITIONS ANALYSIS
INTERSECTION WEEKDAY LEVELS OF SERVICE *[APPENDIX A - IV E; V A]*

Intersection	AM Peak Hour		PM Peak Hour	
	LOS	Delay[1] (secs)	LOS	Delay[1] (secs)
Tulare Avenue at Fowler Avenue	B	14.4	B	12.5
Tulare Avenue at Argyle Avenue	A	5.8	B	13.6
Tulare Avenue at Clovis Avenue	C	21.3	D	35.5
Tulare Avenue at Peach Avenue	C	27.3	C	26.9
Kings Canyon Road at Temperance Avenue	C	27.0	D	49.2
Kings Canyon Road at Armstrong Avenue	C	25.9	C	27.2
Kings Canyon Road at Fowler Avenue	B	18.1	C	21.0
Kings Canyon Road at Argyle Avenue	A	4.5	A	8.4
Kings Canyon Road at Clovis Avenue	C	22.8	C	21.4
Kings Canyon Road at Peach Avenue	B	18.9	C	31.8
Clovis Avenue at McKinley Avenue	C	24.5	D	41.5
Clovis Avenue at Shields Avenue	C	21.4	C	23.5
Clovis Avenue at Butler Avenue	C	24.9	B	14.9
Clovis Avenue at Jensen Avenue	D	38.0	D	39.4
Fowler Avenue at McKinley Avenue	C	22.8	C	28.5
Temperance Avenue at McKinley Avenue	B	18.1	C	29.6
Temperance Avenue at Jensen Avenue	D	49.9	C	30.6
Jensen Avenue at Fowler Avenue	B	10.6	B	13.6
Belmont Avenue at Clovis Avenue	C	24.3	D	35.8
Belmont Avenue at Fowler Avenue	C	28.7	D	35.6
Belmont Avenue at Armstrong Avenue	B	17.9	C	30.6
Belmont Avenue at Temperance Avenue	C	22.5	C	23.5
Clovis Avenue at Ashlan Avenue	C	21.3	D	48.2
Clovis Avenue at Shaw Avenue	C	25.7	D	41.1
Clovis Avenue at Santa Ana Avenue	A	6.1	B	14.8
Ashlan Avenue at Temperance Avenue	C	26.6	C	31.8
Tulare Avenue at Fancher Creek Drive West	A	73	A	4.6
Tulare/Armstrong Avenue at Fancher Creek Drive East				
• SB Left	A	7.3	A	8.6
• WB Approach	A	8.7	B	11.1
Tulare at Fancher Drive/Regional Shopping Center	B	17.2	C	27.7
Fancher Creek Drive at Fowler Avenue	A	7.7	B	19.8
Clovis Avenue at SR 180 EB off-ramp	B	17.9	D	52.4
Clovis Avenue at SR 180 WB off-ramp	C	29.8	C	27.7
Fowler Avenue at SR 180 EB off-ramp	B	16.2	B	16.2
Fowler Avenue at SR 180 WB off-ramp	A	8.4	A	6.1

[1] *Delay per vehicle* *secs = seconds* *NB = northbound* *SB = southbound*
EB = eastbound *WB = westbound*

TABLE 2.2-25
MITIGATED 2025 PROJECT CONDITIONS ANALYSIS
WEEKDAY 50TH AND 95TH PERCENTILE QUEUE LENGTH *[APPENDIX A - IV.E; V.A]*

Intersection Approach	Queue Storage Length (ft)	50th Percentile Queue Length (ft) (AM/PM)	95th Percentile Queue Length (ft) (AM/PM)
Clovis Avenue at Belmont Avenue	566[1]		
SB Left	na	68/94	m90/m108
SB Through	na	284/~417	m336/m401
• SB Right	na	12/15	m27/m26
Fowler Avenue at Belmont Avenue	707[1]		
• SB Left	na	185/166	#288/#272
• SB Through	na	83/204	m122/286
• SB Right	na	5/2	m16/m10

[1] = Total storage distance between intersections based on measurements taken from Caltrans supplied plans
ft = feet SB = southbound na = not available or does not exist in this scenario
**** = data not available # = 95th percentile volume exceeds capacity, queue may be longer*
~ = Volume exceeds capacity, queue is theoretically infinite m = Volume for 95th percentile queue is metered by upstream signal

TABLE 2.2-26
WEEKDAY LEVELS OF SERVICE SUMMARY FOR THE STUDY SEGMENTS *[CALTRANS APPENDIX A - IV E; V A]*.

Segments	Existing		2015 Project		2025 Project		Mitigated 2025 Project	
	LOS							
	AM	PM	AM	PM	AM	PM	AM	PM
Kings Canyon Road from Peach Avenue to Minnewawa Avenue	C	C	C	C	C	C	C	C
Kings Canyon Road from Minnewawa Avenue to Clovis Avenue	C	C	C	C	C	C	C	C
Kings Canyon Road from Clovis Avenue to Argyle Avenue	C	C	C	C	C	C	C	C
Kings Canyon Road from Argyle Avenue to Fowler Avenue	C	C	C	C	C	C	C	C
Kings Canyon Road from Fowler Avenue to Armstrong Avenue	C	C	C	C	C	C	C	C
Kings Canyon Road from Armstrong Avenue to Temperance Avenue	C	C	C	C	C	C	C	C
Tulare Avenue from Peach Avenue to Minnewawa Avenue	C	C	C	C	C	C	C	C
Tulare Avenue from Minnewawa Avenue to Clovis Avenue	C	C	C	C	C	C	C	C
Tulare Avenue from Clovis Avenue to Fancher Creek Drive	na	na	C	C	C	C	C	C
Tulare Avenue from Fancher Creek Drive to Fowler Avenue	C	B	C	C	C	C	C	C
Clovis Avenue from Shaw Avenue to Santa Ana Avenue	C	C	C	C	C	C	C	C
Clovis Avenue from Santa Ana Avenue to Gettysburg Avenue	C	C	C	C	C	C	C	C
Clovis Avenue from Gettysburg Avenue to Ashlan Avenue	C	C	C	C	C	C	C	C
Clovis Avenue from Ashlan Avenue to Shields Avenue	C	C	C	C	C	C	C	C
Clovis Avenue from Shields Avenue to McKinley Avenue	C	D	C	C	C	C	C	C
Clovis Avenue from McKinley Avenue to Olive Avenue	C	C	C	D	C	D	C	D
Clovis Avenue from Olive Avenue to Belmont	C	C	na	na	na	na	na	na
Clovis Avenue from Olive Avenue to SR 180	na	na	C	C	D	F	D	C
Clovis Avenue from SR 180 to Belmont	na	na	C	D	C	D	C	D
Clovis Avenue from Belmont to Tulare Avenue	C	D	na	na	na	na	na	na
Clovis Avenue from Belmont to Fancher Drive/Regional Commercial Driveway	na	na	C	D	C	D	C	D
Clovis Avenue from Fancher Drive/Regional Commercial Drive to Tulare Avenue	na	na	C	C	C	C	C	C
Clovis Avenue from Tulare Avenue to Kings Canyon Road	C	D	C	C	C	C	C	C
Clovis Avenue from Kings Canyon Road to Butler Avenue	C	C	C	C	C	C	C	C
Clovis Avenue from Butler Avenue to California Avenue	C	C	C	C	C	C	C	C
Clovis Avenue from California Avenue to Jensen Avenue	C	C	C	C	C	C	C	C
Fowler Avenue from Shields Avenue to McKinley Avenue	C	C	D	D	D	D	D	D
Fowler Avenue from McKinley Avenue to Olive Avenue	C	C	D	D	D	F	D	C
Fowler Avenue from Olive Avenue to Belmont Avenue	C	C	na	na	na	na	na	na
Fowler Avenue from Olive Avenue to SR 180	na	na	D	D	D	D	D	D
Fowler Avenue from SR 180 to Belmont Avenue	na	na	C	C	C	C	C	C
Fowler Avenue from Belmont Avenue to Tulare Avenue	D	C	C	D	D	D	D	D
Fowler Avenue from Tulare Avenue to Kings Canyon Road	C	C	na	na	na	na	na	na
Fowler Avenue from Tulare Avenue to Fancher Creek Drive	na	na	D	D	D	E	D	C
Fowler Avenue from Fancher Creek Drive to Kings Canyon Road	na	na	C	C	C	C	C	C
Fowler Avenue from Kings Canyon Road to California	C	C	D	D	D	D	D	D

TABLE 2.2-26
WEEKDAY LEVELS OF SERVICE SUMMARY FOR THE STUDY SEGMENTS *(CALTRANS APPENDIX A - IV E; V A)*.

Segments	Existing		2015 Project		2025 Project		Mitigated 2025 Project	
	LOS							
	AM	PM	AM	PM	AM	PM	AM	PM
Fowler Avenue from California Avenue to Jensen Avenue	A	C	C	C	C	C	C	C
Armstrong Avenue from Olive Avenue to Belmont Avenue	C	B	C	C	C	C	C	C
Armstrong Avenue from Belmont Avenue to Fancher Creek Boulevard	na	na	C	C	C	C	C	C
Armstrong Avenue from Kings Canyon Road to Butler Avenue	A	B	B	C	B	C	B	C
Temperance Avenue from Clinton Avenue to McKinley Avenue	B	C	B	B	B	C	B	C
Temperance Avenue from McKinley Avenue to Olive Avenue	C	C	B	B	B	B	B	B
Temperance Avenue from Olive Avenue to Belmont Avenue	C	C	B	B	B	B	B	B
Temperance Avenue from Belmont Avenue to Kings Canyon Road	C	B	na	na	na	na	na	na
Temperance Avenue from Belmont Avenue to SR 180	na	na	B	B	B	B	B	B
Temperance Avenue from SR 180 to Kings Canyon Road	na	na	B	C	E	E	B	C
Temperance Avenue from Kings Canyon Road to California Avenue	B	B	B	B	C	C	C	C
Temperance Avenue from California Avenue to Jensen Avenue	B	B	B	B	B	B	B	B
Belmont Avenue from Temperance Avenue to Locan Avenue	C	C	C	D	D	D	D	D

na = did not exist in this scenario

TABLE 2.2-27
WEEKDAY LEVELS OF SERVICE SUMMARY FOR THE STUDY INTERSECTIONS *[CALTRANS APPENDIX A – IV E; V A]*.

Intersection	Existing		2015 Project		Mitigated 2015 Project		2025 Project		Mitigated 2025 Project	
	LOS AM/PM	Delay[1] AM/PM (secs)	LOS AM/PM	Delay[1] AM/PM (secs)	LOS AM/PM	Delay[1] AM/PM (secs)	LOS AM/PM	Delay[1] AM/PM (secs)	LOS AM/PM	Delay[1] AM/PM (secs)
Jensen Avenue at Fowler Avenue	C/B	20.1/15.3	C/B	21.6/17.8	B/B	16.0/13.4	B/B	14.9/12.3	B/B	10.6/13.6
Belmont Avenue at Clovis Avenue	C/C	22.4/25.1	C/D	21.1/38.1	B/C	18.2/30.9	C/E	26.2/57.5	C/D	24.3/35.8
Belmont Avenue at Fowler Avenue	F/F	62.97/97.00	F/F	436.44/497.22	C/C	23.9/25.0	C/D	26.7/35.7	C/D	28.7/35.6
Belmont Avenue at Armstrong Avenue					C/C	20.2/20.6	B/C	19.1/32.2	B/C	17.9/30.6
• EB Left-Through	A/A	8.3/8.0	na	na						
• EB Left	na	na	A/A	9.9/8.8						
• WB Left	na	na	A/B	8.4/12.0						
• NB Approach	na	na	—/—	—/—						
• SB Approach	B/B	12.2/12.6	F/—	211.4/—						
Belmont Avenue at Temperance Avenue	C/D	24.65/26.98	F/F	316.83/309.68	C/C	26.0/21.2	C/C	22.0/25.8	C/C	22.5/23.5
Clovis Avenue at Ashlan Avenue	C/E	29.0/56.6	D/E	35.9/67.3	C/D	30.7/49.9	D/F	40.5/164.4	C/D	21.3/48.2
Clovis Avenue at Shaw Avenue	C/C	21.5/26.4	C/C	23.3/31.8	C/C	23.3/32.0	C/D	24.6/42.2	C/D	25.7/41.1
Clovis Avenue at Santa Ana Avenue	A/A	4.8/7.5	A/A	4.8/9.2	A/A	4.7/9.6	A/B	5.9/14.0	A/B	6.1/14.8
Ashlan Avenue at Temperance Avenue	B/D	13.11/26.51	F/F	226.94/616.78	C/C	25.2/25.6	C/C	27.7/33.8	C/C	26.6/31.8
Tulare Avenue at Fancher Creek Drive West					A/A	9.3/3.8	A/A	6.1/7.0	A/A	73/4.6
• WB Left	na	na	A/A	7.7/9.3						
• NB Approach	na	na	B/C	11.5/21.0						
Tulare/Armstrong Avenue at Fancher Creek Drive East										
• SB Left	na	na	A/A	7.3/7.6	A/A	7.3/7.6	A/A-	7.3/8.6	A/A-	7.3/8.6
• WB Approach	na	na	A/A	8.7/9.3	A/A	8.7/9.3	A/B	8.7/11.1	A/B	8.7/11.1
Tulare at Fancher Drive/Regional Shopping Center					B/B	17.8/18.1	B/C	16.8/27.1	B/C	17.2/27.7
• EB Left	na	na	A/A	8.4/9.4						
• WB Left	na	na	A/A	7.7/8.4						
• NB Approach	na	na	C/—	19.3/—						
• SB Approach	na	na	C/—	15.9/—						
Fancher Creek Drive at Fowler Avenue					A/B	7.6/14.2	A/B	7.5/18.1	A/B	7.7/19.8
• NB Left	na	na	B/B	10.5/12.7						
• SB Left	na	na	A/B	9.4/10.4						
• WB Approach	na	na	F/—	63.0/—						
• EB Approach	na	na	C/—	24.2/—						
Clovis Avenue at SR 180 EB off-ramp	na	na	B/E	18.7/77.8	B/D	15.0/48.6	B/D	18.7/51.9	B/D	17.9/52.4
Clovis Avenue at SR 180 WB off-ramp	na	na	B/A	11.6/8.6	B/A	12.8/7.6	C/C	23.4/27.7	C/C	29.8/27.7
Fowler Avenue at SR 180 EB off-ramp	na	na	B/B	15.1/16.7	B/B	12.4/15.3	B/B	17.1/16.3	B/B	16.2/16.2
Fowler Avenue at SR 180 WB off-ramp	na	na	A/A	6.5/5.5	A/A	6.9/5.5	A/A	8.1/6.1	A/A	8.4/6.1

[1] *Delay per vehicle* *secs = seconds* *NB = northbound* *SB = southbound* *EB = eastbound* *WB = westbound* *na = not applicable*
— = exceeds software parameters

TABLE 2.2-27
WEEKDAY LEVELS OF SERVICE SUMMARY FOR THE STUDY INTERSECTIONS *[CALTRANS APPENDIX A – IV E; V A]*.

Intersection	Existing		2015 Project		Mitigated 2015 Project		2025 Project		Mitigated 2025 Project	
	LOS AM/PM	Delay[1] AM/PM (secs)	LOS AM/PM	Delay[1] AM/PM (secs)	LOS AM/PM	Delay[1] AM/PM (secs)	LOS AM/PM	Delay[1] AM/PM (secs)	LOS AM/PM	Delay[1] AM/PM (secs)
Tulare Avenue at Fowler Avenue	B/A	11.9/1.4	B/B	13.9/12.9	B/A	11.8/9.9	B/B	11.5/12.9	B/B	14.4/12.5
Tulare Avenue at Argyle Avenue					A/A	8.0/9.0	B/B	10.7/10.5	A/B	5.8/13.6
• NB Left-Through-Right	A/A	7.2/7.2	A/F	7.3/112.7						
• SB Left-Through-Right	A/A	7.2/7.3	A/E	7.3/36.4						
• WB Approach	A/A	8.7/8.7	B/A	11.1/9.9						
• EB Approach	A/A	8.7/8.8	B/A	10.4/8.3						
Tulare Avenue at Clovis Avenue	A/B	7.2/10.1	B/C	11.4/26.9	B/C	14.6/24.5	B/C	15.4/31.4	C/D	21.3/35.5
Tulare Avenue at Peach Avenue	B/B	11.3/12.8	C/B	24.1/18.5	C/B	23.1/17.6	C/C	27.6/27.1	C/C	27.3/26.9
Kings Canyon Road at Temperance Avenue					C/C	21.3/27.0	D/F	41.6/83.7	C/D	27.0/49.2
• EB Left	A/A	8.4/8.2	A/B	10.0/10.1						
• WB Left	A/A	7.9/8.2	A/A	8.2/8.4						
• NB Approach	D/E	32.4/44.6	—/—	—/—						
• SB Approach	E/D	38.7/32.7	—/—	—/—						
Kings Canyon Road at Armstrong Avenue	B/A	16.8/9.4	B/B	19.9/14.8	B/B	15.4/18.2	C/C	22.3/27.7	C/C	25.9/27.2
Kings Canyon Road at Fowler Avenue	B/C	18.4/21.6	C/D	22.8/35.7	C/D	23.9/35.9	B/C	19.1/22.3	B/C	18.1/21.0
Kings Canyon Road at Argyle Avenue					A/A	5.0/6.5	A/A	6.1/6.9	A/A	4.5/8.4
• EB Left	A/A	9.3/9.5	B/B	11.3/12.5						
• SB Approach	C/C	21.3/23.4	E/F	47.6/647.4						
Kings Canyon Road at Clovis Avenue	C/D	24.3/37.5	C/D	22.9/42.2	C/D	21.3/42.2	C/C	26.7/27.1	C/C	22.8/21.4
Kings Canyon Road at Peach Avenue	C/C	22.5/22.5	B/C	18.9/31.9	B/C	19.1/32.1	C/D	20.3/37.1	B/C	18.9/31.8
Clovis Avenue at McKinley Avenue	B/B	12.2/13.8	C/C	23.4/31.2	C/D	33.2/45.9	C/D	29.1/81.6	C/D	24.5/41.5
Clovis Avenue at Shields Avenue	B/B	19.6/18.1	B/B	20.0/17.7	C/B	24.8/19.1	C/C	20.3/72.3	C/C	21.4/23.5
Clovis Avenue at Butler Avenue	B/A	12.7/6.6	B/A	13.5/8.6	B/A	17.3/8.4	B/B	17.9/12.9	C/B	24.9/14.9
Clovis Avenue at Jensen Avenue	C/C	26.3/26.2	C/D	27.0/45.9	C/D	28.6/44.0	D/D	41.1/42.9	D/D	38.0/39.4
Fowler Avenue at McKinley Avenue					C/C	22.1/24.5	C/C	24.4/30.1	C/C	22.8/28.5
• NB Left	na	na	A/A	9.2/9.1						
• SB Left	na	na	A/A	9.0/9.5						
• WB Approach	na	na	—/—	—/—						
• EB Approach	na	na	—/—	—/—						
Temperance Avenue at McKinley Avenue					B/C	17.3/26.0	B/C	19.4/31.2	B/C	18.1/29.6
• NB Left	na	na	B/B	13.4/11.2						
• SB Left	na	na	A/C	8.3/24.3						
• SB Left-Through	A/A	7.7/8.2	na	na						
• WB Approach	B/B	12.4/13.8	—/—	—/—						
• EB Approach	na	na	—/—	—/—						
Temperance Avenue at Jensen Avenue					B/C	17.8/21.2	E/F	80.0/83.6	D/C	49.9/30.6
• EB Left	A/A	9.9/8.9	E/E	40.6/44.3						
• WB Left	A/A	8.5/9.4	A/B	8.9/13.9						
• NB Approach	E/F	41.2/56.3	—/—	—/—						
• SB Approach	E/E	48.3/47.0	—/—	—/—						

Table 2.2-28 shows the roundabout analysis results including number of entering legs, number of lanes, diameter and level of service. As can be seen in Table 2.2-3 all three (3) study locations are projected to operate at or above a LOS "B" in both the 2015 and 2025 Project scenarios.

Table 2.2-29 shows the projected 50th and 95th-percentile queue lengths for the various scenarios for these two locations. Neither of the two locations is projected to exceed the available queue storage lengths. However, the Clovis Avenue SB through movement between the SR 180 EB ramp intersection and the Belmont Avenue intersection is projected to exceed capacity of the movement and the resulting queues may be longer. However there is approximately 90 to 160 feet remaining storage distance between the two intersections that this movement could utilize. Please note that existing and non-signalized future queue lengths for the Fowler Avenue SB movement between the SR 180 EB off-ramp and Belmont Avenue intersection could not be determined since the intersection is currently an AWSC and there is no methodology for an AWSC queue length determination.

The City of Fresno's Traffic Signal Mitigation Impact Fee program indicates that a new development will be assessed a fee of $47.81 per average daily trip. For a proposed Project of this size including the 14 acres of light industrial, 93 acres of business park, 1,543 single family, 408 multi-family, 30,000 sf of general office and 960,000 sf of retail commercial, the fees would be approximately $3,513,100 . These fees were calculated based the projected trip generation of 73,481 daily trips with no reduction for capture or pass-by. Also please note that these fees were calculated based on only the applicant controlled parcels.

Table 2.2-30 shows the Project's Fair Share Percentages for the proposed improvements detailed previously using the City's, Caltrans' or the County's formula . The City of Clovis does not use a Fair Share Percentage formula since they have an Impact Fee Program. Therefore, any Fair Share Percentages shown for proposed improvements at Clovis intersections utilizes the City of Fresno's formula. The traffic growth projected for each of the study segments and intersections is due not only to this Project but to background growth projected to occur in the City of Fresno and surrounding areas. Therefore, the Fair Share percentages shown in Table 2.2-30 are provided as information only and the City as lead agency will determine what mitigation measures, if any, they will require the applicant to fund. Also please note that several of the intersections included require signalization as part of the mitigation. If the City of Fresno Traffic Signal Mitigation Impact Fee is assessed toward this Project, then signalization costs should be removed from consideration in regards to the Project's Fair Share fees.

The Fair Share Percentages, per City of Fresno and Caltrans requirements, were calculated by taking the Project trips (applicant controlled) minus the Project Trips (Non-applicant controlled) and dividing by the total 2025 Project volumes minus the Existing volumes for the given intersection. The formula used in calculating the City of Fresno and Caltrans Fair Share Percentages is:

Fair Share Percentage = (Project Only Trips (Applicant) - Project Only Trips (Non-applicant)) / (2025 Project Volumes - Existing Volumes)

TABLE 2.2-28
WEEKDAY LEVELS OF SERVICE SUMMARY FOR THE STUDY ROUNDABOUTS *[CALTRANS APPENDIX A – IV E; V A]*.

Intersection	2015 Project				2025 Project			
	No. of Legs	No. of Lanes	Diameter (ft)	LOS AM/PM	No. of Legs	No. of Lanes	Diameter (ft)	LOS AM/PM
Fowler Avenue at Fancher Creek Drive	4	2	135	A/B	4	2	135	B/B
Tulare Avenue at Fancher Drive/ Regional Commercial Driveway	3 4	2 2	135 135	A/A A/B	3 4	2 2	135 135	A/A A/B
Fancher Drive 90° bend in the Regional Commercial Center	2	1	110	A/B	2	1	110	A/B

TABLE 2.2-29
50TH-PERCENTILE AND 95TH-PERCENTILE QUEUE LENGTH SUMMARY *[CALTRANS APPENDIX A – IV E; V A]*

Intersection	Queue Storage Length (ft)	Percentile Queue Length									
		Existing		2015 Project		Mitigated 2015 Project		2025 Project		Mitigated 2025 Project	
		50th AM/PM	95th AM/PM	50th AM/PM	95th AM/PM	50th AM/PM	95th AM/PM	50th AM/PM	95th AM/PM	50th AM/PM	95th AM/PM
Clovis Avenue at Belmont Avenue	566[1]										
• SB Left	na	na	na	100/96	m140/m112	88/95	#143/m112	72/94	m99/m108	68/94	m90/m108
• SB Through	na	na	na	278/~450	343/m#442	160/30	206/m#433	324/~473	382/m#454	284/~417	m336/m401
• SB Right	na	na	na	4/1	m13/m4	3/5	m13/m12	14/20	m40/m32	12/15	m27/m26
Fowler Avenue at Belmont Avenue	707[1]										
• SB Left	na	na	na	***	***	141/160	#265/#250	207/166	#293/#272	185/166	#288/#272
• SB Through	na	na	na	***	***	82/166	105/257	107/190	147/275	83/204	m122/286
• SB Right	na	na	na	***	***	1/1	m4/m5	6/2	m18/m10	5/2	m16/m10

[1] = Total storage distance between intersections based on measurements taken from Caltrans supplied plans
ft = feet
SB = southbound
na = not available or does not exist in this scenario
**** = data not available*
 # = 95th percentile volume exceeds capacity, queue may be longer
~ = Volume exceeds capacity, queue is theoretically infinite
m = Volume for 95th percentile queue is metered by upstream signal

TABLE 2.2-30
FAIR SHARE PERCENTAGES *[CALTRANS APPENDIX A – V C]*

	Project (Applicant)	(Non-Applicant)	2025 Project	Existing	Fair Share Percentage
Segment					
Clovis from Olive to SR 180 (City)	440	118	4,973	2,322	12%
Fowler from McKinley to Olive (County)	126	17	1,799	919	6%
Fowler from Tulare to Fancher Creek (City)	723	964	3,189	2	32%
Temperance from SR 180 to Kings Canyon (County)	260	9	5,429	441	5%
Intersection					
Tulare at Argyle (City)	1,322	279	1,587	47	68%
Kings Canyon at Temperance (City)	359	15	6,311	1,092	7%
Kings Canyon at Argyle (City)	524	0	2,267	1,176	48%
Fowler at McKinley (County)	169	18	4,075	919	4%
Temperance at McKinley (County)	194	27	5,880	673	3%
Temperance at Jensen (County)	316	41	7,090	1,463	4%
Belmont at Fowler (City)	1,532	36	4,046	1,885	69%
Belmont at Armstrong (City)	692	24	2,031	778	53%
Belmont at Temperance (City)	436	10	3,600	1,296	18%
Clovis at Ashlan (County)	202	58	6,686	4,500	2%
Ashlan at Temperance (County)	96	9	3,466	944	3%
Tulare at Fancher Creek Drive West (City)	497	77	643	0	65%
Tulare at Fancher Drive/regional Commercial Driveway (City)	2,687	1,006	2,843	0	59%
Fancher Creek Drive at Fowler (City)	901	33	2215	0	39%
Clovis at SR 180 EB ramps (Caltrans)	1,329	274	5,849	0	18%
Belmont at Clovis (City)	1,137	160	4,490	3,277	81%

(Controlling Jurisdiction)

The Fair Share Percentages, per County of Fresno requirements, were calculated by taking the Project trips (applicant controlled) minus the Project Trips (Non-applicant controlled) and dividing by the total 2025 Project volumes for the given intersection. The formula used in calculating the County of Fresno Fair Share Percentages is:

Fair Share Percentage = (Project Only Trips (Applicant) - Project Only Trips (Non-applicant)) / 2025 Project Volumes

Level of Significance After Mitigation

Mitigation would reduce the potential impacts for the 2015 Project and 2025 Project Scenarios to a less-than- significant level. Securing sufficient right-of-way for a limited number of roadway segments and intersections to implement recommended mitigation, however, may be infeasible. For these segments and intersections, traffic impacts would be significant and unavoidable.

CIRCULATION ISSUES

As stated in Section 2.1, *Land Use, Planning and Agriculture*, the staff of the Planning and Development Department has determined that the proposed project is consistent with the 2025 Fresno General Plan and that no amendments to the General Plan are necessary to implement the project. This determination of consistency includes, but is not limited to, all land use designations, and the planned circulation system (see Figure 2.2-1: 2025 Fresno General Plan).

- In regards to the applicant proposed-roundabout at the intersection of Fowler Avenue and Fancher Creek Boulevard, no such roundabout currently exists in the metropolitan area at the intersection of a planned arterial and collector. The traffic impact section, however, contains analysis that this proposed roundabout will function at a LOS B in both the AM and PM peak hours in 2025 (see Table 2.2-28. All of the project-proposed roundabouts will function at high levels of service). The final determination as to the appropriateness of this roundabout will be made by the City Council based on recommendations from the City Traffic Engineering Section.

- Within the proposed regional commercial area, the 2025 Fresno General Plan shows Fancher Creek Boulevard as a direct extension of Tulare Street into the project with a crossing at the existing Fancher Creek bridge on the eastern side of the commercial designation. The four-way intersection of Clovis Avenue, and Tulare Street/Fancher Creek Boulevard will be signalized. Table 2.2-20 shows that this intersection is projected to operate at LOS B in the AM peak and LOS C in the PM peak in 2025. The adopted General Plan land use diagram also shows a second collector entrance north of Tulare street which will also serve the regional commercial site and intersect Fancher Creek Boulevard just prior to the bridge crossing. It is not anticipated that the intersection of this secondary collector and Clovis Avenue will be signalized. The adopted circulation system is consistent with access requirements for a major regional commercial shopping center and provides adequate access to parcels currently controlled by Fancher Creek Properties, LLC and the MEGG properties. The final alignment of these roadways will be determined at the time of site plan review.

2.3 AIR QUALITY

Introduction

This section describes the proposed project's impact on local and regional air quality including the identification of air pollutant standards, current air quality conditions, air quality impacts and associated mitigation measures.

Air quality is described in relation to the ambient air quality standards for ozone precursors. In addition, an analysis of carbon monoxide (CO) pollutant impacts along a representative number of street and road segments adjacent to the Project has also been prepared.

The Project lies within the central portion of the San Joaquin Valley Air Basin (SJVAB) in the Northeast Fresno County. The Project site includes the development of land uses as shown below.

TABLE 2.3-1
PROPOSED LAND USES

Use	Units/Square Feet
Business Park	1,530,000 square feet
Single Family Residential	1,543 units
Multi-family Residential	480 units
Shopping Center	1,320,000 square feet

The Sierra Nevada and the Coastal Range surround Fresno County to the east and west. These mountain ranges direct air circulation and dispersion patterns. Temperature inversions can trap air within the Valley, thereby preventing the vertical dispersal of air pollutants. In addition to topographic conditions, the local climate can also contribute to air quality problems. Climate in the City of Fresno is classified as Mediterranean, with moist cool winters and dry warm summers.

Light winds and atmospheric stability provides frequent opportunities for pollutants to accumulate in the atmosphere. Wind speed and direction also play an important role in the dispersion and transport of air pollutants. Wind at the surface and aloft can disperse pollution by mixing vertically and by transporting it to other locations. The prevailing winds during the summer are from the north and west. These winds, known as "up-valley winds," originate with coastal breezes that enter the Valley through breaks in the coastal ranges, particularly through the Carquinez Straits in the San Francisco Bay Area.

Ozone, classified as a "regional" pollutant, often afflicts areas downwind of the original source of precursor emissions. Ozone can be easily transported by winds from a source area. Peak ozone levels tend to be higher in the southern portion of the Valley, as the prevailing summer winds sweep precursors downwind of northern source areas before concentrations peak. Fresno County is occasionally influenced by precursors emitted in the San Francisco Bay Area; however, sources within the Valley are considered to be a greater influence under most conditions. The separate designations reflect the fact that ozone precursor transport depends on daily meteorological conditions.

Other primary pollutants, CO, for example, may form high concentrations when wind speed is low. During the winter, Fresno experiences cold temperatures and calm conditions that increase the likelihood of a climate conducive to high CO concentrations.

Surface radiant cooling can also cause temperature inversions. On clear winter nights, the ground loses heat at a rapid rate, causing air in contact with it to cool. Once formed, radiation inversions are similar to subsidence inversions with respect to their effects on pollutant dilution. As a result, conditions in Fresno are conducive to the containment of air pollutants.

Air Pollution Sources and Current Air Quality

The San Joaquin Valley Air Pollution Control District (District) is the agency empowered to regulate air pollutant emissions. The District regulates air quality through its permit authority for most types of stationary emission sources and through its planning and review activities for other sources.

Federal and California ambient air quality standards have been established for the following five critical pollutants: nitrogen dioxide, sulfur dioxide, particulate, carbon monoxide, and ozone. Ozone pollution is the most conspicuous type of air pollution, and is often characterized by visibility-reducing haze, eye irritation, and high oxidant concentrations (i.e., "smog").

In general, there are four major sources of air pollutant emissions in the SJVAB including motor vehicles, industrial plants, agricultural activities, and construction activities. Motor vehicles account for significant portions of regional gaseous and particulate emissions. Local large employers such as industrial plants can also generate substantial regional gaseous and particulate emissions. In addition, construction and agricultural activities can generate significant temporary gaseous and particulate emissions (dust, ash, smoke, etc.). Finally, urban areas upwind in Fresno can cause or generate transported emissions from all four-pollutant sources.

Principal factors that affect air quality in and around Fresno are: (a) the sink effect, climatic subsidence and temperature inversions and low wind speeds; (b) automobile and truck travel; and (c) increases in mobile and stationary pollutants generated by local urban growth.

Applicable federal and State standards for each regulated pollution category compared to monitoring data for the closest monitoring site is provided in Table 2.3-2. The applicable standard for each pollution category, for environmental documentation purposes (i.e., identification of significant impacts), is whichever are the more stringent of the federal and State standards. As shown in the table, Fresno County is non-attainment for ozone and PM_{10}.

TABLE 2.3-2
FEDERAL AND STATE STANDARDS FOR NONATTAINMENT POLLUTANTS IN THE CITY OF FRESNO

Pollutant	Averaging Time	Applicable Standard	Monitoring Station	
			First High	Second High
Ozone *	Max. Hourly High	0.09 ppm State 0.12 ppm Federal	0.136 ppm	0.130 ppm
Carbon Monoxide (CO)	Max. Eight-hour High Standard Violation Max. One-hour High Standard Violation	9.0 ppm State/Federal 20.0 ppm State 35.0 ppm Federal	2.53 ppm 4.4 ppm	2.56 ppm 3.6 ppm
Particulate (PM_{10})	Geometric Mean 24 Hour High	30.0 mg/m^3 State 50.0 mg/m^3 State	38.0 mg/m^3 92.0 mg/m^3	38.0 mg/m^3 89.0 mg/m^3

SOURCE: California Air Resources Board, 2003, Air Quality Data Summary
*NOTE: The monitoring site for ozone is located in the City of Fresno at the Drummond Street site, which is the closest monitoring station to the project site. First and second highest annual data used.
Fresno County was found in attainment for CO on August 3, 2000 (CARB).

Ozone Emissions

The most severe air quality problem in the SJVAB is the high level of ozone. Ozone can cause eye irritation and impair respiratory functions. Accumulations of ozone depend heavily on weather patterns and thus vary substantially from year to year. Ozone is produced in the atmosphere through photochemical reactions involving reactive organic compounds (ROG) and nitrogen oxides (NO_X). Numerous small sources throughout the region are responsible for most of the ROG and NO_X emissions in the Basin. The Federal 8- hour ozone standard has been exceeded an average of 43 times per year over the past three years in Fresno County.

Suspended PM_{10} Emissions

PM_{10} refers to particulate matter less than 10 microns in diameter - those that can be inhaled and cause health effects. Common sources of particulate include demolition, construction activity, agricultural operations, traffic and other localized sources such as from fireplaces. Very small particulate of certain substances can cause direct lung damage, or can contain absorbed gases that may be harmful when inhaled. Particulate can also damage materials and reduce visibility. Eight hour PM_{10} standards are exceeded occasionally at the Fresno monitoring station (the standard was violated on 65 days in the past three years). The annual geometric mean has also been exceeded during that same time frame.

Carbon Monoxide (CO)

Because CO is emitted primarily by motor vehicles and is non-reactive, ambient CO concentrations normally follow the spatial and temporal distributions of vehicular traffic. CO concentrations are also influenced by meteorological factors such as wind speed and atmospheric mixing. High levels of CO can impair the transport of oxygen in the bloodstream and thereby aggravate cardiovascular disease and cause fatigue, headaches, and dizziness. The California Air Resources Board (CARB) found CO standards in Fresno County in attainment of standards on August 3, 2000.

Nitrogen Dioxide (NO_2)

The major sources of nitrogen dioxide (NO_2), essential to the formation of photochemical smog, are vehicular, residential, and industrial fuel combustion. NO_2 is the "whiskey brown" colored gas evident during periods of heavy air pollution. NO_2 increases respiratory disease and irritation and may reduce resistance to certain infections. The standards for NO_2 are being met in the SJVAB and the District does not expect that the standards will be exceeded in the near future.

Sulfur Dioxide (SO_2)

The major source of sulfur dioxide (SO_2) is the combustion of high-sulfur fuels for electricity generation, petroleum refining and shipping. In humid atmospheres, sulfur oxides can react with vapor to produce sulfuric acid, a component of acid rain. SO_2 can irritate the lungs, damage vegetation and materials and reduce visibility. The standards for SO_2 are being met in the SJVAB and the District does not expect that the standards will be exceeded in the near future.

Lead (Pb)

Gasoline-powered automobile engines are a major source of airborne lead, although the use of leaded fuel is being reduced. Lead can cause blood effects such as anemia and the inhibition of enzymes involved in blood synthesis. Lead may also affect the central nervous and reproductive systems. Ambient lead levels have dropped dramatically as the percentage of motor vehicles using unleaded gasoline continues to increase. The standards for lead are being met in the SJVAB and the District does not expect that the standards will be exceeded in the future.

Air Quality Standards

The federal Clean Air Bill, first adopted in 1967 and periodically amended since then, established federal ambient air quality standards. A 1987 amendment to the Bill set a deadline for the attainment of these standards. That deadline has since passed. Other federal Clean Air Bill Amendments, passed in 1990, share responsibility with the State in reducing emissions from mobile sources.

In 1988, the State of California passed the California Clean Air Act (CCAA, State 1988 Statutes, Chapter 1568) that established more stringent State ambient air quality standards, and set forth a program for their achievement. State air basins are established by the CARB. CARB implements State ambient air quality standards, as required in the State CCAA, and cooperates with the federal government in implementing pertinent sections of the federal Clean Air Bill, Amendments. Further, CARB has responsibility for controlling stationary and mobile source air pollutant emissions throughout the State.

Fresno County is in the CARB-designated, SJVAB. A map of the SJVAB is provided in Exhibit 1. In addition to Fresno County, the SJVAB includes San Joaquin, Kern, Kings, Madera, Merced, Stanislaus, and Tulare Counties.

The District is the agency responsible for monitoring and regulating air pollutant emissions from stationary, area, and indirect sources within Fresno County and throughout the SJVAB. The District also has responsibility for monitoring air quality and setting and enforcing limits for source emissions. CARB is the agency with the legal responsibility for regulating mobile source emissions. The District is precluded from such activities under State law.

The U.S. Environmental Protection Agency (EPA) is responsible for enforcement of the provisions of the federal Clean Air Bill, Amendments. Based on the provisions contained in the 1990 amendment, EPA designated the entire San Joaquin Valley as non-attainment for two pollutants: ozone and particle matter less than 10 microns in size or PM_{10}. More recently, on April 24, 2004, the EPA reclassified the San Joaquin Valley ozone nonattainment area from its previous severe status to "extreme" at the request of the SJVAPCD Board. Fresno County, it is considered to be in non-attainment of ozone and PM_{10} standards.

The District was formed in mid-1991 and prepared and adopted the San Joaquin Valley Air Quality Attainment Plan (AQAP), dated January 30, 1992, in response to the requirements of the State CCAA. The CCAA requires each non-attainment district to reduce pertinent air contaminants by at least five percent (5%) per year until new, more stringent, 1988 State air quality standards are met.

For regional pollutants such as ozone and PM_{10}, the impact of new development cannot be predicted in terms of concentrations, but is addressed in terms of changes in the regional burden of emissions.

The District has established interim thresholds for certain pollutants as shown in Table 2.3-3. For localized pollutants, such as CO, an increase in concentrations that would result in a predicted violation of the most stringent State or federal standard [20.0 parts per million (PPM) for 1-hour or 9.0 PPM for 8 hours] is considered to represent a significant impact. This assessment provides two types of project area pollutant impact analysis: (1) regional mobile and area source impacts, (2) street and highway traffic impacts.

TABLE 2.3-3
SJVAPCD OZONE PRECURSOR EMISSION THRESHOLDS FOR PROJECT OPERATIONS

Non-Attainment Pollutant	Minimum Thresholds Tons/Year
NO_X	10
ROG	10

Source: SJVAPCD

Existing Transportation Control Measures (TCMs) & Air Quality Mitigation Programs/ Policies

Until the passage of the CCAA, the primary role of air districts throughout California was control of stationary sources of pollution such as industrial processes and equipment (stationary sources). With the passage of the FCAA and CCAA, air districts were required to implement transportation control measures (TCMs) and are encouraged to adopt indirect source control programs to reduce area source emissions. These mandates created the need for the District to work closely with cities, counties, and with regional transportation planning agencies (RTPAs) to develop new programs.

SJVAPCD Air Quality Attainment Plan (AQAP)

The SJVAPCD AQAP - TCMs were developed by the District with assistance from the RTPAs. The TCMs fall into several categories including mobility improvements, trip reduction programs, and user incentives among others.

This joint effort culminated in the development and subsequent adoption of eleven TCMs:

1. Alternative Work Schedules
2. Bicycling
3. Fleet Operators Alternate Fuels Program
4. Park-and Ride Lots
5. Parking Management
6. Passenger Rail
7. Public Transit
8. Rideshare Program
9. Telecommunications
10. Traffic Flow Improvements
11. Trip Reduction Programs

Rate of Progress Plans

Various TCMs that have been incorporated into the Rate of Progress (ROP) Plans, or have been identified by the regional transportation planning agency (Council of Fresno County Governments) to provide for positive air quality conformity findings associated with the 2001 Fresno County Regional Transportation Plan (RTP) and the Federal Transportation Improvement Program (FTIP).

District Rules

The following rules have been adopted by the District and are required. The District is proposing an indirect source mitigation program which is also discussed.

District Rules 4901 (Wood Burning Fireplaces and Wood Burning Heaters) and District Rule 4902 (Residential Water Heaters) limit emissions of PM_{10} and NOx . On July 17, 2003, amendments to Rule 4901 were adopted that may affect future residential developments.

Limits on Wood-Burning Devices in New Residential Developments

Density Ratios	2 or fewer homes per acre	More than 2, fewer than 3, homes per acre	3 or more homes per acre
Open-hearth fireplace allowed?	Yes	No	No
EPA Phase II certified wood burning heater or pellet stove allowed?	Yes	Yes	Yes
Number of solid fuel * burning devices allowed	One per home	One per home	One per home, 2 per acre

* Solid fuel includes wood, pellets, and manufactured fire logs.

Source: SJVAPCD

District Regulation VIII (Fugitive PM10 Prohibitions)- Regulation VIII (Rules 8011-8081) is a series of rules designed to reduce PM10 emissions (predominantly dust/dirt) generated by human activity, including construction, road construction, bulk materials storage, landfill operations, etc. A Dust Control Plan must be submitted for the District's approval at least 30 days before construction activities begin if the project cumulatively encompasses 40 acres or more or will move more than 2,500 cubic yards per day of material on at least three days of the project. A construction assistance bulletin has been enclosed for the applicant.

The District is currently amending Regulation VIII. On August 19 and September 16, 2004, the District's Board approved amendments and anticipates implementing revised requirements on or about October 1, 2004. For non-residential uses, the amendments include changes to Rule 8021. The Dust Control Plan threshold has changed from 40.0 acres to 5.0 acres. For a non-residential site of 1-5 acres, an owner/operator must provide written notification to the District of the intent to begin earth moving activities.

For residential uses, the Dust Control Plan threshold has changed from 40.0 acres to 10.0 acres. For a residential site of 1-10 acres, an owner/operator must provide written notification to the District of the intent to begin earth moving activities.

In that construction on the Fancher Creek project will commence after October 1, 2004, the applicant will be required to contact the District to determine where requirements may have changed and how rule changes may affect the project.

District Rule 4641 (Cutback, Slow Cure, and Emulsified Asphalt, Paving and Maintenance Operations). Paving operations of this project will be subject to Rule 4641. This rule applies to the manufacture and use of cutback asphalt, slow cure asphalt and emulsified asphalt for paving and maintenance operations.

Indirect Source Mitigation Program

The District is developing a set of rules to address emissions from development. Under the Program proposed in Rule 9510 and Rule 3180, development projects would be required to mitigate a portion of their emissions with on-site mitigation and/or by contributing to a mitigation fund that would be used to pay for the most cost-effective projects to reduce emissions. The amount of the fee may be revised in the future depending on the emission reductions required to meet rate of progress and the emission reducing projects available to fund. This proposed development may or may not be subject to the rules once they are adopted. The developer is advised to monitor the development of these rules, and consider them in project planning.

IMPACTS

Standards of Significance

According to the CEQA Guidelines, a project will normally have a significant adverse impact on air quality if it will "violate any ambient air quality standard, contribute substantially to an existing or projected air quality violation, or expose sensitive receptors to substantial pollutant concentrations."

For regional pollutants such as ozone, PM_{10}, sulfur dioxide or nitrogen dioxide, the impact of new development cannot be predicted in terms of concentrations, but is addressed in terms of changes in the regional burden of emissions. For non-attainment pollutants (ozone precursors or PM_{10}), any net increase in regional emissions is considered significant.

For localized pollutants, such as carbon monoxide, an increase in concentrations that would result in a predicted violation of the most stringent State or federal standard (20.0 PPM for 1-hour or 9.0 PPM for 8-hours) is considered to represent a significant impact. This assessment provides for two types of localized area pollutant impact analysis; street and highway improvements and traffic volumes and construction impacts.

Regional and Area Source Operations Impact Assessment

The following regional air quality impact assessment has been developed to identify the amount of pollutant increases from mobile and area sources associated with the Project. The regional air quality analysis was conducted for the Year 2015, assumed to the completion date of the project.

Results of the 2015 regional mobile source analysis and the area source operations analysis are reflected in Table 2.3-4. The URBEMIS 2002 model results are contained in the Technical Appendices on file with the City Planning and Development Department.

TABLE 2.3-4: Emission Projections

Operational Source Emissions (tons/year) [1]				
Use	**Units/SQ. FT.**	**ROG**	**NOx**	**PM_{10}**
Mixed Use Development	Various [2]	59.74	82.92	146.99
Area Source Operations Emissions (tons/year)[3]				
Use	**Units/SQ. FT.**	**ROG**	**NOx**	**PM_{10}**
Mixed Use Development	Various [2]	18.77	8.31	0.02

[1] Mobile and Area Sources Emissions calculated using URBIMIS 2002 model.
[2] See Project Description
[3] Area Source Emissions include Stationary Sources.

The totals for operational and area source emissions for the year 2015 are: ROG - 78.51 tons/year; NOx - 91.23 tons/year; and PM_{10} - 147 tons/year. Projected opening day emissions exceed the District Interim Emission Thresholds which is to be expected for a large mixed-use project that will be phased over a several year period. Project emissions are expected to be significant and unavoidable. Even with credit taken in the URBEMIS modeling process for trip reduction measures available to the project, emissions are reduced by only 2-3.5%.

Localized (CO and Construction) Air Quality Impacts

CO Analysis

The project is expected to generate automobile traffic that will affect air quality along adjacent streets and highways. Adjacent to such roadways, the measurable pollutant most significant is CO. Federal regulations require that new roadway improvement projects, that may be implemented using federal funds, must not exceed State or federal standard CO concentrations of 20 parts per million (PPM) for 1 hour (the federal maximum standard of 35 PPM is far less stringent than the State's maximum standard of 20 PPM). Further, emissions generated from development projects must also not exceed the minimum 8-hour standard of 9 PPM. To analyze the No Project's and Project's "worst case" CO concentrations along such roadways, the analysis methodology considered the highest second annual maximum CO concentration reported in 2003, using approximately 3.6 PPM as an estimate of the background concentration for the 1 hour standard and 2.56 PPM as an estimate of the background concentration for the 8 hour standard (source: CARB annual publications).

Seventy-five degrees was used as the mean summer temperature in Fresno. The emissions rates used in this analysis were obtained from the CALINE4 model.

To assess the cumulative impacts of increased traffic generated by other planned developments, an analysis of future year 2025 peak hour volumes was developed. The year 2025 trip assignments were developed from corresponding traffic impact analyses of the Fancher Creek Development. Six receptor sites were chosen to conduct the analysis. The CALINE4 model was run using "worst case" conditions for the 2025 conditions. The next step is to add the maximum CO concentration generated by the project to the background CO concentration of approximately 3.6 PPM for the 1 hour standard and 2.56 PPM for the 8 hour standard based on CO data from 2003.

Results of the year 2025 project CO concentration analysis during the AM and PM peak hours are contained in the following tables. Based on the results, CO concentration levels will meet federal and State air quality standards for the project.

TABLE 2.3-5
LOCAL ROADWAY AIR QUALITY SEGMENT ANALYSIS AM

RECEPTORS		AIR QUALITY STANDARDS				AIR QUALITY LEVELS FOR EACH RECEPTOR		ARE STANDARDS EXCEEDED (YES/NO)?	
		FEDERAL		STATE					
#	DESCRIPTION	1 hr	8 hr	1 hr	8 hr	1 hr	8 hr	1 hr	8 hr
BACKGROUND LEVELS (ppm)		35.0	9.0	20.0	9.0	3.6	2.56	NO	NO
1	Clovis/Tulare	35.0	9.0	20.0	9.0	5.6	3.5	NO	NO
2	Kings Canyon/Argylle	35.0	9.0	20.0	9.0	6.6	3.9	NO	NO
3	Kings Canyon/Fowler	35.0	9.0	20.0	9.0	6.1	2.6	NO	NO
4	Fowler/Tulare	35.0	9.0	20.0	9.0	5.4	2.6	NO	NO
5	Belmont/Fowler	35.0	9.0	20.0	9.0	4.8	3.2	NO	NO
6	Belmont/Armstrong	35.0	9.0	20.0	9.0	5.3	2.7	NO	NO
AVERAGES/SUMMARY		35.0	9.0	20.0	9.0	5.6	3.08	NO	NO

TABLE 2.3-6
LOCAL ROADWAY AIR QUALITY SEGMENT ANALYSIS PM

RECEPTORS		AIR QUALITY STANDARDS				AIR QUALITY LEVELS FOR EACH RECEPTOR (R1 and R2)		ARE STANDARDS EXCEEDED (YES/NO)?	
		FEDERAL		STATE					
#	DESCRIPTION	1 hr	8 hr	1 hr	8 hr	1 hr	8 hr	1 hr	8 hr
BACKGROUND LEVELS (ppm)		35.0	9.0	20.0	9.0	3.6	2.56	NO	NO
1	Clovis/Tulare	35.0	9.0	20.0	9.0	5.7	3.6	NO	NO
2	Kings Canyon/Argylle	35.0	9.0	20.0	9.0	6.8	4.0	NO	NO
3	Kings Canyon/Fowler	35.0	9.0	20.0	9.0	6.4	2.6	NO	NO
4	Fowler/Tulare	35.0	9.0	20.0	9.0	5.4	2.6	NO	NO
5	Belmont/Fowler	35.0	9.0	20.0	9.0	4.9	3.3	NO	NO
6	Belmont/Armstrong	35.0	9.0	20.0	9.0	5.3	2.7	NO	NO
AVERAGES/SUMMARY		35.0	9.0	20.0	9.0	5.75	3.13	NO	NO

Construction Impacts

Construction air quality impacts are generally attributable to dust generated by equipment and vehicles. Fugitive dust is emitted both during construction activity and as a result of wind erosion over exposed earth surfaces. Clearing and earth moving activities do comprise major sources of construction dust emissions, but traffic and general disturbances of soil surfaces also generate significant dust emissions. Further, dust generation is dependent on soil type and soil moisture.

Adverse effects of construction activities cause increased dust-fall and locally elevated levels of total suspended particulate. Dust-fall can be a nuisance to neighboring properties or previously completed developments surrounding or within the Project area and may require frequent washing during the construction period. Further, asphalt paving materials used during construction will present temporary, minor sources of hydrocarbons that are precursors of ozone.

PM_{10} emissions can result from construction activities of the project. The SJVAPCD requires implementation of effective and comprehensive control measures, rather than a detailed quantification of emissions. The SJVAPCD has determined that compliance with Regulation VIII for all sites and other control measures will constitute sufficient mitigation to reduce PM_{10} impacts to a level considered less-than significant.

MITIGATION

Compliance with Regulation VIII under the San Joaquin Valley Air District for all construction sites will constitute sufficient mitigation to reduce PM_{10} impacts to a level considered less-than significant.

In addition, the following measures are designed to minimize localized fugitive dust during grading and construction activities of the project, and to reduce emissions from long-term project operation:

1. All personnel working on the project will be trained prior to starting work on methods for minimizing air quality impacts during construction.

2. All active portions of construction sites, earthen access roads, and material excavated or graded shall be sufficiently watered to prevent excessive amounts of dust. Watering shall occur at least twice a day with complete coverage, preferably in the late morning and after work is done for the day. Where feasible, reclaimed water shall be used.

3. All clearing, grading, earth moving, or excavation activities shall cease during periods of winds greater than 20 miles per hour averaged over one hour.

4. All material transported off site shall be either sufficiently watered or securely covered to prevent excessive amounts of dust.

5. The area disturbed by clearing, earth moving, or excavation activities shall be minimized at all times. This can be accomplished by mowing instead of discing for weed control and seeding and watering inactive portions of the construction site until grass is evident.

6. Construction site vehicle speeds shall be limited to 15 miles per hour.

7. If used, petroleum-based dust palliatives shall meet the road oil requirements of the District's rule regarding Cutback Asphalt Paving Materials.

8. Streets adjacent to the Project site shall be swept as needed to remove silt that may have accumulated from construction activities. The streets are required to be wet prior to or in conjunction with rotary sweeping.

9. All internal combustion engine driven equipment shall be properly maintained and well tuned according to the manufacturer's specifications.

10. Exposed stockpiles of soil and other excavated materials will be enclosed, covered, watered twice daily, or applied with soil binders.

11. During the smog season (May through October) the construction period shall be lengthened to minimize the number of vehicles and equipment operating at the same time.

12. Carpooling will be encouraged among construction workers through contractor bid specifications and project orientation for workers.

13. When available, electric equipment shall be utilized in lieu of gasoline powered engines.

14. Vehicle idling time will be minimized (e.g., 5 minute maximum). ? construction phases only

15. Construction activities shall minimize obstruction of through traffic lanes adjacent to the site and a flag person shall be retained to maintain safety adjacent to existing roadways.

16. The use of energy efficient street lighting and parking lot lighting shall be considered to reduce emissions.

17. Less polluting alternatives to wood stoves shall be required, in accordance to Rule 4901, where feasible, e.g. CEC certified natural gas fireplace appliances, which are 70% efficient and create far less pollution than wood stoves.

18. Landscaping shall include water efficient plant species and irrigation to reduce water consumption and provide passive solar benefits.

19. Require that space and water heaters comply with District Stationary Source Rules and Uniform Mechanical Code requirements, and encourage the installation of energy efficient lighting beyond Title 24 requirements for all commercial/residential developments.

20. Use of HVAC equipment with a SEER of 12 or greater.

21. Provide pedestrian/transit oriented project design.

22. Restrict residential traditional wood fireplaces and install only natural gas fireplaces or inserts.

23. Commit to on-site improvements; bikeways, transit infrastructure, pedestrian enhancements.

24. For non-residential development include secure bicycle parking and paths connected to the bikeway system from the development.

25. For reducing VMT, consider Park and Ride Lots and a Satellite Telecommuting Center.

Neighborhood Electric Vehicles
Trolley buses for pedestrian mall & commercial area

Level of Significance Following Mitigation

With implementation of the construction-related mitigation measures listed above, air quality impacts of the project are expected to be insignificant. Operational and area emissions, however, are expected to remain significant and unavoidable with project implementation.

2.4 GEOLOGY AND SOILS

Introduction

This chapter describes existing soil conditions and geotechnical conditions in the project area and identifies impacts and mitigation associated with implementation of the proposed project. Information on geology and soils was compiled using information from the NRCS, the U.S. Geological Survey, California Department of Conservation, and other geotechnical and soils information prepared for the project site.

Setting

The Central Valley constitutes a structural downwarp overlain by a nearly level alluvial plain extending from Redding on the north to the Tehachapi Mountains on the south. The original basin underlying the Central Valley gradually filled with waterborne sediments, largely derived from erosion of the Sierra Nevada. The San Joaquin River is the principal river in the area. Alluvial fans, formed by this river, are the largest geomorphic features in the Fresno area. The formation of the fans resulted in rather flat regional topography except for some areas adjacent to the river where geologic forces, including river erosion, have caused relatively significant elevation variations.

The project site slopes gently to the southwest. The elevation is approximately 270 feet above sea level. Fancher Creek traverses the project area. In addition, the Eisen Ditch is located on the site.

Soils

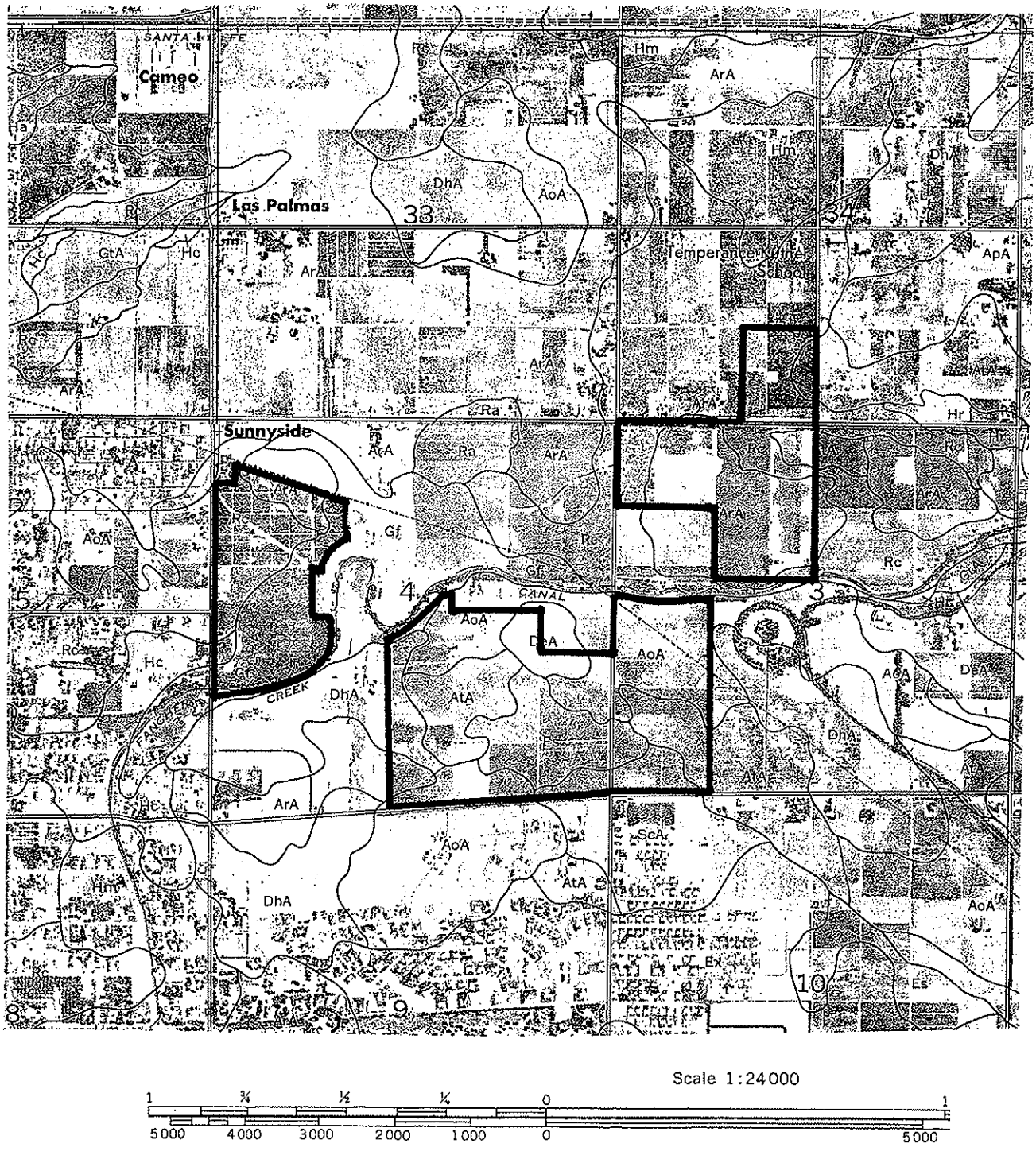
The NRCS has mapped eight primary soil units on the project site which are shown on Figure 2.4-1. Soils are generally sandy with low erosion hazard. Some of the site soils are characterized by hardpan layers 24 to 48 inches below the surface. The following generalized soil descriptions are based on NRCS data and field observations.

Atwater Sandy Loam, 0 to 3 percent slopes (AoA) is the primary site soil covering approximately 30 percent of the site. Runoff from the soil is very slow and permeability is rapid. The hazard of erosion is negligible. The soil has a Storie index rating of 70 (capability III) and is considered prime agricultural soil.

Atwater Sandy Loam, 0 to 3 percent slopes (ArA) has a similar profile to the Atwater series except that it has a sandy loam surface layer. The Storie index rating is 81 (capability II) and is considered prime agricultural soil.

Atwater Sandy Loam, moderately deep, 0 to 3 percent slopes (AtA) has a similar profile to the Atwater series except that it has a lightly cemented material that underlies the surface at moderate depth. The Storie rating is 65 (capability III) and is considered agricultural soil of statewide importance.

Figure 2.4-1: Project Site Soils



Delhi Sandy Loam, 0 to 3 percent slopes (DhA) is excessively drained due to rapid permeability. Erosion hazard is slight to none and runoff is very slow. The Storie rating is 72 (capability III) and is considered prime agricultural soil.

Exeter sandy loam (ES) is a sandy soil with a hardpan layer generally more than 24 inches below the surface. Permeability is slow because of the hardpan. The Storie rating is 42 (capability III) and is considered agricultural soil of statewide importance.

Grangeville fine sandy loam 0 to 2 percent slopes (Gf) is a sandy soil with slow runoff due to the nearly level profile. Permeability is moderately rapid. The Storie rating is 90 (capability I) and is considered prime agricultural soil.

Ramona loam, 0 to 2 percent slopes (Rc) is representative of the nearly level topography of the project site. The characteristics of this soil type unit include well drained with a moderately slow permeability subsoil and a low shrink-swell potential. Runoff is slow and the hazard of erosion is low. The soil has a Storie index rating of 85 (capability I) and is considered a prime agricultural soil.

San Joaquin sandy loam 0 to 3 percent slopes (ScA) is a sandy soil with a hardpan at depths of 24 to 48 inches. Runoff is slow and water holding capacity is low. The Storie rating is 31 (capability III) and is considered agricultural soil of statewide importance.

Records of the Fresno County Environmental Health System indicate use of an above-ground storage tank at 5841 E. Kings Canyon Road resulted in soil contamination which required remediation. Departmental records also indicate that the California Regional Water Quality Control Board issued a Site Closure letter for the subject property on September 25, 2001, stating that no further site investigation or remediation actions are required at the subject site.

Seismicity

No active or potentially active faults are known to cross the project site, nor is the project located in a designated "Special Studies Zone" under the Alquist-Priolo Special Studies Zone Act of 1972. The project site is, however, located within a region that is seismically active. The primary seismic hazard is ground shaking produced by a number of active and potentially active faults in the Coast Range and the Sierra Nevada. Major faults west of the project site include the San Andreas, Ortigalita, Calaveras, Hayward, Coalinga, and Rinconada Faults. The San Andreas Fault is possibly the best known fault and is located 70 miles west of the project site. Major faults east of the project site include the Owens Valley Fault, Kern Front Fault Groups, White Wolf Fault, and Kern Canyon Fault. The Owens Fault Group is approximately 60 miles east of the project site.

The Fresno area is rated a "moderate" zone for earthquake intensity. A rating of "moderate" on the intensity scale is defined by the United States Geological Survey as an earthquake measuring 6.0 to 6.9 magnitude on the Richter Scale. A magnitude of 6.0 to 6.9 represents an earthquake felt by everyone, causing furniture to move, waves on ponds and moderate damage to reinforced and unreinforced masonry structures. An earthquake of magnitude 8.5 is considered the maximum credible quake and would most likely result from activity on the San Andreas Fault.

Liquefaction

Liquefaction involves a sudden loss in strength of a saturated soil caused by an earthquake, resulting in the temporary transformation of the soil into a fluid mass. If the liquefying layer is near the surface, the effects are such like that of quicksand on any structure located on it. If the layer is in the subsurface, it may provide a sliding surface for the material above it. Liquefaction typically occurs in areas where groundwater is less than 30 feet below the surface, and where the soils are composed predominantly of poorly consolidated fine sand. No indication of liquefaction has been detected on the site by the project engineer.

Slope Stability/Landslides

Slope stability and landslides are not known to be a problem in the project area due to the relatively flat topography. There are, however, slopes of up to 30 percent located in the eastern portion of the project site.

Subsidence

Subsidence is the gradual lowering of the ground surface and results from settlement as the consequences of compaction or loss of subsurface materials such as groundwater. The Fresno area is not known to have experienced significant subsidence or subsequent constraints to development due to subsidence.

IMPACTS

Section 2.1 of this EIR, *Land Use, Planning, and Agriculture*, discusses potential project impacts on agricultural productivity, prime soils, and the conversion of agricultural land. This chapter discusses potential project impacts on other geologic and soil characteristics.

The analysis is based on review of published information and reports regarding geology, seismicity and soils, site visits to observe topography and soil characteristics, and consultation with County staff. In that the applicant has not submitted development plans nor subdivision maps, preliminary grading plans are not yet available. Therefore, the discussion of impacts is necessarily general for several subtopics.

Standards of Significance

An impact would be considered significant if: 1) substantial erosion of existing surface materials would occur and potentially impact either the site or adjacent properties; and 2) the proposed structures, facilities, utilities, and streets would be subject to major seismic hazards that could result in property damage or personal injury.

Impact

- **Seismic activity along any of the regional faults could result in moderate damage to structures in the proposed project. This would be a *less-than-significant impact.***

Project development would locate residents, structures, and facilities at risk of moderate ground shaking in the event of a moderate-to-major earthquake on local or regional faults. Although the level of seismic risk is not unusual for the region, property damage and injuries could result. Impacts are likely to be limited to ground motion, not surface rupture. Soil properties and post-development conditions on the project site may vary the susceptibility of ground motion and secondary hazards including liquefaction and differential settlement.

Structures in the City of Fresno are required to be constructed to withstand an earthquake intensity of VIII or better, which is consistent with the maximum expected earthquake. Adherence to specifications of the Uniform Building Code would minimize structural damage resulting from seismic activity. Project site grading and cut and fill activity would be subject to conditions of a grading permit. Prior to issuance of a grading permit, the developer would be required to demonstrate slope stability for artificial slopes created. Existing building codes and standards of the City of Fresno will reduce potential seismic impacts to a less-than-significant level.

Mitigation

No additional mitigation is required.

Impact

- **The project would be developed on soils which have development constraints which could cause structural damage. This would be a *less-than-significant impact.***

Site soils consist of sandy loams, with some fine clayey layers which have low-to-moderate expansive characteristics. Expansive soils may cause damage to building foundations, patios, garages, and roadways. The use of special construction techniques and design (soil mixed with imported earth) can effectively control these problems. Low-strength soils may experience compaction, producing non-seismic and seismic-differential settlement and potential damage to structures, concrete, and roadways. Buildings and roads must be designed to offset the ability of the soil to support loads, especially under saturated conditions. The City will require that structures and infrastructure subject to expansive soils or other soil constraints shall be constructed with properly designed foundations and footings in accordance with the Uniform Building Code.

Existing building codes and standards of the City of Fresno will reduce potential structural impacts, as a result of soil conditions, to a less-than-significant level.

Mitigation

No additional mitigation is required.

Impact

- **Development of the proposed project would require excavation, grading, and other construction operations. Slope and soil disturbance could result in soil erosion. This would be a *potentially significant impact.***

Although the project development would include revegetation and landscaping that would eventually decrease erosion of soils over the life of the project, disruption of surface soils through excavation, cut and fill, and grading associated with project construction would result in erosion and sedimentation impacts. Significant grading, and cut and fill activity will be necessary to implement the proposed project.

The City will require preparation of a grading plan which incorporates temporary stabilization measures to protect exposed areas during construction activities, watering to control dust, and soil erosion, and sedimentation control measures.

The developer will be responsible for measures to mitigate impacts to water quality from erosion, and must also meet water quality standards for the State of California. To be in compliance, the applicant will be required to obtain a grading permit from the City of Fresno and a General Construction permit, or National Pollution Discharge Elimination System (NPDES) permit, available from the California Regional Water Quality Control Board. The General Construction permit is required when grading directly disturbs one or more acres of the property. The project must also be in compliance with any standards established by RWQCB for non-point sources of pollution.

Mitigation

The developer shall be responsible for the following mitigation measure to be included as a condition of approval on each conditional use permit, tentative tract map, or site plan:

1. A qualified geologist or consultant shall prepare and submit an erosion control plan for approval by the City of Fresno Public Works Department demonstrating compliance with water quality standards. Elements of this plan shall address both the potential for soil erosion and non-point source pollution.

Level of Significance After Mitigation

Mitigation would reduce impacts to a less-than-significant level.

2.5 BIOTIC RESOURCES

This section describes biotic resources within the planning area, evaluates site impacts to those resources, and proposes mitigation measures. The development of open space parcels in or near sensitive areas can damage or modify biotic habitats used by sensitive plant and wildlife species. In such cases, site development may be regulated by state or federal agencies, subject to provisions of CEQA.

Setting

The study area is located in the San Joaquin Valley on agricultural, urban, and vacant lands southwest of the City of Fresno. The elevation of the study area is approximately 270 feet above sea level. Annual precipitation is approximately 8 to 15 inches, almost 95 percent of which falls between the months of October and March.

Biotic Habitats

Three primary biotic habitats occur within the study area: 1) agricultural (vineyards, orchards, truck farming); 2) urban/ruderal (fallow land, residential, commercial, and roadways); and 3) Great Valley Cottonwood Riparian Forest.

Agriculture. The surrounding agricultural habitat is dominated by vineyards, orchards, and truck farming. Agriculture provides relatively low habitat value for wildlife due to the lack of understory vegetation. Annual management practices eliminate breeding and foraging habitat for many small birds and mammals native to the region. Species observed in the agricultural habitat include Mourning Doves, American Crows, House Sparrows, western fence lizards , and coyotes. Domestic dogs and cats from nearby residential areas occur regularly in this habitat, further diminishing value for wildlife.

Urban/Ruderal. The urban/ruderal habitat includes highly modified habitats planted with ornamental trees and shrubs. Ruderal habitats comprise those frequently disturbed areas that often only support weedy annuals adapted to such disturbance. Urban habitats support a diversity of bird species during spring and fall migration including White Crowned Sparrows, Yellow-rumped Warblers, and Western Scrub Jays. California Quail and House Finches would also be expected to visit urban areas. Small mammals associated with urban areas include house mice and black rats.

Great Valley Cottonwood Riparian Forest. This habitat occurs along the banks of Fancher Creek and contains a mixture of mature cottonwood trees, willows, and other water-related species. The habitat ranges from nearly non-existent in highly disturbed areas to approximately 200 feet wide near the eastern end of the project site.

Special Status Plants and Animals

A number of special status plants and animals occur in the vicinity of the study area. These species, and their potential to occur in the study area, are listed in Table 2.5-1 on the following pages.

TABLE 2.5.1 - SPECIAL STATUS SPECIES THAT OCCUR OR HAVE THE POTENTIAL TO OCCUR IN THE PROJECT VICINITY

ANIMALS (adapted from CNDDB 1996)

Species Listed as Threatened or Endangered under the State and/or Federal Endangered Species Act

Species	Status	Habitat	*Occurrence in the Study Area
Conservancy Fairy Shrimp (*Branchinecta conservatio*)	FE	Found in deep vernal pools of California.	Unlikely. The site provides unsuitable habitat for this species.
Vernal Pool Fairy Shrimp (*Branchinecta lynchi*)	FT	Found in vernal pools, but may use other seasonal wetlands.	Possible. The site provides suitable wetlands habitat for this species.
Vernal Pool Tadpole Shrimp (*Lepidurus packardi*)	FE	Found in deep vernal pools of California.	Unlikely. The site provides unsuitable habitat for this species.
Valley Elderberry Longhorn Beetle (*Desmocerus californicus dimorphus*)	FT	Lives in mature elderberry shrubs of California=s Central Valley and Sierra Foothills.	Absent. Elderberry plants have not been observed on the site.
Blunt-nosed Leopard Lizard (*Gambelia silus*)	FE, CE	Frequents sparsely vegetated alkali and desert scrub habitats.	Unlikely. The site provides unsuitable habitat for this species.
Swainson=s Hawk (*Buteo swainsoni*)	CT	Uncommon resident and migrant in the Central Valley. Forages in grasslands and fields close to riparian areas.	Unlikely. The site provides marginal foraging habitat for this species, which has not been seen often in the project vicinity.
Western Yellow-billed Cuckoo (*Coccyzus americanus occidentalis*)	CE	Frequents valley foothill and desert riparian habitats in scattered locations in California	Absent. The site provides unsuitable breeding and foraging habitat for this species, which has been extirpated from the project vicinity.
Fresno Kangaroo Rat (*Dipodomys nitratoides exilis*)	FE, CE	Frequents alkali scrub and herbaceous habitats with scattered shrubs in the southwestern San Joaquin Valley.	Absent. The site provides unsuitable breeding and foraging habitat for this species.
San Joaquin Kit Fox (*Vulpes macrotis mutica*)	FE, CT	Frequents desert alkali scrub, annual grasslands and may forage in adjacent agricultural habitats.	Absent. Although the site provides suitable breeding and foraging habitat for this species, kit fox have not been observed in the project vicinity for several decades.

State and Federal Species of Special Concern

Species	Status	Habitat	*Occurrence in the Study Area
California Tiger Salamander (*Ambystoma californiense*)	FPE, CSC	Frequents annual grasslands; requires vernal pools for breeding and rodent burrows for refuge.	Possible. The site provides marginal breeding habitat, but suitable aestivation habitat for populations that breed offsite.
Western Spadefoot Toad (*Scaphoipus hammondii*)	CSC	Frequents annual grasslands and foothill hardwood woodlands; requires vernal pools or other temporary wetlands for breeding.	Possible. The site provides marginal breeding habitat, but suitable aestivation habitat for populations that breed offsite. Found in vernal pools north of the study area by J. Stebbins in a 1992 site visit.
Western Pond Turtle (*Clemmys marmorata*)	CSC	Frequents suitable aquatic habitats throughout California.	Unlikely. Turtles have not been seen in the golf course ponds. These ponds provide marginal habitat. Bullfrogs and fish in the ponds would limit survival of young turtles.

TABLE 2.5.1 - LIST OF SPECIAL STATUS SPECIES THAT OCCUR OR HAVE THE POTENTIAL TO OCCUR IN THE PROJECT VICINITY.

ANIMALS (adapted from CNDDB 1996)
State and Federal Species of Special Concern (cont.)

Species	Status	Habitat	*Occurrence in the Study Area
California Horned Lizard (*Phrynosoma coronatum*)	CSC	Frequents sandy washes with scattered shrubs, grasslands, scrublands, and oak woodlands of Central California.	Absent. The site provides marginal to unsuitable breeding and foraging habitat for this species.
Golden Eagle (*Aquila chrysaetos*)	CSC	Frequents rolling foothills, mountain areas, sage-juniper flats and desert habitats; requires cliffs or large trees for nesting.	Possible. The site provides marginal to suitable foraging habitat for this species.
Burrowing Owl (*Athene cunicularia*)	CSC	Frequents open, dry grasslands, deserts and ruderal areas; requires ground burrows for nesting and roosting cover.	Likely. The site provides suitable rodent burrows for nesting and roosting cover for this species. Owl pellets were located at two separate ground burrow entrances in the site. .
White-tailed Kite (*Elanus caeruleus*)	CSC	Frequents open grasslands and agricultural areas throughout Central California; requires groves of dense broad-leafed deciduous trees for nesting	Possible. The site provides suitable foraging habitat for this species.
Northern Harrier (*Circus cyaneus*)	CSC	Frequents, grasslands, open rangelands, freshwater and emergent wetlands.	Likely. The site provides suitable breeding and foraging habitat for this species.
Ferruginous Hawk (*Buteo regalis*)	FSC, CSC	Breeds in the Pacific Northwest and Canada, but winters in a variety of California habitats, including grasslands, savannahs and wetlands.	Possible. The site provides suitable winter transient foraging habitat for this species.
Sharp-shinned Hawk (*Accipiter striatus*)	CSC	Breeds in the mixed conifer forests of the northern Sierra Nevada, but winters in a variety of California habitats.	Possible. The site provides suitable winter transient foraging habitat for this species.
Cooper=s Hawk (*Accipiter cooperii*)	CSC	Breeds in oak woodlands, riparian forests and mixed conifer forests of the Sierra Nevada, but winters in a variety of California lowland woodland habitats.	Unlikely. There is little tree cover on the site. Therefore, it provides marginal to unsuitable foraging habitat for this species.
Merlin (*Falco columbarius*)	CSC	Breeds in Canada, but winters in a variety of California habitats, including grasslands, savannahs and wetlands.	Possible. The site provides suitable winter transient foraging habitat for this species.
Prairie Falcon (*Falco mexicanus*)	CSC	Frequents annual grasslands to alpine meadows; requires cliffs or rock outcroppings for nesting.	Possible. The site provides suitable foraging habitat for this species.
Long-eared Owl (*Asio otus*)	CSC	Frequents riparian woodlands and forests of California.	Absent. The site provides unsuitable breeding and foraging habitat for this species.

TABLE 2.5-1 - LIST OF SPECIAL STATUS SPECIES THAT OCCUR OR HAVE THE POTENTIAL TO OCCUR IN THE PROJECT VICINITY.

ANIMALS (adapted from CNDDB 1996) State and Federal Species of Special Concern (cont.)

Species	Status	Habitat	*Occurrence in the Study Area
Short-eared Owl (*Asio flammeus*)	CSC	Frequents marshes, grasslands, irrigated lands, dunes and other treeless habitats of the Central Valley and western Sierra Nevada foothills.	Possible. The site provides suitable winter transient foraging habitat for this species.
California Horned Lark (*Eremophila alpestris actia*)	CSC	Frequents a variety of open habitats where trees and shrubs are absent; requires grasslands and fallow fields for nesting.	Possible. The site provides suitable breeding and foraging habitat for this species.
Yellow Warbler (*Dendroica petechia _rewster*)	CSC	Frequents riparian deciduous habitats of alder, willow and cottonwoods: requires forests with heavy brush under story for nesting.	Absent. The site provides unsuitable breeding and foraging habitat for this species.
Tri-colored Blackbird (*Agelaius tricolor*)	CSC	Frequents grassland and cropland habitats; requires proximity to fresh water and emergent wetland vegetation with dense cattails and thickets of willow for nesting.	Possible. The site provides suitable foraging habitat for this species.
Yuma Myotis (*Myotis yumanensis*)	FSC, CSC	Frequents ponds, streams, stock tanks; requires buildings, mines, caves or spaces under bridges for roosting and nesting.	Possible. The site provides suitable foraging habitat for this species, which ranges throughout California.
Long-eared Myotis (*Myotis evotis*)	FSC, CSC	Frequents brush woodland, and forest habitats; requires buildings, crevices, snags for roosting and nesting	Absent. The site provides marginal to unsuitable breeding and foraging habitat for this species.
Fringed Myotis (*Myotis thysanodes*)	FSC, CSC	Frequents pinyin-juniper, valley foothill hardwood, and coniferous forests; requires buildings mines, caves or crevices for roosting and nesting.	Absent. The site provides unsuitable breeding and foraging habitat for this species.
Long-legged Myotis (*Myotis volans*)	FSC, CSC	Frequents woodland, forest and shrub habitats; requires buildings, mines, rock crevices, or snags for roosting and nesting.	Absent. The site provides unsuitable breeding and foraging habitat for this species.
Spotted Bat (*Euderma maculatum*)	FSC, CSC	Frequents deserts, grasslands and forests habitats; requires rock crevices for roosting and nesting.	Unlikely. The site provides marginal to unsuitable breeding and foraging habitat for this species.
Pacific Western Big-eared Bat (*Plecotus townsendii townsendii*)	FSC, CSC	Frequents all but subalpine and alpine habitats; requires buildings, mines, caves or tunnels for roosting and nesting.	Unlikely. The site provides suitable foraging habitat for this species, but is considered uncommon in California.

TABLE 2.5-1 - LIST OF SPECIAL STATUS SPECIES THAT OCCUR OR HAVE THE POTENTIAL TO OCCUR IN THE PROJECT VICINITY.

ANIMALS (adapted from CNDDB 1996) State and Federal Species of Special Concern (cont.)

Species	Status	Habitat	*Occurrence in the Study Area
Pallid Bat (*Antrozous pallidus*)	CSC	Frequents grasslands, shrublands, woodlands and forests habitats; requires mines, caves or crevices for roosting and nesting.	Unlikely. The site provides marginal to unsuitable breeding and foraging habitat for this species.
California Mastiff Bat (*Eumops perotis*)	FSC, CSC	Frequents grasslands to woodland habitats along the central and southern coast and the Central Valley; requires high buildings, cliff faces, trees or tunnels for roosting and nesting.	Unlikely. The site provides marginal to unsuitable breeding and foraging habitat is available on the site.
San Joaquin Pocket Mouse (*Perognathus inornatus*)	FSC, CSC	Frequents dry grassland or scrubland habitats of the Central and Salinas Valleys.	Absent. The site provides unsuitable breeding and foraging habitat for this species.
American Badger (*Taxidea taxus*)	CSC	Frequents herbaceous, shrub and drier open stages of most habitats; requires ground burrows for denning	Unlikely. The site provides suitable denning and foraging habitat for this species, but is considered uncommon in California.

PLANTS

Species Listed as Threatened or Endangered under the State and/or Federal Endangered Species Act

Species	Status	Habitat	*Occurrence in the Study Area
Hairy Orcutt Grass (*Orcuttia pilosa*)	FE, CE CNPS 1B	Found in vernal pools of California=s Central Valley; requires deep pools with prolonged periods of inundation.	Unlikely. Suitable habitat was once available for this species, but it was not observed in any pools during the 1991-92 site visits.
San Joaquin Orcutt Grass (*Orcuttia inaequalis*)	FE, CE CNPS 1B	Found in vernal pools of California=s Central Valley; requires deep pools with prolonged periods of inundation.	Unlikely. Suitable habitat was once available for this species, but it was not observed in any pools during the 1991-92 site visits.
Hartweg=s Golden Sunburst (*Pseudobahia bahiifolia*)	FPE, CE, CNPS1B	Occurs on clay soils in valley and foothill grassland habitat. Often found on north slopes of knolls or shady areas.	Absent. Suitable soils are absent from the site.
San Joaquin Adobe Sunburst (*Pseudobahia peirsonii*)	FPE, CE	Occurs on clay soils in valley and foothill grassland habitat.	Absent. Suitable soils are absent from the site.
Succulent Owl=s Clover (*Castelleja campestris succulenta*)	FT, CE CNPS 1B	Found in vernal pools and moist places at the base of the Sierra foothills.	Unlikely. Suitable habitat was once available for this species, but it was not observed in any pools during the 1991-92 site visits.

TABLE 2.5-1 - LIST OF SPECIAL STATUS SPECIES THAT OCCUR OR HAVE THE POTENTIAL TO OCCUR IN THE PROJECT VICINITY.

PLANTS
Species Listed as Threatened or Endangered under the State and/or Federal Endangered Species Act

Species	Status	Habitat	*Occurrence in the Study Area
Bogg=s Lake Hedge-Hyssop (*Gratiola heterosepala*)	CE CNPS 1B	Found in hallow water and margins of vernal pools.	Unlikely. Suitable habitat may once have been available for this species, but it has never been documented in the project vicinity.
Greene=s Tuctoria (*Tuctoria greenei*)	FT, CR CNPS 1B	Found in vernal pools of California=s Central Valley; requires deep pools with prolonged periods of inundation.	Unlikely. Suitable habitat was once available for this species, but it was not observed in any pools during the 1991-92 site visits.

Other special status plants listed by CNPS

Spiny-sepaled Button Celery (*Eryngium spinosepalum*)	CNPS 1B	Found in vernal pools of Fresno and Tulare Counties.	Unlikely. Suitable habitat was present for this species, but it has never been documented in the project vicinity.
Sanford=s Arrowhead (*Sagittaria sanfordii*)	CNPS 1B	Found in freshwater marshes, pond margins, sloughs, etc. of California=s Central Valley and low Sierra Foothills.	Absent. Suitable habitat was not present in the site for this species prior to golf course construction.
Orange Lupine (*Lupinus citrinus* ssp. *citrinus*)	FC CNPS 1B	Found in decomposed granite of the Sierra foothills.	Absent. Suitable habitat was not present in the site for this species.

*Present: Species observed on the site at time of field surveys or during recent past.
Likely: Species not observed on the site, but it may reasonably be expected to occur there on a regular basis.
Possible: Species not observed on the site, but it could occur there from time to time.
Unlikely: Species not observed on the site, and would not be expected to occur there except, perhaps, as a transient
Absent: Species not observed on the site, and precluded from occurring there because habitat requirements not met.

STATUS CODES

FE	Federally Endangered	CE	California Endangered
FT	Federally Threatened	CT	California Threatened
FPE	Federally Endangered (Proposed)	CR	California Rare
FC	Federal Candidate	CSC	California Species of Special Concern
FSC	Federal Species of Concern	CNPS	California Native Plant Society Listing
FSS	U.S. Forest Service Sensitive Species		

IMPACTS

Standards of Significance

Specific project impacts to biological resources may be considered significant if they will:

- have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the CDFG or USFWS;

- have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the CDFG or USFWS;

- have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means; and/or

- interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.

Impact

- **Special status wildlife species could be adversely affected by implementation of the Fancher Creek project. This would be a *significant impact.***

Thirty-six special status animals occur regionally (see Table 2.5-1). Of these 36 species, 22 would not occur in the study area, or would be unlikely to occur there, due to the absence of suitable habitat. The proposed Fancher Creek Project is not expected to have any effect on regional populations of these 22 species.

Twelve species including the White-tailed Kite, Sharp-shinned Hawk, Merlin, Prairie Falcon, California Horned Lark, and Tri-colored Blackbird occur regionally and typically use habitats similar to those found in the study area. These 12 species would be expected to pass over the site, or venture on to it while foraging. The planning area, however, provides marginal habitat for these species, at best.

In association with the proposed PG&E substation to be located north of the project, the California Natural Diversity Data Base (CNDDB) was searched in 2001 for special status vegetation, wildlife and aquatic species that might occur in the project area. Habitat suitability for all species on the list was evaluated. The major natural plant community that occurs in the project site is the Great Valley Cottonwood Riparian Forest which occurs along the Fancher Creek Canal. This habitat ranges from non-existent in some highly disturbed areas to an estimated 200 feet wide near the eastern edge of the site.

The Fancher Creek canal and other canals in the area hold water throughout the whole year in some years, possibly supporting aquatic life, including fish and amphibians. In most years, however, the canals and ditches are not operating in November, December, or January. Fancher Creek canal is used as a major flood control/irrigation canal, resulting in periodic flow during the fall and winter. The canal passes high volumes of water during full operation, holding maximums of 1,000 cubic feet per second. This type of canal system would move any fish and amphibians out of the area during high flow periods because there is little refuge from high velocities in the canals. However, replacement species would move back into the habitat during low flow periods. Fish that might be found at the sites would include any of the warm water fish known to inhabit the San Joaquin Valley floor, including a mix of mostly non-native fish, including various minnows. One would expect to find that the most abundant fish during the summer and early fall would be mosquito fish which are used at all of these locations to control mosquitos during this warm period.

The CNDDB search documented sightings of the California Tiger Salamander near Herndon Avenue in 1994, approximately six miles north and east of the site. Because of the seasonal high flows in the spring and summer and dry periods during the late summer and winter, the potential for any species of amphibians, including California tiger salamanders, to maintain populations in the site canals and ditches is minimal.

The only other special status aquatic species that might found at these locations is the Western pond turtle. No pond turtles have been observed on the site, and Western pond turtles in the project area's water bodies are likely to be limited by the seasonal nature of water flows. In addition, successful nesting for turtles is likely to be adversely affected because of the combination of agricultural fields and residential property adjacent to the canals.

Mitigation

1. The Fancher Creek project shall maintain a minimum 100-foot building setback from Fancher Creek in order to maintain the Great Valley Cottonwood Riparian Forest. Any disturbance of the habitat shall be based on a management and monitoring plan prepared by a biological consultant and accepted by the California Department of Fish and Game.

Impact

- **Special status plant species could be affected by implementation of the Fancher Creek Project. This would be a *less- than-significant impact.***

The study area provides marginal to entirely unsuitable habitat for special status vascular plant species known to occur regionally. Therefore, implementation of the project would have no effect on regional populations of special status plants.

Mitigation

None required.

2.6 NOISE

Introduction

In analyzing noise levels, the Federal Highway Administration's (FHWA) Highway Traffic Noise Prediction methodology must be applied. The City of Fresno has required an acoustical analysis to determine if existing or future traffic noise from surrounding roadways will exceed the City's noise standards and to determine if mitigation measures will be required for compliance with the City's standards.

Acoustical Terminology

Unless otherwise stated, all sound levels reported in this analysis are A-weighted sound pressure levels in decibels (dB). A-weighting de-emphasizes the very low and very high frequencies of sound in a manner similar to the human ear. Most community noise standards utilize A-weighted sound levels, as they correlate well with public reaction to noise.

Ambient Noise Level: The composite of noise from all sources near and far. In this context, the ambient noise level constitutes the normal or existing level of environmental noise at a given location.

CNEL: Community Noise Equivalent Level. The average equivalent sound level during a 24-hour day, obtained after addition of approximately five decibels to sound levels in the evening from 7 p.m. to 10p.m. and ten decibels to sound levels in the night before 7 a.m. and after 10 p.m.

Decibel, dBA: A unit for describing the amplitude of sound, equal to 20 times the logarithm to the base 10 of the ratio of the pressure of the sound measured to the reference pressure, which is 20 micropascals (20 micro-newtons per square meter).

DNL/L_{dn}: Day/Night Average Sound Level. The average equivalent sound level during a 24-hour day, obtained after addition often decibels to sound levels in the night after 10:00 p.m. and before 7:00 a.m.

L_{eq}: Equivalent Sound Level. The sound level containing the same total energy as a time varying signal over a given sample period. L_{eq} is typically computed over 1, 8 and 24-hour sample periods.

L_{eq}(h): The hourly value of L_{eq}.

L_{max}: The maximum noise level recorded during a noise event

L_n: The sound level exceeded "n" percent of the time during a sample interval (L_{90}, L_{50}, L_{10}, etc.). L_{10} equals the level exceeded 10 percent of the time.

L_n(h): The hourly value of L_n.

Noise Exposure Contours: Lines drawn about a noise source indicating constant levels of noise exposure. CNEL and DNL contours are frequently utilized to describe community exposure to noise.

SEL or SENEL: Sound Exposure Level or Single Event Noise Exposure Level. The level of noise accumulated during a single noise event, such as an aircraft overflight, with reference to the duration of one second. More specifically, it is the time-integrated A-weighted squared sound pressure for a stated time interval or event, based on a reference pressure of 20 micropascals and the reference duration of one second

Sound Level: The sound pressure level in decibels as measured on a sound level meter using the A-weighing filter network. The A-weighing filter de-emphasizes the very low and very high frequency components of the sound in a manner similar to the response of the human ear and gives good correlation with subjective reactions to noise.

Note: CNEL and DNL represent daily levels of noise exposure averaged on an annual basis, while L_n *represents the average noise exposure for a shorter time period, typically one hour.*

City of Fresno Noise Exposure Criteria

The City of Fresno Noise Element of the General Plan establishes noise level criteria in terms of the Day-night Average Level (DNL) metric. The DNL is the time-weighted energy average noise level for a 24-hour day, with a 10 dB penalty added to noise levels occurring during the nighttime hours (10:00 p.m. - 7:00 a.m.). The DNL represents cumulative exposure to noise over an extended period of time and is therefore calculated based upon annual average conditions.

Referencing Table 2.6-1, the City of Fresno Noise Element of the General Plan identifies a maximum exterior noise exposure level of 60 L_{dn} dB for outdoor activity areas. The intent of the exterior noise level requirement is to provide an acceptable noise environment for outdoor activities and recreation. For interior areas a minimum of 45 L_{dn} dB is required. The intent of the interior noise level standard is to provide an acceptable noise environment for indoor communication and sleep.

IMPACTS

Standards of Significance

Noise resulting from the project would be considered significant if it would result in: exposure of people to noise levels in excess of standards established in local general plans or noise ordinances; the transmission lines or substation generated; exposure of people to excessive groundborne vibration or groundborne noise levels; a substantial permanent increase in ambient noise levels in the project vicinity above levels without the project; or, for a project within an airport land use plan, would the project expose people residing or working in the project area to excessive noise levels.

Impact

- **The project will expose future residents to traffic noise levels that exceed adopted standards. This is a *significant impact.***

Existing "baseline" traffic noise levels are based on traffic data from the traffic impact analysis. Existing traffic was used as an input to the Sound2000 model. Sound2000 is the Caltrans version of FHWA's STAMINA 2.0/OPTIMA Traffic Noise Prediction Programs. Once existing levels are established, future levels, based on expected traffic growth, are calculated and compared to both the existing noise level and the maximum allowable noise exposure based on the City of Fresno's General Plan.

TABLE 2.6-1
MAXIMUM ALLOWABLE NOISE EXPOSURE
TRANSPORTATION NOISE SOURCES - 2025 Fresno General Plan

Land Use	Outdoor	Interior Spaces	
		L_{dn} dB	L_{eq} dB
Residential	60	45	--
Transient Lodging	60	45	--
Hospitals, Nursing Homes	60	45	--
Theaters, Auditoriums, Music Halls	--	--	35
Churches, Meeting Halls	60	--	45
Office Buildings	--	--	45
Schools, Libraries, Museums	--	--	45

Source: City of Fresno 2025 Fresno General Plan, Noise Element

Noise level measurements were conducted within the project site in July 2004. The purpose of the measurements was to evaluate the accuracy of the model in describing traffic noise exposure within the project site. The estimated vehicle speed adjacent to the project site on existing roadways is 30-40 miles per hour.

Noise monitoring equipment consisted of a Quest Electronics Type 2 sound level meter. Noise measurements were conducted in terms of the equivalent energy sound level (L_{eq}). Measured L_{eq} were compared to L_{eq} values calculated (predicted) by the Sound 2000 model traffic volumes, truck mix and vehicle speeds as inputs. The results of this comparison are shown in Table 2.6-2. The locations described below are representative of the approximate location of the closest residential building setbacks from Kings Canyon Road and Fowler Avenue.

- Receptor 1: 20 feet from the curb of Kings Canyon Road west of Fowler Avene
- Receptor 2: 20 feet from the curb of Kings Canyon Road east of Fowler Avenue
- Receptor 3: 20 feet from the curb of Fowler Avenue south of Tulare Avenue
- Receptor 4: 20 feet from the curb of Fowler Avenue north of Tulare Avenue
- Receptor 5: 60 feet from the curb of Belmont Avenue west of Fowler Avenue
- Receptor 6: 60 feet from the curb of Belmont Avenue, east of Clovis Avenue

TABLE 2.6-2
NOISE IMPACTS FOR EXISTING AND FUTURE CONDITIONS

Receptor	Existing Leq Measured	Existing Leq Predicted	Future Predicted	Difference Existing & Future
Receptor 1	69.5	70.6	74.2	3.6
Receptor 2	62.0	63.0	65.7	2.7
Receptor 3	64.8	64.8	68.4	3.6
Receptor 4	64.1	60.2	62.7	2.5
Receptor 5	59.3	58.0	62.7	4.7
Receptor 6	59.9	61.9	69.7	7.8

Impacts in the project area resulting from 21 years of growth and development (through 2025) are described in this Section. Traffic conditions were referenced from the traffic impact assessment and volumes contained in the Council of Fresno County Government's traffic forecasting model to reflect logical growth in vehicle trips. Results are identified in Table 2.6-2, above.

Interior Noise Analysis. Residential construction methods complying with current building code requirements will reduce exterior noise levels by at least 20-25 dB if windows and doors are closed. An evaluation of existing and predicted future noise levels indicate that this reduction will be sufficient for compliance with the City's 45 dB DNL interior standard.

Exterior Noise Analysis. Results of the analysis indicate that Receptors1, 2, 3, 4, & 6 will exceed the City of Fresno's acceptability criterion of 60 dB DNL within the outdoor activity areas of noise sensitive land uses. For the undeveloped site, the future traffic noise exposure for Kings Canyon Road at the closest proposed building setback is 74.2 L_{eq}. Since 2025 traffic represents worst-case condition, it provides the basis for assessing noise mitigation requirements.

Mitigation

To mitigate traffic noise exposure, the project developer has proposed a sound-wall along major roads adjacent to planned residential areas. This wall will provide acoustical shielding of individual backyards and reduce the amount of noise affecting the interior of proposed residences. Sound wall noise attenuation was calculated using the same receiver locations with a 6-foot wall. The model calculates future noise levels with the wall of a given height in place based on the height of the receiver, distance from the receiver to the wall, and distance from the noise source to the wall. Results of the analysis as indicated in Table 2.6-3 show that a sound-wall of six feet would attenuate noise levels to under 60 dBA for future traffic noise levels.

1. A 6-foot high sound wall should be constructed along the project site where homes are located adjacent to roadways. The sound wall must be continuous and constructed of a dense material such as masonry blocks or stucco on both sides of a wood/steel frame.

2. The applicant shall follow the State Noise Insulation Standards (California Code of Regulations, Title 24) and Chapter 35 of the Uniform Building Code (UBC) concerning interior noise exposure for multi-family housing, hotels and motels.

3. Double pained windows shall be installed in all buildings at the project site. Exterior doors, excluding glass doors, should be solid-core wood or insulated steel with perimeter weather-stripping and threshold seals.

TABLE 2.6-3
FUTURE TRAFFIC NOISE EXPOSURE ON-SITE WITH MITIGATION

On- Site Receptor	Sound Wall Height in Feet	Predicted Future Leq, dB with Mitigation
1	6.0	59.8
2	6.0	51.1
3	6.0	54.3
4	6.0	50.4

4. Mechanical ventilation or air conditioning must be provided for all homes so that windows and doors may remain closed for the required acoustical insulation.

Level of Significance with Mitigation

With incorporation of recommended mitigation measures, potential traffic noise impacts will be reduced to a less-than-significant level.

Impact

- **The project will expose future residents and employees to noise levels from operations at the Fresno-Yosemite International Airport. This is a *less-than-significant impact.***

Section 2.1, *Land Use, Planning, and Agriculture* contains the FYI Airport Land Use Plan. Development Areas 1 and 2 on the Fancher Creek project are within Approach Protection Zones (APZ) III and IV and are subject to the following land use safety compatibility criteria:

- APZ III - Residential density no greater than two dwelling units per acre.
- APZ IV - Residential density no greater than five dwelling units per acre.
- APZs III and IV - No schools, hospitals, nursing homes, churches, auditoriums, concert halls, amphitheaters, or other uses that would concentrate a large number of people. That it is understood that the property in question is close to the Fresno Yosemite International Airport and that the operation of the airport and land and take-off of aircraft may generate moderate interference with outdoor activities and with indoor activities if windows are open.
- Recommended residential construction include features that provide sufficient noise attenuation (e.g., installation of air conditioning to that windows may be kept closed). Buyer notification shall include real estate disclosures for property within the Airport Review Area. The disclosure statement shall notify the buyer of the proximity of the airport and that aircraft overflights may affect the habitability and quiet enjoyment of the property.

The residential portion of Area 2 is specifically planned to be outside APZ IV and the 60 dB CNEL noise contour of the existing airport land use plan. It is understood that as the plan is updated, noise contours may encroach upon the residentially planned areas, requiring additional noise attenuation not now required.

Mitigation

None required beyond existing regulatory requirements.

What about plan updates
Traffic safety zones
Need maps

2.7 DRAINAGE

Introduction

This section analyzes drainage methods to be used on-site and includes a discussion of existing drainage facilities.

Setting

Only a small portion of the site adjacent to Fancher Creek is within the 100-year flood zone according to the Flood Insurance Rate Map (FIRM) published by the Federal Emergency Management Agency (FEMA). Topographical maps for the project area show that the natural drainage pattern flows toward the southwestern boundary of the site. The site has established drainage patterns associated with existing agriculture and the established Fancher Creek drainage area.

Drainage

The project site is within the service area of the Fresno Metropolitan Flood Control District (FMFCD) . In some cases, proposed land uses are not consistent with the District's planned uses, although the District has not updated its plans to be consistent with the 2025 Fresno General Plan. Storm drainage facilities have generally not been constructed and facilities would have to be constructed and/or up-sized at the developer's expense to accommodate higher intensity uses.

Storm drainage service will be provided through construction of FMFCD Master Plan facilities or in cases where permanent facilities can not be made available at the time of development, that temporary facilities will be constructed until permanent FMFCD facilities are available.

The FMFCD Drainage Master Plan has undergone independent environmental review for the construction of these facilities including the watershed area. Future drainage engineering will be required to integrate the existing drainage collection and transmission system with the residential and commercial development proposed for the project site.

Water Quality

EPA Stormwater Discharge Permitting Regulations. The 1972 amendments to the Clean Water Act prohibit the discharge of pollutants to navigable waters from a point source unless the discharge is authorized by a National Pollutant Discharge Elimination System (NPDES) permit. The EPA, using the results of Nationwide Urban Runoff Program (NURP) studies of commercial and residential stormwater characteristics, has developed the permitting strategy described in the municipal stormwater permitting regulations. It is within the existing authority of the RWQCB to issue an NPDES permit for any stormwater out fall to the waters of the United States. The City of Fresno Public Works Department is responsible for issuing and monitoring NPDES permits as necessary with site grading permits.

General stormwater discharge permits are required for stormwater discharges associated with construction activity on parcels of one acre or more. Landowners are responsible for obtaining and complying with the permits, thereby reducing liability for developers and contractors who do not hold title to the parcels.

Permit applicants are required to prepare, and retain at the construction site, a stormwater pollution prevention plan which describes the site, erosion and sediment controls, means of waste disposal, implementation of approved local plans, control of post-construction sediment, and erosion control and non-stormwater management. Dischargers are also required to inspect their construction sites before and after storms to identify stormwater discharge associated with construction activity .

Urban Runoff Quality. EPA administers the NURP to characterize urban runoff quality . Heavy metals were observed to be the most prevalent priority pollutant constituents, and concentrations in urban runoff were found to exceed EPA ambient water quality criteria and drinking water standards in many cases. Organic priority pollutants were also identified, but at a lower frequency and at lower concentrations than the heavy metals. Constituents found in urban runoff vary . During seasonal dry periods, pollutants contributed by vehicle exhaust, vehicle and tire wear, crankcase dripping, and atmospheric fallout accumulate within the watershed. Precipitation during the early portion of the wet season displaces these pollutants into the stormwater runoff resulting in high pollutant concentrations in the initial wet weather runoff. This initial runoff with peak pollutant levels can be referred to as the "first flush" of a storm event or events.

Storm Drainage Master Plan

A storm drainage master plan will be required for the project. The purpose of the plan is to provide a storm drainage collection and disposal system for the proposed project. The storm drainage system and detention basin facility will be designed in accordance with FMFCD requirements, which will be responsible for its operation and maintenance.

IMPACTS

The evaluation of hydrological impacts was primarily based on information provided by FMFCD. Hydrologic effects of the proposed project were evaluated for potential impacts to the drainage of stormwater in the vicinity compared to the existing and proposed conditions for the project area to determine impacts to drainage facilities and water quality.

Standards of Significance

For the purposes of this EIR, an impact was considered to be significant if the proposed project would cause substantial flooding (including the need for new flood control facilities), erosion or siltation; or substantial degradation of water quality.

Impact

- **Increased runoff generated by the proposed project will require new flood control facilities. This is a *potentially significant impact.***

The proposed development will produce storm runoff that must be properly discharged and mitigated. FMFCD has developed and adopted a Storm Drainage and Flood Control Master Plan. Each property contributes its pro-rata share to the cost of the public drainage system. It is this form of participation in the cost and/or construction of drainage systems that will mitigate the impact of development.

Drainage issues by project area are:

Area 1: This portion of the proposed project lies within District Drainage Area "BQ". The down stream Master Plan drainage facilities that would serve the proposed light industrial development have not been constructed. As a result, the developer will make necessary improvements as development occurs and these facilities can accommodate storm runoff.

Area 2: This portion of the proposed project is located within Drainage Area "BO". The existing Master Plan storm drain facilities were designed to serve medium low density residential land uses. The developer will be required to mitigate the impacts of increased runoff and may make improvements to the pipeline system or provide a permanent peak-reducing facility. The permanent peak reducing facility will be required to reduce runoff from a 10-year storm to a 2-year discharge.

Area 3: This portion of the proposed project is located within Drainage Areas "BO" and "BM". The down stream Master Plan drainage facilities that would serve the proposed residential and mixed-use commercial area have not been constructed. As a result, the developer will make necessary improvements as development occurs and these facilities can accommodate storm runoff.

Area 4: This portion of the proposed project is located within Drainage Area "Y". The existing Master Plan storm drain facilities were designed to serve medium low density residential land uses. The developer will be required to mitigate the impacts of increased runoff by providing a permanent peak-reducing facility. The permanent peak reducing facility will be required to reduce runoff from a 10-year storm to a 2-year discharge.

Transmission of stormwater will be through a combination of pipelines and surface facilities contained in the drainage master plan to be approved by FMFCD. The drainage master plan, including conveyance pipes, shall be designed and constructed in accordance with FMFCD criteria to detain stormwater runoff generated by the project on-site for a 100-year 10-day storm event. The drainage master plan for the site, and improvements to be constructed by the developer, will reduce potential storm drainage impacts to a less-than-significant level.

Mitigation

No additional mitigation is required.

Impact

- **Increased runoff could result in erosion, sedimentation, and increased levels of contaminants, including nutrients, resulting in possible water quality impacts associated with detention facilities. This is a *significant impact.***

The amount of runoff generated by the project would be greater than that under existing conditions due to an increase in impervious surfaces. There would be a corresponding increase in roadway contaminants such as heavy metals, oil and grease, as well as an increase in nutrients such as fertilizers and other chemicals from landscaped areas. These constituents could result in water quality impacts to detention facilities. No project generated runoff will leave the proposed project site unless directed toward an FMFCD facility.

The Fresno-Clovis Storm Water Quality Management Program has developed a Model Construction Activities Storm Water Pollution Prevention Plan and has adopted Construction and Post-Construction Site Storm Water Quality Management Guidelines. These resource documents were developed to assist the construction and development community in complying with State and Federal storm water regulations.

Mitigation

The developer shall be responsible for the following mitigation measure to be included as a condition of approval on each conditional use permit, tentative tract map, or site plan:

1. The master storm water plan developed and implemented for the project shall include all applicable best management practices identified in the Construction and Post-Construction Guidelines to ensure that pollutants are controlled to standards required by the City of Fresno and the State of California. No specifics

Level of Significance After Mitigation

Implementation of the above mitigation measure would reduce impacts to a less-than-significant level.

2.8 PUBLIC SERVICES

This section discusses potential project impacts to public services. It is noted that many of the public services for the project could be funded in part by the benefit assessment district proposed by the applicant. Other sections of the DEIR also discuss public services, including Section 2.7 - *Drainage;* Section 2.9 - *Hydrology;* and Section 2.12 - *PG&E Substation*

LAW ENFORCEMENT

The Fresno City Police Department (FPD) provides law enforcement services to southeast Fresno as annexation and development occurs. Unincorporated portions of the site are under the jurisdiction of the Fresno County Sheriff's Department. An Instant Aide Agreement exists between the Sheriffs Department, the California Highway Patrol, and the Police Departments within the Cities of Fresno and Clovis.

The number of officers deployed in each district and shift depends on the workload demand. Currently, the Department indicates there is insufficient manpower to provide the preferred level of service. This is largely the result of the City's significant growth, both in area and population. Unlike UGM fees for fire service, police service fees have not been established to provide for capital improvements, vehicles or the equipment necessary to serve the expanded urbanization. The City may consider establishing a UGM fee to provide and equip new police facilities.

IMPACTS

Standards of Significance

Impacts of the project on law enforcement services would be considered significant if existing public safety resources were not available to adequately serve the proposed project.

Impact

- **The project would result in the need for additional law enforcement services. The impact on law enforcement is a *potentially significant impact.***

The FPD southeast substation is located south of the Cedar/Butler intersection, approximately 3.5 miles southwest of the project site. FPD has indicated that the proposed project will generate calls for service which may result in longer response times. It is anticipated that through the submittal of tract maps for potential residential land uses that design criteria to deter potential theft and vandalism can be more carefully reviewed and implemented.

The 2025 Fresno General Plan proposes a new Southeast Growth Area that will increase the City's SOI boundary. As a result, FPD will further define their resource needs to accommodate growth in the area. Such needs may include a new substation for the Southeast Growth Area.

Based on a preliminary review conducted by the FPD, it has been determined that the proposed project would be absorbed into current beats and that there would be no additional resources required for initial phases of the project. Additional personnel and equipment would be required as cumulative growth occurs in southeast Fresno.

Proposed land uses would not typically present unusual police protection issues. Project development would likely result in corresponding increases in burglaries, car thefts, and vandalism in residential areas; and burglaries, shoplifting, and increased traffic collisions in the commercial and light industrial areas.

Mitigation

The developer shall be responsible for the following mitigation measures:

1. Maximize visibility and natural surveillance abilities through the placement and design of physical features including building orientation, windows, entrances and exits, parking lots, walkways, guard gates, low-maintenance landscaping (trees and shrubs), fences or walls, signage and any other physical obstructions.

2. Implement design features to clearly identify public/private spaces and to facilitate natural access control and territorial reinforcement, to include, but not limited to, the following measures:

    a. Identify public entrances and exits through the implementation of sidewalks, pavement, lighting and landscaping to clearly guide the public.

    b. Discourage/prevent public access to and from dark and/or un-monitored areas through the use of fences, walls or landscaping.

    c. Implement exterior nighttime lighting of display areas, parking lots, walkways, entrances, and exits. These areas should be illuminated, at a minimum, one-half-hour after sunset and one-half-hour before sunrise during hours of operation.

    d. Incorporate measures such as graffiti-resistant paints and surfaces, landscaping along bare surfaces, and view fences.

    e. Provide clearly identifiable public access to emergency services-emergency and pay telephone locations, clearly identifiable streets, roads and paths, and clearly identifiable addresses.

3. The Police Department shall be consulted during site planning and design to insure that adequate provisions for crime prevention are designed into the project.

Level of Significance After Mitigation

With implementation of the proposed mitigation measures impacts to law enforcement shall be mitigated to a less than significant level.

FIRE PROTECTION

Both the City of Fresno Fire Department and the Fresno County Fire Protection District provide fire and paramedic services to the subject property. The closest City of Fresno fire station (approximately 3.5 miles) is located at the Fresno Yosemite International Airport. The Fresno County Fire Protection District provides fire protection services to the unincorporated portion of the project area and detachment from the District would occur with annexation to the City. As a matter of policy, LAFCo requires a transition agreement as a condition of annexation when detachment from a fire district occurs.

IMPACTS

Analysis of fire protection services is based on consultation with Fresno Fire Department staff and determining the potential response time from various existing fire stations which could serve the proposed project.

Standards for Significance

A potentially significant impact would occur if response time exceeded five minutes from a Fresno Fire Department station and there were no provisions to provide for fire services from a location that was within the desired response time contour.

Impact

- **The project would result in the need for additional fire protection services. The impact of the project on fire protection is a *potentially significant impact.***

The project site is located within the extended three-mile service radius of City of Fresno Fire Station No. 10, which is in the vicinity of Air Terminal Drive and Westover adjacent to FYI. The City of Fresno has acquired a UGM site for the location of Fire Station No. 15 at the southeast corner of Clovis Avenue and Sunnyside Avenue, just to the southwest of the project site.

The City of Fresno UGM ordinance requires developments to pay fees to pay for the construction of new fire stations. The current UGM fee for the Fire Station No. 15 service area is approximately $620 an acre.

Response time from City of Fresno fire stations would be five minutes or less depending upon where the service call is generated on-site. In addition, all non-residential uses on the project site would be sprinklered.

The 2025 Fresno General Plan proposes a new Southeast Growth Area that will increase the City's SOI boundary. As a result of this future growth coupled with the proposed project, it will be necessary to provide for enhanced fire protection services to better serve the southeast area of the city.

Mitigation

The developer shall be responsible for the following mitigation measures:

1. The geometric sections of all interior roads shall, at a minimum, be improved to City of Fresno standards to adequately provide for emergency vehicles. Any deviations from the City standards shall be accomplished through modifications or exceptions requested at the site plan review stage.

2. A water supply and distribution system including fire hydrants shall be designed and constructed to meet the minimum specifications of the Fresno Fire Department for fire protection purposes.

3. As a condition of annexation, the City shall enter into a fire transition agreement with the Fresno County Fire Protection District.

Level of Significance After Mitigation

Implementation of the proposed mitigation measures will reduce project fire protection impacts to a less than significant level.

SCHOOLS

The project site is within the Clovis Unified School District (CUSD). Fancher Creek Elementary School is located at the southwest corner of Fowler and Tulare Avenues.

IMPACTS

Standards for Significance

The project will normally have a significant impact on schools if it will: I) result in short-term student capacity deficiencies prior to the completion of planned school facilities, and 2) result in the need for new school facilities as a result of full build-out of the project.

Impact

> **Using CUSD generation factors, the project has the potential to generate approximately 734 K-6 students; 218 7-8 students; and 401 9-12 students, for a total of 1,353 students from proposed residential uses that would be part of the project. ~~This is~~ a *potentially significant impact.***

Potential student generation from project residential development is estimated below. The estimate assumes that future development under the R-1/UGM zone district will be single family in nature.

It is recognized, however, that a range of housing types and densities may be constructed in the R-1/UGM district within the Medium Density Residential designation. Therefore, the estimate should be considered a worst-case projection.

TABLE 2.8-1
Potential Student Generation

	K-6	7-8	9-12	K-12
Single Family Residences				
Units	1,660	1,660	1,660	1,660
Generation Rate	.3709	.1046	.2013	.6768
Students	616	174	334	1,124
Multifamily Residences				
Units	480	480	480	480
Generation Rate	.2451	.0915	.1405	.4771
Students	118	44	67	229
Total	**734**	**218**	**401**	**1,353**

Source: Clovis Unified School District

The 734 students potentially generated in grades K-6 would be enough to fill an entire elementary school. Therefore, it is appropriate for the project to identify the location of a new elementary site within the site boundaries. The preliminary subdivision map of Figure 1-5 shows a 16-acre site at the southwest corner of the intersection of Tulare Avenue and Fancher Creek Boulevard. A site is location is acceptable to Clovis Unified.

At this time, the District does not have a timetable for the development of an elementary school within the project area. Although Fancher Creek Elementary School is currently operating in excess of design capacity with an enrollment of 761, the District also has nine other elementary schools with enrollments in excess of 700. As such, the District is monitoring a number of growing areas, in addition to the Fancher Creek area, for new elementary schools. The timing and priority of new schools will depend on the timing of development activity in the various areas being monitored.

Intermediate and high school students generated by the project would attend Reyburn Intermediate School and Clovis East High School, located at the Reagan Educational Center at Ashlan and DeWolf Avenues. These schools are approaching capacity and additional high school and intermediate school facilities will eventually within the City of Fresno's planning area south of the Gould Canal and north of Tulare Avenue to accommodate planned development.

School facilities fees currently levied by the District are $2.53 per square foot for residential uses and $0.34 per square foot for commercial/industrial development. Based on the project description, the project will pay in excess of $9.2 million in school facility fees in 2004 dollars. These fees are revised annually and future project development would be subject to the development fees in place at the time fee certificates are obtained.

Mitigation

1. Any tentative subdivision map submitted for the portion of development Area 3 to be zoned R-1/UGM shall include an elementary school site at a location acceptable to the Clovis Unified School District.

Level of Significance After Mitigation

Implementation of the proposed mitigation measure will reduce project impacts on school facilities to a less than significant level.

PARKS & RECREATION

The project area will be served by the City of Fresno for parks and recreation services. The City of Fresno *Parks and Recreation Master Plan* determined that there was a shortage of park space within the plan area. In addition to construction of additional neighborhood, community and regional parks, the Plan calls for the creation of open space within future residential developments. Park sites are constructed through a combination of various funding sources, including state grants, city revenues, and UGM fees. The UGM fees are designated to construct park sites within the specific geographic boundary of the UGM district.

Additional park space has been developed west and south of the project site in the past five years. The City has developed Sunnyside Park, a 5.0-acre neighborhood park at Peach and Butler Avenues, and a 13.29-acre soccer park on Lane Avenue east of Chestnut. Two additional soccer fields have been completed at Mosqueda Community Park at the southeast corner of Maple and Butler. While these do not fully meet the needs of the area, they have improved the ratio of open/park space per capita.

IMPACTS

Standards of Significance

An impact due to project development is considered potentially significant if there is a substantial increase in the demand for public parks and recreation that would potentially impact existing or proposed properties/projects in the vicinity of the site.

Impact

- **Approval of the project will generate the need for additional park space. This is *a significant impact.***

The proposed project is expected to generate a population of approximately 5,000 residents. It will be necessary to provide active and passive recreational opportunities within the immediate vicinity of the project. Active recreational areas (ball diamonds, soccer fields, and basketball courts) at the Fancher Creek Elementary School site and the future elementary school site will also be used by project residents. The project is within a UGM area expected to collect fees for the future development of parks.

The City of Fresno park standard is three acres per 1,000 persons, or about 15 acres of park space for residents within the project. Policies of the 2025 Fresno General Plan will require that a portion of the project will be set aside for open space purposes. The project will also be served by a network of internal paths connected to the regional trail system which will provide walking and bicycling opportunities for residents as well as access to other recreational amenities.

The Roosevelt Community Plan proposes a neighborhood park site (net 7.5 acres) just south of and adjacent to Fancher Creek Elementary School. The proposed rezoning is compatible with this designation as parks are allowed in the R-1 zone district with a conditional use permit. There also exists the potential for the proposed project to incorporate a smaller neighborhood park (net 5.0 acres) adjacent and contiguous to the Fancher Creek Elementary School, and a series of pocket and linear parks.

There is also a proposal for a "Linear Park" designation for Fancher Creek extending on the project site from Armstrong Avenue to Clovis Avenue. Although this linear park is conceptual at this point, there are general concerns that need resolution such as individual property rights, jurisdictional issues, and financial responsibilities. The "linear park" proposes to be a lively and active park which would include a place to hike, run, skate, bike, watch birds, picnic, and sit.

Mitigation

1. Participate with the City and the Clovis Unified School District in securing an agreement that will permit the use of the active recreational areas (athletic ball fields, basketball courts, gymnasium, and other appropriate facilities) at Fancher Creek Elementary and the nearby proposed new elementary school site.

Does not answer question of day time users?

Level of Significance After Mitigation

Implementation of the proposed mitigation measures will reduce project impacts to sewer service and facilities to a less than significant level.

FRESNO AREA EXPRESS (FAX)

The Fresno Area Express provides public fixed-route transit service and demand-response paratransit service to the City of Fresno. FAX fixed-route services are currently operated as far east as Clovis Avenue; in addition, the Handy Ride system provides paratransit services as far east as Clovis Avenue as well.

IMPACTS

Standards of Significance

An impact is considered potentially significant if the project would conflict with adopted policies, plans, or programs supporting alternative transportation.

Impact

- **Approval of the project will generate the need for additional transit service. This is *a significant impact.***

Although FAX staff does not anticipate an immediate demand for fixed-route bus service to the initial Fancher Creek developments, they do expect an immediate demand for elderly and disabled people to be requested almost immediately for regular service to medical, social, and shopping activities. As the development falls outside the City of Fresno's transit sphere of influence, costs associated with service delivery will need to be determined.

Fixed-route service may not be initially expected. However, as the community grows, school age children or working parents will want public transportation. Workers will need to commute to urban Fresno and Clovis for jobs, and public transit will become an issue. FAX is concerned about the effect of this and other projects and requests that an analysis be undertaken for the need and provision of transit services for the entire new development area. This request is consistent with objectives of the 2025 Fresno General Plan which anticipates significantly expanded transit services as the community grows. Such an analysis should be budgeted and undertaken by the City of Fresno as a measure necessary for the implementation of the General Plan.

Mitigation

1. FAX staff shall be included in the project review for the proposed project, including subsequent tract maps, site plans, and conditional use permits. Measures shall be included in project design to facilitate transit, including transit stops and shelters, linkage of transit to the internal trail systems, and the funding for future transit improvements.

Level of Significance After Mitigation

Implementation of the proposed mitigation measure will reduce project impacts to transit services to a less than significant level.

2.9 HYDROLOGY

Introduction

This section was prepared by Kenneth D. Schmidt and Associates, groundwater quality consultants of Fresno, California. The complete report is found in the Technical Appendices on file with the City of Fresno Development Department. The purpose of this report is to describe the groundwater conditions and potential impacts on groundwater due to development of the project. In addition, a groundwater supply evaluation was conducted for the project, and these results are incorporated.

The proposed project covers 476 acres between Olive Avenue and Kings Canyon Road, and between Clovis and Temperance Avenues. Fancher Creek passes through the project site. The project includes 243 acres of residential development, with up to 2,023 residential units. The project is to be served water by Bakman Water Co. and the City of Fresno, and is to be connected to the regional sewer system.

Existing Conditions

A comprehensive hydrogeologic evaluation of the Fresno Urban Area was provided by Kenneth D. Schmidt and Associates (KDSA) for the Fresno-Clovis Water Management Plan Update (Appendix D of CH_2M-Hill, 1992). Figure 2.9-1 shows the locations of Bakman Water Co. supply wells and City water supply wells and monitor wells in the area, and a subsurface geologic cross section.

Subsurface Geologic Conditions. Regional subsurface geologic conditions in the Fresno area were described by Page and LeBlanc (1969). The project site is located within the alluvial fan deposited by Fancher Creek and other intermittent streams between the San Joaquin and King Rivers.

As part of Water Resources Management Plan for the City of Fresno (KDSA, 1992), a subsurface geological cross section was developed that extended from west to east, about one-half mile east of the proposed project. Cross Section A-A' (Figure 2.9-2) indicates that coarse-grained alluvial deposits are predominant in the upper 250 feet or so of the subsurface beneath the project site. These de-posits have been termed the older alluvium in the Fresno area. A fairly continuous clay layer or layers has been delineated, based primarily on electric logs and geologic logs for City of Fresno monitor wells in the area. This clay is generally found below a depth of about 250 feet and functions as a confining bed. This clay is important because high nitrate and/or DBCP groundwater is often found above it in some parts of the southeast Fresno area. A number of test holes have been drilled by the City in the vicinity of the project site to depths of beyond 500 feet, and some coarse-grained strata have been encountered below a depth of 500 feet. However, clay strata are normally predominant at depths. Deposits below a depth of about 250 feet in the area southwest of Fresno are termed the Tertiary-Quaternary continental deposits.

Figure 1: Location of Public Supply Wells and Subsurface Geologic Cross Section

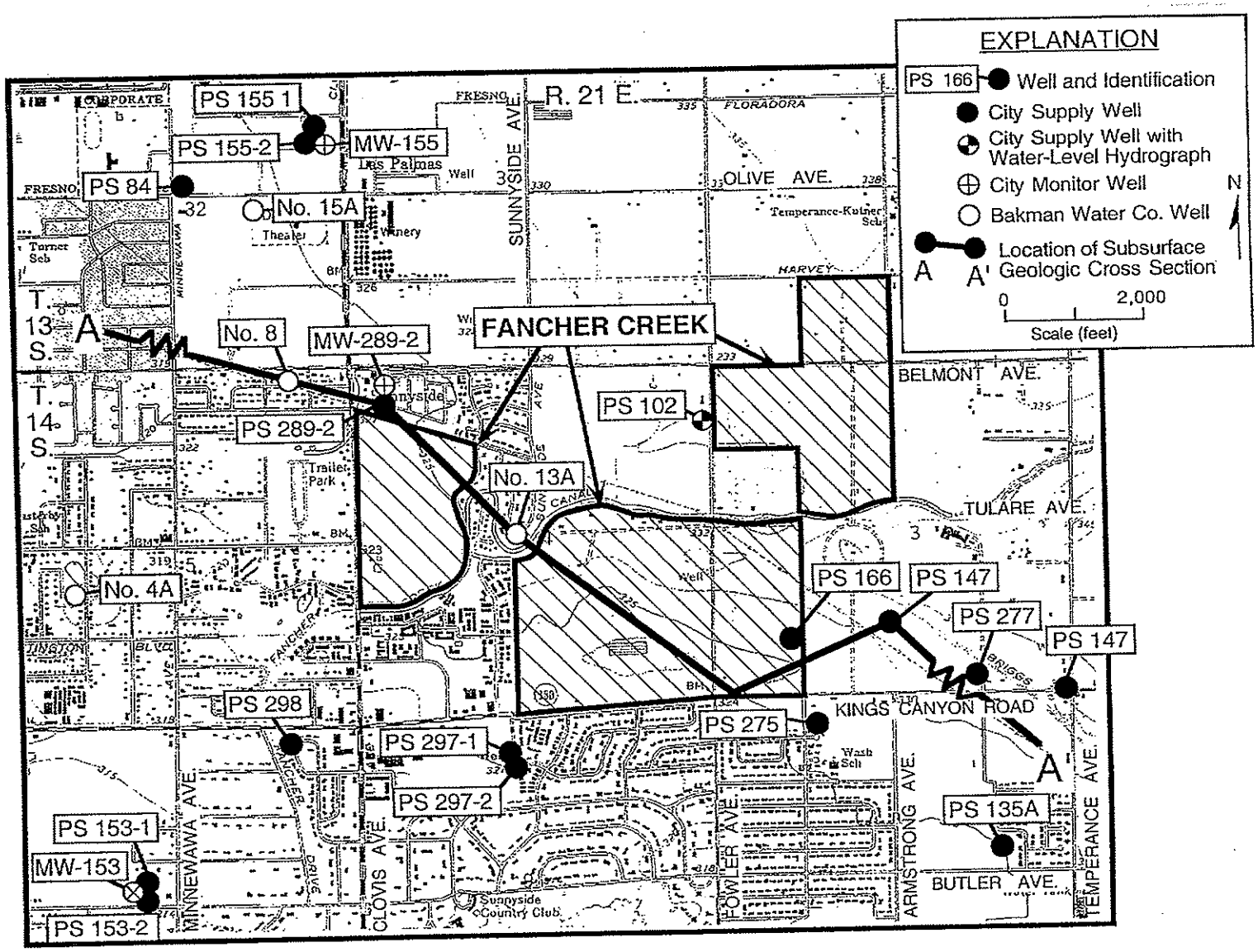


Figure 2: Subsurface Geologic Cross Section A-A'

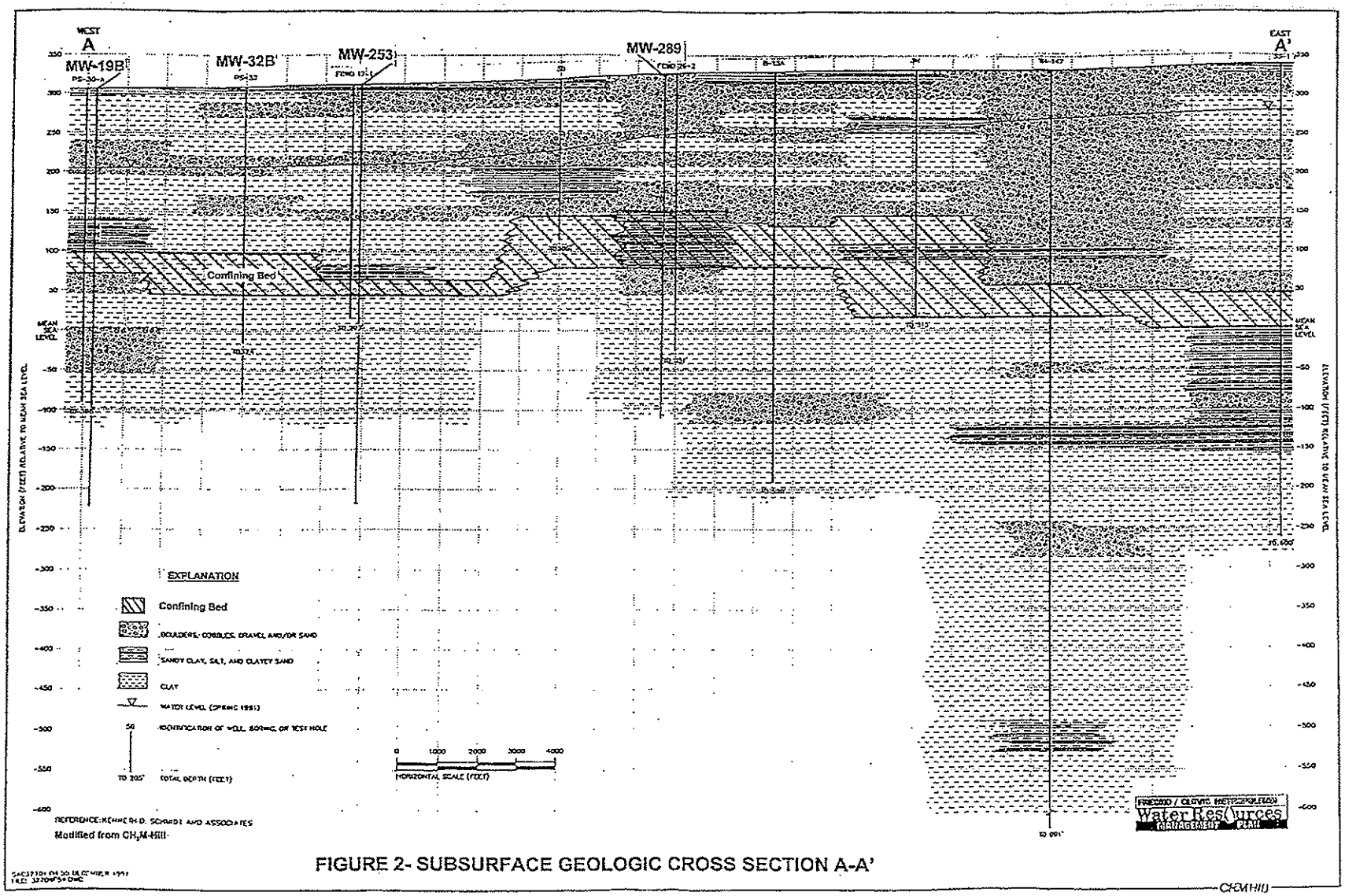


FIGURE 2- SUBSURFACE GEOLOGIC CROSS SECTION A-A'

Well Data. Table 2.9-1 provides construction data for Bakman Water Co. wells that are located in the vicinity. Newer wells have generally been drilled deeper, to obtain good quality groundwater from deeper strata. Well No. 8 is an older shallow well that has had high nitrate and DBCP concentrations and water pumped from it is blended with water from a deeper well (8-A) prior to use. The other three Bakman Water Co. wells in the vicinity have annular seals ranging from 245 to 280 feet in depth. The tops of the perforations in these wells range from 262 to 300 feet in depth, and the bottoms from 440 to 750 feet in depth.

TABLE 2.9-1
CONSTRUCTION DATA FOR BAKMAN WATER CO. SUPPLY WELLS

Well No.	Date Drilled	Drilled Depth (feet)	Cased Depth (feet)	Perforated Interval (feet)	Annular Seal (feet)
4-A	3/03	650	642	262-622	0-245
8	2/62	196	140	O.B.	Unknown
13-A	3/90	480	450	270-440	0-255
15-A	3/03	780	770	300-750	0-280

Information from well drillers reports (Appendix A of the Schmidt report).

Table 2.9-2 provides construction data for City of Fresno wells in the study area. Newer City wells have also generally been drilled deeper, to obtain good quality groundwater from deeper strata. Included are PS 147, PS 153-1, and PS 166. Even though PS 102 was drilled in 1980, it has a relatively deep (200 feet) annular seal. The annular seals for PS 153-1 and PS 166 extend to depths of 280 and 375 feet, respectively. Tops of the perforations in PS 147, 153-1, and 166 range from 300 to 375 feet, and the bottoms from 620 to 680 feet. PS 135-A and PS 289-2 are both of moderate depth (about 450 feet), but have perforations extending up to 150 feet and 180 feet, respectively. Most of the shallow City wells were formerly operated by several Fresno County Waterworks Districts and were drilled by the cable-tool method. Included are PS 247-1, PS 275, and PS 277. PS 153-2 was drilled in 1993 and is also shallow. Wells PS 135-A, PS 153-2, PS 275, PS 277, and PS 289-2 are being treated for DBCP removal.

TABLE 2.9-2
CONSTRUCTION DATA FOR CITY OF FRESNO SUPPLY WELLS

Well No.	Date Drilled	Drilled Depth (feet)	Cased Depth (feet)	Perforated Interval (feet)	Annular Seal (feet)
PS 84	11/75	460	450	160-450	0-50
PS102	7/80	545	445	260-445	0-200
PS135A	8/95	462	400	150-390	0-120
PS 147	4/91	625	620	315-620	0-35
PS 153-1	3/92	640	630	300-620	0-280
PS 153-2	6/93	265	260	170-250	0-150
PS 166	10/96	680	660	375-680	0-375
PS 275	5/57	250	184	O.B.	Unknown
PS 277	9/67	255	232	O.B.	0-60
PS 289-2	5/95	450	440	180-430	0-140
PS 297-1	3/59	203	151	O.B.	Unknown
PS 297-2	7/95	525	355	135-345	0-120

Information from well drillers reports (Appendix A of the Schmidt report).

Table 2.9-3 contains construction data for four City of Fresno multiple completion monitor wells in the vicinity of the project site (Figure 2.9-1). Electric logs are available for all of these wells. All four sites have a shallow well, completed above a depth of 220 feet. Three of the sites have an intermediate well, completed below the 250-foot deep confining bed. In general, substantial clay was present below from about 400 to 500 feet in depth at three of these sites, and thus deeper monitor wells were not in-stalled at these sites. A deep monitor well, perforated from 580 to 600 feet in depth, was completed at MW-166. Logs and construction diagrams for these wells are provided in Appendix A of the Schmidt report.

Drillers reports for private water supply wells in the vicinity of the project site indicate that most domestic wells are less than about 200 feet deep and most irrigation wells are less than about 300 feet deep.

Water Levels. The project site is near the southeast edge of the depression cone beneath the City of Fresno. Spring water-level elevation maps prepared by the California Department of Water Resources for recent years have consistently shown a westerly direction of groundwater flow beneath the project site. Appendix B of the Schmidt report contains information on water levels in wells in the vicinity of the project site.

Figure 2.9-3 is a water-level hydrograph for City of Fresno PS-102. This hydrograph is indicated to be representative of the project site. Depth to water (static levels in the spring) ranged from about 50 to 55 feet in the early 1980's to between 100 and 110 feet in 2004. The average rate of water-level decline at PS 102 was about two and a half feet per year between Spring 1983 and Spring 2004.

As urbanization has expanded, deliveries of canal water for irrigation in the vicinity have decreased, which has resulted in less groundwater recharge and more pumping. However, with the development of a number of storm basins in the area, intentional recharge is projected to increase considerably in the future, which should stabilize water levels.

TABLE 2.9-3
CONSTRUCTION DATA FOR CITY MONITOR WELLS

Well No.	Date Drilled	Drilled Depth (feet)	Perforated Interval (feet)	Annular Seal (feet)
MW-153	12/03	816	200-210	0-187
			308-313	286-294
			528-548	474-488
MW-155	11/91	816	199-209	0-177
			294-314	254-270
			373-383	326-339
MW-166	11/95	710	205-220	0-195
			407-422	360-380
			625-635	580-600
MW-289	4/94	861	141-151	0-136
			258-278	230-240
			415-435	370-386

Information from Luhdorff & Scalmanini reports to City of Fresno and well drillers reports.

Aquifer Characteristics. Appendix C of the Schmidt Report contains pump test data for Bakman Water Co. and City wells in the vicinity of the project site. Table 2.9-4 shows pumping rates, pumping levels, drawdowns, and specific capacities for four Bakman Water Co. wells in the vicinity. Pumping rates ranged from about 700 to 1,500 gpm and specific capacities ranged from about 15 to 61 gpm per foot of drawdown. The highest specific capacity was for the shallowest well (No. 8), which taps coarse-grained older alluvium. In May 2003, a step drawdown and constant discharge test was conducted on new well No. 15-A. A transmissivity of 37,000 gpd per foot was obtained from drawdown data for the constant discharge test. In July 2003, a step drawdown and constant discharge test was conducted on new well No. 4-A. A transmissivity of 30,000 gpd per foot was obtained from recovery measurements the constant for discharge test. These values apply to strata in the Tertiary-Quaternary continental deposits, below the confining bed and the older alluvium.

Figure 3: Water Level Hydrograph for PS 102

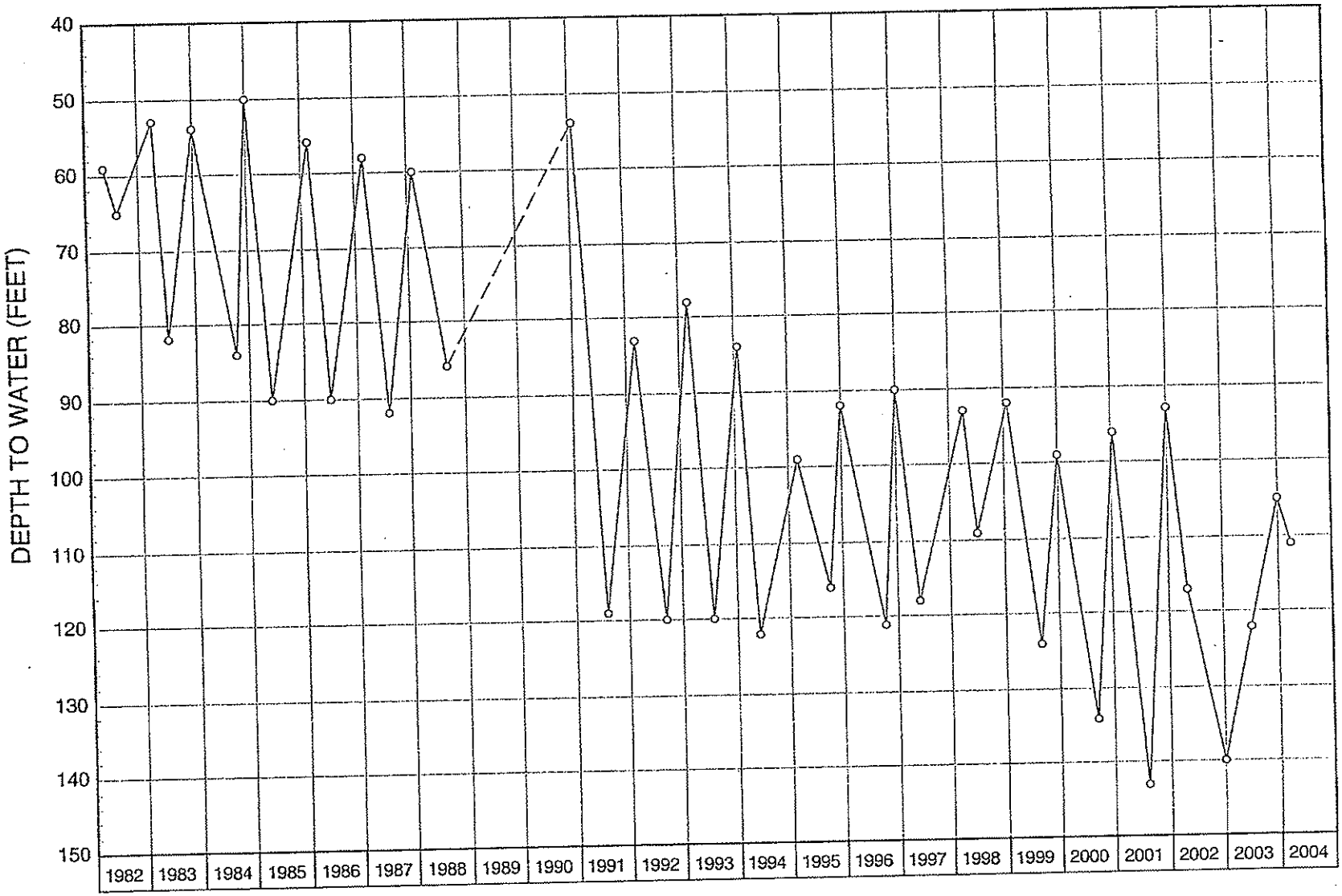


TABLE 2.9-4
PUMP TEST DATA FOR BAKMAN WATER CO. WELLS

Well No.	Pumping Date	Rate (gpm)	Static Level (feet)	Pumping Level (feet)	Drawdown (feet)	Specific Capacity (gpm/ft)
4A	7/03	1,414	116.6	215.1	96.5	15
8	6/62	800	56	69	13	61
13-A	6/03	1,033	140.3	178.5	38.2	27
15-A	5/03	1,500	102.1	209.5	107.4	14

Data from Bakman Water Company.

Table 2.9-5 contains the results of measurements of pumping rates, static levels, and pumping levels for City of Fresno wells in the area. Pumping rates ranged from about 200 to 1,600 gpm. Except for two wells, pumping rates were 800 gpm or less. Specific capa-cities ranged from 5 to 92 gpm per foot. In general, the highest values were for shallow wells, tapping the older alluvium, and lower values were usually for deeper wells. In October 1996, a step drawdown and constant discharge test was done on City of Fresno PS-166. A transmissivity of 32,000 gpd per foot was determined from recovery measurements.

Recharge and Discharge. The major sources of recharge to groundwater in the vicinity prior to urbanization were deep percolation beneath crop lands irrigated with canal water, seepage from canals (Fancher Creek and Briggs Canal), and groundwater inflow from the east. Figure 2.9-4 shows four Fresno Metropolitan Flood Control District storm runoff basins in the study area. One of these basins (BO) is along the Fancher Creek Canal, and adjacent to part of the proposed project. Intentional recharge of City of Fresno canal water has been undertaken at two of the basins (BO and W). The other two basins (BK and BM) have not been used for canal water recharge. FID records indicate that from about 230 to 330 acre-feet per year of canal water were recharged in Basin W during March 1999-February 2001. No recharge of canal water has been done in this basin since that time, because the basin is being reconfigured as part of the Freeway 180 construction. FID records indicate that from about 220 to 840 acre-feet per year of canal water was recharged in Basin BO during March 1999-February 2004. The average canal water recharge in this basin was about 510 acre-feet per year. According to the Fresno Metropolitan Flood Control District FMFCD, two new basins north of the project area are being considered for future development. After urbanization, the major source of recharge is expected to be intentional recharge in some FMFCD basins and groundwater inflow from the east.

Figure 4: Locations of Intentional Recharge Sites in Vicinity

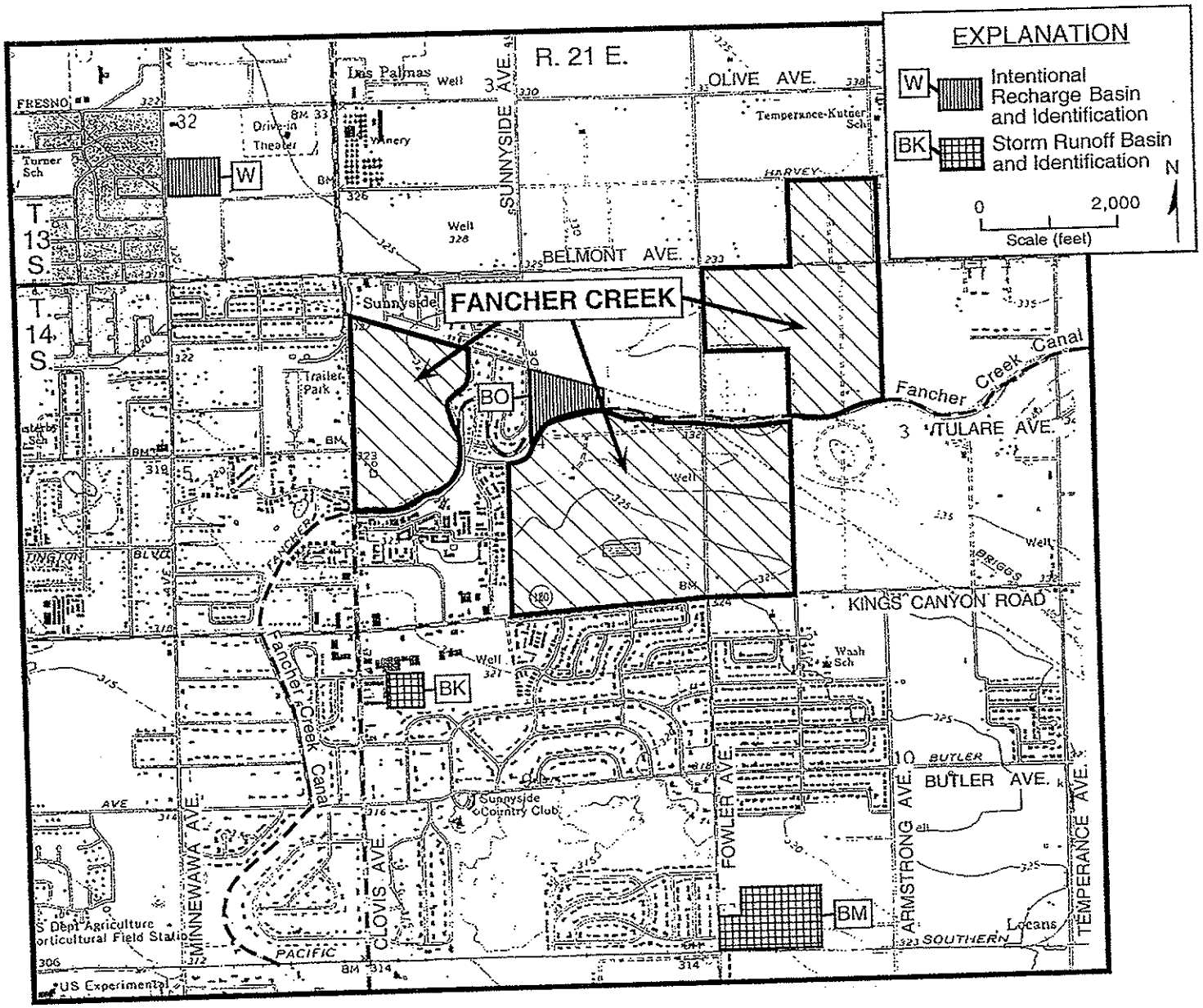


TABLE 2.9-5
PUMP TEST DATA FOR CITY OF FRESNO SUPPLY WELLS

Well No.	Date	Pumping Rate (gpm)	Static Level (feet)	Pumping Level (feet)	Drawdown (feet)	Specific Capacity (gpm/ft)
PS 84	6/04	1,150	123	156	43	27
PS 102	6/04	1,600	129	185	56	29
PS 135	6/04	320	79	150	71	5
PS 147	6/04	400	145	223	78	5
PS 153-1	6/04	430	95	156	61	7
PS 153-2	6/04	720	145	218	73	10
PS 166	6/04	420	150	168	18	23
PS 247	11/91	194	70.0	72.1	2.1	92
PS 277	6/04	800	77	105	28	10
PS 289	5/01	743	110.8	129.4	18.6	40

2004 data from City of Fresno SCADA graphs.

Groundwater Quality. High nitrate and DBCP concentrations have been found in shallow groundwater beneath part of the Fresno area, particularly in southeast Fresno. Figure 2.9-5 shows the distribution of nitrate in groundwater of the Fresno area, based on a map prepared for a recent City of Fresno nitrate study (KDSA, 2004). As can be seen, there was a large high nitrate area southeast, and another west of, the project site. Data indicate that the high nitrate concentrations are usually limited to groundwater in strata above the confining bed (about 250 feet deep).

Figure 2.9-6 shows DBCP concentrations in well water in the vicinity of the project site in 1989-91, taken from Appendix D of CH_2M-Hill (1992). DBCP concentrations apparently ranged from about 0.1 near the north boundary of the proposed project to about 0.5 ppb near the south boundary. The MCL for DBCP is 0.2 ppb, and a number of City wells in the area are bing treated for DBCP removal. Since the late 1970's, DBCP concentrations in the groundwater have decreased, due to alternation processes.

Figure 5: Distribution of Nitrate in Well Water (200-04)

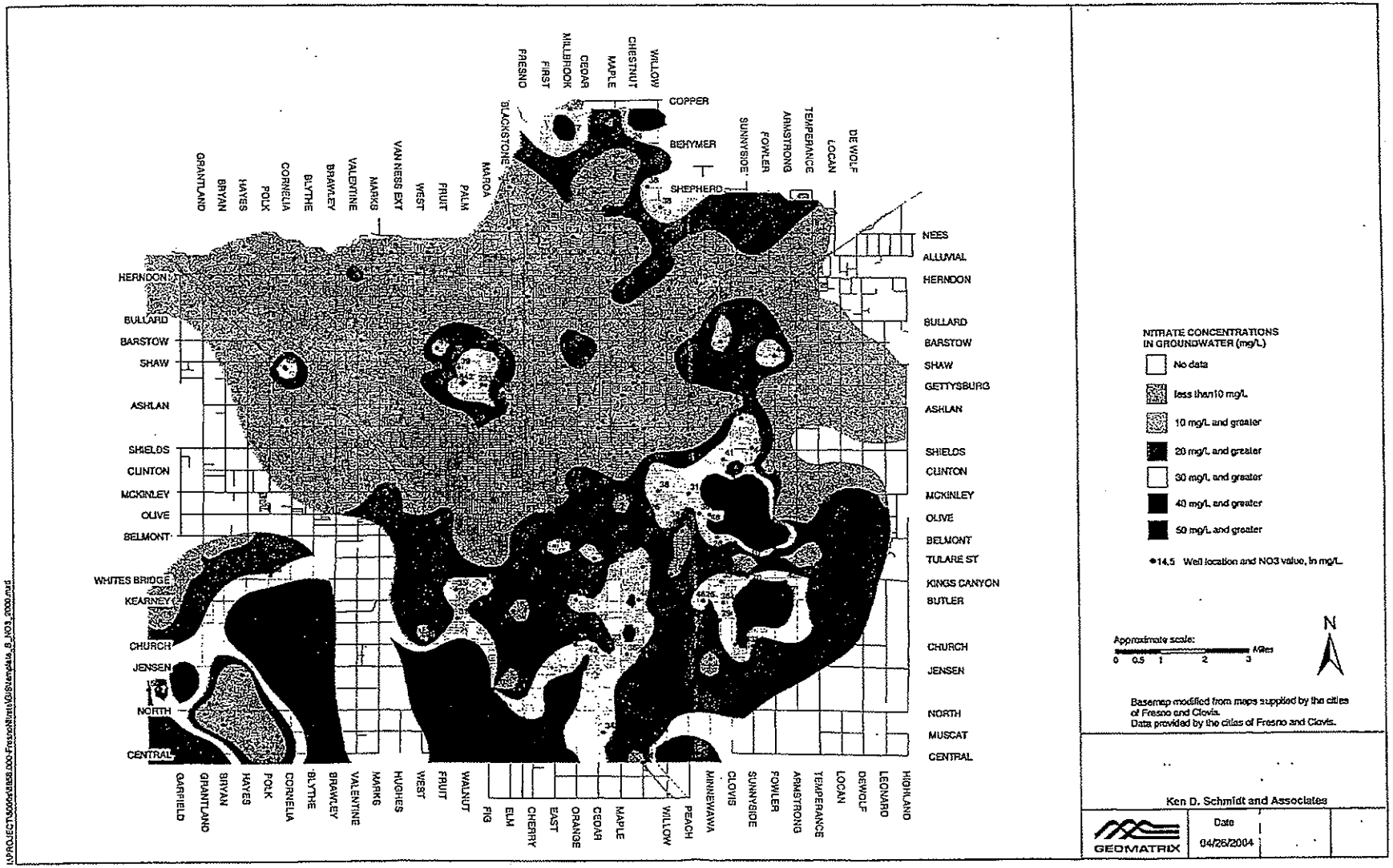


Figure 6: Distribution of DBCP in Well Water (1989-91)

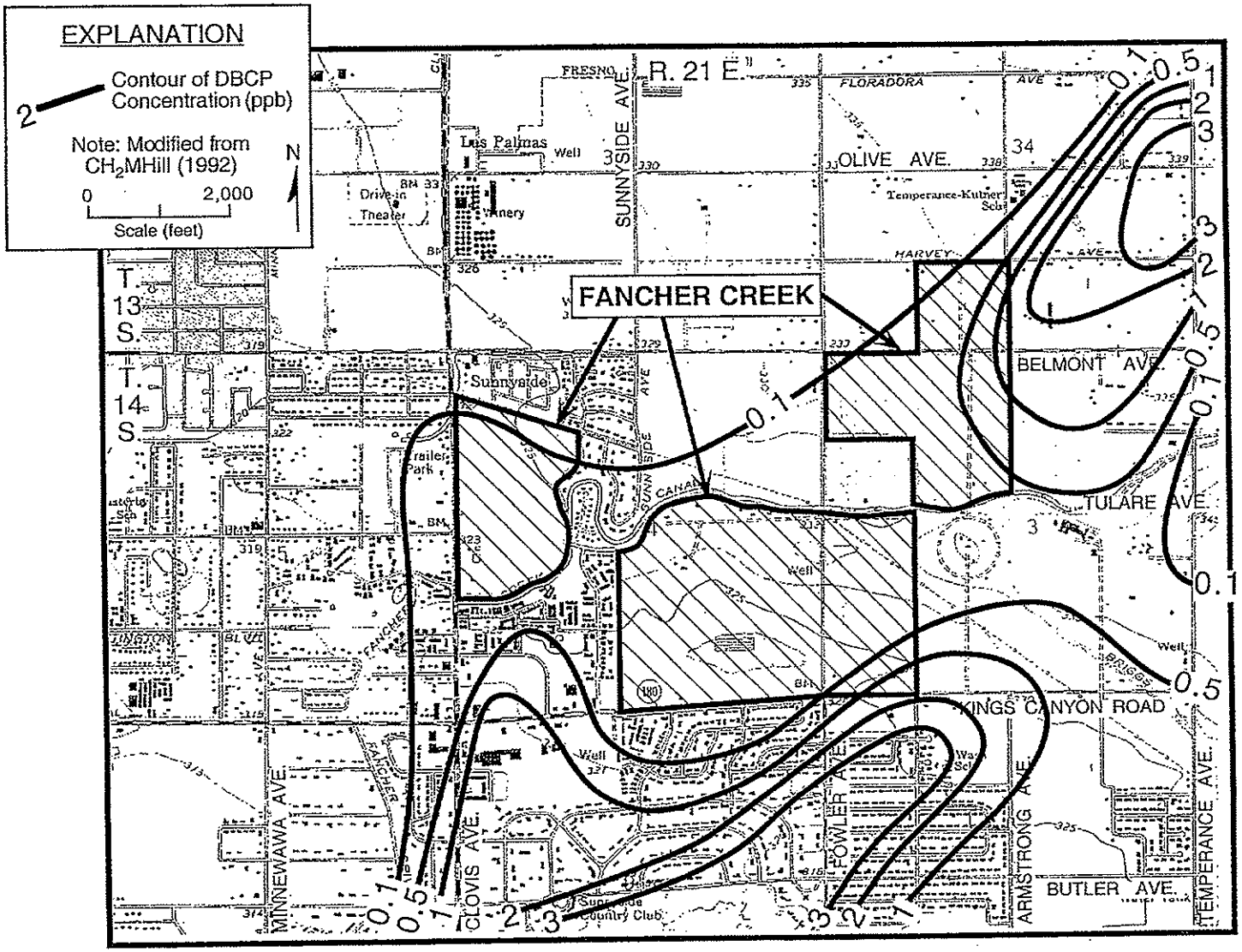


Table 2.9-6 shows the results of chemical analyses of water from the four Bakman Water Co. wells in the vicinity. TDS concentra- tions in water from deep wells ranged from 170 to 180 mg/l, and nitrate concentrations from 9 to 14 mg/l, well below the MCL of 45 mg/l. Iron and manganese concentrations were below the respective detection limits. Arsenic concentrations in water from the deep wells ranged from 0.002 to 0.004 mg/l, well below the new MCL of 0.01 mg/l (10 ppb). DBCP and EDB concentrations in water from the deep wells were less than the detection limits, except for a DBCP concentration of 0.03 mg/l for Well No. 13-A, well below the MCL of 0.2 ppb. The quality of water from Wells No. 4-A and 15-A is expected to be representative of new Bakman Water Co. project-site wells. Comprehensive Title 22 drinking water analyses are avail-able for each well (Appendix D). No problem constituents were indicated to be present for the deep Bakman Water Co. wells in the vicinity of the project site. As discussed previously, water from Well No. 8 is high in nitrate and DBCP concentrations, and water pumped from this well is blended prior to use.

Table 2.9-7 shows the results of analyses of water from four relatively shallow City of Fresno wells in the vicinity. TDS concentrations ranged from 170 to 500 mg/l and nitrate concentrations from 22 to 44 mg/l. Iron, manganese, and arsenic concentrations were low, well below the MCLs. DBCP has been detected in water from some of these wells, and water from some of these is treated for DBCP removal.

Table 2.9-8 shows the results of analyses of water from four City of Fresno deep or moderately deep wells in the vicinity. TDS and nitrate concentrations were similar to values for deep Bakman Water Co. wells in the vicinity. TDS concentrations ranged from 190 to 280 mg/l and nitrate concentrations from 6 to 26 mg/l. Iron, manganese, and arsenic concentrations were well below MCLs, except for a manganese concentration of 0.03 mg/l in water from PS 147. The quality of water from PS 166 is expected to be representative of water from deep City wells to be developed at the project site.

Trends in the vertical distribution of selected chemical constituents are available for the pilot holes for Bakman Water Co. Well No. 13-A and City of Fresno PS 102, and two casing hammer test wells (near Bakman Water Co. Wells 4-A and 15-A). Five other casing hammer test wells have been done in the Sunnyside area (Sunnyside High School, two for the proposed Canterbury project, and two others for the City of Fresno). In addition, such information is available from a number of City of Fresno nested monitor wells in the area. In general, these data indicate lower nitrate and DBCP concentrations in water below a depth of about 300 feet (below the confining bed), compared to in shallower ground-water.

TABLE 2.9-6
CHEMICAL ANALYSES FOR BAKMAN W.C. WELLS

Constituent (mg/l)	No. 4A	No. 8	No. 13-A	No. 15-A
Calcium	16	69	17	19
Magnesium	9	38	8	10
Sodium	24	26	36	30
Potassium	2	4	2	2
Carbonate	<10	<1	<10	<10
Bicarbonate	140	240	170	170
Sulfate	3	26	4	4
Chloride	5	11	8	8
Nitrate	9	40	10	14
pH	7.6	7.4	7.8	7.9
Electrical Conductivity (micromhos/cm @ 25°C)	255	630	310	319
Total Dissolved Solids (@ 180°C)	170	420	180	180
Iron	<0.05	<0.05	<0.05	<0.05
Manganese	<0.01	<0.01	<0.01	<0.01
Arsenic	0.002	<0.002	0.002	0.004
DBCP (ppb)	<0.02 -	0.03	<0.02	
EDB (ppb)	<0.02 -	<0.02	<0.02	
Date	7/25/03	10/01	12/03	5/9/03
Perforated Interval (feet)	262-622	140 O.B.	270-440	300-750

TABLE 2.9-7
CHEMICAL ANALYSES FOR RELATIVELY SHALLOW CITY OF FRESNO WELLS

Constituent (mg/l)	PS 153-2	PS 275	PS 277	PS 297-1
Calcium	73	19	24	58
Magnesium	56	11	14	35
Sodium	32	16	19	28
Potassium	4	<2	2	3
Carbonate	<1	<1	<1	<1
Bicarbonate	320	107	110	240
Sulfate	39	9	13	27
Chloride	32	5	11	16
Nitrate	44	22	26	
pH	7.4	7.6	7.6	7.5
Electrical Conductivity (micromhos/cm @ 25°C)	780	250	320	606
Total Dissolved Solids (@ 180°C)	500	170	210	370
Iron	<0.05	<0.05	<0.05	<0.05
Manganese	<0.01	<0.01	<0.01	<0.01
Arsenic	<0.002	<0.002	<0.002	
<0.002				
DBCP (ppb)	0.24	<0.02	<0.02	-
EDB (ppb)	<0.02	<0.02	<0.02	-
Sampling Date				
Inorganics	6/00	10/03	11/02	11/02
Trace Organics	6/04	11/02	6/04	-
Perforated Interval (feet)	170-250	184 O.B.	232 O.B.	151
O.B.				

Water from PS 153-2, PS 275, and PS 277 is being treated for DBCP removal.
Data from City of Fresno.

TABLE 2.9-8
CHEMICAL ANALYSES FOR DEEP CITY OF FRESNO WELLS

Constituent (mg/l)	PS 102	PS 147	PS 153-1	PS 166
Calcium	19	16	38	20
Magnesium	10	9	22	12
Sodium	32	52	26	33
Potassium	<2	<2	2	<2
Carbonate	<1	<1	<1	<1
Bicarbonate	120	150	160	159
Sulfate	4	<2	12	4
Chloride	8	14	18	10
Nitrate	14	6	26	12
pH	7.9	7.8	7.7	7.7
Electrical Conductivity (micromhos/cm @ 25°C)	300	340	440	310
Total Dissolved Solids (@ 180°C)	190	200	280	180
Iron	<0.05	<0.05	<0.05	<0.05
Manganese	<0.01	0.03	<0.01	<0.01
Arsenic	0.002	0.004	<0.002	<0.002
DBCP (ppb)	0.16	<0.02	0.15	0.02
EDB (ppb)	<0.02	<0.02	<0.02	<0.02
Sampling Date				
Inorganics	11/02	12/02	12/02	03/03
Trace Organics	05/04	03/04	05/01	03/03
Perforated Interval (feet)	260-445	300-620	375-680	300-620

Data from City of Fresno.

IMPACTS

The evaluation of impacts to groundwater resources are primarily based on the information contained in the following reports: *Groundwater Conditions at the Fancher Creek Project*, August 2004, by Kenneth D. Schmidt and Associates; *Fresno -Clovis Metropolitan Water Resources Management Plan*, Phase I Report, Volume 1 & 2, Jan 1992, CH2M-Hill. These reports are available for review at the City of Fresno Planning and Development Department.

Standards of Significance

An impact was considered significant if the proposed project would cause depletion of the available groundwater, or substantial degradation or depletion of groundwater recharge. A potentially significant impact was identified if available technical data was not conclusive in terms of the significance of an impact.

In order to determine impacts of the project on the water budge, the following need to be considered.

1. Consumptive use: pre-project and project.
2. Surface water use or recharge: pre-project and project.
3. Sewage export.

Consumptive Use. Crops at the project site were surveyed by KDSA in mid-June 2004. As of 2004, the following acreages were present:

Vegetables	180 acres
Deciduous Fruit	80 acres
Vineyard	10 acres
Fallow	30 acres

Consumptive use values were taken from the California Department of Water Resources, San Joaquin District. The consumptive use of applied water for these crops is as follows:

Vegetables	2.0 feet per year
Deciduous Fruit	2.6 feet per year
Vineyard	2.0 feet per year

For lands that were fallow at the time of the crop survey, a value of 2.0 feet per year was used. Thus the total pre-project consumptive use of applied water is estimated to have been 670 acre-feet per year.

For the proposed project, Provost and Pritchard has estimated the annual water use to be 1,530 acre-feet. Of this amount, an estimated 750 acre-feet would be consumptive use, or about 80 acre-feet per year more than for the pre-project.

Surface Water Use. Fresno Irrigation District records indicate that in recent years, an average of 740 acre-feet per year of canal water was available for irrigation of 349 acres at the project site. Considering irrigation practices and other factors, an average of about 400 acre-feet per year this water was indicated to have been used at the project site. Surface water is not proposed to be used in the near future at the project site. In order to achieve a water budget, the past amount of surface water used at the site (400 acre-feet) would have to be recharged, plus the 80 acre-feet per year of increased consumptive use, and plus the average sewage export. The average amount of this recharge would thus be about 1,430 acre feet per year. Recharge of this amount of water appears to be possible if existing basins in the vicinity are hooked up, or new basins are developed as proposed and used for canal water recharge.

Besides recharge in basins, in-lieu recharge in the vicinity maybe possible. For example, some canal water could be used for irrigation of golf courses, landscaping, or cropland, in order to reduce groundwater pumping.

Sewage Export. As shown in Table 2.9-9, Provost and Pritchard Engineering Group has determined that the average sewer flow for the project would be about 950 acre-feet.

TABLE 2.9-9
WATER BUDGET FOR THE PROPOSED PROJECT

Period	Consumptive Use (AF/yr)	Surface Water Used (AF/yr)	Sewage Export (AF/yr)
Pre-Project	670	400	0
Full Development	750	0	950
Difference	+80	-400	+950

The amount of additional surface to be recharged would be 80 + 950 + 400, or 1,430 acre-feet per year, in order to achieve a water balance compared to the pre-project.

Source: Provost & Pritchard Engineering Group

For at least the near future, this water would be exported from the southeast Fresno area to the regional WWTF.

Groundwater Quality. Overall, the impacts of the proposed project on groundwater quality would be beneficial. This is because concentration due to evapotranspiration would be less, and more canal water would be recharged in the vicinity, compared to pre-project. Application of fertilizers and pesticides would be less than for the pre-project. Also the TDS of the well water supply would be low, resulting in a low TDS effluent.

Summary and Conclusions

The consumptive use of applied water for the proposed project would be about 750 acre-feet per year, or about 80 acre-feet per year greater than for the pre-project. Canal water would not be used for the proposed project for the near-term. An estimated 950 acre-feet of sewage would be exported from the project site. In order to attain a water balance for the project, an average of about 1,430 acre-feet per year of canal water would have to be recharged in the vicinity. High nitrate and DBCP concentrations are in shallow groundwater in the vicinity of the project site. However, proper well construction techniques can be used to install new City supply wells that will produce water of suitability quality without treatment. Such wells are expected to be constructed similarly to City of Fresno PS-147 and PS-166, which are perforated from 315 to 620 feet, and 375 to 680 feet in depth, respectively, and to Bakman Water Co. Well 15A, which is perforated from 300 to 750 feet in depth.

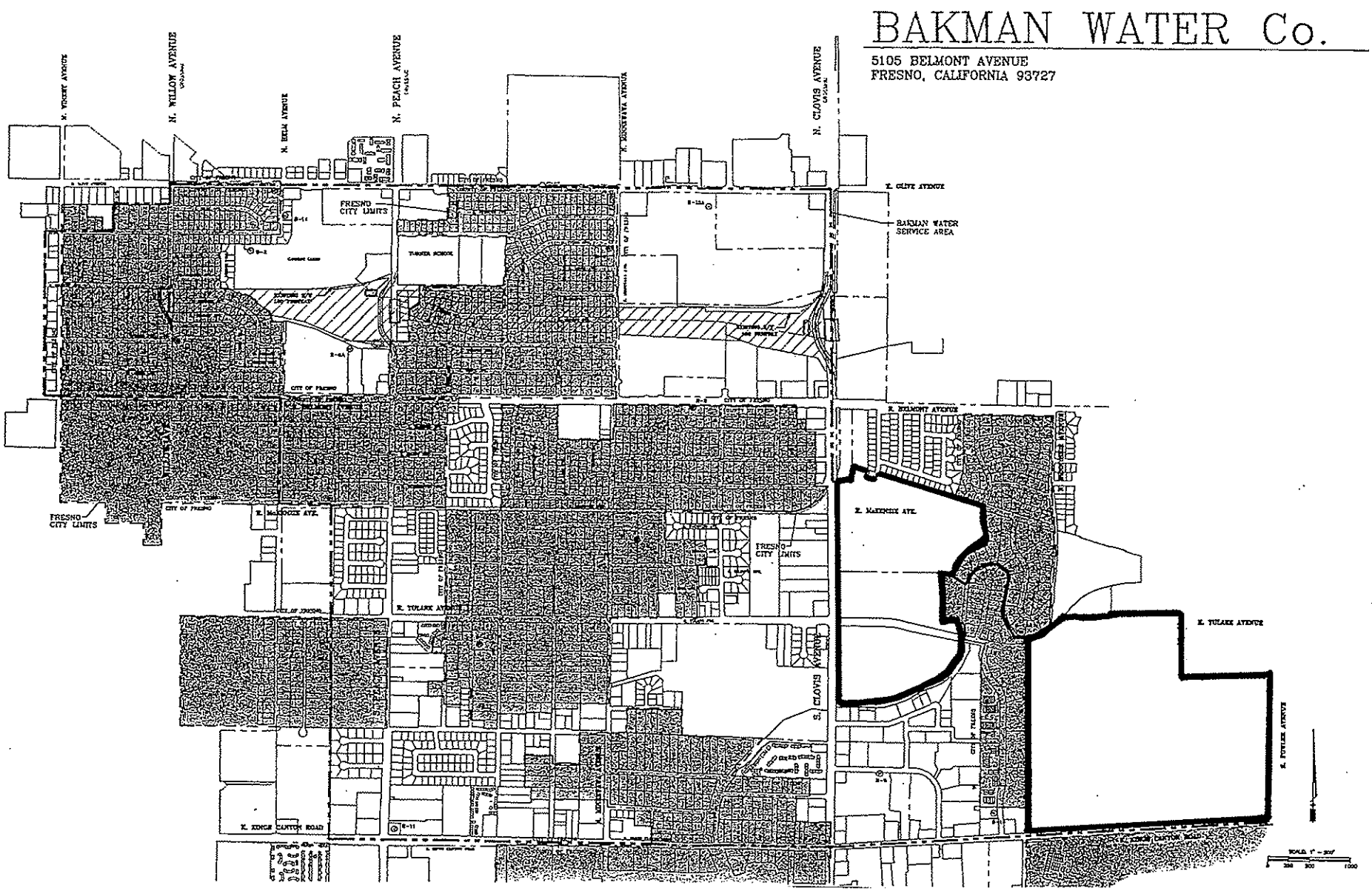
Impact

- **Approval of the project will require pumping from the groundwater aquifer. This is a *significant impact.***

Connection to the City of Fresno water system and Bakman Water Company will occur, allowing water from the balance of these systems to serve the project. The City is constructing a new 20 mgd surface water treatment plant on a 38-acre site located at the northeast corner of E. Behymer and N. Chestnut. The surface water treatment plant is completed and on-line. The purposes of the surface water treatment plant are to supply domestic water for the City of Fresno and to provide in-lieu groundwater recharge by reducing dependence on water wells for municipal supply. In-lieu recharge, which is the use of treated surface water for direct municipal supply, will reduce withdrawals from water wells and put a much grater volume of surface water to beneficial use than could otherwise be accommodated by direct recharge via percolation at the ponding basins in the area.

Approximately 327 acres of the proposed 476 acres of the project are within the boundaries of the Bakman Water Company as shown in Figure 2.9-7. These boundaries of Bakman Water Company are set by the California Public Utilities Commission (PUC) for future growth in the area. The boundaries include the regional commercial site, the proposed 211 acre R-1/UGM area west of Fowler Avenue, and portion of the C-2 mixed use area at Kings Canyon and Fowler lying westerly of Fowler Avenue.

Figure 2.9-7: Bakman Water Company Boundaries



Bakman's system of 15 supply wells is currently serving approximately 8,500 residents and commercial uses with drinking water and fire flow protection. The system meets or exceeds all drinking water standards. The company has considered the proposed development and proposes two new water wells strategically placed and sized according to the needs of the project. The company would expand its system of 12" water lines to serve the project utilizing existing facilities in the area of Tulare and Argyle. This system would enhance the area being developed to provide fire protection as needed and keep the distribution system efficient. Bakman Water Company will require water metering for all new construction within its service boundaries.

The project applicant has discussed the possibility of adding the approximate 10.33 acre parcel east of Fowler Avenue proposed for C-2 mixed use into the Bakman Water Company boundaries in order to alleviate the duplication of services for this area of development. Although this expansion is not supported by the City of Fresno, Bakman has stated that this area can be included into its looped system with no adverse effect to existing distribution system designs.

It is estimated that the project would require two domestic wells. Total pumping from the groundwater aquifer would be significantly less than prior to development, especially if canal water is available to recharge the groundwater. The sub-surface geologic conditions are favorable for intentional recharge in the site vicinity.

FID has committed, at a minimum, to the continued provision of "historic" water deliveries. This ensures a permanent source of water is available from FID to continue recharge on the project site. As a result, groundwater levels are not expected to decline, given the assumptions used in the EIR. Production wells would be located away from the site perimeter, so as to minimize drawdown in off-project wells. Connection to the City's water delivery system and the Bakman Water Company System in their service area, the continued delivery of surface water and recharge programs on the project site combined with proper well location would reduce impacts to a less-than-significant level.

SB 610 requires any city or county to consider a water supply assessment prepared for that development to determine whether projected water supplies available to the proposed project are sufficient to meet the project's anticipated demand. The threshold requiring analysis is 500 equivalent residential units. Additionally, effective January 1, 2002, SB 221 prohibits a city or county from approving development agreements, parcel maps, or tentative tract maps for any subdivision with more than 500 units unless a sufficient water supply is, or will be, available for the subdivision prior to its completion.

The project site is located in the Fresno Hydrologic Unit. The groundwater underlying the Fresno area is hydrologically and geologically linked, and has previously been described by the State Water Resources Control Board as the "Fresno Ground Water Unit." This Unit covers a 258,560-acre area bounded on the east by the low-lying foothills of the Sierras, on the north by the San Joaquin River, on the south by the Kings River and the Consolidated Irrigation District boundary, and on the west generally parallel to and several miles east of the Fresno Slough. Hydrologically and geologically, the Unit comprises a single groundwater basin. The Fresno Hydrologic Unit entirely underlies the City of Fresno and Fresno Irrigation District service areas.

The Fresno Groundwater Unit is a very productive aquifer characterized by highly permeable alluvial geology with significant deposition of porous, coarse-grained materials, providing a high water storage coefficient. Draft Bulletin No. 118 characterizes the native safe yield of the Kings River Basin as being over drafted. However, as noted in the *Fresno Metropolitan Water Resources Management Plan* (Water Plan) and the Schmidt Report for the project, several water supply agencies, including the City, have implemented, and have plans for further water management programs within the Fresno Groundwater Unit to augment the native yield of the basin. These projects include the use of developed water sources obtained from Friant and Pine Flat dams, along with recycled water and storm water recharge. These supplemental water sources are used "conjunctively" with local groundwater to meet the area's agricultural and urban water demands.

The Water Plan ~~and the Schmidt Report~~ describe in more detail the hydrologic conditions of the Fresno Unit. In summary, the Fresno Unit is in near equilibrium. Overdraft is conservatively estimated at less ~~than 20,000 acre feet (as reflected in net annual~~ reduction in stored groundwater) out of an annual water budget of almost 1,000,000 acre feet. Conservative estimates of useable groundwater in storage well exceed 10,000,000 acre feet. Although this minimal overdraft has only nominal impact on the areas long term water supply viability, the City and other water management agencies have planned enhancement and expansion of conjunctive use programs. With full implementation of current and planned programs, the Fresno Groundwater Unit will remain in long-term equilibrium beyond 2025, even with anticipated urban growth.

It should also be noted that the Kings River Basin is not adjudicated, nor are there any legal limitations on the use of groundwater. Therefore, there are no court orders or judgments specifying the amount of groundwater to which the City or the Project applicant is entitled.

The City of Fresno has a contractual right to obtain 60,000 acre-feet of water per year from the Friant Unit of the Central Valley Project. Water delivered from the Friant Unit is classified as either Class 1 water or Class 2 water. Contracts to serve Class 1 water take priority and all Class 1 water is allocated before any Class 2 water supplies are allocated. The total amount of water subject to Class 1 contracts is 800,000 acre-feet. In comparison, the average annual flow of the San Joaquin River, which is the source of inflow for water delivered by the Friant Unit, is 1,670,000 acre-feet. (Decision No. 935 of the State Water Resources Control Board, p. 24.) Thus, in Decision No. 935, the State Water Resources Control Board described the Friant Unit's Class 1 contractual supplies as very reliable.

The City has a permanent right to receive a portion of the water supplies available to the Fresno Irrigation District (FID). The FID holds high priority vested rights to receive approximately 470,000 acre-feet per year of water from the Kings River, as well as a Class 2 Central Valley Project water supply contract, with an average annual yield of about 30,000 acre feet. Within the FID, water entitlements "run with the land". When lands are converted from agricultural to urban uses, the FID water entitlements are transferred to the new land use. Currently, the City represents approximately 19% of the area within the FID and enjoys a proportionate allocation of the FID water entitlements – roughly 95,000 acre-feet per year. As more property within FID urbanizes and receives potable water supply from the City, the City's pro rata share of FID's entitlement increases.

Given the current land use patterns and associated water demands, the consumptive use of the average urban development is slightly lower than the consumptive use of associated agricultural lands. Thus, the urbanization of agricultural land within FID results in a net increase in availability (reliability) of water.

The City accesses its portion of the FID entitlement through a set of water sharing agreements with FID. These agreements create an institutional framework through which the City and FID conjunctively use various surface water, groundwater and recycled water supplies available to each entity. This arrangement ensures that the full portfolio of water supplies available to each entity is used directly, or recharged into the local groundwater basin so that the long-term regional water supply/demand equilibrium is maintained.

The City of Fresno, the City of Clovis, FID and the Fresno Metropolitan Flood Control District are collaborating an a new water supply project that will capture intermittent regional stream flows to enhance recharge of the local groundwater basin. The four entities have submitted a water rights application to the State Water Resources Control Board to establish their priority right to capture these surface water flows. The application has not been contested. The State Water Resources Control Board is expected to grant the application within the next 3 years. During this time, the four entities will finalize the design and construction of the physical infrastructure needed to implement this water supply project. The average annual yield from this water supply is estimated between 40,00-50,000 acre-feet. The cities of Fresno and Clovis will have priority rights to use the water developed from this project.

The City reclaims the municipal wastewater generated through the City's consumptive water use. Currently, approximately 70,000 acre ft. per year of treated wastewater is used directly for agricultural irrigation or banked in the groundwater basin, generally augmenting the availability of groundwater to the City. For example, about 30,000 acre feet per year is provided to the FID is made available by the City in exchange for additional surface water supplies beyond that which the City is otherwise entitled from FID. The City intends to take delivery of this exchange water once it has completed the development of additional facilities. Additional recycled water exchange capacity is conservatively estimated at 30,000 acre ft over the life of the 2025 General Plan.

During wet years, significant amounts of unallocated surface water is available for capture for groundwater recharge. More efficient use of these –"flood waters" from the Kings and San Joaquin rivers could be made with the development of additional groundwater recharge and banking facilities. FID has plans to add additional dedicated spreading basins to increase the ability to capture and bank flood waters from the Kings and San Joaquin Rivers for later use. The City and FID plan to further develop these water resources.

To avoid any negative impact on the overall groundwater balance (as compared to historical conditions), it is anticipated that implementation of the final phase of the Project will be conditioned on dedication to the City of an additional 250 acre-feet per year of surface water entitlement. This additional supplemental water supply may be provided through suitable arrangements for additional groundwater recharge/banking, additional recycled water use, City's renewal of its CVP supply contract, banked flood waters or water purchases.

Based on data prepared for the Fancher Creek project, and considering available groundwater resources, historical surface water deliveries intended for recharge, and connection to the public water supply systems, there are adequate water supplies available for the project.

Mitigation

The developer shall be responsible for the following mitigation measures:

1. The project shall commit to a water conservation program which shall include low-flow water fixtures, water conserving landscaping of public spaces, and water conserving practices for golf course irrigation.

2. Technical water supply information shall be submitted which demonstrates residential and commercial uses and corresponding water requirements.

3. The developer shall prepare a water master plan for approval by the City in accordance with City requirements.

4. The project should attain a water budget by using or recharging an average of about 1,500 acre-feet per year of canal water in the vicinity.

5. New public supply wells shall be designed and constructed to tap good quality water, which would not require treatment and would result in a low TDS effluent.

Level of Significance After Mitigation

Implementation of mitigation measures would reduce impacts to a less-than-significant level.

Impact

- **Approval of the project could result in domestic water wells with contaminants exceeding State MCLs. This is a *significant impact.***

DBCP and nitrates have been found in the groundwater in both City of Fresno wells and the Bakman Water Company. The State Department of Health Services mandates that DBCP MCLs be less than 0.20 parts per billion.

It is noted that if wells proposed to serve a public system are initially identified as exceeding MCL standards, they are not allowed to be included in the system. Treatment and/or blending would not permitted as a means of allowing the well to be placed into service. Alternatively, if a previously approved well which meets all applicable standards is already online, and routine sampling reveals an MCL has been exceeded, then treatment and/or blending plans can be submitted for review and approval by DHS.

Mitigation

The developer shall be responsible for the following mitigation measures based on required water-well monitoring:

1. Should any existing community water supply well exceed the DBCP MCL as detected in regular monitoring, granular activated carbon treatment or other acceptable technology shall be required consistent with CCR Title 22 requirements.

2. Should other contaminants be identified in the future, remediation shall be resolved in accordance with CCR Title 22 requirements. New wells as necessary

Level of Significance After Mitigation

Implementation of mitigation measures would reduce impacts to a less-than-significant level.

Impact

- **Groundwater quality degradation from stormwater runoff associated with urban development is a *significant impact.***

FMFCD is responsible for control of storm runoff in the Fresno urban area. In most of the urban area, storm runoff is collected and transported to percolation basins, where it is recharged to the groundwater, as a groundwater management practice.

The average annual rainfall in Fresno is slightly more than 10 inches. A study of storm runoff was conducted in the Fresno urban area in the early 1980s, as one of 28 NURP projects. The major objective of the Fresno NURP project was to determine the impact of basin recharge of urban storm runoff. As part of the program, the U.S. Geological Survey characterized the quality or urban storm runoff from areas with different land uses. Samples of runoff were collected from drainage areas representative of four different types of land use, including commercial and single-family residential. Samples of runoff were collected during thirteen storm events in the winter of 1982-83. Most samples were analyzed for the major inorganic chemical constituents, nutrients, trace metals and organic chemical constituents. Brown and Caldwell (1984) indicated that in general, runoff from the single-family residential site had the lowest contents of trace inorganic chemical constituents. Higher lead contents, however, were found in runoff from the residential sites.

Of the trace inorganic chemical constituents in the storm runoff, lead appears to be the major concern. However, lead is not mobile in most soil-aquifer systems, and has not been found at significant levels in shallow groundwater in the Fresno area despite decades of storm runoff percolation. Also, no trace organics have been found at significant levels in shallow Fresno area groundwater that are associated with percolation of storm runoff from residential areas or commercial areas.

Most contaminants in urban storm runoff would be expected to be associated with the suspended fraction, and this would eventually settle to the bottom of the storm runoff pond. It may be necessary to occasionally remove some solid materials from the bottom of the pond to avoid a buildup of contaminants such as lead. These activities would be performed by the FMFCD who will operate the storm water recharge facilities.

Mitigation

The developer shall be responsible for the following mitigation measure to be included as a condition of approval for all conditional use permits, tentative tract maps, or site plans:

1. Grading plans shall demonstrate that all areas of irrigated turf or other open space drain away from FMFCD basins, except in extraordinary wet years (10-year frequency storms).

Level of Significance After Mitigation

Implementation of the mitigation measure would reduce impacts to a less-than-significant level.

2.10 AESTHETICS

Introduction

This chapter evaluates the potential impacts of the proposed project on aesthetic resources. Information on the existing visual character of the area was collected through site visits. Potential impacts were evaluated based on a visual assessment analysis and proposed development standards of the project.

The project site is located in a mixed residential and rural setting in the southeastern portion of the City of Fresno. The predominate visual characteristics include existing residential areas, intensive commercial development at the intersection of Clovis and Kings Canyon, orchards, and row crops south of Belmont and east of Fowler, and rural residential development to the east of Temperance.

Beginning generally at Clovis Avenue and extending east into the downtown are the Sunnyside and Roosevelt communities with single-family homes, commercial development, parks and schools. The Fresno-Yosemite International Airport is located 1 ½ mile north of the site at Clovis and McKinley Avenues.

IMPACTS

Standards of Significance

Aesthetic/environmental impacts would be considered significant if one or more of the following would result from development of the proposed project: 1) the obstruction of any scenic vista or view open to the public; 2) the creation of an aesthetically offensive site open to the public view; and/or 3) the aesthetic impact is a substantial, demonstrable negative impact.

Impact

- **Development of Fancher Creek would alter the character and appearance of the project area. This conversion is considered to be a *significant impact.***

Analysis of visual impacts can be difficult because visual impacts are subject to personal preferences and sensitivities. Public views of the project site are from segments of Kings Canyon Road, Fowler Avenue, and Belmont Avenue. The regional commercial uses adjacent to Clovis Avenue will be highly visible from that roadway. The proposed project would notably transform public foreground and middle-ground views from these major roads. These views, currently of rural homes and agricultural expanse, would transition over time to that of an urban community encompassing a mixed use residential, commercial, and business park development.

Based on the nature of the proposed project, residential uses would be highly visible from surrounding roads. Views from Kings Canyon Road would be altered; in particular, historical views of orchards would be removed to be replaced with sound wall and landscaping treatment as seen further to the east adjacent to the Golden Dawn Ranch development.

New views will be typical of the urban setting found in newer neighborhoods in the metropolitan area. Views, however, will be altered significantly from existing rural, open, and agricultural viewsheds.

No direct access will be allowed to residential home sites from adjacent roadways. Development guidelines, which include setback and landscaping requirements and standards for wall and berm treatments, can reduce potential aesthetic impacts in an urban setting. These development guidelines should also include entry treatments for major project roadways as well as architectural standards for commercial/office development.

The proposed project would provide significant improvements to reduce aesthetic impacts. Short-term impacts would remain until landscaped vegetation reaches maturity.

Mitigation

The developer shall ensure that the following measures are incorporated in the design of the project:

1. The developer shall incorporate landscape, wall treatment, signage, and architectural standards for the development of residential, commercial, and recreation/open space.

2. A minimum 20-foot landscaped area shall parallel the northerly side of Kings Canyon Road. A berm and/or combination berm/sound wall shall parallel this roadway where residential lots are proposed.

3. Project entries along Fowler Avenue shall incorporate special entry features, such as extensive landscaping and low profile entry signs.

Level of Significance After Mitigation

With incorporation of mitigation measures, visual and aesthetic impacts will be reduced to a less-than-significant level.

Impact

- **Development of the project would introduce new light and glare. This is a *less-than-significant impact.***

Urban development brings with it the potential for new light sources from residential neighborhoods, commercial areas, street lights, and parking-lot lighting. Light and glare from the project would be typical of new development in the metropolitan area and would be controlled by the site plan review process for new commercial, multifamily, and parking lots. Lighting associated with urban development does not generally create hazards or nuisance effects, but provides accent, direction, and security. No significant effects are expected from new light and glare.

Mitigation

None required.

2.11 CULTURAL RESOURCES

This section is a summary of the *Historic Property Survey for the Proposed Fancher Creek Project, Fresno, California,* prepared by Jon L. Brady of J & R Environmental Services. The complete report and appendices are part of the EIR Technical Appendices and are on file with the City of Fresno Planning and Development Department. Surveys were undertaken in accordance with the requirements of the California Environmental Quality Act of 1970 (CEQA; PRC §21000, et seq.). Mr. Brady meets the Secretary of Interior's Professional Qualification Standards for archaeology and architectural history.

Setting

The project study area lies within the Lower Sonoran Zone that is west of but not a part of the Sierra Nevada. The Greater Central Valley (mainly the Lower Sonoran Zone) community is characterized by flat terrain with elevations ranging from 300 to 400 feet.

During the prehistoric period, a number of aboriginal groups occupied the floodplains of Big Dry Creek and Little Dry Creek and the area south of the San Joaquin River. These groups included the Gahsowu, Wakichi, and Kechayi of the Yokuts. The Dumna, Tolteche, and Daliche Yokuts occupied the north side of the San Joaquin River. These groups as well as other Yokuts groups were politically organized into small tribes, each with its own distinctive name, dialect, settlements and recognized territories which usually encompassed no more than two drainages. Permanent wintering areas usually occurred around major watercourses like the San Joaquin River or the Kings River. From these areas they moved out to temporary seasonal camp sites.

Early nineteenth century contact with valley Indians came as a result of punitive actions by Spanish soldiers seeking runaway mission Indians and military deserters. During the Mexican period, several expeditions into the valley resulted in Indians being captured and returned to the missions. Most certainly during the 1840s, both Mexicans and Anglo-Americans moved through the Valley in greater numbers, resulting in their visits becoming more permanent.

The discovery of gold in 1848 brought thousands of fortune seekers into the lower Mother Lode area and with them came greater potential for conflict between Indians and miners. In 1851, soldiers arrived in response to the Mariposa Indian War. Eventually, a military post was built on the south bank of the San Joaquin River about two miles above Friant. The following year, Camp Barbour was moved downstream to Rootsville, a settlement of miners, and renamed Fort Miller. The major industries of the area became farming and cattle. As the state's population continued to grow, new counties were formed. Fresno County, formed in 1856, was carved from portions of Mariposa, Merced, and Tulare counties.

Development of Fresno. In 1856, with Millerton designated the first county seat, Fresno County was developed from portions of Mariposa, Merced and Tulare Counties in 1856. By 1874, the city of Fresno – established in 1872 by the Central Pacific Railroad – had become the county seat. In 1885, with a population of 1,112, the city incorporated.

The Central Pacific Railroad, having completed the western segment of the Transcontinental Railroad, decided to connect the northern part of the state with Los Angeles. The railroad line would traverse Fresno County with its principal stop being located at Sycamore (now Herndon) on the San Joaquin River. Construction crews commenced work on the rail line on December 31, 1869. During an inspection tour, several officials of the Central Pacific Railroad including its director, Leland Stanford, visited the 2,000 acre ranch of A. J. Easterby. Upon seeing the fields of "gently-waving green grain", Stanford exclaimed "Wonderful! Here we must build the town". The new site was located in the "Sinks of the Dry Creek", the lowest spot between the San Joaquin and the Kings Rivers.

Shortly after Leland Stanford's visit to Easterby's ranch, the Contract and Finance Company (a real estate subsidiary of Central Pacific) purchased 4,480 acres of land from the so-called German Syndicate of which Easterby was a member. This group of German-born residents of San Francisco had previously purchased 80,000 acres from William S. Chapman.

By the spring of 1873 track had been laid as far as the new town site of Fresno. At the end of April 1873 Fresno had side tracks and a turning table. Over the course of the next month the town site was surveyed by Edward H. Mix. It was divided into "302- by 400-foot blocks, with 25- by 150-foot lots and twenty-foot alleys". The cost of individual lots was dependent upon location - lots ranged from $60 to $250. Within two years the city boasted of having "four general stores, two fruit stores, one drugstore, three hotels, two restaurants, six saloons, two law offices, two physicians, one tinsmith, one saddle shop, two butcher shops, three blacksmiths, one tailor, the *Expositor*, and twenty-five private residences"

As the community grew in stature and with an ever increasing population, calls for a change in the county seat from Millerton to Fresno were being made. Eventually, a petition was submitted to the Fresno County Board of Supervisors calling for a special election to address this issue. On March 23, 1874 the special election was held and resulted in Fresno being designated the new county seat.

Aside from the railroad, the colony system and agriculture made Fresno the leading agricultural center of the San Joaquin Valley. In developing the colony system, land speculators purchased large tracts of land, divided them into 20-acre lots, and in many cases built roads, canals, and lined streets and canals with decorative trees and plantings. Promoters advertised these colonies as self-contained units with ample water to grow crops and raise a family. These successful promotions contributed to the growth of Fresno County, and ultimately, the city of Fresno.

Early Water Conveyance Systems. Water was the key to the success of the colony system. Thus, during the 1870s property owners east of present-day Fresno attempted to expand the earliest canals. The most ambitious undertaking was that of A. Y. Easterby who eventually used Kings River water to irrigate 2000 acres of his lands north of the project study area. The center of Easterby's operation was located in Sections 5 and 6 of Township 14 South, Range 21 East (M.D.B. & M.), which was bounded by present-day Chestnut Avenue, Kings Canyon Road, Clovis Avenue, and Belmont Avenue. Easterby hired Moses Church to supervise the construction of a canal to bring water to his land.

In order to accomplish this task, Church, Easterby, and Robert Edmiston, an engineer, incorporated the Fresno Canal and Irrigation Company on February 16, 1871. Moses Church intended to widen and lengthen the Centerville Ditch until it reached the natural channel of Fancher Creek. Although Fancher Creek was a natural conduit, it was extended in various stages during the late 1870s, 1880s, and decades later, to serve irrigated colonies to the south and west of the project study area.

The Fancher Creek Canal, also known as Fresno Canal in the late 1800s, was completed in 1874. The canal began at the head of the terminus of the Centerville Canal (later renamed the Fresno Canal by Moses Church) near the "...center of Section 31, township 13 south, range 23 east, M. D. B. & M., and running thence in a southwesterly direction 9.09 miles more or less to the terminus of said canal near the south line of the northeast quarter of section 17, township 14 south, range 22 east, M.D.B. & M.". A segment of the canal traverses Area 2 of the project study area.

A segment of a second structure, the Eisen Ditch, also constructed in the early 1870s irrigated considerable acreage for both Easterby and F. T. Eisen. A review of historic maps suggests that Eisen Ditch along with numerous laterals extending from it carried a substantial flow (Mikesell 1991:5). The head of the ditch is located on the west side of Fancher Creek Canal in the southwest one-quarter of Section 35 of Township 13 South, Range 21 East (M.D.B. & M.). From here it carried water in a southwesterly direction to a point where it intersected Temperance and Belmont Avenues (Belmont was originally known as Centerville and Fresno Road). The ditch continued on the south side of Belmont Avenue to its intersection with Fowler Avenue. The ditch turned southwest across Easterby land. Today, that section of the ditch on the south side of Belmont between Temperance and Armstrong Avenues is piped underground; a half-mile segment of the Eisen Ditch, on the south side of Belmont Avenue between Armstrong Avenue and Fowler Avenue and within Area 2 of the project study area, remains open earthen. Beyond Fowler Avenue water is piped underground for another quarter mile.

Both Fancher Creek Canal and the Eisen Ditch were maintained by the Fresno Canal and Irrigation Company until 1920 when the Fresno Irrigation District was formed. In 1921 the newly formed Fresno Irrigation District (FID) incorporated a majority of the canals of the Fresno Canal and Irrigation Company. The district began a program of routine maintenance that included dredging and replacement of wooden regulatory structures with concrete structures. Between 1871 and 1920, the Fresno Canal and Irrigation Company's maintenance program was not a priority. Thus, in 1921, the district manager of the newly formed irrigation district informed the Board of Directors of the need "for the clearing of trees, brush, fences, corrals, advertisement signs, and other obstructions from the canals and ditch banks, because they hampered the district's maintenance work" (Willison 1980:196).

The Fancher Creek Canal has been improved over time. Both the Fresno Canal and Irrigation Company and the Fresno Irrigation District modified the natural channel to improve the operation of it as a water conduit. Mikesell (1991:2) described Fancher Creek Canal as ranging from a natural meandering channel (refer to Figure 4) to one that had been reinforced with concrete and rip-rap. The canal has also been cleared and graded for most of its length, and the banks have been lined with crushed concrete (outside the present study area).

All of the wood structures associated with the Eisen Ditch were also replaced with concrete gates such as the one shown in Figure 5 above. With the exception of the one-half mile of open earthen ditch, the rest of Eisen Ditch is piped.

Agricultural Colonies of the 1870s and 1880s. The 1870s and 1880s were "boom" years for colonizing ventures in the vicinity of Fresno. This resulted from the migration of families from the East Coast to California. No longer were people seeking their fortunes in the gold fields, but rather were looking for a place to raise their families. Affordable colony lands provided water and roads, and assured population growth in Fresno County.

News of the first successful colonies, in Fresno County, was touted by the very people trying to capitalize on the colony system. Land speculators purchased land around the City of Fresno at a rapid pace, seeking to convert their investments into huge profits. Real estate agents, especially from the San Francisco area, promoted excursions to Fresno that were often successful for the agents and those they represented. According to one source the "...arrival of newcomers greatly accelerated the growth of the outlying districts".

A segment of one of the original colonies lies within the project study area. The Temperance or Church Colony, established by Moses J. Church in 1877, is bounded by present-day McKinley, Temperance, Belmont and Fowler Avenues. The colony consisted of one section of land subdivided into 20-acre lots that were all sold by March 1878. The 30-acre parcel in Area 1 (APN's 310-130-60 and 310-130-35) includes Lots 1 and 8 as well as portions of Lots 2 and 7 located in the southwest one-quarter of Section 34 of Township 13 South, Range 21 East (M.D.B. & M) of the former Temperance Colony. This 30-acre area is presently under cultivation (refer to Figure 3).

While the colony system continued to expand during the 1880s, it was done without capital investment. Consequently, the development of colonies after 1880 appears to have taken much longer, and in most cases without the success of earlier ventures.

Beyond the colony system several sections of land, portions of which are located within the project study area, were owned exclusively by two individuals, Francis T. Eisen and George C. Roeding. The largest area belonged to Roeding, who as a member of the so-called German Syndicate, had invested in the purchase of 80,000 acres prior to the coming of the railroad. After the Central Pacific Railroad purchased approximately 4,500 acres from the syndicate, the rest of the land was divided up among the investors. One's share was in proportion to that person's financial investment in the purchase of the land from William Chapman. Roeding received eleven sections of land. Almost immediately thereafter, Mr. Roeding began to sell the land.

Francis T. Eisen bought 640 acres at $10 an acre (Section 3 of Township 14S, Range 21E) from Roeding. His land was bounded by present-day Clovis Avenue to the west, Belmont Avenue on the north, and Fowler and Kings Canyon Avenues to the east and south.

The Eisen estate was not only famous for its vineyards and winery, but also for the functions that were a part of the social fabric of Fresno. By the late 1870s the Eisen vineyards had over one-hundred-sixty varieties of grapes.

The centrally located winery produced over 100,000 gallons of choice brandy and wine annually. The success that Eisen enjoyed in the wine industry encouraged others to plant vineyards. Eisen also had "sixty acres of alfalfa, twenty acres of corn, numerous fruit tree and a home off present-day Belmont surrounded by a twenty-acre garden containing two-hundred-and-fifty varieties of roses". The Eisen mansion was one of the first in Fresno.

The Eisen estate remained intact through the early years of the 20th century. As Fresno began to expand to the east, by the 1920s, the former lands of Eisen were subdivided (Progressive Map Company 1935). The southwest one-quarter of Section 4, which is bounded by Kings Canyon Avenue to the south and Clovis Avenue to the west, Fancher Creek Canal to the north and the western boundary of a 157-acre parcel (APN 313-021-19) that is within the project study area (Area 3), is commercially developed. In addition to this, there are single-family and multiple family housing units as well. It is here within this commercial and residential development that the former Eisen mansion and winery were located. In that portion of Area 3 (APN 313-021-19) (refer to Figure 3) located west of N. Fowler Avenue, north of Kings Canyon Road and south of Fancher Creek Canal there is no visible or recorded evidence of the Eisen's estate or vineyard located in the southeast one-quarter of Section 4 of Township 14 South, Range 21 East (M.D.B. & M.). There are however, two pre-1954 buildings within the 157-acre parcel at 5845 E. Kings Canyon Road (APN 313-021-19). In addition to these historic period buildings there are several post-1954 residences and ancillary buildings. None of these extant buildings appear to be associated with the former Eisen estate.

Area 4 is also within the former lands of F. T. Eisen and there is one extant historic period residence and associated ancillary building located at 133 N. Clovis Avenue (APN 313-021-01). These buildings are also not associated with the former Eisen estate.

Frederick C. Roeding owned eleven sections of land in the Fresno area, of which two sections were located east of the Eisen property. In 1883 Roeding went into partnership with F. T. Eisen in establishing the Fancher Creek Nursery in the northwest one-quarter of Section 3 of Township 14 South, Range 21 East (M.D.B. & M.), which is within Area 2 of the project study area. Shortly thereafter, his son, George C. Roeding, having earned a degree in horticulture, expanded the nursery business at the southeast corner of S. Fowler Avenue and E. Belmont Avenue. According to Eaton (1965:15) George C. Roeding soon was

> *recognized in the nursery business and he became one of the best known and respected men in his profession. He brought the Smyrna fig to California along with its necessary companion, the blastophaga grossorum wasp, which he smuggled out of Asia. He was the father of today's tasty Calimyrna fig.*

Presently, within the area that was formerly part of the Fancher Creek Nursery there are two parcels of land identified as APN's 313-270-05S and 313-270-06. A circa 1940 Western barn is located at 860 N. Fowler (APN 313-270-05S), while a residence constructed circa 1957 is located at 6381 E. Belmont Avenue on the parcel identified as APN 313-270-06.

The Roeding residence and associated buildings were located on the south side of Fancher Creek Canal, outside the project study area, in the center of Section 3. The residence was encircled with a drive "which in turn was transected by the north-south running entrance road". All of the buildings associated with the Roeding estate have long since been removed.

That segment of the former Roeding estate located within Area 3 (APN's 313-280-01 and 313-280-33) remains undeveloped with the exception of a post-1954 commercial property located at 44 N. Fowler Avenue.

Regulatory Context

California Environmental Quality Act (CEQA). CEQA requires consideration of project impacts on archaeological or historical sites deemed to be "historical resources." A substantial adverse change in the significant qualities of a historical resource is considered a significant impact. For the purposes of CEQA, a "historical resource" is a resource listed in, or determined to be eligible for listing in, the California Register of Historical Resources (CRHR). Historical resources may include, but are not limited to:

> Any object, building, structure, site, area, place, record or manuscript which a lead agency determines to be historically significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California. [14 California Code of Regulations (CCR) 15064.5(a)(3)].

The eligibility criteria for the California Register are the definitive criteria for assessing the significance of historical resources for the purposes of CEQA (Office of Historic Preservation). Generally, a resource shall be considered "historically significant" if it meets the criteria for listing on the CRHR, as defined in the Public Resources Code (PRC):

- Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage.
- Is associated with the lives of persons important in our past.
- Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values.
- Has yielded, or may be likely to yield, information important in prehistory or history [PRC 5024.1(c)].

City of Fresno Historic Preservation Ordinance. The City of Fresno Historic Preservation Ordinance (Fresno Municipal Code, Chapter 13, Article 4) establishes a Historic Preservation Commission and a Local Register of Historic Resources.

Any building, structure, object, or site may be designated as a historical resource and listed on the Local Register if the Historic Preservation Commission and the Fresno City Council find that the resource is more than 50 years old; possesses integrity of location, design, setting, materials, workmanship, feeling, and association; and meets the criteria for listing on the CRHR, as discussed above.

The Local Ordinance establishes and delegates certain powers and authority to the Historic Preservation Commission, institutes a Local Register of Historic Resources; sets criteria for listing on the Register and establishes hearing procedures related to projects that would affect historic resources.

The City of Fresno is also a Certified Local Government under an agreement with the State of California. This agreement allows the City to do most of the environmental review as mandated under CEQA and the National Historic Preservation Act, review which normally would be conducted at the State level. As a CLG the City has numerous obligations, however, including the performance of historic surveys to State standards.

Records Search. A records search of the Fancher Creek project showed no cultural resources within the project area or a one-half-mile radius that are listed in the National Register of Historic Places, California Points of Historic Interest, California State Historic Landmarks, the California Register, or the California Inventory of Historic Resources. Fancher Creek within the project area was also noted.

IMPACTS

Standards of Significance

Pursuant to Section 15065(a) of the CEQA Guidelines, elimination of important examples of major periods of California history or prehistory would be a significant impact. A significant environmental impact could occur if a project would result in adverse physical or aesthetic effects to a prehistoric or historic or historic building, structure, or object; or have the potential to impact religious or sacred uses.

Impact

- **Implementation of the Fancher Creek project could result in the loss of important archaeological resources. This is a *potentially significant impact.***

If buried cultural materials are encountered during construction, all work in that area should be halted or diverted until a qualified archaeologist can evaluate the nature and significance of the finds.

Mitigation

Developers shall include the following mitigation measure in all construction contracts for earthwork/excavation:

1. If material that may be human remains, animal fossils, or archaeological material is encountered during project grading, excavating, or construction, work shall stop in the immediate area.

    a. If the material is suspected human remains, the Fresno County Coroner shall be immediately contacted for determination as to whether the material is prehistoric in nature. If the remains or other archaeological material is possibly Native American, the Native American Heritage Commission shall be immediately contacted and a recognized archaeologist retained to conduct an assessment. The site shall be formally recorded and recommendations made to the City of Fresno as to any further site investigations or site avoidance/preservation.

    b. If the material is human-related, but not human remains, and possibly Native American, the Native American Heritage Commission shall be immediately contacted and a recognized archaeologist retained to conduct an assessment. The site shall be formally recorded and recommendations made to the City of Fresno as to any further site investigations or site avoidance/preservation.

    c. If animal fossils are uncovered, the Museum of Paleontology, U.C. Berkeley shall be contacted to obtain a referral list of recognized paleontologists. An assessment shall be conducted by a paleontologist and, if the paleontologist determines the material to be significant, it shall be preserved.

2. Archaeological resources shall be evaluated through a "consolidated approach" in which the three phases of discovery and identification, evaluation and assessment, and mitigation are streamlined into a single operation. This affords the opportunity to treat the resources appropriately while eliminating potential project delays.

Level of Significance After Mitigation

Implementation of the above mitigation measures will ensure that potential impacts to archaeological resources are less-than-significant.

Impact

- **Implementation of the Fancher Creek project could result in the loss of important historical structural resources. This is a *less than significant impact.***

Structures more than 50 years old or buildings or facilities with unique architecture have potential historical importance. Development activities in the project area have the potential to affect historic resources in two ways. Direct effects to historic resources (buildings, objects, sites, and objects) would occur through site acquisition and clearance. Development projects may also cause a loss of a historic resource's surroundings and context.

Jon L. Brady conducted research and evaluated buildings within the project area that are at least 50 years old. During July, 2004, the properties were surveyed and photographed. Figure 2.11-1 shows the location of potential resources.

Within the built environment, three properties (Map No.'s 3, 4 & 5) with pre-1954 buildings and one structure (Map No. 1), the Fancher Creek Canal were identified, recorded, and evaluated. A second structure (Map No. 2) within the project study area, the Eisen Ditch, was evaluated in 1991 and with the passage of time, nothing has changed that would warrant a re-evaluation of this structure.

While the Fancher Creek Canal dates to the late 1870s, it lacks historical integrity. This canal was a natural channel utilized as a water conduit for irrigation. Over the decades the Canal was modernized and in some locals, took on the appearance of an engineered structure. The meandering nature of the canal within the project still points to a natural channel. Consequently, the structure does not meet the definition of a "historical resources" as defined by California PRC §21084.1.

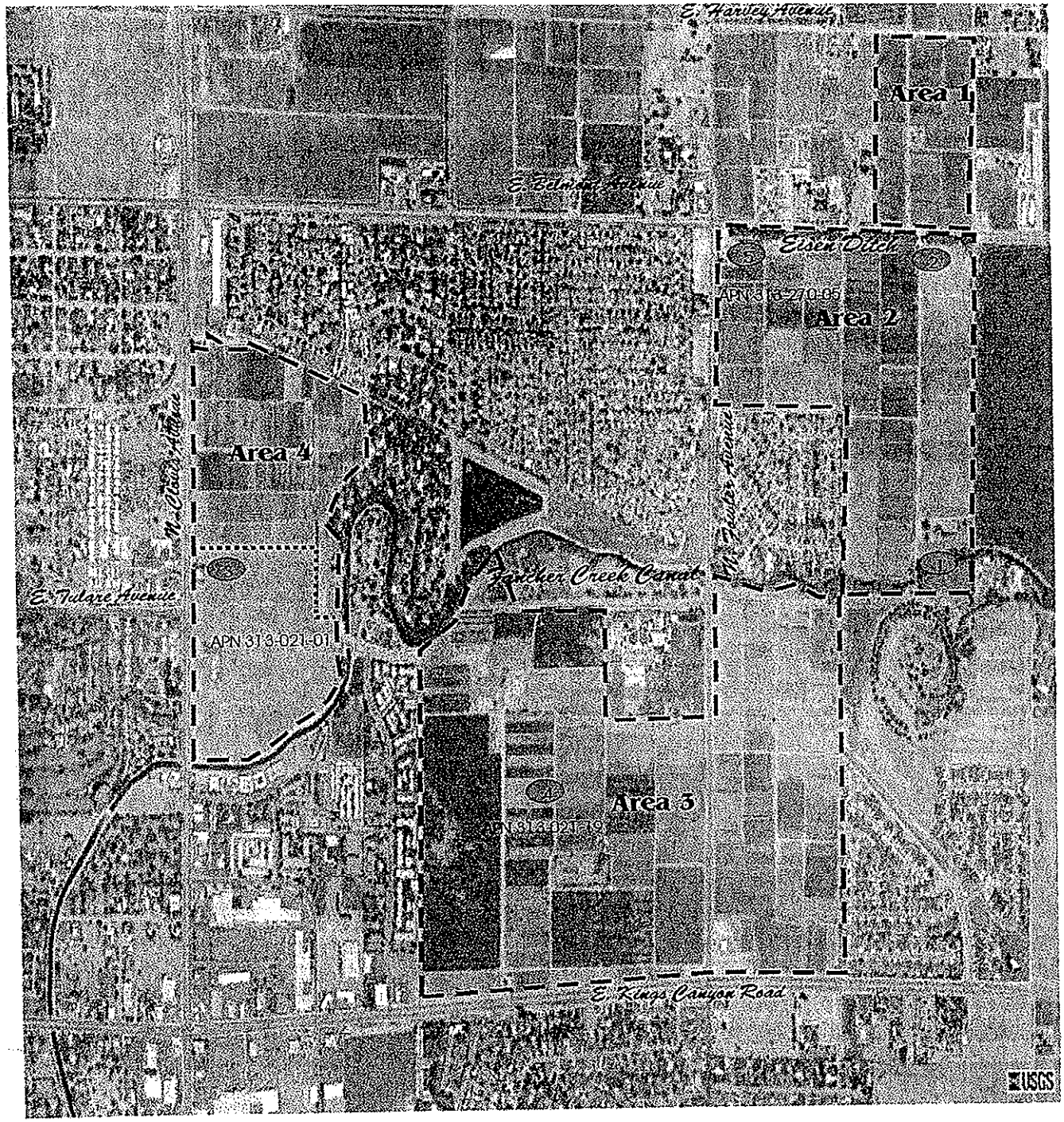
The four pre-1954 historic period buildings on three separate parcels (Map No.'s 3, 4 & 5) do not reflect extraordinary workmanship associated with a master craftsman, nor do they represent important examples of their type, period, region, or method of construction. Furthermore, there is no evidence that the buildings are associated with events or individuals of recognized significance in national, state, regional, or local history. All other buildings within the project study area have not met the requisite 50 years, thus no further study was necessary. Therefore, none of the buildings or structure considered in this report constitute an "historical resource," as defined by Calif. PRC §21084.1.

Based on the research results presented above, all of the pre-1954 buildings and the one structure were recorded into the California Historical Resource Information System due to their age, but were determined not to meet the CEQA definition of a "historical resource." In light of the results stemming from the field survey and archival research discussed in this report, no further studies are required unless project plans undergo such changes as to include areas not covered by this study.

Mitigation

No additional mitigation is required.

Figure 2.11-l: Resource Location Map



Legend

- Map Reference
- Project Study Area Boundaries
- Parcel Boundaries

Scale: 1:742

2.12 PACIFIC GAS AND ELECTRIC COMPANY (PG&E) SUBSTATION

Pacific Gas and Electric Company (PG&E) has been working with the City of Fresno, the Fancher Creek developers, and others on the siting and construction of a new electrical substation and power line. The proposed project is needed to serve later phases of the Fancher Creek development, the Reagan Center within Clovis Unified School District, the Fresno Yosemite International Airport, and expected growth in the surrounding area.

In previous meetings and letters, including the response to the Notice of Preparation for this EIR, PG&E officials have noted that current electrical systems will not be able to meet the full demand of development occurring in the southeast area of Fresno. It is anticipated that the Fancher Creek project will require the new substation after 2006 with additional new growth to the northeast and east requiring the substation by 2007.

The Airways Substation will be constructed on a 5-acre site west of Armstrong Avenue and south of Shields as shown in Figure 2.12-1. The figure also shows the alternative alignments for 115 KV power line routes connecting the substation to the existing Barton-Sanger 115 KV power line. Alternative alignment "A" would connect to the Barton-Sanger line 1/4 mile east of Fowler Avenue and continue north of Belmont Avenue approximately 3/4 mile to Harvey Avenue. Alternative "B" would connect to the Barton-Sanger line adjacent to Clovis Avenue at the northwest corner of the Fancher Creek project. The line would continue north to the SR 180 alignment and then continue east approximately 1 1/4 miles adjacent to the freeway until connecting the Alternative "A" alignment at Harvey Avenue. From this point, both alternatives would continue north to the proposed substation site.

This section discusses potential physical impacts of the location of the substation and power line alternatives, including recommended mitigation measures to reduce project impacts.

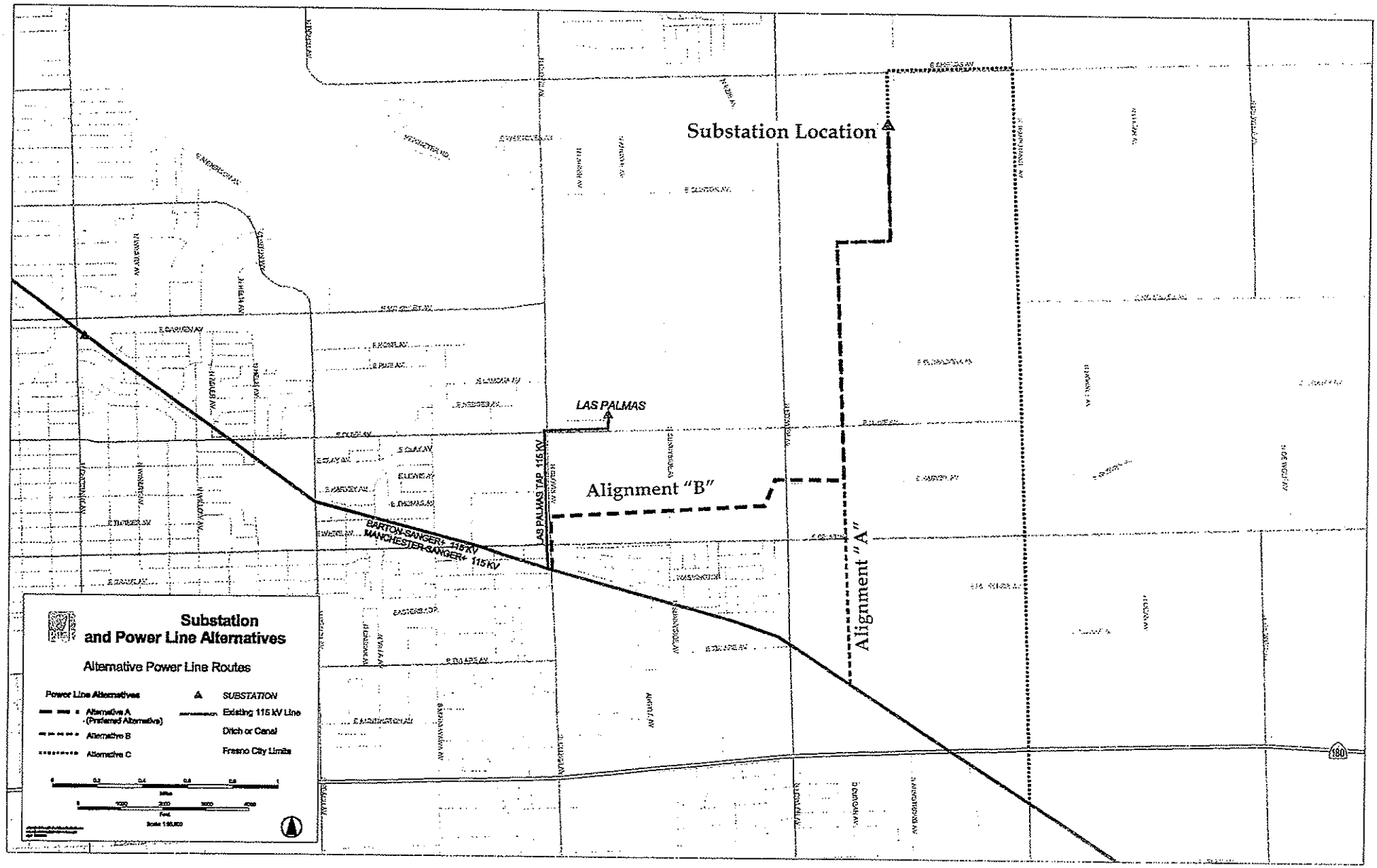
LAND USE

Standards of Significance

Impacts to land use would be significant if any of the following occur: conversion of land designated as prime farmland, unique farmland, or farmland of statewide importance to non-agricultural use; conflicts with existing agricultural zoning or a Williamson Act contract; changes to the environment resulting is conversion of designated farmland to non-agricultural use; physically divides an established community; conflicts with applicable land use plans; or conflicts with an applicable habitat conservation plan.

Please see Section 2.1, *Land Use, Planning, and Agriculture*, for background information.

Figure 2.12-1: PG&E Substation Location and Alternative Alignments



Impacts

Construction of the substation and permanent access roads, as well as the installation of poles, will reduce the amount of prime farmland available in Fresno County, although such loss is estimated at less than 10 acres and the impact will be less than significant.

The substation site and permanent access roads will be located on land subject to a Williamson Act contract. Project operation will therefore reduce the amount of land under the Williamson Act i the general area. Only the five-acre portion of the parcel under contract would be removed, however, reducing the impacts to the balance of the parcel remaining under the act. Please see Section 2.1, *Land Use, Planning, and Agriculture* for a discussion on the Williamson Act and required cancellation procedures. Substations are frequently placed in agricultural areas and do not result in the types of land use conflicts that other uses could create in such areas. This impact will be less than significant.

The site for the substation is designated for Low Density Residential uses by the 2025 Fresno General Plan and the site is within unincorporated Fresno County. As the area is still primarily in agriculture, future subdivision design can accommodate the substation. Annexation of the substation site is not required.

Mitigation

Because no significant land use impacts would result from construction or operation of PG&E facilities, no mitigation is required prior to construction.

TRAFFIC AND CIRCULATION

Standards of Significance

Traffic Impacts would be significant if any of the following occur: a substantial increase in traffic; exceedance of an established level of service standard; a change in air traffic patterns; substantial increase in hazards due to a design feature; or conflicts with adopted policies supporting alternative transportation.

Please see Section 2.2, *Traffic and Circulation*, for background information

Impacts

The majority of substation and power line construction activities will occur in roadless areas and will not require road closures. Construction activities will result in temporary traffic disruption on several major roads, however. PG&E anticipates temporary lane closures during construction on Armstrong Avenue, Harvey Avenue and possibly Clovis Avenue (for Alternative "B") several times during construction. The public will be notified in advance of lane closures.

Because of the temporary nature of the closures and the short length of time that the closures will occur, this impact would be less than significant. Impacts to traffic resulting from truck trips to and from the project area during construction will be insignificant as a result of the small number of trucks required.

Operation of the substation will not impact transportation or circulation because the substation will be an unmanned facility. Because no portion of the project is within 1,000 feet of the Fresno Yosemite International Airport, air traffic patterns will not be affected by the placement of new structures and power lines.

Mitigation

Because no significant traffic impacts would result from construction or operation of PG&E facilities, no mitigation is required.

AIR QUALITY

Standards of Significance

Impacts to air quality would be significant if the project would cause any of the following to occur: violate any ambient air quality standard; contribute substantially to an existing or projected air quality violation; or expose sensitive receptors to substantial pollutant concentrations.

Please see Section 2.3, *Air Quality*, for background information on existing air quality.

Impacts

Fugitive dust in the immediate area of construction is the primary potential air quality impact. In addition, fugitive dust, pollutants associated with the operation of construction equipment, and construction crew commuting is also expected.

Using a worst case scenario, PG&E projects the following construction phase emissions assuming a three month construction period.

•	PM_{10}	.67 tons per day	
•	ROG	.04 tons per day	(3.6 tons during construction period)
•	NOx	.357 tons per day	(31.5 tons during construction period)

The San Joaquin Valley Air Pollution Control District's threshold for NOx of 10/tons year would be exceed during project construction. PM_{10} emissions can result from construction activities of the project. The SJVAPCD requires implementation of effective and comprehensive control measures, rather than a detailed quantification of emissions. The SJVAPCD has determined that compliance with Regulation VIII for all sites and other control measures will constitute sufficient mitigation to reduce PM_{10} impacts to a less-than significant level.

Once constructed, the project will not cause pollutants to be emitted into the air in significant amounts during its span of operations. Since the substation is unmanned, there will be no vehicular emissions associated with its use.

Mitigation

1. All personnel working on the project will be trained prior to starting work on methods for minimizing air quality impacts during construction.

2. All active portions of construction sites, earthen access roads, and material excavated or graded shall be sufficiently watered to prevent excessive amounts of dust. Watering shall occur at least twice a day with complete coverage, preferably in the late morning and after work is done for the day. Where feasible, reclaimed water shall be used.

3. All clearing, grading, earth moving, or excavation activities shall cease during periods of winds greater than 20 miles per hour averaged over one hour.

4. Al material transported off site shall be either sufficiently watered or securely covered to prevent excessive amounts of dust.

5. The area disturbed by clearing, earth moving, or excavation activities shall be minimized at all times. This can be accomplished by mowing instead of discing for weed control and seeding and watering inactive portions of the construction site until grass is evident.

6. Construction site vehicle speeds shall be limited to 15 miles per hour.

7. If used, petroleum-based dust palliatives shall meet the road oil requirements of the District's rule regarding Cutback Asphalt Paving Materials.

8. Streets adjacent to the Project site shall be swept as needed to remove silt that may have accumulated from construction activities. The streets are required to be wet prior to or in conjunction with rotary sweeping.

9. All internal combustion engine driven equipment shall be properly maintained and well tuned according to the manufacturer's specifications.

10. Exposed stockpiles of soil and other excavated materials will be enclosed, covered, watered twice daily, or applied with soil binders.

11. During the smog season (May through October) the construction period shall be lengthened to minimize the number of vehicles and equipment operating at the same time.

12. Carpooling will be encouraged among construction workers through contractor bid specifications and project orientation for workers.

13. When available, electric equipment shall be utilized in lieu of gasoline powered engines.

14. Vehicle idling time will be minimized (e.g., 5 minute maximum).

15. Construction activities shall minimize obstruction of through traffic lanes adjacent to the site and a flag person shall be retained to maintain safety adjacent to existing roadways.

Level of Significance Following Mitigation

If the construction- related mitigation measures listed above are implemented, the air quality impacts of the project are expected to be insignificant. Operational and area emissions are expected to be insignificant with project implementation.

GEOLOGY AND SOILS

Standards of Significance

Impacts to geology and soils would be significant if the project results in increased exposure to geologic hazards, or if the project resulted in soil erosion.

Please see Section 2.4 *Geology and Soils*, for background information.

Impacts

Saturated loose sands and soft clays can pose difficulties for construction access and excavation activities. Implementation of appropriate mitigation measures will ensure that potential impacts to construction are less than significant.

Wind erosion could occur during construction and grading activities. Runoff water erosion potential, however, is generally low or negligible due to topographic flatness and permeable soils.

Standard substation and power line design requirements will take into account estimated ground shaking and seismic activity. Potential impacts as a result of ground shaking are less than significant.

Mitigation

1. Where necessary, construction activities shall be scheduled for the dry season to allow safe and reliable truck and equipment access. Where the potential of unsafe soil exists, near surface soft and loose soils can be replaced with engineered backfill.

2. An erosion and sediment control plan shall be developed and implemented by PG&E throughout the project construction period.

Level of Significance Following Mitigation

With implementation of the recommended mitigation measures, impacts to geology and soils will be reduced to a less than significant level.

BIOTIC RESOURCES

Specific project impacts to biological resources may be considered significant if they will:

- have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the CDFG or USFWS;

- have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the CDFG or USFWS;

- have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means; and/or

- interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.

Please see Section 2.5, *Biotic Resources*, for background information.

Impacts

In association with the proposed PG&E substation and alignment routes, the California Natural Diversity Data Base (CNDDB) was searched in 2001 for special status vegetation, wildlife and aquatic species that might occur in the project area. Habitat suitability for all species on the list was evaluated. The major natural plant community that occurs in the project site is the Great Valley Cottonwood Riparian Forest which occurs along the Fancher Creek Canal. This habitat ranges from non-existent in some highly disturbed areas to an estimated 200 feet wide near the eastern edge of the site.

Field surveys undertaken of the substation site and alignment routes found no special status plant or wildlife species. The Fancher Creek canal and other canals in the area hold water throughout the whole year in some years, possibly supporting aquatic life, including fish and amphibians. In most years, however, the canals and ditches are not operating in November, December, or January. Fancher Creek canal is used as a major flood control/irrigation canal, resulting in periodic flow during the fall and winter. The canal passes high volumes of water during full operation, holding maximums of 1,000 cubic feet per second.

This type of canal system would move any fish and amphibians out of the area during high flow periods because there is little refuge from high velocities in the canals. One would expect to find that the most abundant fish during the summer and early fall would be mosquito fish which are used at all of these locations to control mosquitos during this warm period.

The CNDDB search documented sightings of the California Tiger Salamander near Herndon Avenue in 1994, approximately six miles north and east of the site. Because of the seasonal high flows in the spring and summer and dry periods during the late summer and winter, the potential for any species of amphibians, including California tiger salamanders, to maintain populations in the site canals and ditches is minimal.

The only other special status aquatic species that might found at these locations is the Western pond turtle. No pond turtles have been observed on the site, and Western pond turtles in the project area's water bodies are likely to be limited by the seasonal nature of water flows. In addition, successful nesting for turtles is likely to be adversely affected because of the combination of agricultural fields and residential property adjacent to the canals.

Removal of vegetation in the area where the proposed Alternative alignment "A" crosses Fancher Creek could remove habitat marginally suitable for reproduction, cover, and/or feeding by special status and other wildlife. Because of the small size of the area to be cleared, estimated at ½ acre of less, and its low habitat value, removal would result in a less than significant impact to wildlife species. Construction of the power line would have an extremely minimal effect on sensitive wildlife, as there is no suitable feeding, reproduction, or cover habitat for these species along the power line route.

The presence of power lines can sometimes lead to bird collisions, especially raptors. There are no major bird flight paths or critical habitats in the project area, nor does placement, orientation, or configuration of the power lines contribute to high risk. On the proposed power line, all clearances between conductors or between conductors and ground will be sufficient to protect even the largest of birds from electrocution.

Mitigation

1. To further reduce potential impacts to the habitat along Fancher Creek, the width of the clearing required will be minimized. After construction, the area disturbed will be revegetated with native plant species. The revegetation will be designed, conducted and monitored by a qualified botanist or revegetation specialist.

2. To prevent destruction of active nests of bird species that are either special status or protected by the Migratory Bird Treaty Act, all trees and shrubs should be removed outside the nesting season, generally between August and February.

Level of Significance Following Mitigation

With implementation of the recommended mitigation measures, impacts to biotic resources will be reduced to a less than significant level.

NOISE

The area surrounding the substation site is in agricultural use. As such, existing noise levels are very low at the proposed site. If developed according to the 2025 Fresno General Plan. The site would be bounded by low density residential uses in the future with light industrial uses located to the west. Sound level measurements taken in the area of the substation and along the transmission alternative routes averaged 60 t0 68 dBA (Ldn).

Standards of Significance

Noise from permanent structures during project operation would be considered significant if the transmission lines or substation generated noise levels that exceed Leq 50 dBA (daytime) or Leq 45 dBA (nighttime) in the City of Fresno; or Ldn 65 dBA or Leq 50 dBA in other areas of Fresno County.

Please see Section 2.6, *Noise*, for background information.

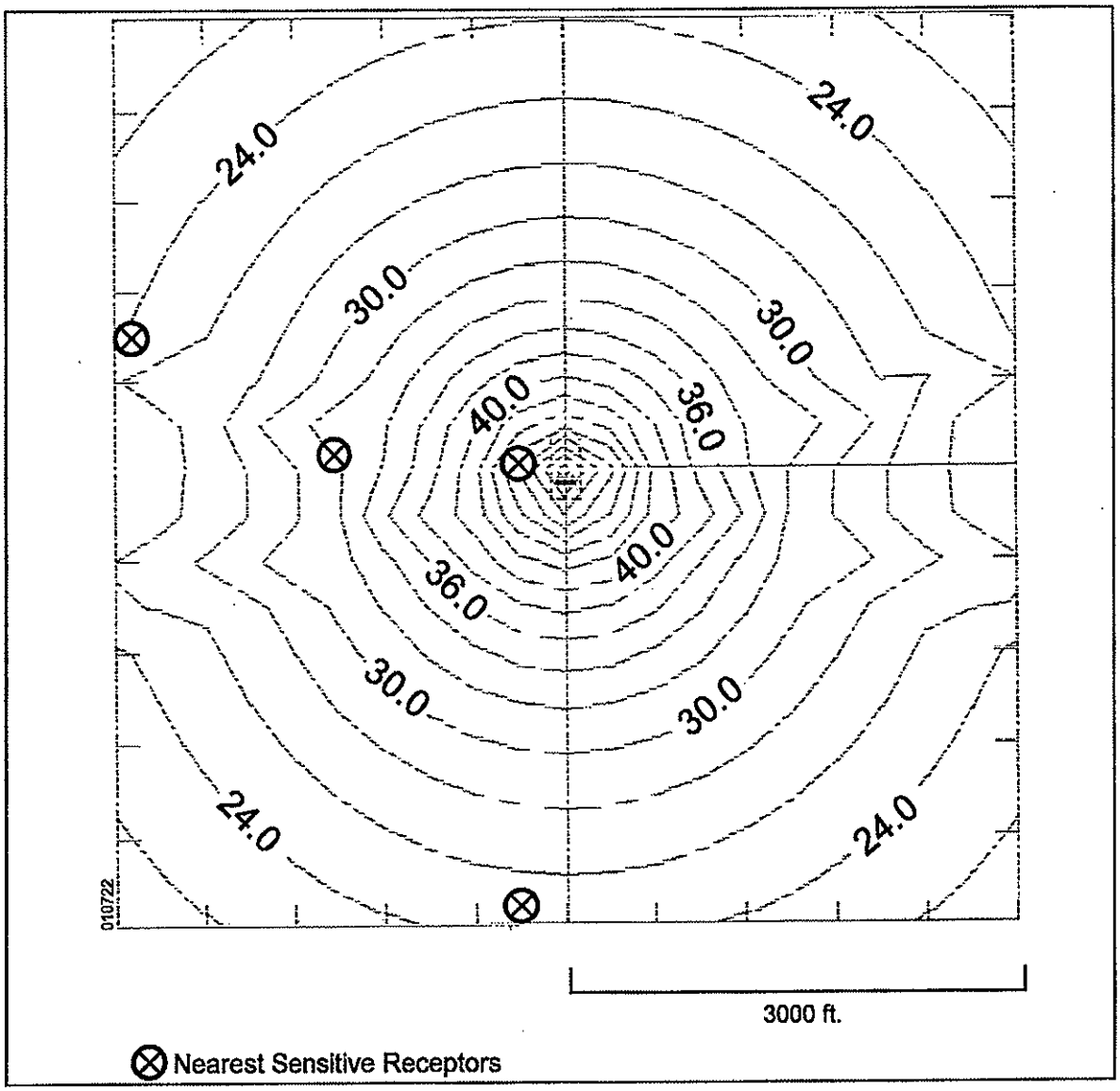
Impacts

Construction of the substation and power lines will involve earth moving equipment, trucks, and cranes. The nose levels would vary with the type of equipment being used. While construction noise will be occasionally audible, such noise levels constitute an insignificant effect.

Audible transmission line noise is generated from corona discharge, which is experienced as a random crackling or hissing sound. Corona discharge occurs when particles such as dust or water droplets come into contact with a conductor, and it is this discharge that causes the crackling or hissing sounds. The potential for noise from corona discharge is greater during wet or windy weather. During dry, calm conditions, the sound of corona discharge is generally inaudible to a person standing directly below a transmission line. During wet or windy weather, such noise may be audible within several hundred feet of the transmission line. The sound generated by 115 kV lines during adverse weather, such as fog or rain, will be less than 30 dBA directly below the transmission lines. This noise is less than existing ambient levels and is not significant.

At the substation, three banks of essentially equal sized transformers are planned. Three 115/21kV transformers are planned to be located near the perimeter of the yard. The transformers will meet a 79 dBA noise level. It should be noted that the noise specifications are derived from actual tests of similar transformers. To predict the noise impact from the three banks of transformers in operation, the noise impact characteristics were computer modeled. A worst-case scenario was modeled; full load, day time operation. The results are shown on Figure 2.12-2.

Figure 2.12-2 Substation Isophonic Distributions



The noise level from the substation transformers at the substation boundary is predicted to be 45-46 dBA. At 400 feet, noise levels are predicted to be less than 40 dBA. On a long-term basis, these noise levels are well within the various City and County guidelines and will not result in a significant noise impact.

Transformer noise contains a pure tone or "hum" component that can be the most offensive characteristic of transformer noise. While a 5 dBA penalty is sometimes added to account for increased sensitivity , no penalty is imposed within local ordinances. Even if the 5 dBA penalty is added, transformer noise is still below threshold levels.

Mitigation

1. During construction, compressors and other small stationary equipment will be shielded with portable barriers.

2. "Quiet" equipment that incorporates noise control elements will be used during construction.

3. Equipment exhaust stacks/vents will be directed away from buildings.

4. Truck traffic will be routed away from noise-sensitive areas where feasible.

5. Temporary sound barriers will be employed, if necessary, when construction will occur within 100 feet of residences or businesses or if sensitive receptors will be exposed to construction noise for more than one day.

6. Pre-drilled piles and/or other methods will be used, where possible, to reduce duration of impact pile driving and reduce the noise and vibration impacts.

7. Vibration levels will be monitored at the beginning of the project and when construction is occurring near sensitive equipment to ensure that vibration criteria will not be exceeded at these sensitive locations.

8. Construction techniques, including but not limited to, the use of non-vibratory means of soil compression, will be used where possible to ensure that the determined construction criteria are not exceeded.

9. Design specifications for the proposed transformers must meet or exceed the following:
   - 45 MVA 215/21kV transformers will meet 79 dBA, at 45 MVA (full capacity) FA rating.

10. The substation will be designed to maintain a minimum 50-foot distance between the transformers and the nearest fence line. This separation will maintain noise levels below the 55 dBA ordinance during day time full-load operation.

11. All transformers must be operated at reduced loading and without fan cooling between the hours of 10:00 pm and 7:00 am.

Level of Significance Following Mitigation

With implementation of the recommended mitigation measures, noise impacts will be reduced to a less than significant level.

HAZARDS

Standards of Significance

The project would have significant impacts if it created a hazard to public health or the environment through, among other things, the use of hazardous materials. Safety hazards from proximity to airstrips or exposure of people to fires or electromagnetic fields could also constitute a significant effect.

Impacts

Hazardous Materials. During construction, hazardous materials will be handled in accordance with best management practices contained in the site Hazardous Substance Control and Emergency Response Plan and Hazardous Materials Business Plan. PG&E will also prepare a Spill Prevention, Countermeasure, and Control plan for the proposed substation as outlined in Title 40 of the Code of Federal Regulations, Part 112. These plans will ensure that hazardous materials and oil spills are contained and controlled in keeping with best management practices. The substation will be operated in compliance with all applicable federal, state, and local regulations. Compliance with these regulations will reduce potential impacts to a less than significant level.

Fire Hazard. Power lines can be a fire hazard if they fall to the ground and create an electrical arc that ignites combustible material. During mechanical and structural design, PG&E will consider normal and unusual structural loads, such as ice and wind, that can cause power lines to break. PG&E also installs high-speed relay equipment that senses a broken line condition and actuates circuit breakers to de-energize the line in about 1/10 of a second. The company will also clear any fire-conducting objects that are located near power lines or the substation.

Airport Hazards. A portion of the proposed power line route will be located within the Fresno-Yosemite International Airport approach-departure surface. However, the power line would be constructed within height limitations set by the airport. In addition, the proposed project will be reviewed by the Fresno County Airport Land Use Commission to ensure consistency with the airport's land use plan. Adverse affects on aeronautical operations would be avoided.

EMFs. Electrical currents and voltages at the substation and along the connection lines would generate electric and magnetic fields (EMFs). EMFs are fields of force created by electric voltage. Magnetic field strength is measured in terms of lines of force per unit area (Gauss, G; or milligauss, mG).

EMFs are found whenever electricity is used, such as utility lines, building wires in homes, offices, schools and home appliances. Typical magnetic fields from these sources range from below 1.0 mG to 1,000 mG.

In recent years, EMFs from this use have come under scientific scrutiny regarding their possible effects on human health. Given the uncertainty of the EMF issue, the scientific community has been unable to determine if EMF causes adverse health effects or to establish any standard or level of exposure known to be either safe or harmful. No long-term exposure health-based national, international or state EMF standards or regulations have been developed. Both the California DHS and the EPA have clearly stated that standards are not recommended at this time.

The California Public Utilities Commission (PUC) has directed all utilities to take no-cost or low-cost EMF reduction steps on new and upgraded transmission, substation, and distribution facilities. The no-cost measures are those steps taken in the design stage which do not increase the project cost, but will reduce the magnetic field strength. The low-cost measures cost 4% or less of the project cost but reduce the magnetic field strength in the area by 15% or more. PG&E will prepare and EMF Field Management Plan which will specifically delineate the no-cost and low-cost EMF measures that will be installed as part of the final engineering design of the project and submit the plan to the PUC prior to construction activity.

Mitigation

Because no significant impacts would result from construction or operation of PG&E facilities, no mitigation is required.

CULTURAL RESOURCES

Standards of Significance

The project would have significant impacts if it caused substantial adverse change in the significance of a historical or archaeological resource, or disturbed human remains.

Please see Section 2.11, *Cultural Resources*, for background information.

Impacts

Walking surveys of the proposed power line routes and substation site were conducted in July of 2001. No cultural resources were found along the routes or at the site. There is the potential , however, for disturbing cultural resources during construction activities.

Mitigation

1. If material that may be human remains, animal fossils, or archaeological material is encountered during project grading, excavating, or construction, work shall stop in the immediate area.

a. If the material is suspected human remains, the Fresno County Coroner shall be immediately contacted for determination as to whether the material is prehistoric in nature. If the remains or other archaeological material is possibly Native American, the Native American Heritage Commission shall be immediately contacted and a recognized archaeologist retained to conduct an assessment. The site shall be formally recorded and recommendations made to the City of Fresno as to any further site investigations or site avoidance/preservation.

b. If the material is human-related, but not human remains, and possibly Native American, the Native American Heritage Commission shall be immediately contacted and a recognized archaeologist retained to conduct an assessment. The site shall be formally recorded and recommendations made to the City of Fresno as to any further site investigations or site avoidance/preservation.

c. If animal fossils are uncovered, the Museum of Paleontology, U.C. Berkeley shall be contacted to obtain a referral list of recognized paleontologists. An assessment shall be conducted by a paleontologist and, if the paleontologist determines the material to be significant, it shall be preserved.

2. Archaeological resources shall be evaluated through a "consolidated approach" in which the three phases of discovery and identification, evaluation and assessment, and mitigation are streamlined into a single operation. This affords the opportunity to treat the resources appropriately while eliminating potential project delays.

Level of Significance Following Mitigation

With implementation of the recommended mitigation measures, impacts to cultural resources will be reduced to a less than significant level.

VISUAL RESOURCES

Standards of Significance

Aesthetic/environmental impacts would be considered significant if one or more of the following would result from development of the proposed project: 1) the obstruction of any scenic vista or view open to the public; 2) the creation of an aesthetically offensive site open to the public view; and/or 3) the aesthetic impact is a substantial, demonstrable negative impact.

Please see Section 2.10, *Aesthetics*, for background information.

Impacts

The proposed substation site is in a rural location. The transmission line alternatives are in areas presently being developed with residential and commercial uses, and highway facilities. There will be visual changes with addition of the substation facilities.

The substation equipment will be enclosed by a chain link fence on three sides and a masonry wall on the eastern entrance. The transformers within the site will be approximately 13 feet tall. The highest structures in the substation will be the dead-end structures that will exceed 35 feet in height. The lattice steel poles will be approximately 95 fee in height and set on foundations approximately eight feet on each side. Views from existing residential development of the substation will be non-existent or minimal since the substation is located in an existing agricultural area. Rural homes closest to the substation will have clear views of the facility. Wall requirements along the east frontage and landscaped setbacks from Armstrong Avenue will reduce these impacts.

The lattice poles will be highly visible from existing residential development along Alternative alignment "A". This is especially true for existing single family homes within the northern portion of the Golden Dawn project and for the subdivision at the northeast corner of Fowler Avenue and Fancher Creek. The towers are difficult to screen and eventually become part of the permanent hard scape of the area. Existing power poles along the Barton-Sanger transmission line have been generally placed within street medians or open space areas and not as visually obtrusive to existing residential areas. Alternative alignment "B" follows a route that does not cross residentially planned areas, follows the alignment of SR 180 in an east-west direction, and would be less visually intrusive that Alternative "A".

Mitigation

The selection of Alternative alignment "B" would reduce visual impacts generally to a level less than significant. If Alternative "A" is selected, visual impacts are considered significant and unavoidable in that no adequate mitigation is available.

GROWTH INDUCING AND CUMULATIVE IMPACTS

Need to reconcile with Proj Description

As discussed in the introduction, the substation facility is needed to meet customer demand without overloading existing electrical facilities. PG&E is required by law to maintain adequate electrical service necessary to promote public health and safety. To determine what facilities will be needed to meet future demand for electricity, PG&E reviews and follows local land use and development policies.

The project will not directly or indirectly foster economics or population growth or remove obstacles to growth in the project area. The project is designed to meet immediate and projected power needs in the project area. The proposed project will accommodate projected electrical distribution in the project area by additional power to a system where the existing distribution capacity can not meet projected needs. The proposed project is consistent with PUC requirements to provide improvements to reliably meet projected demand.

The project is not considered growth inducing for the following reasons:

- Local jurisdictions and developers assume that electric service will be provided regardless of where the development occurs (because PG&E is required by law to provide it). The lack of facilities for supplying electric power for new and prosed development has not been an obstacle to current or proposed development . Because the proposed project is in response to planned development, it will not remove any current obstacles to growth. It is unlikely that the project will induce additional growth in the project area because that growth is regulated by the local jurisdictions.

- The project will provide short-term construction employment but no permanent employment. The limited, temporary nature of this employment will not result in long-term growth in the metropolitan area.

- The proposed project does not require the extension of public services to previously unserved areas. PG&E currently provides electric service to the entire project area. As previously discussed, the project is in response to new and proposed growth approved by local jurisdictions. The project will not require the development of access roads and the project will be primarily located within existing rights-of-way and highway corridors.

- The project will not tax existing services. The project will not require water, wastewater, or permanent solid waste services. The need for city and county provided services, such as law enforcement and fire protection, will be negligible, and could occur only during the construction phase of the project.

A project could have a significant cumulative impact if a change in the environment resulted from the incremental impact of the proposed project when added to other closely related past, present, and probable future projects. Cumulative impacts can result from individually minor, but collectively significant, projects taking place over a period of time. Cumulative impacts of growth in the project area are discussed in 3.0, *Environmental Analysis*.

ALTERNATIVE ALIGNMENTS

Other than no project, Alternative alignment "B" is the environmentally superior alternative. The alignment will mitigate potential visual impacts to existing residents in the Fowler/Armstrong corridor and follow a route along the freeway north of Belmont that will not be disruptive to existing or future residents. In addition, no crossing of Fancher Creek will be required with attendant potential vegetation and wildlife impacts.

3.0 ENVIRONMENTAL ANALYSIS

3.1 ALTERNATIVES TO THE PROPOSED PROJECT

Introduction

In accordance with Section 15126.6 of the CEQA Guidelines, the EIR must analyze a range of reasonable alternatives to the proposed project. The CEQA Guidelines provide the following direction for the analysis of alternatives:

- Describe a range of reasonable alternatives to the project, or to the location of the project, that would feasiblely attain most of the basic objectives of the project but avoid or substantially lessen significant effects.
- Evaluate the comparative merits of the alternatives.
- The EIR must consider a reasonable range of potentially feasible alternatives that will foster informed decision making and public participation. An EIR is not required to consider alternatives which are infeasible.
- The specific alternative of "no project" shall be evaluated along with its impact.
- If the environmentally superior alternative is the "no project" alternative, identify an environmentally superior alternative among the other alternatives.

The overall vision of the applicant for Fancher Creek can be summarized as:

1. Zone the site consistent with the 2025 Fresno General Plan.
2. Provide a variety of housing opportunities with a range of densities, styles, sizes and values designed to satisfy the identified increasing demand for housing in southeast Fresno.
3. Provide for commercial, office, and business park development sufficient to accommodate the needs of the population of the project as well as unmet needs in southeast Fresno.
4. Provide for alternative forms of transportation within the project and connection to regional trail and mass transit systems thereby reducing dependency upon the automobile.
5. Provide for a variety of open space opportunities within the project.
6. Provide the ability, through flexible zoning conditions, to develop mixed-use projects, which combine a variety of uses on one parcel.
7. Create a strong sense of "community" with landscaping, signage, lighting and project amenities that are unique to the Fancher Creek project.

This section identifies several alternatives to the proposed project including No Project, Increased Density, and Reduced Units. The impacts of each alternative are compared to impacts identified for the proposed project and quantified where possible. The alternatives were selected based on their ability to reduce one or more significant impacts of the proposed project.

3.1.1 No Project Alternative

Under the No Project alternative, rezoning, tentative tract map or tentative parcel map approval, or annexation, would not take place within the City of Fresno. Development of the site could proceed in accordance with existing zoning allowing a combination of agricultural and rural residential zoning. Impacts resulting from the proposed project identified in this EIR, including significant unavoidable impacts to traffic and air quality, would not occur. It is likely that the conversion of agricultural land would continue over time, as land is developed to rural homesites consistent with the existing AE-5 zone district.

Any environmental benefits of this alternative must be considered short-term, however. The project site is planned for a variety of urban uses by the 2025 Fresno General Plan. State planning and zoning law requires that zoning be consistent with the land use element of the General Plan and one intent of the proposed project is to implement this zoning consistency (it is understood that in implementing zoning consistency, potential impacts to the environment must be considered and mitigated to the extent feasible).

In addition, the project site is located in an area of southeast Fresno that is rapidly urbanizing and is within a primary growth area of the City of Fresno. As a result, the No Project alternative is not considered feasible in the long-term.

Under the No Project alternative, several site-specific impacts to the environment would be greater than the proposed project. The alternative, however, would more strongly support policies of the General Plan calling for more efficient development, the conservation of land resources, including agricultural land, and advancement of the principals contained in *A Landscape of Choice*.

3.1.2 Increased Density Alternative

Under the Increased Density alternative, the number of residential units would be increased by developing the Medium Density land use designation at 10.37 units/acre, the high end of the category as stipulated in the 2025 Fresno General Plan. Such density could be achieved by smaller single family residential lots interspersed with multi-family projects at densities of 15 to 20 units acre. The commercial, mixed-use, and business park land uses of the proposed project would remain as currently proposed.

Table 3-1
Increased Density Alternative

Alternative	Number of Units	Population
Increased Density	3,000	7,500
Proposed Project	2,023	5,000

Impacts

Land Use, Planning, and Agriculture. Under the Increased Density alternative, land use compatibility issues would be similar to the proposed project. The change of land use from agriculture and fallow land to an urban project would be similar. The elimination of larger lots would make the project more compact and dense. The increased density alternative also may act to preserve prime agricultural soils elsewhere in the metropolitan area by leading to a more efficient land use pattern on the project site.

The diversity of housing types would be greater in the higher density alternative, even though larger lots would be eliminated. Different housing types could be provided, including multifamily and rental units providing housing to a wider range of income groups.

Potential land use impacts at the interface of existing single family neighborhoods and high density development could increase, particularly if multifamily development was proposed at the common property line.

Transportation and Circulation. Implementation of the Higher Density alternative would significantly increase traffic impacts on surrounding roadways. Assuming a trip generation consistent with the traffic study prepared for the project, the Increased Density alternative has the potential to generate approximately 10,000 additional daily trips compared to trips generated by the proposed project. Higher densities would increase the potential for transit and offset a portion of the greater traffic impacts attributable to this alternative.

Improvements to Clovis Avenue, Kings Canyon Road, and Fowler Avenue would be required in a similar manner as the proposed project. However, the increase in traffic volume may require additional improvements beyond those forecast for the proposed project plus cumulative build-out.

Air Quality. Air quality degradation from the Increased Density alternative would be proportionately greater because of the higher traffic volumes in and surrounding the project site. However, with the greater density, the possibility of developing a cost-effective public transit system and the use of alternative transportation modes is enhanced. Greater transit use resulting from higher density could act to reduce vehicle emissions. There would be no appreciable change to the air quality impacts from a cumulative perspective, however.

Geology and Soils. Impacts on soils would be similar to the proposed project as the same areas would be graded for development.

Noise. The Increased Density alternative would have approximately the same noise impacts as the proposed project and require the installation of noise walls, setbacks, and landscaping as the proposed project. Increased vehicle trips, however, could expose more people to unwanted noise along transportation corridors.

Wastewater Treatment. Wastewater production is expected to increase by 30 percent. This level of wastewater generation would create greater impacts to the wastewater collection system.

Hydrology. Surface hydrology would be more impacted compared to the proposed project. The amount of impermeable surface would be increased substantially. FMFCD would have to consider additional storm water drainage facilities to accommodate the density of the site.

There would be a substantial increase in the demand on groundwater from the additional residential uses. Approximately 1,000 additional residential units would require 240,000 additional gallons of water per day at 240 gallons per unit. This density could exceed the water balance capabilities of the surface supplies to be delivered to the golf course lakes.

Public Services and Utilities. Demands for public services would be substantially increased since the population increases to 7,500 compared to approximately 5,000 in the proposed project. Additional police and fire protection may be required. A larger public park system would be necessary to meet park-to-population standards. The Increased Density alternative would exceed the capacity of the proposed second elementary school and have proportionately higher impacts on middle schools and high schools.

Aesthetics. The Increased Density alternative would impact site aesthetics in a fashion similar to the proposed project because both are urban density projects. The proposed project would have smaller lots around the perimeter of the project and views to the traveling public would be similar with either alternative.

This alternative, similar to the proposed project, would dedicate and develop recreational trails along Fancher Creek and tie into the City/County/San Joaquin regional trails.

Cultural Resources. The potential for disturbance of cultural resources during construction would be essentially the same with the Increased Density alternative.

Increased Impacts as a Result of the Increased Density Alternative

Compared to the proposed project, the Increased Density alternative would increase impacts in several areas.

- Traffic levels would increase by nearly 10,000 trips per day, leading to decreased levels of service on several project area road segments.
- Air emissions would also proportionately increase. While the potential for transit use is increased with somewhat higher density, regional air quality is not expected to change.
- There would be a substantial increase in water demand.

- The Increased Density alternative would impact the planned second elementary school and proportionately increase impacts to middle schools and high schools.

3.1.3 Reduced Units Alternative

The Reduced Units alternative would use the low end of the Medium Density Residential land use designation as established by the 2025 Fresno General Plan, or 4.99 units to the acre. The balance of the project site would be developed with residential and commercial uses at densities similar to the proposed project. Under the Reduced Units alternative, the number of residential units would be decreased. The following table summarizes the Reduced Units alternative.

Table 3-2
Reduced Units Alternative

Alternative	Number of Units	Population
Reduced Units	1,690	4,225
Proposed Project	2,023	5,000

Impacts

Land Use, Planning, and Agriculture. Under the Reduced Units alternative, land use compatibility issues would be reduced compared to the proposed project. The lower number of units per acre would be implemented with more traditional single family development and potential land use impacts with existing single family neighborhoods would be reduced.

The Reduced Units alternative would generate fewer people than the proposed project (4,225 compared to 5,000). The diversity and choice in the housing market would be reduced by eliminating 333 units from the housing inventory.

Transportation and Circulation. Implementation of the Reduced Units alternative would reduce traffic impacts accruing to the project site on surrounding roadways and intersections. Assuming a trip generation consistent with the traffic study prepared for the project, the Reduced Units alternative has the potential to generate 3,330 fewer trips compared to the proposed project.

Air Quality. Air quality degradation from the Reduced Units alternative would be proportionately less because of the lower traffic volumes in the project site and surrounding area. However, with the Reduced Units alternative the possibility of developing a cost-effective public transit system and the use of alternative transportation modes is also reduced. There would be no appreciable change to air quality impacts from a cumulative perspective.

Geology and Soils. Similar to the proposed project, this alternative would have no impacts on geology and soils.

Noise. The Reduced Units alternative would result in fewer noise impacts compared to the proposed project, although installation of noise walls, setbacks, and landscaping would still be required.

Wastewater Treatment. Wastewater production would be reduced by approximately 30,000 gallons per day. Compared to the proposed project, there would be less impact on the regional WWTF.

Hydrology. Surface hydrology would be less impacted compared to the proposed project with development of 333 fewer residential units. The amount of impermeable surface would be reduced somewhat. There would be a reduction in the demand for water from residential uses of approximately 80,000 gallons per day.

Public Services and Utilities. Demands for public services would be reduced for a population of 4,225 compared to approximately 5,000 in the proposed project. Reduced impacts include those to police protection, fire protection, parks and recreation, and schools.

Aesthetics. The Reduced Density alternative would impact site aesthetics in a fashion similar to the proposed project because both are urban density projects. The proposed project would have smaller lots around the perimeter of the project and views to the traveling public would be similar with either alternative.

Cultural Resources. The potential for disturbance of cultural resources during construction would be similar with the Reduced Units alternative as the entire residential portion of the site would be disturbed.

Increased Impacts as a Result of the Reduced Units Alternative

Compared to the proposed project, the Reduced Units alternative would result in a less efficient use of land. Provision of services to the project under this alternative may become less efficient and/or more costly because the basic service and utility infrastructure is still required; the population base over which to spread the cost, however, is substantially lower.

Summary of Alternatives

Table 3-3
Summary of Alternatives

Issue	No Project	Increased Density	Reduced Units
Land Use/Agricultural	o	-	+
Traffic	-	+	-
Air Quality	-	o	o
Geology, Soils	-	o	-
Noise	-	o	-
Wastewater	-	+	-
Hydrology	-	+	-
Public Facilities	-	+	o
Aesthetics	-	o	o
Cultural Resources	-	o	o

o = Similar impact to proposed project
+ = Greater impact than proposed project
- = Less impact than proposed project

No Project. The No Project alternative would create fewer impacts compared to the project. The No Project alternative, however, does not meet the primary objectives of the project which is the development of the project site with a planned commercial, mixed-use, and residential development. While the No Project alternative is environmentally superior to the proposed project, it is considered infeasible given the land uses for the project site on the 2025 Fresno General Plan.

Increased Density. The Increased Density alternative is not environmentally superior to the proposed project. It would not eliminate any of the significant adverse environmental impacts associated with the proposed project and could result in greater impacts in several areas. By virtue of its more intense nature, the Increased Density alternative would create greater traffic, wastewater, water, and public facility impacts than the proposed project. More intense development could, however, reduce the amount and pace of agricultural land taken out of production elsewhere by development. The Increased Density alternative would increase the diversity in housing opportunities in the project by encouraging construction of smaller lot attached units and multi-family rental housing; large lot development would occur in other locations.

Reduced Units. The Reduced Unit alternative would reduce land use impacts and also reduce impacts to traffic, noise, and public facilities. The Reduced Unit alternative, however, would not achieve the developer's project objectives. Less than 85 percent of the residential units proposed by the developer would be allowed on the project site. The costs of infrastructure remain high even with the Reduced Density Alternative, including impact fees for streets and highways, well development, and other facilities.

Environmentally Superior Alternative

The Reduced Units alternative reduces overall environmental impacts compared to the proposed project. By virtue of its impacts to traffic, noise, and public services, the Reduced Units alternative is considered the environmentally superior alternative for the project site.

good points

The Reduced Units alternative, however, would reduce overall densities; as a result, more land off-site will be necessary to accommodate a given population base. It can therefore be argued that the Reduced Units alternative could force growth to other areas, further impacting agricultural production and increasing urban sprawl. In the long term, any growth alternative that directs growth further to the east and southeast of the urban area would ultimately have a greater impact on prime and productive agricultural lands due to the existence of more of such lands at the edge of the metropolitan area.

3.2 GROWTH-INDUCING IMPACTS

In order to comply with CEQA, an EIR must discuss the ways in which the proposed project could foster economic or population growth or the construction of additional housing, either directly or indirectly, in the surrounding environment (CEQA Guidelines Section 15126.2(d)). A given project may induce growth beyond its own boundaries by removing obstacles to population growth, for example by providing water service to an area where none exists, or by creating an amenity that attracts new population or economic activity. In accordance with Section 15126.2(d), this discussion of growth-inducing impacts does not assume that growth is necessarily beneficial, detrimental, or of little significance to the environment. Induced growth is considered a significant impact only if it affects the ability of agencies to provide needed public services or if it can be demonstrated that the potential growth is some other way significantly affects the environment.

The growth inducing effects of the Fancher Creek project are limited in scope. Among these limitations are:

- The project site is planned for urban growth by the 2025 Fresno General Plan and zoning consistent with that plan is proposed. The project is considered an in-fill site on land that has long been planned for urban development.

- Infrastructure, including water and sewer systems, will be sized to serve primarily the Fancher Creek site. No major infrastructure improvements such as expansion of the wastewater treatment plant or extension of a major sewer trunk are necessary to serve the project, and therefore, would not contribute to growth off-site. Similarly, the mitigation measures that Fancher Creek would be required to provide -- for example, for traffic -- would account only for Fancher's contributions to significant impacts and would not, therefore, enable further growth beyond its borders.

The effects of induced growth on the subject property are discussed in various sections of the EIR. The identified measures in this EIR ensure that the project effects are mitigated to the greatest extent feasible.

Growth Inducing Impacts of the PG&E Substation

As discussed in Section 2.9-1, the new substation is needed to serve the Fancher Creek project and additional projected growth in southeast Fresno. PG&E is required by law to maintain adequate electrical service necessary safety, health, comfort, and convenience of the public (Public Utilities Code, Section 451).

The project will not directly or indirectly foster economic or population growth or remove obstacles to growth in the service area. The project is designed to meet the immediate need for electric power in the project area. The proposed project will accommodate projected electrical distribution in the area by providing additional power to a system where existing distribution capacity cannot meet projected needs. Lack of these improvements will result in a deterioration of service and the increased likelihood of system instability. The proposed project is consistent with CPUC requirements that require improvements to electricity supply to reliably meet projected demand.

The lack of facilities for supplying electric power for new development in southeast Fresno has not been an obstacle to current or proposed development. Because the proposed substation is in response to this development, it will not remove any current obstacles to growth. It is unlikely that implementation of the project will facilitate additional growth in the project area because growth and development is regulated by local jurisdictions.

The proposed project does not require the extension of public services to previously unserved areas as PG&E currently provides electric service to the entire area. The project will not require development of access roads and the project will be primarily located within existing rights-of-way and streets and highway corridors.

The project will not impact existing community services and does not require water, wastewater, or permanent solid waste services. The need for such services as law enforcement, fire protection will be negligible and could occur only during the construction phase of the project.

3.3 SIGNIFICANT IRREVERSIBLE IMPACTS

Non-renewable resources that may be affected by development of the project include prime agricultural land and open space. Project development would also necessitate irreversible commitments to soil coverage, increased runoff, public utility/service demands, traffic generation, air resources, and visual changes. The EIR discusses each of these areas and includes mitigation measures as appropriate to lessen identified impacts. In several impact areas, particularly agricultural land conversion, traffic, and air resources, this commitment of resources results in significant, irreversible impacts.

3.4 CUMULATIVE IMPACTS

Section 15130 of the CEQA Guidelines requires that cumulative impacts be discussed when they are significant. Cumulative impacts occur when two or more individual effects together create a considerable environmental impact or compound or increase other impacts (Section 15355). The discussion of cumulative effects is not required to be as detailed as the impact analysis for the project; the severity of cumulative effects and the likelihood of their occurrence, however, must be examined. The applicable standards for adequacy of this examination are "practicality and reasonableness."

A "full build-out" condition was assumed which relied on a combination of projections and specific project assumptions to define full build-out of the following:

1. Existing County General Plan
2. 2025 Fresno General Plan
3. 1993 Clovis General Plan

The Cumulative Impacts analysis is also required to examine reasonable options for mitigating or avoiding significant cumulative effects of a proposed project. The Guidelines point out, that with some projects, the only feasible mitigation for cumulative impacts may be the adoption of ordinances or regulations rather than the imposition of conditions on a project-by-project basis. Ordinance or policy mitigation is more suitable for plan-level rather than development-level projects.

Cumulative Land Use, Planning, and Agricultural Impacts

Direct project impacts in this area include General Plan consistency, consistency with LAFCO policies and standards, conversion of prime agricultural land, and impacts to existing residential uses.

The conversion of agricultural land to other uses due to growth in and around Fresno was determined to be a significant and unavoidable cumulative impact of the Fresno County General Plan update and the 2025 Fresno General Plan.

Land use compatibility concerns can often be addressed by careful site design, including the use of buffers, landscaping, fencing, and berming where appropriate.

To the extent that there is a cumulative impact in this area, it can be mitigated on a project-by-project basis by examining individual circumstances and applying these design criteria through the existing subdivision review process.

Mitigation

At the project level, there are few feasible measures available for mitigating regional loss of agriculture. There are no known additional feasible mitigation measures for mitigating this cumulative land use impacts. Impacts to farmland remain significant and unavoidable, because conversion of substantial acreage of agricultural land will still likely occur in order to accommodate the region's increasing population and industrial base.

Cumulative Traffic Impacts

Direct project impacts in this area include roadway segments operating below acceptable standards. Cumulative impacts can occur when less-than-significant impacts from project-level traffic combine with existing or planned future projects to cause a roadway segment to operate at unacceptable levels of service.

Mitigation

Mitigation Measures identified require the project to fund a combination of project-triggered improvements and fair share funding of various regional improvements and studies. Included in the list of regional improvements is the widening of Clovis Avenue and Kings Canyon Road. Other major improvements are not programmed or funded at this time and therefore timing of mitigation can not be identified. Even with approved mitigation in place, some roadway segments and intersections are expected to operated below acceptable levels, and cumulative traffic impacts remain significant and unavoidable.

Cumulative Air Quality Impacts

Direct project impacts in this area include emissions during construction, increase in local concentrations of carbon monoxide, and impacts to regional air quality.

The project would contribute to impacts to regional air quality. The region is presently considered "non-attainment" for ozone precursors and PM_{10}. Cumulative development will exceed the significance thresholds identified by the air district for these emissions and this is considered a significant and unavoidable cumulative impact. Cumulative increases for other pollutants are not considered significant because neither project-level nor regional (cumulative) thresholds are exceeded.

Mitigation

The mitigation identified in Section 2.3 identifies several design criteria that would be required of the project to partially mitigate cumulative air quality impacts. At the project level, there are no other feasible measures known.

Cumulative Geology and Soils Impacts

Impacts to geology and soils are fully avoidable and not considered to have cumulative implications.

Mitigation

None required.

Cumulative Noise Impacts

Direct project impacts in this area include increases in noise during construction, increase in ambient noise from increased traffic, and exposure of future project residents to noise.

Mitigation

At the project-level, there are few feasible measures available for mitigating regional noise increases. Project-specific mitigation measures already require noise walls at appropriate locations. A number of program-level measures have been identified earlier in this section for mitigation of cumulative traffic impacts. The City of Fresno should consider those same mechanisms for the dual purpose of improving ambient noise levels by decreased traffic noise in the region. As part of the CEQA analysis for specific project development, comparative impacts to ambient sound levels should be examined.

Cumulative Drainage Impacts

Direct project impacts in this area include increased runoff and impacts to water quality. Cumulative impacts could occur in both these areas of direct impact, when project runoff from any number of small less-than-significant or fully mitigable sources compounds to cause a significant cumulative effect. FMFCD has planned facilities for serving growth in the area. To the extent that new growth areas are identified and that currently unplanned land uses occur, amendment of the District master Plan and upgrading of facilities will ensure full mitigation for potential cumulative impacts.

With regard to water quality, general storm water discharge permits are required for construction activity on parcels of five acres or more. While this threshold allows for cumulative impacts to occur, the project would be required to secure such a permit, and therefore would not contribute to cumulative effects.

Mitigation

None required.

Cumulative Hydrologic Impacts

Direct project impacts in this area include groundwater pumping and recharge, impacts to off-site wells, contamination of domestic water wells, groundwater recharge, increased urban storm runoff, and degradation of groundwater quality from urban runoff.

Cumulative development may result in a substantial continued decline in groundwater elevations without aggressive recharge programs, water conservation, and alternative water sources. Increased use of surface water may be required to both recharge the groundwater, and/or as a direct source of domestic supply. If the project secures surface water for the net increase in water demand that has been calculated to result, then there would be no project-level contribution to this cumulative impact. However, if surface water is not secured to supply the new increment of the water documented as needed to serve the project, then the project would result in a significant, unavoidable cumulative impact.

Applicants must also describe their efforts and facilities for controlling storm water quality, and to supplement their present capabilities by obtaining adequate regulatory authority and implementing appropriate "best management practices" to the maximum extent practicable.

Because, federal and state regulatory agencies are already empowered through their regulatory authority to fully mitigate this potential cumulative impact no further mitigation is required.

Mitigation

None required.

Cumulative Impacts to Public Facilities and Services

Direct project impacts in this issue area include need for additional law enforcement services, additional fire protection services, schools to serve new students, additional park space, the placement of home sites in proximity to overhead transmission lines, and exposure to contaminated soil and groundwater.

Need for additional law enforcement services is identified as being affected more by population growth than by project-specific land uses. As growth occurs , however, this impact is mitigated by increased tax revenue which pays for basic personnel and equipment as growth occurs over time. The project will provide additional project mitigation by dedicating a community service center site which would mitigate project impacts plus serve surrounding properties. Project contribution to potential cumulative impacts in this areas is considered fully mitigated by this dedication.

Need for additional fire protection services is identified as fully mitigated at both the project level and cumulatively. The project would pay a fair-share equivalent of the costs towards the permanent UGM station. Additional mitigation for cumulative impact is not required.

New school facilities is also identified as being fully mitigated at both the project-level and cumulatively, based on the identification of a new elementary school site and payment of school facilities fees. Additional mitigation for cumulative impact is not required.

Mitigation

None required.

Cumulative Aesthetic Impacts

Direct project impacts is this issue area include alteration of the character and appearance of the project area and alteration of the viewshed along major roads. These impacts are direct project impacts specific to the project circumstances and location. Because of this, these impacts would not compound over time, or persist and worsen. Further analysis is not required. Gradual change in the character and appearance of the region as urban growth continues over time, is another area of potential cumulative impact, to which the project would incrementally contribute.

Mitigation

None required.

Cumulative Cultural Resource Impacts

The EIR identifies potential loss of important cultural resources as a direct impact of the project. Unintended impacts to unknown cultural resources could be a cumulative impact resulting from general growth in the area. The EIR includes mitigation measures that require any such finds to be fully investigated and properly protected/mitigated pursuant to applicable state regulations.

Mitigation

None required.

3.5 EFFECTS NOT FOUND TO BE SIGNIFICANT

Based on project analysis by City staff and responses to the Notice of Preparation, the potential impacts of the project on the following impact areas were considered not to be significant as a result of project implementation:

- Displace existing housing, especially affordable housing. The project is to be located on land currently in agricultural production or fallow land. Nineteen housing units will be displaced with the project. The homeowners are willing sellers, however, and will find adequate replacement housing in the Fresno metropolitan area.
- Inadequate emergency access. Roads surrounding the project site will be improved to provide for adequate emergency access.
- Energy and mineral resources. There are no energy or mineral resources located on the project site.
- Possible interference with an emergency response plan or emergency evacuation plan. There are no known emergency response or evacuation plans in the site vicinity which the project would affect.
- Communication systems. Communication systems will be extended to the site as development occurs. No adverse impacts are expected.

4.0 REFERENCES, ORGANIZATIONS AND PERSONS CONSULTED

City of Fresno, *2025 Fresno General Plan and Master Final EIR*, November 2002

City of Fresno, *Roosevelt Community Plan and EIR*, April 1992

City of Fresno, *Fresno Zoning Ordinance*

City of Fresno, *Edison Community Plan*

City of Fresno, *Mitigated Negative Declaration and Final Initial Study, Revisions to the City of Fresno Surface Water Treatment Plant*, August 2001

PG&E, *Information Report on the Pacific Gas and Electric Company Proposed Pinedale Substation in the City of Fresno*, November 1986

PG&E, *Background Information on the Proposed South Clovis Substation and Power Lines*

Alternatives Growth Alliance, *A Landscape of Choice*, 1998

CH_2M Hill, *Fresno Metropolitan Water Resources Management Plan*, 1995

Nick Yovino, Director, City of Fresno Planning & Development Department

Gil Haro, Planning Manager, City of Fresno Planning & Development Department

David Braun, Planner II, City of Fresno Planning & Development Department

Martin McIntyre, Director, City of Fresno Public Utilities Department

Jim Bier, City of Fresno Public Utilities Department

Don Triplett, PG&E Fresno Office

Stephanie Kahl, Fresno County Environmental Health Division

Sheri Clark, Fresno County Environmental Health Division

Dave Mitchell, San Joaquin Valley Air Pollution Control District

APPENDIX A

RESPONSES TO THE NOTICE OF PREPARATION

DEPARTMENT OF TRANSPORTATION
DIVISION OF AERONAUTICS – M.S.#40
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P. O. BOX 942873
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Flex your power!
Be energy efficient!

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Planning Division
Development Department
CITY OF FRESNO

March 4, 2004

Mr. Mike Sanchez
City of Fresno
Planning and Development Department
2600 Fresno Street, Room 3043
Fresno, CA 93721-3604

Dear Mr. Sanchez:

Re: *City of Fresno's Notice of Preparation (NOP) of a Draft Environmental Impact Report (DEIR) for the Fancher Creek Project*

The California Department of Transportation, Division of Aeronautics (Department), reviewed the above-referenced document with respect to airport-related noise and safety impacts and regional aviation land use planning issues pursuant to the California Environmental Quality Act (CEQA). The following comments are offered for your consideration.

1. The proposal consists of Areas 1, 2, 3 and 4. These project areas are located in the vicinity of Fresno Yosemite International Airport. Fresno Yosemite International Airport is a tremendous economic engine for the Fresno area. In 2003, the airlines contributed to the local economy with a vigorous 516,757 annual airline passenger enplanements. Protecting the airport safety zones and the precision approaches required for airline operations, however, is fundamental to maintaining a healthy airport. It is essential that governing agencies responsible for maintaining the Fresno Yosemite International Airport viability continue with effective land use decisions that impact the airport.

2. Area 1 is located approximately 8,000 feet southeast of the Fresno Yosemite International Airport beneath the extended runway centerlines. Area 1 involves a rezone of 30 acres at the northwest corner of North Armstrong and East Belmont Avenues from Exclusive Agriculture to Light Manufacturing/Urban Growth Management. Proposed development includes a mix of office, industrial and commercial uses. Area 1 is located within Safety Zone III as defined by the Fresno County Airport Land Use Commission (ALUC) airport land use plan.

3. Area 2 is located south of and adjacent to Area 1 and involves the rezone of approximately 109 acres generally bound by East Belmont Avenue on the north, North Fowler Avenue on the west, Fancher Creek on the south, and North Armstrong Avenue on the east from Exclusive Agriculture-20 acres to Light

Manufacturing/Urban Growth Management and Single Family Residential/Urban Growth Management. Proposed development will include a mix of office, industrial and commercial on approximately 77 acres and single family residential on approximately 32 acres. Portions of Area 2 are located within Safety Zones III and IV. The proposed residential areas appear to be just outside these safety zones.

4. Area 3 is located approximately 9,000 feet southeast of Fresno Yosemite International Airport. Proposed uses include retail, commercial, community services and single family and multi-family residential uses, with the proposed number of dwelling units estimated at 750. The Clovis Unified School District proposes to develop an elementary school site on 16 acres on the southwest corner of the proposed Fancher Creek Boulevard and East Tulare Avenue alignment. The school district should be advised that in accordance with Education code Section 17215, if a school site is proposed within two miles of a runway, a school site evaluation by the Division of Aeronautics is required. Prior to acquisition of the land, the school district should be advised to submit a written request to the State Department of Education.

5. Area 4 is located a little over a mile southeast of Yosemite International Airport. Proposed uses include development of a regional commercial shopping center with retail and associated commercial uses and possibly multi-family residential on 95 acres. Fresno

6. In accordance with Public Utilities Code (PUC) Section 21676, local General Plans and any amendments must be consistent with the adopted airport land use compatibility plans developed by the Fresno County ALUC. The proposal should be submitted to the Fresno County ALUC for review. In addition to submitting the proposal to the ALUC, it should also be coordinated with airport staff to ensure that the proposal will be compatible with future as well as existing airport operations.

7. In accordance with CEQA, Public Resources Code 21096, the Department's Airport Land Use Planning Handbook (Handbook) must be utilized as a resource in the preparation of environmental documents for projects within an airport land use compatibility plan boundaries or if such a plan has not been adopted, within two nautical miles of an airport. The Handbook is a resource that should be applied to all public use airports. The Handbook is published on-line at http://www.dot.ca.gov/hq/planning/aeronaut/htmlfile/landuse.php.

8. Another consideration is the recently enacted legislation AB 2776, which amended Section 11010 of the Business and Professions Code and Sections 1102.6, 1103.4, and 1353 of the Civil Code, relating to aviation. This bill changed buyer

notification requirements for lands around airports. According to the new law, any person who intends to offer land for sale or lease within an *airport influence area* is required to disclose that fact to the person buying the property.

9. To ensure compliance with Federal Aviation Regulations Part 77, "Objects Affecting Navigable Airspace," submission of a Notice of Proposed Construction or Alteration (Form 7460-1) to the Federal Aviation Administration (FAA) may be required. For further technical information, please refer to the FAA's web site at http://www1.faa.gov/ats/ata/ATA400/oeaaa.html.

10. We feel strongly that the protection of airports from incompatible land use encroachment is vital to California's economic future. Although the need for compatible and safe land uses near airports in California is both a local and a state issue, airport land use commissions and airport land use compatibility plans are key to protecting an airport and the people residing and working in the vicinity of an airport. Consideration given to the issue of compatible land uses in the vicinity of an airport should help to relieve future conflicts between airports and their neighbors. The DEIR should thoroughly address airport-related noise and safety impacts.

These comments reflect the areas of concern to the Department's Division of Aeronautics with respect to airport-related noise and safety impacts and regional airport land use planning issues. We advise you to contact our district office in Fresno concerning surface transportation issues.

Thank you for the opportunity to review and comment on this proposal. If you have any questions, please call me at (916) 654-5314.

Sincerely,

Sandy Hesnard

SANDY HESNARD
Aviation Environmental Planner

c: Fresno Yosemite International Airport, Fresno County ALUC

San Joaquin Valley
Air Pollution Control District

March 10, 2004

Reference No. 20040013

RECEIVED
MAR 11 2004
DEVELOPMENT DEPARTMENT
CITY OF FRESNO

Darrell Unruh
Planning and Development Dept.
2600 Fresno St., Third Floor
Fresno Ca 93721

Subject: Fancher Creek Project
Notice of Preparation of a Draft Environmental Impact Report (EIR No. 10133)

Dear Mr. Unruh,

The San Joaquin Valley Unified Air Pollution Control District (District) has reviewed the project referenced above and offers the following comments:

The entire San Joaquin Valley is classified non-attainment for ozone and fine particulate matter (PM10). This project will contribute to the overall decline in air quality due to increased traffic and ongoing operational emissions. This project may generate significant air emissions and it will reduce the air quality in the San Joaquin Valley. The project will make it more difficult to meet mandated emission reductions and air quality standards. A concerted effort should be made to reduce project-related emissions as outlined below:

Preliminary analysis indicated that the potential emissions from this project exceed the District's Thresholds of Significance for adverse air quality impacts. These thresholds are 10 tons per year for either of the following two ozone precursor emissions: reactive organic gases (ROG) or oxides of nitrogen (NOx). The District recommends the preparation of an Air Quality Impact Assessment (AQIA) and a Traffic Impact Study to determine impacts when projects are of this size, unless an analysis has been accomplished for a recent previous approval such as a general plan amendment or zone change. Please indicate to the District if the project has been analyzed in a previous study.

The District recommends using the URBEMIS 2002 program to calculate project area source and mobile source emissions and to identify mitigation measures that reduce impacts. If the analysis reveals that the emissions generated by this project will exceed the District's thresholds, this project may significantly impact the ambient air quality if not sufficiently mitigated. The project applicant or consultant is encouraged to consult with District staff for assistance in determining appropriate methodology and model inputs. Questions regarding URBEMIS 2002 should be directed to Thomas Jordan at (559) 230-5802.

The District does not typically recommend quantifying emissions from construction activities. The District considers that the PM10 emissions are reduced to levels considered less-than-significant through compliance with Regulation VIII Fugitive Dust Rules. If construction activity is especially intense, or sensitive receptors are nearby, the District recommends applying the enhanced PM10 control measures listed in the District's *Guide for Assessing and Mitigating Air Quality Impacts* (GAMAQI, 2002 Revision).

The District recommends that the air quality section of the EIR have four main components:

Section I:

It should provide a description of the regulatory environment and existing air quality conditions impacting the area.

Section II:

It should provide estimates of existing emissions and projected pollutant emissions related to the increase in populations, project source emissions and vehicle use, along with an analysis of the effects of these increases. The EIR should include the methodology, model assumptions, inputs and results for pollutant emissions. The cumulative impact analyses should consider current existing and planned development both within the project area and in surrounding areas. The EIR needs to address the short-term and long term local and regional adverse air quality impacts associated with the operation of construction equipment (ozone precursors, carbon monoxide, and PM10) and emission generated from stationary and mobile sources.

The California Air Resources Board (ARB) has designated diesel particulate emissions as a toxic air contaminant. The proposed project should be analyzed to see if diesel emissions would be located near a current or proposed location of sensitive receptors and if diesel toxicity is a potential source of concern. On page 43 of the "Guide for Assessing and Mitigating Air Quality Impacts" (GAMAQI), the District addresses and defines sensitive receptors with respect to CEQA. If there will be diesel emissions near sensitive receptors and diesel toxicity is a concern, the project developer should perform a Hazardous Risk Assessment (HRA). A Hazardous Risk Assessment (HRA) needs to address the following:

- Heavy Duty diesel truck travel
- Heavy duty diesel truck idling
- Truck refrigeration units (TRU)
- IC engines located on the project premises not requiring a District Permit.

The location of sensitive receptors should be explained in terms that demonstrate the relationship between the project site and potential air quality impacts (e.g., proximity, topography, or upwind or downwind location). All future development that may reasonably foresee the addition of sensitive receptors in the area, based on land use zoning or designations, should also be included in the analysis. For question about HRA's please contact Mr. Leland Villalvazo, Supervising Air Quality Specialist, at (559) 230-5881

Section III:

It should identify and discuss all existing District regulations that apply to the project. It would be appropriate to discuss proposed rules that are being developed that would apply to the proposed project. Current rules and regulations are available on the District's website at http://www.valleyair.org/rules/1ruleslist.htm. District rules and regulations are periodically revised, and new regulations are promulgated. The District strongly advises the City to contact the District for any rule updates and new rules when the project development begins. Current District rules and regulations applicable to the proposed project are requirements.

The following items are rules and regulations that have been adopted by the District to reduce emissions throughout the San Joaquin Valley, and are required. This project may be subject to additional District Rules. To identify additional rules or regulations that apply to this project, the applicant is strongly encouraged to contact the District's Small Business Assistance Office at 230-5888.

District Rules 4901 (Wood Burning Fireplaces and Wood Burning Heaters) and *District Rule 4902* (Residential Water Heaters) to limit the emissions of PM10 and NOx in residential developments. Please note that on July 17, 2003 amendments to Rule 4901 where adopted by the District's Governing Board. Amendments to the rule may affect future construction plans for residential developments. Specifically:

§5.3 Limitations on Wood Burning Fireplaces or Wood Burning Heaters in New Residential Developments. Beginning January 1, 2004,

5.3.1 No person shall install a wood burning fireplace in a new residential development with a density greater than two (2) dwelling units per acre.

5.3.2 No person shall install more than two (2) EPA Phase II Certified wood burning heaters per acre in any new residential development with a density equal to or greater than three (3) dwelling units per acre.

5.3.3 No person shall install more than one (1) wood burning fireplace or wood burning heater per dwelling unit in any new residential development with a density equal to or less than two (2) dwelling units per acre.

District Regulation VIII – (Fugitive PM10 Prohibition) is a series of rules designed to reduce PM10 emissions generated by human activity, including construction, road construction, bulk materials storage, landfill operations, etc. A Dust Control Plan must be submitted for the District's approval at least 30 days before construction activities begin if the project cumulatively encompasses 40 acres or more or will move more than 2,500 cubic yards per day of material on at least three days of the project. An assistance bulletin has been enclosed for the applicant.

District Rule 4692 – (Commercial Charbroiling) regulates chain-driven charbroilers to limit Volatile Organic Compounds (VOC) and PM10 emissions. Items subject to this rule include (but are not limited to): grill charbroilers, flamebroilers and direct-fired barbecues.

District Rule 4103 – (Open Burning) regulates the burning of agricultural material. Agricultural material shall not be burned when the land use is converting from agriculture to nonagricultural purposes. In the event that the project burned or burns agricultural material, it would be in violation of Rule 4103 and be subject to District enforcement action.

District Rule 4602 – (Motor Vehicle and Mobile Equipment Refinishing Operations) regulates the finishing and refinishing of Group I and Group II motor vehicles and Equipment. Such vehicles include (but are not exclusive to): passenger cars, large/heavy duty truck cabs and chassis, light and medium duty trucks and vans, golf carts and motorcycles, buses and mobile equipment.

District Rule 4102 – (Nuisance) applies to any source operation which emits or may emit air contaminants or other materials. In the event that the project creates a public nuisance, it could be in violation and be subject to District enforcement action.

Rule 4641 – (Cutback, Slow Cure, and Emulsified Asphalt, Paving and Maintenance Operations). Paving operations of this project will be subject to Rule 4641. This rule applies to the manufacture and use of cutback asphalt, slow cure asphalt and emulsified asphalt for paving and maintenance operations.

In the event that any portion of existing building will be renovated, partially demolished or removed, the project will be subject to District Rule 4002 (National Emissions Standards For Hazardous Air Pollutants). Prior to any demolition activity, an asbestos survey of existing structures on the project site may be required to identify the presence of any asbestos containing building material (ACBM). Any identified ACBM having the potential for disturbance must be removed by a certified asbestos-contractor in accordance with CAL-OSHA requirements. If you have any questions concerning asbestos related requirements, please contact Mr. Dwayne England of this office at 230-5973, or contact CAL-OSHA at 454-1295. An Asbestos Requirements Bulletin has been enclosed for the applicant.

This project may contain operations that are subject to the permitting requirements of the District and require a Permit to Operate (PTO). Any equipment subject to the District's PTO requirements must obtain an Authority to Construct (ATC) from the District. Construction of equipment, which requires an ATC, and intimately related appurtenances such as foundations and utility hookups for the equipment, cannot begin until an ATC is obtained. Construction of equipment not requiring a District permit is not subject to this ATC requirement. Depending upon the nature and complexity of the application and staff workload, ATC approval can take several months. For further information, the applicant should contact the District's Small Business Assistance Office at 230-5888, or our Permit Services Section at 230-5900. To avoid unnecessary delays in the project, applications should be submitted to the District as soon as the project developer has determined the scope of the project.

Section IV:

It should identify and discuss all feasible measures that will reduce air quality impacts generated by the project. The EIR should discuss how the project design would encourage alternative transportation, pedestrian and bicycle access, smart growth design, energy efficient project and building design, and business programs that further reduce air pollution in the valley (such as carpooling). Mitigation measures are emission reduction measures beyond those required in Section III.

Mitigation measures must be included in the EIR that reduce the emissions of reactive organic gases, nitrogen oxides, and PM10 to the fullest extent possible. Site design and building construction measures that would reduce air quality impacts should be included. The Districts GAMAQI describes these features. The current GAMAQI can be found at http://www.valleyair.org/transportation/cega_components.htm. The local Government Commission (LGC) website, http://www.lgc.org, contains valuable information and resources on subjects from street design to energy efficiency. The use of the principles of the document *Landscape of Choice* is encouraged to reduce air quality impacts. Landscape of Choice can be found at http://www.farmlandinfo.org/fic/ft/fresno.pdf.

There are a number of mitigation measures that should be incorporated into the design of this project to reduce the overall level of emissions. (Note: Some of the mitigation measures may already exist as City development standards. All other measures should be implemented to the fullest extent possible). This list should not be considered all-inclusive. The District encourages innovation in measures to reduce air quality impacts.

- Trees should be carefully selected and located to protect the building(s) from energy consuming environmental conditions, and to shade paved areas. A brochure has been included for the applicant. See http://www.coolcommunities.org
  http://www.lgc.org/bookstore/energy/downloads/sjv_tree_guidelines.pdf
  http://www.urbantree.org

- If transit service is available to the project site, improvements should be made to encourage its use. If transit service is not currently available, but is planned for the area in the future, easements should be reserved to provide for future improvements such as bus turnouts, loading areas, route signs and shelters. Appropriations made to facilitate public or mass transit will help mitigate trips generated by the project. Direct pedestrian access to the main entrance of the project from existing or potential public transit stops and provide appropriately designed sidewalks. Such access should consist of paved walkways or ramps and should be physically separated from parking areas and vehicle access routes.

- Multi-story parking facilities should be considered instead of parking lots to reduce exposed concrete surface and save green space. Large expanses of exposed concrete in parking lots exacerbate the 'heat sink' effect as well as widen the distance patrons must cross or drive to destinations. Heat sink created by this and similar projects contribute to the reduced air quality in the valley by heating ozone precursors. Heat mitigation should be considered for this project. Parking facilities allow more patrons to park closer to the multiple desired destinations and provide a cool and protected place to park. Space not used by the parking facility can be used to concentrate units, as park space or as a 'special attraction' space such as fountains or unique units. While the initial cost of a multi-story parking facility may seem cost prohibitive, investments in smart planning increase safety, increase usable area and decrease land waste by reserving areas not used for parking for future growth or special use.

- Sidewalks and bikeways should be installed throughout as much of the project as possible and should be connected to any nearby existing and planned open space areas, parks, schools, residential areas, commercial areas, etc., to encourage walking and bicycling. Pedestrian and bike-oriented design reduces motor vehicle usage and their effects on air quality. Sidewalks and bikeways should be designed to separate pedestrian and bicycle pathways from vehicle paths. Sidewalks and bikeways should be designed to be accommodating and appropriately sized for anticipated future pedestrian and bicycle use. Such pathways should be easy to navigate, designed to facilitate pedestrian movement through the project, and create a safe environment for all potential users (pedestrian, bicycle and disabled) from obstacles and automobiles. Pedestrian walkways should be created to connect all buildings throughout the project. The walkways should create a safe and inviting walking environment for people wishing to walk from one building to another. Walkways should be installed to direct pedestrians from the street sidewalk to the building(s). Safe and convenient pathways should be provided for pedestrian movement in large parking lots. Mid-block paths should be installed to facilitate pedestrian movement through long blocks (over 500' in length) and cul-de-sacs. Sidewalks should be designed for high visibility (brightly painted, different color of concrete, etc.) when crossing

parking lots, streets and similar vehicle paths. Clearly marked and highly visible pedestrian accesses create a safer environment for both pedestrians and vehicles. Pathways through the project should be built in anticipation of future growth.

- As many energy-conserving features as possible should be included in the design/construction of the project. Examples include (but are not limited to):
  - Increased wall and ceiling insulation (beyond building code requirements)
  - Energy efficient widows (double pane and/or coated)
  - High-albedo (reflecting) roofing material. See http://eetd.lbl.gov/coolroof/
  - Radiant heat barrier. See http://www.eere.energy.gov/consumerinfo/refbriefs/bc7.html
  - Cool Paving. See http://www.harc.edu/harc/Projects/CoolHouston/
  - Energy efficient lighting and appliances. See http://www.energystar.gov/
  - Energy efficient water heaters (such as instantaneous water heaters/indirect water heaters)
  - Energy efficient heating/cooling systems (such as radiant heating system)
  - Awnings or other shading mechanism for windows
  - Porch/Patio overhangs
  - Ceiling fans, whole house fans
  - Bicycle parking facilities for patrons and employees in a covered secure area
  - Employee shower and locker areas for bicycle and pedestrian commuters
  - On-site employee cafeterias or eating areas
  - Low or non-polluting landscape maintenance equipment (e.g. electric lawn mowers, reel mowers, leaf vacuums, electric trimmers and edgers, etc.)
  - Orient the unit(s) to maximize passive solar cooling and heating when practicable
  - Utilize passive solar cooling and heating designs.
    See http://www.eere.energy.gov/RE/solar_passive.html
  - Electrical outlets around the exterior of the unit(s) to encourage use of electric landscape maintenance equipment
  - Pre-wire the unit(s) with high speed modem connections/DSL and extra phone lines
  - Natural gas fireplaces (instead of traditional open-hearth fireplaces)
  - Natural gas lines (if available to this area) and electrical outlets in backyard or patio areas to encourage the use of gas and/or electric barbecues
  - Low or non-polluting incentives items should be provided with each residential unit (such items could include electric lawn mowers, reel mowers, leaf vacuums, gas or electric barbecues, etc.)
  - Exits to adjoining streets should be designed to reduce time to re-enter traffic from the project site, etc.

    More information can be found at:
    http://www.lgc.org, http://www.consumerenergycenter.org/index.html
    http://www.sustainable.doe.gov/,

- The applicant/tenant(s) should implement programs that further reduce air pollution in the valley such as encourage employees to rideshare or carpool to the project site to reduce the amount of vehicle traffic to and from the project area. This could include provisions of preferential parking spaces for employees who participate in carpooling or vanpooling, incorporating a compressed workweek schedule, or incentives for employees who use alternative transportation. Check out the "Spare the Air" section of our website www.valleyair.org

- The project should include as many clean alternative energy features as possible to promote energy self-sufficiency. Examples include (but are not limited to): photovoltaic cells, solar thermal electricity systems, small wind turbines, etc. There are rebate and incentive programs for alternative energy equipment. More information can found at-
  http://www.dsireusa.org/, http://rredc.nrel.gov/, http://www.energy.ca.gov/renewables/
- Construction activity mitigation measures include:
  - Require construction equipment used at the site to be equipped with catalysts/particulate traps to reduce particulate and NOx emissions. These catalysts/traps require the use of ultra-low sulfur diesel fuel (15 ppm). Currently, California Air Resources Board (ARB) has verified a limited number of these devices for installation in several diesel engine families to reduce particulate emissions. At the time bids are made, have the contractors show that the construction equipment used is equipped with particulate filters and/or catalysts or prove why it is infeasible.

- Use alternative fuel construction equipment.
- Replace fossil-fueled equipment with electrically driven equivalents (provided they are not run via portable generator set).
- Install wind breaks on windward sides of construction areas.
- Curtail construction during periods of high ambient pollutant concentrations. This may include ceasing construction activity during peak-hour vehicular traffic on adjacent roadways, and "Spare the Air Days" declared by the District.
- Require that all diesel engines be shut off when not in use on the premises to reduce emissions from idling.

- Electrify truck-parking areas to allow trucks with sleeper cabs to use electric heating and cooling to eliminate the need to idle their diesel engines.

- If TRU's (truck refrigeration units) will be utilized, provide an alternative energy source for the TRU to allow diesel engines to be completely turned off.

- The applicant/tenant(s) should require that all diesel engines be shut off when not in use on the premises to reduce emissions from idling.

District staff is available to meet with you and/or the applicant to further discuss the regulatory requirements that are associated with this project. If you have any questions or require further information, please call me at 230-5800 or Mr. Hector R. Guerra, Senior Air Quality Planner, at 230-5820 and provide the reference number at the top of this letter.

Sincerely,

Chrystal Meier
CEQA Commenter
Central Region

Hector R. Guerra
Senior Air Quality Planner

Enclosures

c: file

SUNNYSIDE
PROPERTY OWNERS ASSOCIATION
Sunnyside - Fresno's Secret Garden

March 14, 2004

RECEIVED
MAR 17 2004
DEVELOPMENT DEPARTMENT
CITY OF FRESNO

City of Fresno
Planning and Development Department
2600 Fresno Street, Room 3043
Fresno, Ca 93721-3604

ATT: Mike Sanchez

RE: Notice of Preparation EIR No. 10133

The board members of the Sunnyside Property Owners Association (SPOA) would like to take this opportunity to thank the City for the stipulation of an EIR for the "Fancher Creek Properties" project. As presented at the public meeting the development is "huge" and a complete environmental assessment should accurately identify the impacts and hopefully suggest appropriate mitigation.

SPOA's major concerns are traffic, and the resulting problems with noise and air quality and the impacts these will have on surrounding residential neighborhoods.

Transportation: Even though the completed Highway 180 might be the most convenient way for motorists to access the development, numerous local streets will be impacted as well. We would ask that the EIR study the following streets: Belmont, Olive, Tulare, Kings Canyon, and Jensen from Freeway 41 to Fowler and Clovis and Fowler Avenues from Jensen to Highway 180. Perhaps the biggest impact will be to Fowler Avenue between Jensen and Kings Canyon due to the fact that the existing homes face the street. Mitigation should include the possibility of round-abouts, reduced traffic speed, the deletion of the truck route designation and barriers to divert traffic. The proposed subdivision on Kings Canyon has two access streets to Kings Canyon, a State Highway. We would suggest the EIR study the addition of a frontage road with a landscaped median to better protect the residential uses and to slow traffic entering from the arterial. The round about on Fowler is an attractive feature of the development and will discourage speeding. Speed bumps should be placed in front of both the existing and new school site to slow traffic. Signal lights should be added at Peach and Jensen and Fowler and Belmont

Air-The entire site should be connected by way of trails to the regional shopping center and the business park to encourage alternative modes of transportation. Internal streets should be designed to prevent long stretches of straight roadway so as to discourage speeding within the residential subdivisions. Impact fees should be accessed for light rail/monorail service to the regional shopping center.

Noise- Funds should be collected to implement noise-attenuating solutions when studies show increased traffic noise will impact existing residential. Frontage roads should be studied to buffer residential uses that face the street and block walls and landscaping should be utilized when homes do not. Deliveries should be restricted to daytime hours only, and both the industrial and

regional commercial applications should be designed so that trucks servicing the center are limited to certain streets.

Multi-Family- The Roosevelt Community Plan Area is inundated with apartment complexes. There are poorly managed multi-family uses to the west and south of the proposed residential in Area 3 and to the south of Area 4. These intense pockets of residential uses increase the calls for service to both the Fresno Police and the Fresno County Sheriff's Department and impact surrounding commercial and single family applications as well. The EIR should study the cumulative impact of apartments on police and fire protection, schools, and the surrounding neighborhoods. Senior housing is in short supply and should be studied as an alternative. Condominiums would also be a preferred option to rental units. Garages, on site security, tenant screening, and live in management should be provided as mitigation for tenants as well as existing single family neighborhoods. The possibility of a police substation within the project should be explored as a way to reduce the impacts of additional and existing multi-family uses. We agree with our neighbors to the north, the Sunnyside Fancher Creek Association, in their comments regarding a Redevelopment Zone designation for the existing apartments behind the old Vons building on the northeast corner of Kings Canyon and Clovis.

Fancher Creek Boulevard-Caltrans will be relocating the palm trees on Fowler and Harvey when Highway 180 is completed to Fowler Avenue. We would ask that the EIR study the relocation of those trees to Fancher Creek Boulevard to retain a sense of history and identity in the area.

Fancher Creek-The development of a trail system on the creek should be done in a way to retain and increase the wildlife that frequents the creek. Hard-scape should be limited and landscaping which enhances wildlife should be featured. Attractive barriers should be utilized when the creek is accessible to residential areas.

Business Park-The Business Park should be buffered from the proposed adjacent residential and conditioned to uses that are compatible. Heavy industrial uses allowed in M-1 should be prohibited. Underground truck docking should be utilized and noise-attenuating features such as block walls and site design should be employed to further reduce noise. The entire site should be heavily landscaped and unified in design.

Water-If the site employs the use of wells, the affect of those wells/sources on downstream water users should be studied.

Regional Shopping Center-As in the business park, the use of underground truck docking should be studied. Receiving hours should be limited to daytime hours only and the site should be designed so that the unloading/loading facilities are not adjacent to residential.

Reduced Intensity Alternative-Due to the degradation of the Level of Service (LOS) on Clovis and other streets serving the mixed-use development, we welcome the study of the reduced intensity project. It will be difficult to gage the total impact of this project as the mixed use zoning ordinance has yet to be developed that would allow residential uses with commercial land applications. Unfortunately the "project" is very loosely defined in terms of the commercial applications in Area 3 and 4 and the manufacturing uses in the Business Park, so the EIR should

study a wide amount of possibilities, and hopefully narrow the possibilities based on adverse environmental impacts.

Thank you for the opportunity to provide input. We look forward to viewing the draft EIR.

Sincerely,

Sue Williams
Corresponding Secretary

DEPARTMENT OF TRANSPORTATION
1352 WEST OLIVE AVENUE
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FRESNO, CA 93778-2616
PHONE (559) 445-6666
FAX (559) 488-4088
TTY (559) 488-4066

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MAR 15 2004
DEVELOPMENT DEPARTMENT
CITY OF FRESNO

March 12, 2004

2131-IGR/CEQA
6-FRE-180-64.41+/-
R-04-14
FANCHER CREEK
SCH # 2004021071

Mr. Mike Sanchez
City of Fresno Development Department
Planning Division
2600 Fresno Street
Fresno, CA 93721

Dear Mr. Sanchez:

We have reviewed the Notice of Preparation (NOP) of an Environmental Impact Report (EIR) for the Fancher Creek Project. The project consists of four major project areas and is generally located between North Clovis, North Armstrong, East Kings Canyon (State Route 180) and East Harvey Avenues. Caltrans has the following comments:

At the scoping/public meeting held on February 26, 2004, the City's Consultant indicated that a decision had not yet been made on what type of EIR would be prepared. It would be Caltrans preference to have a focused, project-specific EIR rather than a Master or Program EIR. A project-specific EIR will provide more detail and allow for a more thorough review of the impacts associated with approval of the project. There appears to be sufficient project details available at this time to allow for a focused EIR.

When preparing the EIR, Caltrans recommends that the City evaluate the project's impacts based on the maximum density/land use intensity that can be achieved with the zoning proposed. At the scoping/public meeting, the City's Consultant stated that typically an average density/land use intensity is used in evaluating project impacts. The EIR should use a worse-case scenario to allow for a full and thorough review of the environmental effects of implementing the proposal.

The EIR should take into consideration the numerous developments that have recently been approved in the vicinity of this project. The City has approved significant amounts of new housing since the General Plan Update was prepared.

Trips generated from this project will have a significant impact on the future State Route (SR) 180 Interchanges at Fowler and Temperance Avenues. A Traffic Impact Study (TIS) is needed to assess the project-related impacts to the State Highway system and appropriate mitigation measures. As per the City's policy, please have the preparer of the traffic study reference the Caltrans Guide for the Preparation of Traffic Impact Studies, dated December 2002, and send the scope of the TIS to Caltrans before the traffic study is conducted. Caltrans Guide, while advisory, contains Best Practices and gives insight into Caltrans' expectations when reviewing a traffic study. If the traffic consultant has any issues or concerns regarding the use of the Guide or its interpretation, please contact us so resolution can be reached.

The City should consider a transit alternative for this project and evaluate such an alternative in the EIR. The project is of sufficient size to support transit, and early planning could make such an alternative feasible. Caltrans recommends that this project be routed to Fresno Area Express (FAX) staff for their review and comment. Please see Attachment Number 1 for other recommended transportation alternatives.

According to our Transportation Concept Report (TCR), this segment of the existing SR 180 is planned for 124 feet with an offset alignment to accommodate dual left-turn lanes. Caltrans right-of-way shows this segment existing at 106 feet. An irrevocable offer of dedication will be needed to accommodate the ultimate configuration of SR 180. Due to the offset alignment, the two sections of the project, separated by Fowler Avenue, will have different requirements. The section of the project on the northwest corner of the existing SR 180 and Fowler will require 6 feet; the section on the northeast corner will require 12 feet. This needs to be shown on a revised site plan and forwarded for our review.

An encroachment permit must be obtained for all proposed activities for placement of encroachments within, under or over the State highway rights- of-way. Activity and work planned in the State right-of-way shall be performed to State standards and specifications, at no cost to the State. Engineering plans, calculations, specifications, and reports (documents) shall be stamped and signed by a licensed Engineer or Architect. Engineering documents for activity and work in the State right-of-way shall be submitted using Metric Units. However, dual units may be used for activity and work in the right-of-way costing $1,000,000 or less, or by an exception approved by the Director. The preferred method of delineating dual units is by showing the English unit first then the Metric unit next to it in parenthesis. The Permit Department and the Environmental Planning Branch will review and approve the activity and work in the State right-of-way before an encroachment permit is issued. Encroachment permits will be issued in accordance with Streets and Highway Codes, Section 671.5, "Time Limitations."

Questions regarding the encroachment permit process need to be referred to Kirk Anderson, Transportation Engineer, at (559) 243-8644.

Please be advised that any future development adjacent to a State Route, whether the entitlement is deemed by the lead agency to be discretionary or ministerial should be sent to Caltrans for review. If you have any questions, please call me at (559) 445-6666.

Sincerely,

Moses Stites

MOSES STITES
Office of Transportation Planning
District 6

Enclosure

C: Ms. Barbara Goodwin, Council of Fresno County Governments
State Clearinghouse

ATTACHMENT NUMBER 1

CALTRANS RECOMMENDATIONS FOR TRANSPORTATION ALTERNATIVES

Ongoing development throughout the City of Fresno, including this project, will make traffic operations significantly worse by adding considerably to delay and congestion. Transit alternatives can help reduce congestion and delay and reduce overall degradation of air quality and gridlocked intersections. The City of Fresno should focus on ways to eliminate trips in addition to enhancing capacity. Transportation alternatives the City should consider include standard highway solutions along with the following:

1. Park and ride facilities on site or within the proximity of this project.

2. A study of the general accommodation and provision of mass transit in this area to provide insight on ways of increasing transit usage.

3. Exploring the potential of commuter shuttles. The shuttle could be financed through an assessment district and provide a way for individuals to utilize a park-and-ride facility or commercial area parking lot and be shuttled to various commercial/office centers within the area. Commuters who need to go further could use City of Fresno transit if the City planned for convenient connections. This may help to reduce the Single Occupancy Vehicle (SOV) demand seeking to use the State Highway System.

4. Providing for continuity of non-motorized transportation.

5. Exploring the potential for employer-sponsored carpools/vanpools or monthly transit passes for employees as well as including as a condition of project approval a covered transit stop as mitigation for project-related impacts to the transportation/circulation system.

6. Exploring the potential for linking the purchase of a monthly transit pass with new residential development as partial mitigation for congestion and air quality impacts, and to ensure the long term viability of public transportation.

City of Clovis

Department of Planning and Development Services

CITY HALL · 1033 FIFTH STREET · CLOVIS, CA 93612

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MAR 12 2004

DEVELOPMENT DEPARTMENT
CITY OF FRESNO

March 11, 2004

Mike Sanchez, Associate Planner
Development Department
City of Fresno
2600 Fresno Street
Fresno, California 93721

Dear Mr. Sanchez,

SUBJECT: FANCHER CREEK PROJECT EIR NOTICE OF PREPARATION

We are in receipt of the subject NOP and have the following comments.

Pacific Gas and Electric Resources
Please identify existing and proposed PG&E facilities that will be required by the project. This should include discussion and identification of the new substation that may be required by PG&E to serve this area.

I trust that correspondence from PG&E responding to this NOP will be included in a compendium or appendix to the DEIR. Please confirm.

Traffic and Trip Generation
Please include an analysis of the ability of the local and regional street system to serve existing + planned + project traffic, especially north-south arterial streets that lead to/from Clovis and the effect of future CUSD-related school traffic on the street system.

A market study, which describes the proposed commercial component's market area, would provide the foundation for multiple environmental impact analyses. It could document the geographic range of potential traffic/trip generation effects of the project and can also be employed in the DEIR to depict indirect significant effects of the project on the environment. In regards to the latter, the study should examine the potential physical effects of the project on existing underused commercial centers in Fresno and Clovis within the estimated market area.

This study should take into consideration existing street and intersection geometries within the area identified by the market study.

I encourage you to include this analysis in the framework of the DEIR, as it will be essential for Clovis' evaluation of the DEIR.

The project will likely rely on a completed state highway system for optimum circulation efficiencies. The DEIR should depict the reliability of state funds to support infrastructure projects and provide funding or street system resources or alternatives if funding is not available.

Sewer

Please include in the DEIR an analysis of the effect of the project on the sewer collection system subject to Addendum No. 6 Fresno –Clovis Regional Sewerage System Joint Powers Agreement (entitled "Agreement For Temporary Exchange of Sewer Capacity In The North Avenue And Fowler Avenue Trunk Sewer Mains").

General Planning

Please include an evaluation of the project's consistency with Fresno's General Plan and Roosevelt Community Plan policies.

Thank you for the opportunity to participate on this project. If you have any questions, please contact me at 559 324-2338.

Sincerely,

David E. Fey AICP
Senior Planner

c: Kathy Millison

J:\David\City of Fresno\Ltr M Sanchez 040904.doc

County of Fresno

Department of Public Works and Planning
Andrew E. Richter
Interim Director

March 12, 2004

VIA FACSIMILE (559) 227-1463

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MAR 12 2004
DEVELOPMENT DEPARTMENT
CITY OF FRESNO

Mike Sanchez, Associate Planner
City of Fresno Planning and Development Department
2600 Fresno Street, Room 3043
Fresno, CA 93721-3604

Dear Mr. Sanchez:

SUBJECT: Notice of Preparation - Draft Environmental Impact Report No. 10133
Fancher Creek Project

The Department of Public Works & Planning, Development Services Division, has completed review of the above referenced project. We have the following comments:

General Plan

The Draft EIR should identify and analyze any land use and planning compatibility issues associated with the proposal in relationship to the FYI Environs Plan.

We note that two parcels listed on Table 1, in Area 4 may be mislabeled both in terms of the Assessor's Parcel Numbers and the current zoning. We believe that parcels 313-020-24 and -22 should be APN 313-101-24 and -22 respectively. The latter parcel is in an unincorporated area and is zoned R-1-AH with NB overlay in the County of Fresno. This 4.2-acre parcel should be added into the area identified for future annexations.

Traffic/Transportation

This project will significantly impact intersections and road segments within the County's jurisdiction. The DEIR should address the impacts from traffic generated by the proposed project on roads and intersections within County jurisdiction.

The scope of the Transportation/Circulation section of the Draft EIR should include all major roadways beyond the immediate boundary of the Fancher Creek Project. The County is particularly interested in those roadways and intersections that remain under the County's jurisdiction but are adversely impacted by this project with no proposed mitigation measures. Studies for the prior project (without regional shopping center), although not extending beyond SOI boundaries, indicated potential major impacts to Belmont, Fowler, and McCall Avenues outside of the Sphere of Influence.

A traffic scoping meeting with the County, Caltrans and the City will be required to determine the contents of the traffic study. A trip trace that depicts project traffic is needed to determine the scope of the traffic study.

The level of service threshold for the County of Fresno is LOS C.

The Design and Development Engineering Sections request to be included in future traffic scoping sessions and to receive the Draft EIR for review and comment.

We appreciate the opportunity to comment on the project. If you have any questions, please telephone me at (559) 262-4334.

Sincerely,

Rick Thaxton, Planning and Resource Analyst
Development Services Division

RT
G:\4360Devs&Pln\ENVIRONMENTAL\RT\OAR\NOP-Fancher CreekDEIR CmntLtr.doc

c: Bernard Jimenez, Policy Planning
Lynn Gorman, Transportation
Janet Dailey, Design
Casey Chang, Development Engineering

CLOVIS
UNIFIED
SCHOOL DISTRICT

1450 HERNDON AVENUE
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559.327.9000
www.clovisusd.k12.ca.us

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MAR 12 2004
DEVELOPMENT DEPARTMENT
CITY OF FRESNO

March 9, 2004

Mike Sanchez, Associate Planner
City of Fresno
Planning & Development Department
2600 Fresno Street, Room 3043
Fresno, CA 93721-3604

SUBJECT: Notice of Preparation for Draft EIR No. 10133
(Fancher Creek Project)

Dear Mr. Sanchez:

The purpose of this letter is to present the District's response to the EIR Notice of Preparation (NOP) for the Fancher Creek Project. The NOP estimates that the project will result in the development of 1,660 residential units under R-1 zoning, 480 multiple family units, 1.5 million square feet of industrial development, 1.32 million square feet of commercial development and 30,000 square feet of office development.

Potential student generation from project residential development is estimated in the table below. This estimate assumes that future development under the proposed R-1 zoning will be single family in nature. However, it is recognized that a range of housing types and densities may ultimately be constructed in the R-1 district under the medium density designation. Therefore, the estimate should be considered a worst case projection.

Fancher Creek Project
Potential Student Generation

	K-6	7-8	9-12	K-12
Single Family Residences				
Number of Units	1,660	1,660	1,660	1,660
Student Generation Rate*	.3709	.1046	.2013	.6768
Number of Students	616	174	334	1,124
Multiple Family Residences				
Number of Units	480	480	480	480
Student Generation Rate*	.2451	.0915	.1405	.4771
Number of Students	118	44	67	229
Total	**734**	**218**	**401**	**1,353**

*Student generation rates will be updated in spring 2004.

GOVERNING BOARD
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Associate Superintendent
Janet L. Young, Ed.D.
Associate Superintendent

Based on the student generation table, the project could generate at total of 1,353 students in grades K-12, including 734 in grades K-6, 218 in grades 7-8 and 401 in grades 9-12.

The 734 students potentially generated in grades K-6 would be enough to fill an entire elementary school. Therefore, it is appropriate for the project to identify the location of an elementary school within the project boundaries. The preliminary development plan included as Exhibit 5 in the NOP shows an elementary school site at the southwest corner of the intersection of Tulare Avenue and Fancher Creek Boulevard. A site at this location would be acceptable to the District.

The 2025 Fresno General Plan, Appendix F, shows the portion of Project Area 3 west of Fowler Avenue as an appropriate study area for an additional elementary school site. To ensure that an appropriately-located elementary school site is identified in subsequent development plans, the District recommends that one of the following mitigation measures be included in the Draft EIR:

> As a condition of rezoning approval, the residential portion of Project Area 3 shall be developed in substantial conformance with a master development plan that includes an elementary school site at a location acceptable to the Clovis Unified School District.
>
> or:
>
> Any tentative subdivision map submitted for the single family residential (R-1 zoned) portion of Project Area 3 shall include all R-1 zoned property within Area 3 and shall include an elementary school site at a location acceptable to the Clovis Unified School District.

At this time, the District does not have a timetable for the development of an elementary school within the project area. Although Fancher Creek School is currently operating in excess of design capacity with an enrollment of 761, the District also has nine other elementary schools with enrollments of over 700 (Century, 885; Copper Hills, 758; Dry Creek, 765; Garfield, 812; Maple Creek, 748; Miramonte, 724; Mountain View; 756; Riverview, 719; and Tarpey, 798). As such, the District is monitoring a number a growing areas, in addition to the Fancher Creek area, for new elementary schools. The timing and priority of new schools will depend on the timing of development activity in the various areas being monitored.

Intermediate and high school students generated by the project would attend Clovis East High School and Reyburn Intermediate School, located at the Reagan Educational Center (Ashlan and DeWolf Avenues). These schools are approaching capacity and additional high school and intermediate school facilities will eventually

be needed within the City of Fresno's planning area south of the Gould Canal and north of Tulare Avenue to accommodate planned development.

The school facilities fees currently levied by the District are $2.53 per square foot for residential development and $0.34 per square foot for commercial/industrial development. These fees will be revised in spring 2004 and future project development would be subject to the development fees in place at the time fee certificates are obtained.

Thank you for the opportunity to comment on the Notice of Preparation. Please let me know if the District can be of further assistance to you as the Draft EIR is being prepared.

Sincerely,

Roger Oraze

Roger Oraze, Ed.D.
Assistant Superintendent, Facility Services

cc: Terry Bradley, Ed.D.
Bill McGuire
Scott Odell

City of
FRESNO

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FAX
FRESNO AREA EXPRESS

Noah Lagos, A.A.E.
Director of Transportation
Bruce A. Rudd
Transit General Manager

March 12, 2004

Mike Sanchez
City of Fresno Planning and Development Department
2600 Fresno Street, Room 3043
Fresno, California 93721-3604

RECEIVED
MAR 17 2004
Planning Division
Development Department
CITY OF FRESNO

Dear Mr. Sanchez:

SUBJECT: COMMENTS ON NOTICE OF PREPARATION OF DRAFT ENVIRONMENTAL IMPACT REPORT (EIR No. 10133) FOR THE FANCHER CREEK PROJECT

Fresno Area Express (FAX) has reviewed Notice of Preparation of Draft Environmental Impact Report for the Fancher Creek Project, and appreciates the opportunity to provide comments. Currently FAX provides public fixed-route transit service and demand-response paratransit service for the City of Fresno. FAX fixed-route services are currently operated as far east as Clovis Avenue. The FAX Handy Ride system provides paratransit services as far east as Clovis Avenue as well. Although FAX staff does not anticipate an immediate demand for fixed-route bus service to the proposed Fancher Creek initial developments proposed at this time, we do expect paratransit service for elderly and disabled people to be requested almost immediately. Elderly and disabled individuals will require regular service to medical, shopping, and social activities in Fresno. Because of the high cost of these specialized services, the disabled residents of the area will look to Handy Ride to provide these much needed services. As this development falls outside the City of Fresno's transit sphere of influence, costs associated with service delivery will need to be determined.

Fixed-route service may not be initially expected. However, as the community grows, school aged children of working parents will want public transportation for school and entertainment. Workers will need to commute to Fresno for jobs, and public transit will become an issue. FAX believes that these services should be anticipated and planned for. FAX is concerned about the cumulative effects of the various proposed projects for this area and would request that a cumulative analysis be undertaken for the need and provision of transit services for the entire development area. FAX staff should be included in the evaluation and review of the development plans to ensure that appropriate allowances are made for proper bus and pedestrian facilities to accommodate future public transit needs. Again, who or what entity will pay for these services should be examined as part of an assessment district analysis. FAX believes that this development, should it be approved and built, will eventually lead to significant demand for new fixed-route service, and extended paratransit services. In closing, we request that our staff is part of this ongoing process and be included on your mailing list of all meeting , and notice requirements in the future.

FAX appreciates the opportunity to comment on this project and should you have any questions, please call me at 621-1502.

Sincerely,

John Downs
Transit Planning Manager

Human Services System
Department of Community Health
Brad Maggy, Interim Director

Adult Services Department
Children & Family Services Department
Employment & Temporary Assistance Department

March 8, 2004

RECEIVED
MAR 15 2004
DEVELOPMENT DEPARTMENT
CITY OF FRESNO

FA0274701
LU0009075
PE 2602

Darrell Unruh
City of Fresno
Development Department
2600 Fresno Street
Fresno, CA 93721

Dear Mr. Unruh:

SUBJECT: **Notice of Preparation of a Draft Environmental Impact Report (EIR No. 10133) Pursuant to the Requirements of the California Environmental Quality Act (CEQA)**

PROJECT TITLE: **Fancher Creek Project**

The Fresno County Department of Community Health, Environmental Health System has reviewed the above noted document and has the following comment for your consideration:

- Departmental records indicate use of an above ground storage tank located at 5841 E. Kings Canyon (APN 313-021-19) resulted in soil contamination which required remediation. Departmental records indicate the California Regional Water Quality Control Board issued a Site Closure letter for the subject property on September 25, 2001. A copy is enclosed for your records.

This Department would appreciate the opportunity to comment on future CEQA documents pertaining to this project. If you have any questions, you may contact me at (559) 445-3357.

Sincerely,

Kathleen Boyer, REHS
Environmental Health Specialist III
Environmental Health System

kb

cc: Steven Rhodes, Environmental Health System

Fancher Creek Project

California Regional Water Quality Control Board
Central Valley Region
Robert Schneider, Chair

Vinston H. Hickox
Secretary for Environmental Protection

Gray Davis
Governor

Fresno Branch Office
Internet Address: http://www.swrcb.ca.gov/rwqcb5
3614 East Ashlan Avenue, Fresno, California 93726
Phone (559) 445-5116 • FAX (559) 445-5910

COPY

Mr. Thomas Richards
Fancher Creek Properties, LLC
4955 East Anderson, Suite 123
Fresno, CA 93727

FA 274701
PR 054487

25 September 2001

SOIL REMEDIATION SUMMARY AND SITE CLOSURE, FANCHER CREEK PROPERTIES, 5841 EAST KINGS CANYON ROAD, FRESNO, FRESNO COUNTY

We have reviewed the subject report describing the remediation processes of the petroleum hydrocarbon impacted soils under a former diesel aboveground storage tank (AST) and an associated fuel dispenser at the subject site. Soils with elevated levels of diesel were excavated from the site and groundwater conditions in a nearby downgradient on-site domestic well were investigated. No contaminants were detected in the water samples collected from the well. Your consultant concludes that the remedial activities undertaken at the site were sufficient to eliminate any threat to underlying groundwater and requests the Regional Board to issue a site closure letter. The report, dated 29 March 2001, was prepared by Krazan & Associates, Inc.

The area investigated is a maintenance area in the central portion of a surrounding parcel which encompasses approximately 140 acres. This 140-acre parcel is occupied by orchards, row crops, shop buildings, and residential dwellings for farm workers and is part of a larger proposed development. The report indicates that the soils in the vicinity of the AST (2,500-gallon storage capacity) were impacted primarily as a result of long-term spillage of diesel from a dispenser since the mid 1970s.

In 1999 and 2000, a hand auger soil boring (eight feet deep), three Geoprobe direct-push soil borings (30 feet deep), and two hollow-stem auger soil borings (60 to 80 feet deep) were drilled in the vicinity of the AST. Elevated levels of diesel (3,000 to 10,000 mg/kg) were detected in soils between ground surface and 30 feet bgs and trace levels of diesel (1 to 17 mg/kg) were detected in soils between 55 and 65 feet bgs. No contaminants were detected between 35 to 55 feet bgs. Based on these findings, your consultant estimates that the majority of contaminants exist between ground surface and about 25 feet bgs. The depth to groundwater is estimated to be about 85 feet bgs.

In February 2001, the AST and the associated fuel dispenser were removed and the diesel-impacted soils were excavated up to about 21 feet bgs. During the excavation, the majority of excavated soils displayed strong diesel odor and dark gray staining. Twenty-one feet bgs appeared to be the maximum possible depth of excavation at the site. Four confirmation soil samples were collected from the bottom and sidewalls of the excavation. The results of the soil sample analyses indicated that soil contamination still exists underneath the bottom of the excavation (2,000 to 6,000 mg/kg of diesel).

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Department of Community Health
Environmental Health System

The report states that a relatively small amount of residual diesel (1,700 pounds) constituents still exist in soils under the site between 21 to 30 feet bgs after excavation. However, the report states that the excavation removed the majority of the impacted soils. According to the soil boring results, the diesel levels in soils drop significantly at about 25 feet bgs (from 5,000 to 1,000 mg/kg).

To evaluate the potential impact of the remaining impacted soil to underlying groundwater, a soil sample collected from 55 feet bgs was analyzed for leachable TPH-diesel fractions and MTBE using a method similar to the WET test. The analysis did not detect any leachable petroleum hydrocarbon constituents or MTBE. One domestic well (125 feet deep) located downgradient (west) within 200 feet of the former AST was sampled in February 2001, and no petroleum hydrocarbon constituents or MTBE were detected.

Based on the site remediation work (tank removal and soil excavation) and evaluation of groundwater conditions in the vicinity of the impacted soils, your consultant concludes that site remedial activities were sufficient to remove the threat to groundwater. Your consultant recommends the site assessment and remediation activities be closed.

Based on our review of the subject report, we believe that you remediated the petroleum hydrocarbon impacted subsurface soils underneath your former AST to the maximum extent feasible. We concur with your consultant's conclusion that the majority of the diesel impacted soils were removed by the excavation and the petroleum hydrocarbon contaminants still remaining under the site do not pose a threat to underlying groundwater. The remaining diesel constituents in soils will continue to naturally degrade. No further site investigation or remediation actions are required at the subject site.

Please be advised that this letter does not relieve you of any liability under the California Water Code or Health and Safety Code for past, present, or future operations at the site. Nor does it relieve you of the responsibility to clean up existing, additional, or previously unidentified conditions at the site, which cause or threaten to cause degradation or nuisance or otherwise pose a threat to water quality or public health.

If you have any questions regarding this matter, please telephone Jong Han of this office at (559) 488-4389.

Russell W. Walls

RUSSELL W. WALLS
Senior Engineer
RCE No. 43140

JYH:jyh

cc: Mr. Jim Armstrong, Fresno County Community Health Department, Fresno
San Joaquin Valley Unified Air Pollution Control District, Fresno
Mr. Arthur H. Morrill, Krazan & Associates, Inc., Clovis

FRESNO METROPOLITAN FLOOD CONTROL DISTRICT

File 550.30 "Y", "BM", "BO", "BQ"

March 23, 2004

Mr. Mike Sanchez, Associate Planner
City of Fresno
Planning and Development Department
2600 Fresno Street
Fresno, CA 93721

Dear Mr. Sanchez

Fresno Metropolitan Flood Control District Comments for Environmental Impact Report (EIR No. 10133), Rezone Application No. R-04-14 Drainage Areas "Y", "BM", "BO" and "BQ"

The Fresno Metropolitan Flood Control District bears responsibility for storm water management within the Fresno-Clovis metropolitan area, including the areas of the subject EIR. Within the metropolitan area, storm runoff produced by land development is to be controlled through a system of pipelines and storm drainage retention basins. The storm drainage system should also be included as one of the impacted service systems noted in the Notice of EIR preparation dated February 8, 2004.

The proposed development will produce storm runoff, which must be properly discharged and mitigated. Such mitigation requires certain planned local drainage facilities inclusive of pipeline and storage basins. The California Environmental Quality Act and the National Environmental Policy Act requires the mitigation of adverse environmental impacts associated with land development projects. It is the position of the District that increased storm runoff associated with land development is a significant adverse impact requiring mitigation at the time of, or prior to development.

The community has developed and adopted a Storm Drainage and Flood Control Master Plan. Each property contributes its pro-rata share to the cost of the public drainage system. All properties are required to participate in the community system for everyone. It is this form of participation in the cost and/or construction of drainage systems that will mitigate the impact of development.

5469 E. OLIVE • FRESNO, CA 93727 • (559) 456-3292 • FAX (559) 456-3194

The Fancher Creek Properties project associated with this EIR was broken into four major project areas. Comments on these areas are as follows:

AREA 1:
This portion of the proposed rezone lies within the District's Drainage Area "BQ". The down stream Master Plan storm drainage facilities, which would serve the proposed light industrial development have not been constructed. Therefore, the District can accommodate the runoff generated by this proposed land use.

AREA 2:
Previous correspondence with GPA 2001-21, dated August 31, 2001, for this portion of the rezone in Drainage Area "BO", is still relevant and should be implemented in any proposed design at this location. A copy of the letter is attached for reference.

AREA 3:
Previous correspondence with GPA 2001-006, dated October 3, 2001, for this portion of the rezone in Drainage Area "BO", is still relevant and should be implemented in any proposed design at this location. A copy of the letter is attached for reference.

AREA 4:
This portion of the proposed rezone lies within the District's Drainage Area "Y". The development of this location will be required to mitigate the impact of the proposed land use of C-3 (Commercial, Industrial uses) to the District's Master Plan land use of R-1 (Medium-low residential uses).

This mitigation can be done with a permanent peak reducing facility that will reduce the runoff from a ten-year (10) storm produced by the proposed development, to a two-year (2) discharge, which would be produced by the property if developed with the medium low density land uses. The District will need to review and approve any mitigation methods prior to implementation.

A State General Construction Permit is required for all clearing, grading and disturbances to the ground that result in soil disturbance of at least one acre (or less than one acre if part of a larger common plan of development or sale).

Permittees are required to submit a Notice of Intent to be covered and must pay a permit fee to the State Water Resources Control Board, develop and implement a storm water pollution prevention plan, eliminate non-storm water discharges, conduct routine site inspections, train employees in permit compliance, and complete an annual certification of compliance.

Thank you for the opportunity to comment. Please keep our office informed on the development of this project. If you should have any questions or comments, please contact the District at (559) 456-3292.

Respectfully,

Mark Will
Engineer III, R.C.E.

MW/lrl

FRESNO METROPOLITAN FLOOD CONTROL DISTRICT

File No. 400.31
"Y", "PP", "BG",
"BH", "BK", "BO","BM

October 3, 2001

Mike Sanchez
Planning Division- Development Department
City of Fresno
2600 Fresno Street
Fresno, CA 93721

Gentlemen,

FMFCD Comments for GPA 2001-006
Drainage Areas "Y", "PP", "BG", "BH", "BK", "BM", "BO"

General Plan Amendment 2001-006 lies within several District Drainage Areas. The proposed Fancher Creek Regional Parkway and circulation amendments lie within Drainage Areas "Y", "PP", "BG", "BH", "BK", "BM", "BO" and rural areas. The District would require any development of the proposed Fancher Creek Parkway or the proposed realignment of Tulare Avenue be reviewed for consistency with the adopted Storm Drainage Master Plan through the submittal of improvement plans. The proposed plan amendment will require review and approval of grading and drainage patterns as the street realignment is inconsistent with the patterns established within the current Master Plan.

The General Plan Amendment's proposed land use changes lie within the District's Drainage Areas "BO" and 'BM" as identified on the attached sketch. The District's existing storm drainage facilities can accommodate the proposed land use changes within Drainage Area "BO". The District's system can also accommodate the runoff generated by the proposed land use changes within Drainage Area "BM". The District's downstream Master Plan facilities, which will serve the proposed land use designation of medium density and commercial/mixed use within Drainage Area "BM", have not been constructed. Therefore, the drainage system can be modified to accept runoff from the higher density land uses.

lr\\roberty\letters\plan amend 2001-006

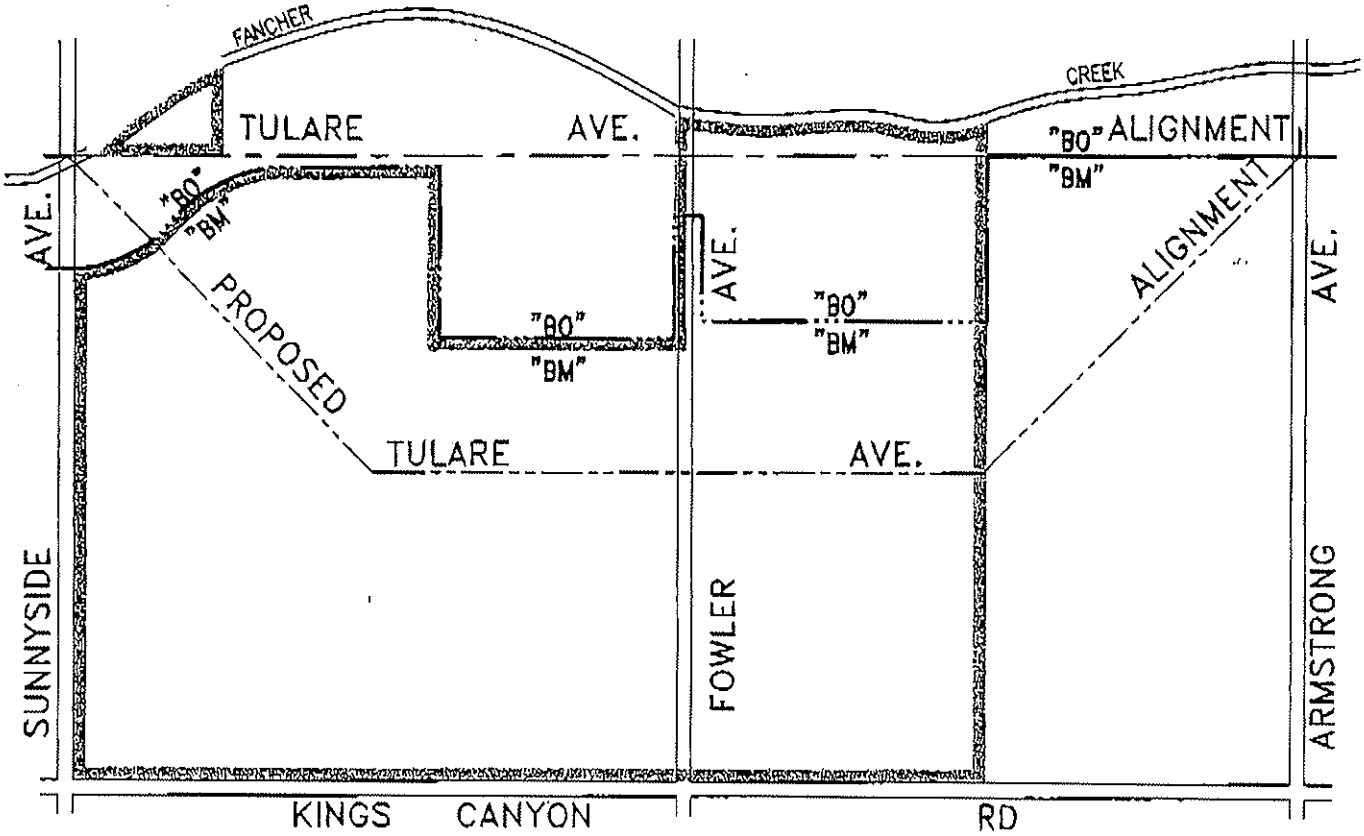
Please contact us if you have any questions regarding this matter.

Sincerely,

Robert Villalobos
Design Tech II

RV/lrl

NOTE:
THIS DRAWING IS SCHEMATIC.
DISTANCES ARE APPROXIMATE.



LEGEND

AREA OF PLANNED LAND USE CHANGE

DRAINAGE AREA BOUNDARY

SCALE = 1" = 800'

N

PLAN
AMENDMENT 2001-006
DRAINAGE AREA: "BO" & "BM"

EXHIBIT NO. 1

FRESNO METROPOLITAN FLOOD CONTROL DISTRICT

TAYLOR 09-28-01

BARG
COFFIN
LEWIS &
TRAPP
ATTORNEYS
LLP

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Fax 415 228 5450
www.bcltlaw.com

March 16, 2004

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Planning Division
Development Department
CITY OF FRESNO

VIA FEDERAL EXPRESS AND FACSIMILE

Mike Sanchez
Associate Planner
City of Fresno
Planning and Development Department
2600 Fresno Street, Room 3043
Fresno, California 93721-3604

Re: Notice of Preparation of Draft Environmental Impact Report (EIR No. 10133 – Fancher Creek Development Project)

Dear Mr. Sanchez:

We are writing on behalf of Drs. Armen Michaelian, Shiro Ego and Arnold Gazarian, owners of a 75-percent undivided interest in a property in the City of Fresno bordering Clovis Avenue known as the "MEGG parcel," APN 313-021-01. The MEGG parcel will be directly and significantly affected by the referenced Project, and the Doctors therefore wish to be included to the greatest extent possible in the City's review of the Project under the California Environmental Quality Act (CEQA). This letter contains our comments in response to the referenced Notice of Preparation.

The referenced Draft Environmental Impact Report ("Project EIR") concerns the Project applicant's filing of Rezone Application R-04-14, which requests rezoning of Project Areas 1, 2, and 3 and the northern portion (designated Parcels 1 and 3) of Project Area 4. The Project applicant owns these Project areas and a 25-percent undivided interest in the MEGG parcel, which comprises the southern 47.42-acre area (designated Parcel 2) of Project Area 4.

The Notice of Preparation states that, even though the Project applicant does not control the MEGG parcel, and therefore is not asking for it to be rezoned, the Project EIR will assume a future rezoning of the parcel from its current designation of AE-5/UGM to C-3/UGM. As the Doctors have repeatedly informed the Project applicant and the City over the last five years, the Doctors have no objection to the rezoning of the MEGG parcel to C-3/UGM so long as the re-zoning is not part of a process that devalues the MEGG parcel or disserves the public interest.

Unfortunately, the proposed Project appears to be part of a process designed to increase the value of the Project applicant's non-MEGG parcels at the expense of decreasing the value of the MEGG parcel, while worsening already-vexing traffic problems in the vicinity. The City should not be party to such a scheme, and it should take advantage of this CEQA process to correct serious errors in prior actions related to this Project.

THE EIR MUST ADDRESS THE IMPACT OF THE PROJECT AND THE PROPOSED FANCHER CONNECTOR ON THE MEGG PARCEL

The General Plan has long called for Tulare Avenue to extend directly eastward from its current terminus at Clovis Avenue. This would divide the MEGG parcel into two pieces fronting on Tulare – a major east-west artery – suitable for development into a regional shopping center. This was consistent with the City's planned pattern of a rectilinear grid of east-west and north-south arteries at regular intervals, designed to promote efficient traffic flow and unclogged local streets.

In 2001, the Project applicant applied for a general plan amendment and rezoning for a variant of the current Project (Plan Amendment Application No. A-01-21, Rezoning Application Nos. R-01-55 and R-02-02). That application included a proposal to create a major new thoroughfare – Fancher Creek Boulevard – running from Clovis Avenue (at a point a short distance north of the intersection with Tulare Avenue) eastward and southeastward across the MEGG parcel to Tulare (the "Fancher Connector").[1]

Not only was this idea ill-advised from a traffic and circulation standpoint, it effectively – and improperly – called for the City to exercise its eminent domain power to benefit one private property owner at the expense of another. The proposal would have carved up the MEGG parcel – greatly diminishing its development potential – and condemned much of the MEGG parcel for the Fancher Connector to enhance the development potential of the Project applicant's adjacent property.

Moreover, the California Department of Transportation (CalTrans)[2] and others (including the Doctors)[3] objected that the traffic and other analyses under CEQA were inadequate and the proposed Mitigated Negative Declaration was inappropriate.

In the face of these objections, the Project applicant withdrew its application in 2002. That, however, was not the end of the Fancher Connector. It turns out the withdrawal occurred while the City was engaged in its periodic comprehensive General Plan update process, which ultimately yielded the current "2025 General Plan." Shortly after the Project applicant withdrew

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1 *See* 2-27-02 Vicinity Map ("Vicinity Map"). A copy of this map is attached at Tab 1.

2 March 1, 2002 letter from Moses Stites to Mike Sanchez ("CalTrans letter"). A copy of this letter is attached at Tab 2.

3 March 20, 2002 letter from James A. McKelvey to Mike Sanchez and Nick Yovino. A copy of this letter is attached at Tab 3.

its application, the City added the Fancher Connector to the Transportation Element Map[4] made part of the 2025 General Plan. This was done without any notice to the Doctors and without any discussion or any CEQA analysis. Thus, the traffic, fairness and CEQA problems that infected the earlier application not only were not corrected, but they were not even brought to light because the Fancher Connector was slipped into the 2025 General plan without notice to those who brought the deficiencies to light.

We prefer to believe this inclusion of the Fancher Connector in the 2025 General Plan – without proper notice or consideration of the environmental impacts and other problems associated with it – was due to an oversight or clerical error. Nothing in the record indicates otherwise. In any event, this inclusion was illegal, improper and – to the extent it was not inadvertent – ill-advised, and it should be corrected now. Within the context of the present CEQA process, this could be done by requiring amendment to the 2025 General Plan – to eliminate the Fancher Connector – as a mitigation measure for the Project.

Further, the Project application currently makes no reference to the Fancher Connector, thereby masking the fairness, traffic and other CEQA issues it raises (and which led to the withdrawal of the applicant's prior application). Particularly in light of the checkered history of this Project, the applicant should clarify whether or not it has abandoned the Fancher Connector before the application package is deemed complete. This information is essential to adequate CEQA analysis of the Project. Therefore, the application should be deemed incomplete, and the CEQA process should be re-initiated after this omission is corrected.

Similarly, if and when the applicant confirms that the Fancher Connector is still part of the Project, the EIR should consider and prefer alternatives that do not include the Connector or any approach that calls for the City to condemn the Doctors' property to enrich the Project applicant.

THE EIR MUST INCLUDE A COMPREHENSIVE ANALYSIS OF THE IMPACTS OF THE PROPOSED FANCHER CONNECTOR ON THE PROJECT AREA

Once the application is complete (and assuming it includes the Fancher Connector), the Project EIR should analyze all environmental impacts of the Connector. This is especially important in light of the major circulation issues in the Project area that are identified by the 2025 General Plan and related Master EIR ("MEIR").

The City forecasts that traffic will become much worse in the Project area in the coming 20 years, especially along the stretch of Clovis Avenue between Belmont Avenue and Kings Canyon Road, where the MEGG parcel is located. According to the 2025 General Plan and MEIR, population in the three surrounding Community Plan Areas is predicted to increase

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[4] *See* 2025 Fresno General Plan, Transportation Element Map (attached at Tab 4); General Plan Master Environmental Impact Report, Figures VB-1, showing current streets, and VB-2, showing current and proposed streets, including the Fancher Connector (attached at Tab 5).

significantly: 33% in the Roosevelt Area, 41% in the McLane Area, and a phenomenal 1800% in the Southeast Growth Area. *See* General Plan at Table 1 (Population Projection by Community Plan Area). Additionally, the planned eastward extension of SR 180 just north of the Project area (General Plan MEIR at V-B3), including a major freeway access interchange at Clovis, will put additional pressure on circulation in the area – and especially along the MEGG parcel – by funneling SR 180 traffic onto Clovis Avenue, between Belmont Avenue and Kings Canyon Road.

The MEIR's analysis of traffic and circulation impacts in the Project area outlines some of the problems related to Project Area 4 that will result from this population growth and the SR 180 extension. Clovis Avenue is designated by the General Plan as an "arterial," and serves as the City's easternmost major north-south transportation corridor. General Plan MEIR at V-B5. By 2025, traffic volume on Clovis Avenue south of Ashlan Avenue is predicted to increase by 105 percent, with a total of 41,770 average daily trips, increasing to 62,960 average daily trips at McKinley Avenue, and peaking at the SR 180 access interchange at 66,020 average daily trips, an increase of 165 percent. General Plan MEIR at V-B12. Traffic volumes along Clovis Avenue in the vicinity of the MEGG parcel and Project Area 4 will face similarly substantial increases. Traffic on Clovis Avenue between Belmont and Tulare will rise from 25,860 to 61,180 average daily trips (an increase of 136 percent), and between Tulare and Kings Canyon from 24,260 to 40,360 average daily trips (an increase of 66 percent). General Plan MEIR at Appendix 2 (Traffic Analysis), chart, page 12.

For these reasons the City has projected the level of service (LOS) on this stretch of Clovis to be LOS "F" without mitigation. General Plan MEIR at V-B12, V-B28. LOS "F" is characterized by "forced or breakdown flow (stop-and-go gridlock). This condition exists when the amount of traffic exceeds the amount that can travel to a destination. Operations within the queues are characterized by stop and go waves, and they are extremely unstable." General Plan MEIR at V-B23. The City has admitted that mitigation to the minimum acceptable level of service – LOS "D" – is infeasible, and feasible mitigation will only result in LOS "E" along Clovis Avenue between Olive and Tulare, immediately adjacent to Project Area 4. General Plan MEIR at V-B17, V-B28. LOS "E" "[r]epresents operating conditions at or near the level capacity. All speeds are reduced to a low but relatively uniform value. Small increases in flow will cause breakdowns in traffic movement." General Plan MEIR at V-B23. For this reason, traffic impacts along Clovis Avenue between Olive and Tulare will remain significant. General Plan at V-B16.

The proposed Fancher Connector will directly affect the segment of Clovis Avenue between Olive and Tulare that is projected to perform at LOS "E." As shown in the 2025 General Plan and MEIR (but not on the maps attached to the application or Notice of Preparation), the Connector would cut through the southern portion of Project Area 4 – that is, the MEGG parcel. It will begin at a new intersection on Clovis, north of the Clovis/Tulare intersection, and curve southeast to a new intersection on Tulare between Clovis and Sunnyside. *See* General Plan at Exh. 7 (Transportation Element Map); General Plan MEIR at V-B21 (Figure VB-2); Vicinity Map.

The MEIR did not analyze how the proposed Fancher Connector would affect the significant traffic impacts forecast for the segment of Clovis Avenue bordering Project Area 4 (between Olive and Tulare) and predicted to perform at LOS "E." Nor does it appear that the MEIR analyzed the impact of the Connector – which "is expected to act as the primary carrier of traffic for this project"[5] – on the rest of the Project area and the surrounding neighborhoods. In fact, the MEIR does not even mention the proposed Fancher Connector, either in the text or in the Traffic Analysis attached to the MEIR as Appendix 2. This is a curious omission, given that the proposed Connector was added to the General Plan Transportation Element Map under review in the MEIR. It is especially curious because, with regard to this section of the City's circulation grid, the proposed Fancher Connector was the only significant connector street added to the Map, and the odd alignment of the Connector is a striking deviation from the otherwise rectilinear grid.

This absence of analysis in the MEIR would be understandable if the MEIR incorporated by reference some other environmental review document that contained an adequate analysis of the circulation impacts of the proposed Fancher Connector. However, the MEIR contains no such reference. This is not surprising because the only traffic study ever performed relating to the Fancher Connector was both legally and factually unreliable. That Traffic Impact Study (TIS) was prepared in connection with the Mitigated Negative Declaration prepared for the Project applicant's prior application for a general plan amendment incorporating the Fancher Connector. Because the applicant withdrew that application, neither the Planning Commission nor the City Council ever approved the Negative Declaration, and the MEIR therefore could not legally rely upon it for any reason. In addition, the MEIR could not legally rely upon this TIS with regard to the Fancher Connector, because the TIS assumed that the Fancher Connector would function as a replacement for Tulare Avenue east of Clovis Avenue.[6] This assumption was incorrect, as the circulation element incorporated in the General Plan and analyzed by the MEIR includes both the Fancher Connector *and* the Tulare extension. *See* General Plan at Exh. 7 (Transportation Element Map); General Plan MEIR at V-B21 (Figure VB-2); Vicinity Map.

Moreover, the TIS was factually unreliable, as indicated in CalTrans' March 1, 2002 comment letter. CalTrans found "[t]he TIS is difficult to understand and to follow. We do not fully understand the process used to develop the future forecasts, and would like to meet with the traffic consultant regarding their methodology." CalTrans also stated that the TIS "did not address the impacts to the State Highway system from the proposed project, specifically the new SR 180 interchanges at Clovis, Fowler, and Temperance avenues," even though CalTrans "specifically requested" such an analysis and "clearly recommended that the applicant follow the CalTrans Guide for the Preparation of Traffic Impact Studies." CalTrans also complained that it was not given an "opportunity to review the scope of the TIS before the study was conducted," even though the agency had requested that as well. *See* CalTrans letter at page 1.

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5 *See* March 20, 2002 Planning Division Staff Report, attached at Tab 6, at page 8.

6 *See* Vicinity Map from February 2002 Traffic Impact Study for Fancher Creek, attached at Tab 7.

CalTrans' comments go on to identify numerous flaws in the TIS:

> Since traffic impacts to State facilities have been completely ignored in the TIS, the resulting environmental document is incomplete. The total effects of this project have not been evaluated or considered by the lead agency and have also not been made available for review by the general public.
>
> The traffic numbers in the TIS are very low compared to the 2025 traffic volumes from the COG traffic model.
>
> The analysis was conducted for a "cumulative" scenario, but did not look at 2025 under full build-out. The CalTrans Guide for the Preparation of Traffic Impact Studies requires the use of build-out scenarios.
>
> In reviewing the TIS, we note that the project will create impacts that will reduce the Level of Service below an acceptable level along several segments and intersections of the local transportation system. The TIS provides mitigation for these impacts . . . . [however] there isn't any mention of who has the responsibility for implementing the mitigation, or how it will be funded.

CalTrans letter at p. 2. The letter concludes by requesting a meeting with the City and the applicant to "resolve these major issues," but not before commenting:

> CEQA specifically states that an environmental document will reflect the <u>independent</u> judgment of the lead agency. These paragraphs seem to be an attempt to allow the applicant to dictate project outcome and mitigation.

CalTrans letter at p. 3 (emphasis in original).

It is unclear why the proposed Fancher Connector would have been incorporated in the 2025 General Plan when the applicant's requested general plan amendment was never approved and the environmental review supporting that amendment was fatally flawed. We understand that preparation of the 2025 General Plan and consideration of the Project applicant's proposed general plan amendment were proceeding on parallel tracks in 2001 and early 2002, and we assume that planning staff incorporated the proposed Fancher Connector into the 2025 General Plan Transportation Element on the assumption that the amendment would be approved. As noted above, perhaps the failure to delete the Connector when the assumption proved wrong was merely an oversight. If so, the Connector should be removed from the 2025 General Plan now either as part of the present process or separately.

Such an oversight would be understandable. However, if this was not the case and, instead, the City purposely left the proposed Fancher Connector in the 2025 General Plan after the amendment was withdrawn, we are at a loss to explain the situation. This would mean that the Project applicant was effectively granted the general plan amendment that was never approved by the Planning Commission or the City Council. Though the Planning Commission and City Council did approve the 2025 General Plan and MEIR, they cannot be deemed to have approved the proposed Fancher Connector. This is because the Fancher Connector is nowhere mentioned – let alone analyzed – in the 2025 General Plan or MEIR, but only shown as a line (unnamed, at that) on the Transportation Element Map.

RECOMMENDATIONS ON SCOPE AND CONTENT OF THE PROJECT EIR

Below are our recommendations for the scope and content of the circulation analysis to be undertaken as part of the Project EIR, based on the concerns we have stated above. In addition, we include some additional recommendations regarding other aspects of the Project EIR.

Generally

The Project EIR should assume full build-out of the MEGG parcel at maximum developable uses and densities for all relevant purposes, including the cumulative impacts analysis.

Circulation

The Project EIR may not rely on the TIS previously prepared. Instead a new, comprehensive and independent TIS should be prepared. The new TIS should:

(1) Fully explore and analyze the impact of the proposed Fancher Connector on the MEGG property, the rest of Project Area 4, other surrounding parcels, and circulation in the greater Project area.

(2) Fully analyze the circulation impact of the Project on:
- -- Clovis Avenue between Olive Avenue and Kings Canyon Road
- -- the proposed extension of Tulare Avenue between Clovis Avenue and Fowler Avenue
- -- the proposed Fancher Connector between Clovis Avenue and Tulare Avenue
- -- the intersection of the proposed Fancher Connector and Tulare Avenue
- -- the intersection of the proposed Fancher Connector and Clovis Avenue.

(3) Take into account the comments contained in CalTrans' March 1, 2002 letter and address all of CalTrans' concerns.

The Project EIR should:

(4) Ensure that the project complies with all relevant General Plan objectives and policies, including, but not limited to:

-- General Plan Objective E-2: Maintain a coordinated land use and circulation system that conforms to planned growth, minimizes traffic conflicts, reduces impacts on adjacent land uses, and preserves the integrity of existing neighborhoods. General Plan at 70.

-- General Plan Policy E-2-c: Control access through limitations of intersections, driveways, and median island openings. General Plan at 70.

-- General Plan Policy E-2-e, E-2-k: Require the design of local streets to provide efficient circulation and allow convenient access while protecting neighborhoods from the intrusion of through traffic. General Plan at 70, 71.

-- General Plan Policy E-2-m: Provide assistance in traffic planning to neighborhood residents who wish to eliminate traffic impacts through methods which spread the costs among those receiving the benefits. General Plan at 71.

(5) Ensure that the Project complies with all relevant General Plan MEIR mitigation measures, including, but not limited to:

-- Mitigation Measure B-1, which states that projects which could affect conditions on street segments predicted to perform at LOS "E" "shall not cause conditions on those segments to be worse than LOS "E" before 2025, without completing a traffic and transportation evaluation. This evaluation will be used to determine appropriate project-specific design measures or street/transportation improvements that will contribute to achieving and maintaining LOS "E." General Plan MEIR at V-B17. (Specifically, Mitigation Measure B-1 should be taken into account when analyzing the effect of the Project and the proposed Fancher Connector on Clovis Avenue between Olive Avenue and Kings Canyon road, which is predicted to perform at LOS "E.")

-- Mitigation Measure B-4, which states that a site access evaluation for developments such as the Project shall be required. This evaluation must (1) address disruption of vehicular traffic flow along adjacent major streets, appropriate design measures for on-site vehicular circulation and access to major streets, and linkages to bicycle/pedestrian circulation systems and transit services, and (2) determine the project's contribution to increased peak hour vehicle delay at major street intersections adjacent or proximate to the

project site, identify project responsibilities for intersection improvements to reduce vehicle delay consistent with the LOS anticipated by the General Plan. General Plan MEIR at V-B18.

(6) Ensure that the project is consistent with the Community Plans for the Roosevelt, McLane, and Southeast Growth Areas.

Air Pollution

The Project EIR should comprehensively analyze the long-term air impacts of the Project and consider specific mitigation measures to reduce the significance of any such impacts below the level of significance.

Public Utilities

The Project EIR should fully explore the cumulative impacts of the Project on the electrical system in the Project area and surrounding neighborhoods, as PG&E has stated that "the current electrical system will not be able to meet the full demand of development occurring in the Fancher Creek area." (See March 3, 2004 letter from PG&E to the City commenting on the Notice of Preparation for the Project EIR).

Alternatives

The Project EIR should consider alternatives as discussed above.

REQUESTS REGARDING THE EIR PROCESS

Documentation

We request that all documents related to General Plan Amendment Application No. A-01-21, Rezoning Application Nos. R-01-55 and R-02-02, and Environmental Assessment No. A-01-21/R-01-55/R-02-02, and any other documents related to the City's environmental review of prior versions of the Fancher Creek Project be made a part of any administrative record for the Project EIR (EIR No. 10133) that is prepared by the City for purposes of judicial review of the Project or the Project EIR under CEQA or other applicable laws. These documents should include, but are not limited to, the March 20, 2002 Planning Division Staff Report regarding Environmental Assessment No. A-01-21/R-01-55/R-02-02 and all documents that were included as attachments to that Report.

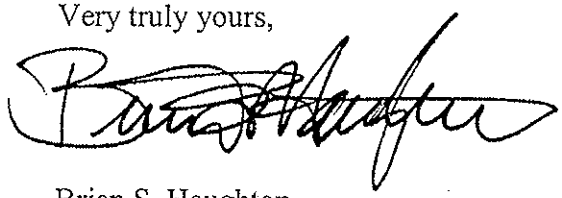
Inclusion of these documents in the administrative record is mandated by state law. *See* Public Resources Code §21167.6 (requirements for public agency preparing "record of proceedings relating to the subject of the action or proceeding"); County of Orange v. Superior Court, 113 Cal.App.4th 1, 6 Cal.Rptr.3d 286 (2003) (documents related to environmental review of prior version of project are part of the administrative record under §21167.6).

Notice of Future Actions

We also request that the City give adequate written notice – under all applicable state laws, city ordinances, and departmental rules – to Drs. Michaelian, Ego and Gazarian, with respect to any actions contemplated by the City that might impact the MEGG parcel environmentally, financially, or otherwise. Specifically, we request notice of any action taken with respect to preparation of the Fancher Creek EIR, consideration of the Rezone Application, and approval of either document by planning department staff, the Planning Commission, the City Council, or any other City official, department, or agency.

Please consider me to be the primary contact with respect to all matters raised in this letter, including notice to the Doctors. I am available to consult with City staff at any time, and I would be happy to assist in any way possible. I can be reached at the telephone number and U.S. Mail address shown above or by e-mail at bsh@bcltlaw.com. Thank you for your consideration.

Very truly yours,



Brian S. Haughton

Attachments (via Federal Express):

Tab 1: Vicinity Map prepared by Planning Department staff, showing proposed Fancher Creek Boulevard and Tulare Avenue extension
Tab 2: Department of Transportation 3/1/02 comment letter on Traffic Impact Study prepared for Environmental Assessment No. A-01-21, R-01-55, R-02-02
Tab 3: Comment letter dated 3/20/02 by James A. McKelvey, on behalf of MEGG Investors and others, regarding Environmental Assessment No. A-01-21, R-01-55, R-02-02
Tab 4: 2025 Fresno General Plan, Exh. 7 (Transportation Element Map)
Tab 5: 2025 Fresno General Plan Draft MEIR, Figure VB-1 (map of existing streets) and 2025 Fresno General Plan Draft MEIR, Figure VB-2 (map of projected streets)
Tab 6: March 20, 2002 Planning Division Staff Report Re: Environmental Assessment No. A-01-21, R-01-55, R-02-02, and attachments thereto
Tab 7: Vicinity Map from February 2002 Traffic Impact Study prepared for Environmental Assessment No. A-01-21, R-01-55, R-02-02

cc: Dr. Armen Michaelian
Dr. Shiro Ego
Dr. Arnold Gazarian
Dean Arakelian, Berberian Companies
Edward Kashian
Tom Richards

Sunnyside-Fancher Creek Association

P.O. Box 1665 - Fresno, California 93717 - 559-456-3426

March 17, 2004

RECEIVED

MAR 17 2004

Planning Division
Development Department
CITY OF FRESNO

Mr. Mike Sanchez, Associate Planner
City of Fresno, Planning and Development Department
2600 Fresno Street, Room 3043
Fresno, CA 93721-3604

RE: Comments on the Scoping for Draft Environmental Impact Report (EIR No. 10133)

Dear Mike,

The Sunnyside-Fancher Creek Association is grateful for this opportunity to submit comments on the scoping for the preparation of Draft EIR No. 10133. We also appreciate the efforts of the City Planning and Development Department and Fancher Creek Properties, Inc. to hold true to the vision of creating development projects that will benefit our neighborhood while mitigating the negative effects of increased traffic congestion, noise, air pollution and other impacts as much as humanly possible.

Some of the concepts being proposed under this "project" are new and generally will be viewed with much skepticism at first. However, we feel if these concepts are properly implemented, they will benefit the community. What we don't want is uncontrolled urban sprawl and antiquated development schemes that only benefit the Developer, negatively impact our environment and lower our property values.

Based on the information provided to us, here are our areas of concern:

LAND USE & PLANNING

Multi-Family Land Uses: We are already surrounded by large apartment complexes on Clovis Avenue, Kings Canyon Road and the area behind the former Vons. These are known problem areas and a blight on the neighborhood. The addition of more units is of great concern to our members because of the long-term effects it may have on safety and property values. We feel that the Southeast area has not received comparable consideration with respect to the kind of development that has boomed in the northern areas and that more high density projects will simply add to the negative reputation of the Southeast area.

We suggest a "clean-up" of the existing complexes before additional apartments are even considered for the area. Perhaps a designation as a Redevelopment area may help lower crime, increase property values and provide an overall improved multi-family community.

We anticipate some problems with Tulare Avenue continuing through from Fowler to Clovis Avenues. Previously our neighborhood was sheltered from the high crime area of these apartments because Tulare only extended in front of Fancher Creek School and there were many acres of wide-open agricultural space between the apartment area and us. With an open road straight through to that problem area, we feel very vulnerable to the possibility of increased crime. Does the new growth in the area warrant a new police substation or creation of neighborhood patrol areas to service the growing community?

Obviously, this higher density land use increases traffic, air pollution, noise and other impacts on the neighborhood. We understand that multi-family uses are essential in the "town center" concept and if designed properly, we feel they could work. However, we would like to reiterate our objection to any additional multi-family, stacked, multi-story complexes similar to the apartment properties that currently exist in the neighborhood simply for the purpose of maximizing the land use potential to exploit the neighborhood.

We are concerned with the density distribution as well as density designation. If multi-family units must ultimately be approved and included in this project, we suggest that they be placed within and closest to the "town centers" where they will "soften" the impacts of the mixed uses and high volume traffic roads on the single family residential areas.

Business Park/Light Industrial: The proposed mix of office, light industrial and commercial uses is another area of concern with regard to the types of uses (manufacturing and light industrial) that will be allowed. Many of our neighbors expressed trepidation at the possibility of auto repair and paint shops or large scale manufacturing uses. We suggest placing uses such as offices that do not create much noise or nighttime activity adjacent to residential areas as a buffering tactic, with the heaviest uses in the business park focused near the center.

We would also like to suggest that specific industrial uses that involve food/meat processing, heavy chemical uses and solid waste recycling not be allowed in the "business park." We feel that despite the fact they are allowed by code in M-1 areas, these "light industrial" uses do not enhance the purpose of the park, do not complement the existing nearby residential uses and can cause serious odor and noise impacts.

Area 2 Residential Use: Two years ago the Sunnyside-Fancher Creek Association organized around the neighborhood outcry against the developer's plan to rezone this area for multi-family use. So, despite the fact the developer and the City have agreed to study the area for single family use at 7 units per acre, until it is built it will continue to be a major concern for us and we will continue to watch its development very closely.

Area 4 Regional Commercial Shopping Center: We have heard this part of the project dubbed as "Riverpark South" but we hope that's where the similarity with the North Fresno regional shopping center ends. The Riverpark Shopping Center is a "monster" retail center with probably the worst traffic congestion in the City. We envision a much smaller scale, quality retail center where pedestrian traffic is encouraged. A major problem with Riverpark is that it is so huge you must traverse across immense parking lots with no safe, continuous walkways between the

various clusters of stores, making it more convenient to *drive* from one part of the shopping center to another!

The southeast area has been in need of some quality stores and restaurants for some time and we hope this center and the existing center at Kings Canyon and Clovis will provide it. It is discouraging to see all the empty tenant spaces at the old Vons center and the closing of the local Office Max. What is being done at this location to stimulate new businesses?

As with other aspects of this entire area of the "project" we are concerned with traffic congestion, noise and air quality. We suspect the shopping center will attract people from Sanger as well as Fowler and Selma, and beyond. Considering that Clovis Avenue is a major arterial, we are concerned about traffic in and out of the shopping center as well as parking within the center. The EIR should address the number of people/vehicles that would be entering the center and estimate for adequate parking.

TRAFFIC CIRCULATION, NOISE & AIR QUALITY

With the proposed 2,140 residential units, increased commuter traffic to and from the business park during the week and increased weekend traffic to the proposed retail/commercial center, we suspect the neighborhood is looking at seriously high levels of traffic on every day of the week.

We suggest that very intensive traffic studies be made on Clovis, Belmont, Fowler and Kings Canyon with respect to traffic level of service as well as the loads and types of traffic anticipated. Traffic loading on intermediate streets is also a concern because it is our belief that residents out of the immediate area will opt to use the proposed Fancher Creek Boulevard and the extended Tulare Avenue as alternate east-west short-cuts to the retail/commercial center. Will these streets be capable of handling the increased traffic loads?

We feel that the traffic study should also include the transportation of goods in and out on large trucks from the business park and commercial/retail center. What are the impacts of this type of traffic on Belmont, Clovis, Fowler and Kings Canyon? Should truck traffic even be allowed on Fowler Avenue? What about additional traffic noise? Should truck traffic be limited to certain hours of the day? Considering the location of the Fancher Creek Elementary School at Fowler and Tulare and the existing residences on Fowler, we question whether trucks should be allowed to use Fowler at all despite its designation as an arterial street.

The load of increased traffic as well as heavy trucks servicing the business park and retail centers will certainly add to maintenance costs. Are the current street sections designed for the additional loading? Should street improvements be made prior to completion of these high use areas? Who will pay for the maintenance and what kind of economic impacts will that have on the neighborhood?

Noise study considerations should focus not only on additional traffic noise created by increased vehicular traffic on surface streets, but loading/unloading noise created at the docks of the commercial business and retail areas. What is the possibility of underground loading/unloading docks? Sound walls? Conditions on hours of loading/unloading?

Pedestrian traffic crossing Fowler Avenue at Tulare (from the east side residential subdivisions to the school) will be heavy during school hours. With increased vehicular traffic *and* large trucks...crossing the street would be a hazard, especially for our children. We've heard some discussion about a pedestrian over-crossing or underpass, which could make it easier for pedestrians to cross Fowler, but there are also additional costs and aesthetics to take into consideration. This should be an area of focus in the EIR.

Members of our association who live along Fowler Avenue have stated that at current traffic levels, the noise is already extreme. What kind of mitigating measures can be provided for those residences? There is already a block wall along the subdivisions. Should the wall be extended higher? Additional landscaping might help, but it is our feeling that it is not an effective mitigation measure for heavy traffic noise. These areas should be the focus of specific noise studies.

Noise and air quality are an inevitable by-product of increased traffic. How do we mitigate these impacts? The "town center" concept is a step in the right direction, but it will take a lot more "town centers" to make a big difference in air quality.

In studying traffic patterns, local driving habits should be considered. What will it take to get the *Fresno* driver out of the car onto a bus or vanpool? What incentives are there? The existing FAX bus system has many shortcomings and most Fresnans are reluctant to use it except as a last resort. But you can't just wait until traffic and air pollution get so bad you have to force people out of their cars. We would like to see a pro-active approach to this problem. Obviously this is a much larger issue than this project alone presents, but perhaps this is where we break new ground and implement new ideas. Transportation systems have a major effect of our lifestyles and careful consideration should be taken into its design and implementation.

In reviewing the initial layout for the residential project in Area 3, it pretty much looks like a typical subdivision. Where are the innovative walking and bicycle trails to encourage getting out of our cars? Where are the paths leading to meaningful destinations such as the businesses, retail centers, schools or parks? We feel greater attention needs to be paid to encouraging non-vehicular traffic through our residential neighborhoods.

We question the use of the roundabout at the intersection of Fowler Avenue and the proposed Fancher Creek Boulevard. We'd like to see how a roundabout on a major arterial such as Fowler would work. We support the idea of slowing traffic along Fowler, or even discouraging large truck traffic, but using the traffic circle at River Park as an example, we question the use of this type of traffic regulator at this location. It is our understanding that Fancher Creek Boulevard is intended as a scenic roadway to encourage pedestrians. How will pedestrians cross Fowler at the roundabout?

The quality of our air is deplorable. But who's to blame? Urban sprawl plays a major part. Poorly designed neighborhoods are another part. Right now... people in our area have to travel many miles to go see a movie, or go to a nice restaurant or visit a decent bookstore. The concept of the regional shopping center forces people to get into their cars and drive. In this way

transportation and air quality are inseparable. If we don't control the traffic, we can't control the air quality.

TRANSPORTATION

Where are the long-term planning elements for the future installation of light rail facilities in our development of the Southeast? As stated previously, transportation systems have a major effect of our lifestyles and careful consideration should be taken into its design and implementation.

The City has a vanpool pilot program currently in place where it provides 12-person vans and resources to find other vanpoolers in your neighborhood. This kind of program is a great alternative to the single-occupant commuter vehicle and perhaps a small stepping-stone to a future light rail system.

PARKS & RECREATION

We currently have no regional, community or neighborhood parks in our immediate area. The Fancher Creek School grounds, the ponding basin overflow area and Hank's Swank Golf Course are the only "green" areas available for outdoor sports and recreation. The former Roeding Tree Circle had great potential for a beautiful neighborhood park, rich with old palms and cedars, but unfortunately the trees have all gone to the new Save Mart Center and single family homes will be built in their place.

The closest community center serving the Southeast area is the Mosqueda Center at Butler and Maple. With the increasing population in our area, what are the possibilities of building a community center to serve our area?

We hope that the EIR will seriously address this missing component from our neighborhood and provide for adequate recreational facilities. We are encouraged to see the proposal of the small 5-acre neighborhood park south of the Fancher Creek School and various "pocket" parks in the proposed subdivision, but they fall short of what the neighborhood needs and wants.

FANCHER CREEK

Development of a greenway along Fancher Creek has been a very contentious issue with many of our members and neighbors over the past several years. Here are some of our concerns:

- Will the creek itself be kept in its natural state?
- If a pathway is constructed along the developer's creek access, how will it be accessed by the neighborhood? Will it be paved? Will it be lighted?
- At some time in the future, does the City anticipate securing properties to complete the trail? This is a major concern of homeowners along the creek who fear the City will use the power of eminent domain to acquire property rights to complete a continuous greenway/parkway.
- With additional pedestrian traffic there will ultimately be the possibility of crime, vandalism, littering, etc. How will the greenway be patrolled and will the creek be maintained?

- How will the privacy of property owners on the opposite side of developed portions of the creek be maintained?
- What can be done to improve the existing portions of Fancher Creek accessible along the overflow basin? Can trees be planted to enhance the trail along the creek?

Development of Fancher Creek should be a major area of focus for the EIR. There was very little in the 2025 General Plan MEIR to address the processes for neighborhood input regarding development of a Fancher Creek greenway.

SCHOOLS

The Fancher Creek Elementary School has been overcrowded for most of the years it has been open and at times has bussed an entire grade to another CUSD school. We have heard a new school is proposed to the west of Fancher Creek, but we are concerned about the timing of the building of the new school. Will the new school be built concurrent with the building of the new subdivisions? With over 2000 new residential units being proposed, how will Fancher Creek accommodate the children of these families if the new school is not at least under construction?

Another concern at Fancher Creek School is the circulation for drop off and pick up of children. The existing cul-de-sac allows for a convenient turn-around in front of the school, but what will happen when Tulare is continued through? The school has very little available property to develop onsite improvements.

SEWER AND WATER FACILITIES

Although we understand there is capacity in the current Fowler Trunk Sewer, how long will it be before we will need additional sewer treatment facilities? There has already been some discussion about whether the City of Clovis will construct their own facilities or participate in a regional treatment plant with the City of Fresno to be located in the Southeast. It might seem out of the scope of this project to be concerned with future sewer concerns, but as the southeast area develops, this issue will become an increasing burden on all of its residents.

Water is an increasing concern as new wells within the City draft water away from County residents, forcing them to deepen their wells. We feel this is a serious issue that has yet to be dealt with aggressively by local agencies. Too often, the focus has been on water supply and conservation is only practiced when convenient. We don't want to have problems with low water pressure because of poor water planning. It's time to encourage strategies and implement elements of "smart growth" planning.

SUMMARY

After enjoying many years of relative serenity on the edge of the City limits, we are faced with the fact that the Southeast area of Fresno will be the new growth area for the next two decades. It will be a difficult adjustment for some, but if we are to grow and still maintain a healthy living environment, the Developers, the City of Fresno and the Neighborhood will all have to accept some changes, challenges, new concepts and compromises.

Land use and its relationship to existing uses is our primary concern because it will ultimately determine what the other issues will be. The comments we expressed here are based on the information provided to us but we feel that these figures are still too vague to give us a clear picture of what to expect. At the scoping meeting when questions were brought up about specific aspects of the subdivision layout, it was expressed that the layout was outdated and some portions no longer applied. Therefore, we strongly recommend that the City request more up-to-date proposals by the Developer to be analyzed by the EIR so the report will more accurately represent the impacts of the ultimate uses.

We support the City's effort to control growth through infill and mixed uses as long as the City maintains the quality of the projects through its review processes, enforces the approved uses in these mixed-use areas and promotes neighborhood involvement in the planning of these projects. Mixed land uses provide the opportunity for us to get out of our cars, get healthier by walking more and getting to know our neighbors better.

We are encouraged by some of the research done by "Active Living by Design," a national program of The Robert Wood Johnson Foundation, part of the School of Public Health at the University of North Carolina (www.activelivingbydesign.org). These kinds of pro-active programs are necessary in Fresno and the Central Valley if we are to improve our quality of life and living.

If the City of Fresno is ready to abandon short-sighted planning strategies and implement these concepts...we will work with you to make our neighborhoods a better place to live.

Thank you again for this opportunity to comment on the scoping for the draft EIR No. 10133.

Sincerely,

Joanne K. Tolladay

Joanne K. Tolladay
Secretary, Sunnyside-Fancher Creek Association

FLY FRESNO
City of Fresno - Airports

Fresno Yosemite International Airport
Fresno-Chandler Downtown Airport
4995 East Clinton Way
Fresno, CA 93727-1525
559-621-4500
FAX 559-251-4825
www.flyfresno.org

RECEIVED
MAR 12 2004
DEVELOPMENT DEPARTMENT
CITY OF FRESNO

DATE: March 11, 20004

TO: Mike Sanchez, Associate Planner

FROM: Daniel Yrigollen, Airport Projects Supervisor

BY: Nathan Sanchez, Engineering Technician

SUBJECT: Fancher Creek Project, EIR No. 10133

The 476-acre subject property located in the area of Fowler Ave. and Kings Canyon Ave. This project lies within the Environs of the Fresno Yosemite International Airport. The current Fresno Yosemite International Airport – Airport Environs Plan is being updated to be consistent with the California Airport Land Use Planning Handbook (CALUPH). As such, the criteria identified by the CALUPH are being used in the evaluation of the subject project.

Project areas 1,2, & 4 lie within the California Safety Zone 6: Traffic Pattern Zone as defined in the California Airport Land Use Planning Handbook.

- As stated in Table 9B on page 9-45
  - There is a low likelihood of accidental occurrence at most airports: risk concerns primarily with uses for which potential consequences are severe.
  - Zone includes all other portions of regular traffic patterns and pattern entry routes.
  - Allows residential uses.
  - Allows most nonresidential uses.
  - Prohibit outdoor stadiums and similar uses with very high intensities.
  - Avoid children's schools, large day care centers, hospitals, nursing homes.

- As stated in Table 9C on page 9-47
  - Residential density is no limit.
  - Non-residential density in rural/suburban land use is 150 people per acre.
  - Non-Residential density in urban use is no limit.

Areas 1 & 2 lie within the Airport Review area as defined in the Fresno Yosemite International Airport - Airport & Environs Plan

- The Airport Review area is defined as follows: all land within the 60 of greater CNEL contours and/or within Approach Protection Zones I through IV as shown on the Fresno Yosemite International Airport Environs Plan Map. The Fresno Yosemite International Airport Environs Plan Map is attached as Figure E-1.

- If a parcel of land is partially within the Airport Review Area, the entire parcel is considered to be subject to the land use consistency requirements of this plan.

Areas 1 & 2 lie within Approach Protection Zone (APZ) III & IV and are subject to the following land use safety compatibility criteria:

- APZ III - Density no greater than 2 dwelling units per acre.
- APZ IV – Density no greater than 5 dwelling units per acre.
- APZ III & IV – No Schools, Hospital, Nursing Homes, Churches, Auditoriums, Concert Halls, Amphitheaters or other uses that would concentrate a large number of people.

FLY FRESNO
City of Fresno - Airports

Fresno Yosemite International Airport
Fresno-Chandler Downtown Airport
4995 East Clinton Way
Fresno, CA 93727-1525
559-621-4500
FAX 559-251-4825
www.flyfresno.org

- That it is understood by the owners' successors in interest that the real property in question lies close to the Fresno Yosemite International Airport and that the operation of the Airport and the landing and take-off of aircraft may generate Moderate interference with outdoor activities and with indoor activities when windows are open.

- Recommend residential construction include features which provide sufficient noise attenuation (e.g. installation of air-conditioning so that windows can be kept closed)

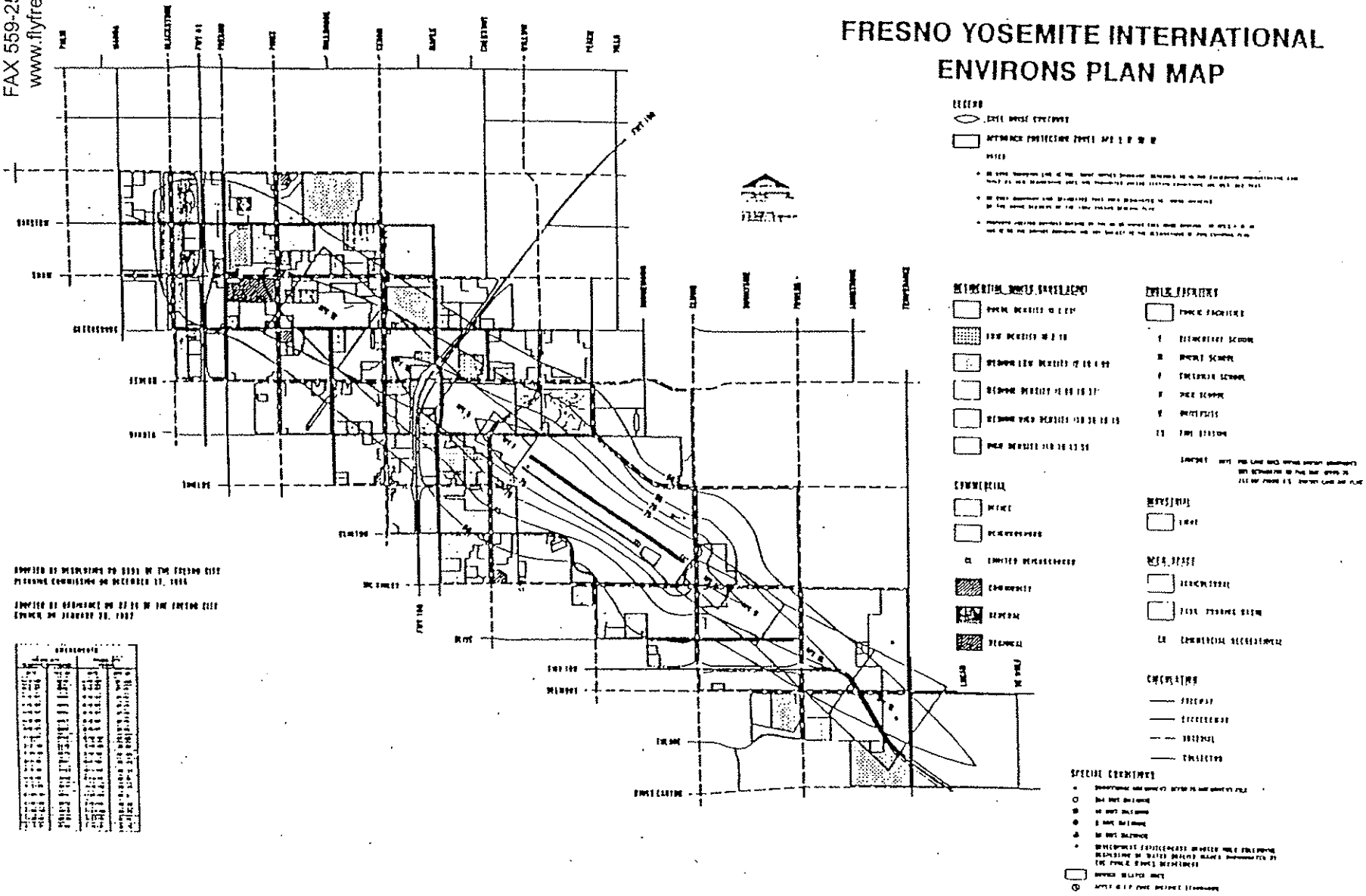
- **Buyers Notification**
  Buyer notification shall be accomplished by the use of real estate disclosure statements for property within the Airport Review Area. The disclosure statement shall notify the buyers of property located within the Airport Review Area of the proximity of the property to the Fresno Yosemite International Airport and that aircraft overflights may affect the habitability and quiet enjoyment of the property.

The environmental review for this project should address the potential for hazardous wildlife attractants on or near airports. Refer to FAA Advisory Circular 150/5200-33 for guidance.

Fresno Yosemite International Airport
Fresno-Chandler Downtown Airport
4995 East Clinton Way
Fresno, CA 93727-1525
559-621-4500
FAX 559-251-4825
www.flyfresno.org

FLY FRESNO
City of Fresno - Airports

FRESNO YOSEMITE INTERNATIONAL
ENVIRONS PLAN MAP



FYIA - AEP FIGURE E-1

2/97

BAKMAN WATER COMPANY

TELEPHONE (559) 255-0324 • P.O. BOX 7965 • 5105 E. BELMONT • FRESNO, CA 93747

March 16, 2004

City of Fresno
Planning and Development Dept.
Attn: Mike Sanchez – Associate Planner
2600 Fresno St. Rm 3043
Fresno, CA 93721-3604

RECEIVED

MAR 17 2004

Planning Division
Development Department
CITY OF FRESNO

Re: Fancher Creek Project Response Letter

Dear Mike Sanchez-

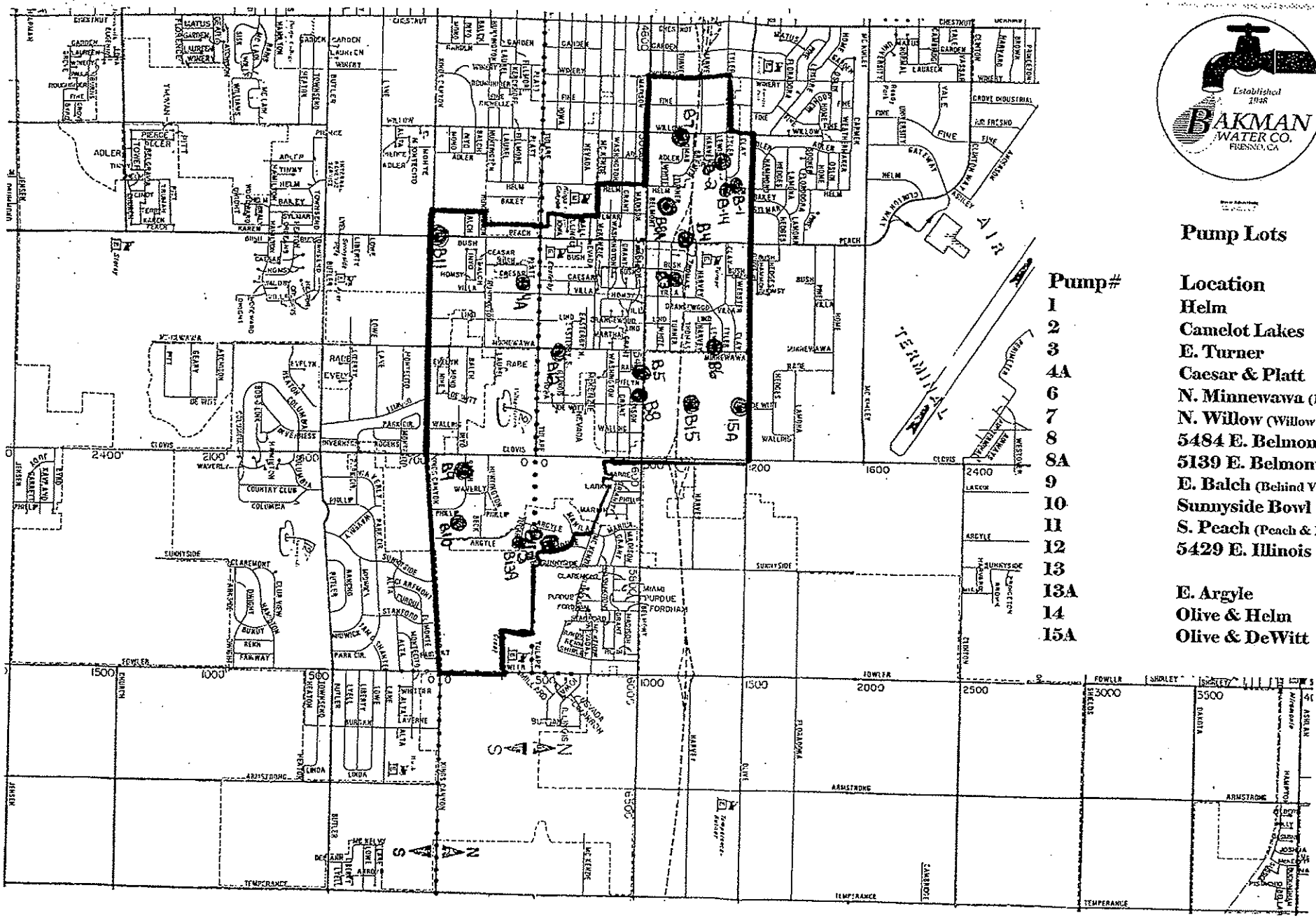
Approximately 327 acres of the proposed 476 acres of development are within the boundaries of the Bakman Water Company. These boundaries of Bakman Water Company are set by the P.U.C. for future growth in this area. 95 acres of area 4-C3/UGM, 211 acres of area 3-R1/UGM and 31 acres of C-2/UGM, approximately 2/3 of this area are within Bakman Water Company and 1/3 (10.33 acres) is in the City of Fresno boundaries. We feel it would be in the best interest of the developer and future residents to incorporate these 10.33 acres within the expansion loop of the Bakman Water Company in order to alleviate the duplication of services for this area of development.

Bakman Water Company's system is currently serving approximately 8500 in population with the highest quality of drinking water, service, landscape irrigation and fire flow protection. The Bakman Water Company's C.E.O., Richard Tim Bakman, has invested a lot of time and energy into creating a working model with the company's engineers showing how a very reliable system can be expanded to service this area. The model illustrates the addition of 12" C900 lines to service this project utilizing existing Bakman Water Company's facilities at the area of Tulare and Argyle. It further illustrates the addition of 2 VFD wells strategically placed within this development and sized according to the needs of this project, additionally outlining its vital interaction with the flows of this areas' distribution system. This will therefore enhance the area being developed to have very effective fire protection when needed, but also keep the distribution system very efficient. The VFD type motor on a well is crucial in a time when power and water issues are of great importance. The 10.33 acres of development addressed above can easily be included into the looped system recommendations with no effect to existing distribution system designs.

We would recommend that the C.V.P. (Central Valley Project) requirements for metering be the standard by which water utilities for this project are developed and managed. This will allow for the standardization of the water usage monitoring in this era of vast development and for the consolidation of services, if needed in the future. Bakman Water Company would require water metering for all new construction within this area and has researched the type of meters that will work most reliably with its existing electronic metering plan. The meters will be of the touch read type and AWWA approved. In conclusion, we will have done our part in maximizing and conserving our precious resources.

Thank you,

Steve Pickens
Field Supervisor



Established 1948

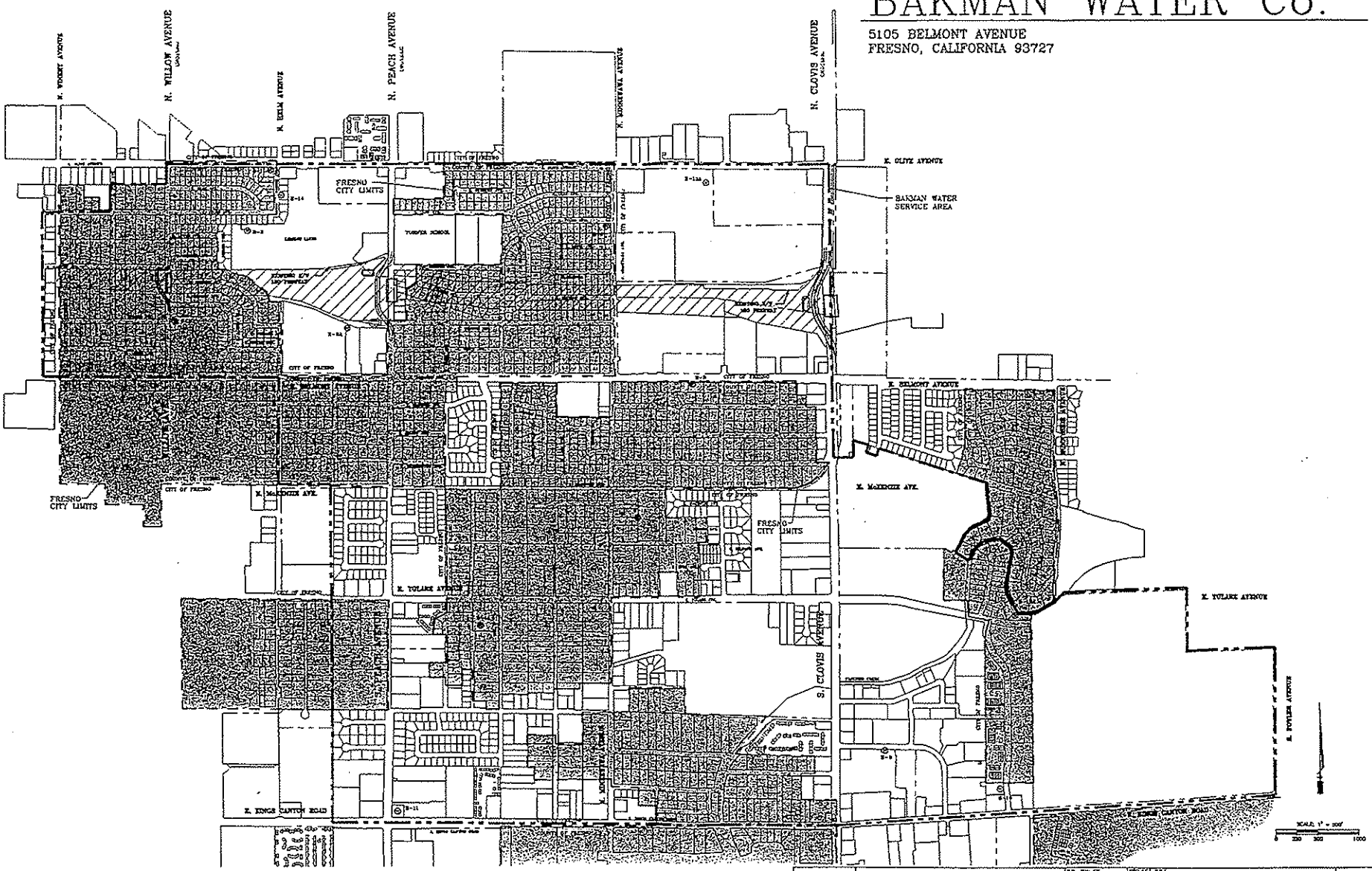
BAKMAN WATER CO.
FRESNO, CA

Pump Lots

Pump#	Location
1	Helm
2	Camelot Lakes
3	E. Turner
4A	Caesar & Platt
6	N. Minnewawa (Between Tyler & Lewis
7	N. Willow (Willow & White)
8	5484 E. Belmont
8A	5139 E. Belmont
9	E. Balch (Behind Von's)
10	Sunnyside Bowl
11	S. Peach (Peach & Kings Canyon)
12	5429 E. Illinois
13	
13A	E. Argyle
14	Olive & Helm
15A	Olive & DeWitt

BAKMAN WATER Co.

5105 BELMONT AVENUE
FRESNO, CALIFORNIA 93727



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1300 E. SHAW AVE. SUITE 178, FRESNO, CALIFORNIA 93710
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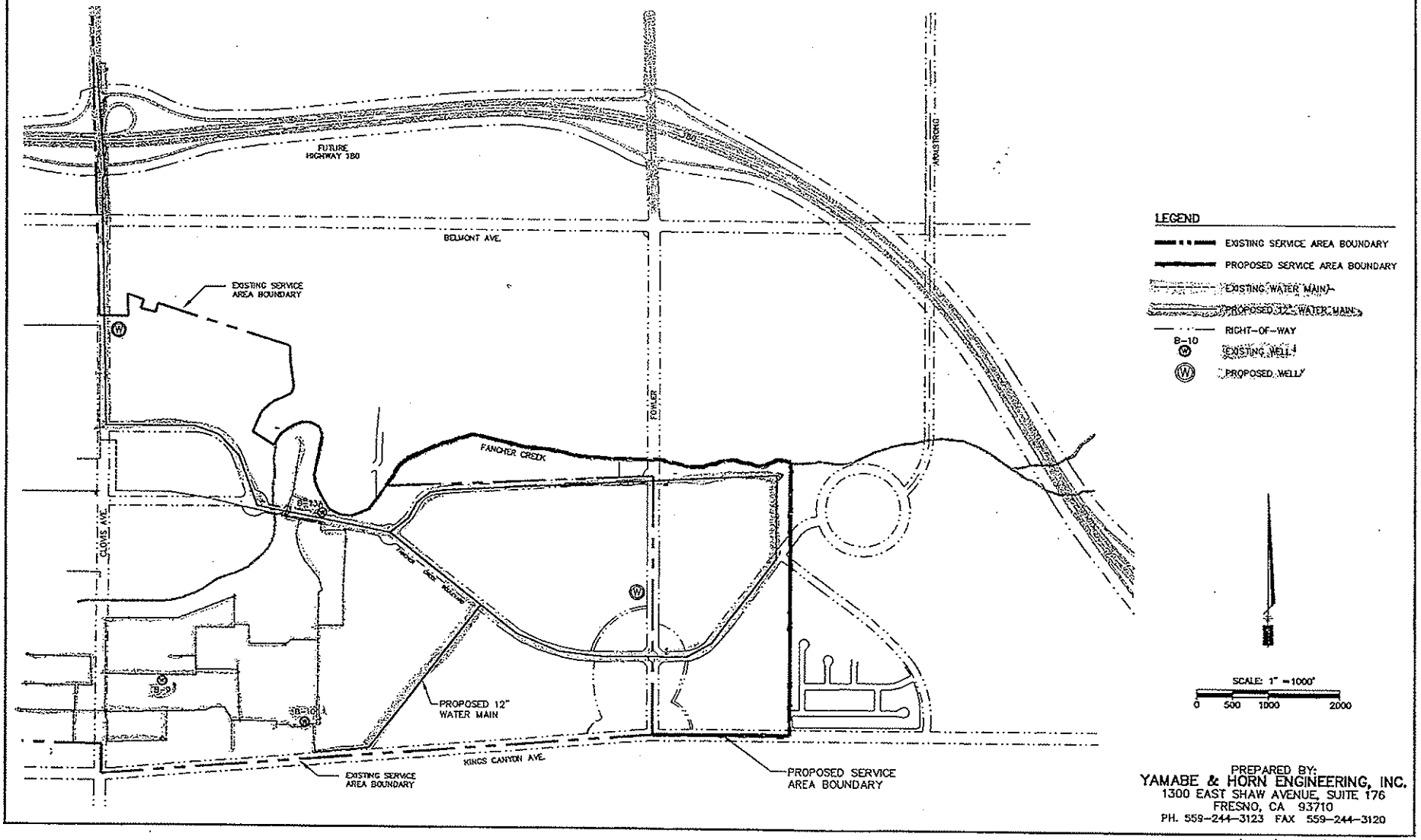
DR. BY: SS
CH. BY: SS
DATE: 12-11-02
REV.

PROJECT TITLE: BAKMAN WATER DISTRICT
FRESNO, CALIFORNIA
SHEET DESCRIPTION: DISTRICT MAP
BAKMAN WATER COMPANY

SHEET NO: 1 of 1

BAKMAN WATER DISTRICT

PROPOSED SERVICE AREA ADDITIONS



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