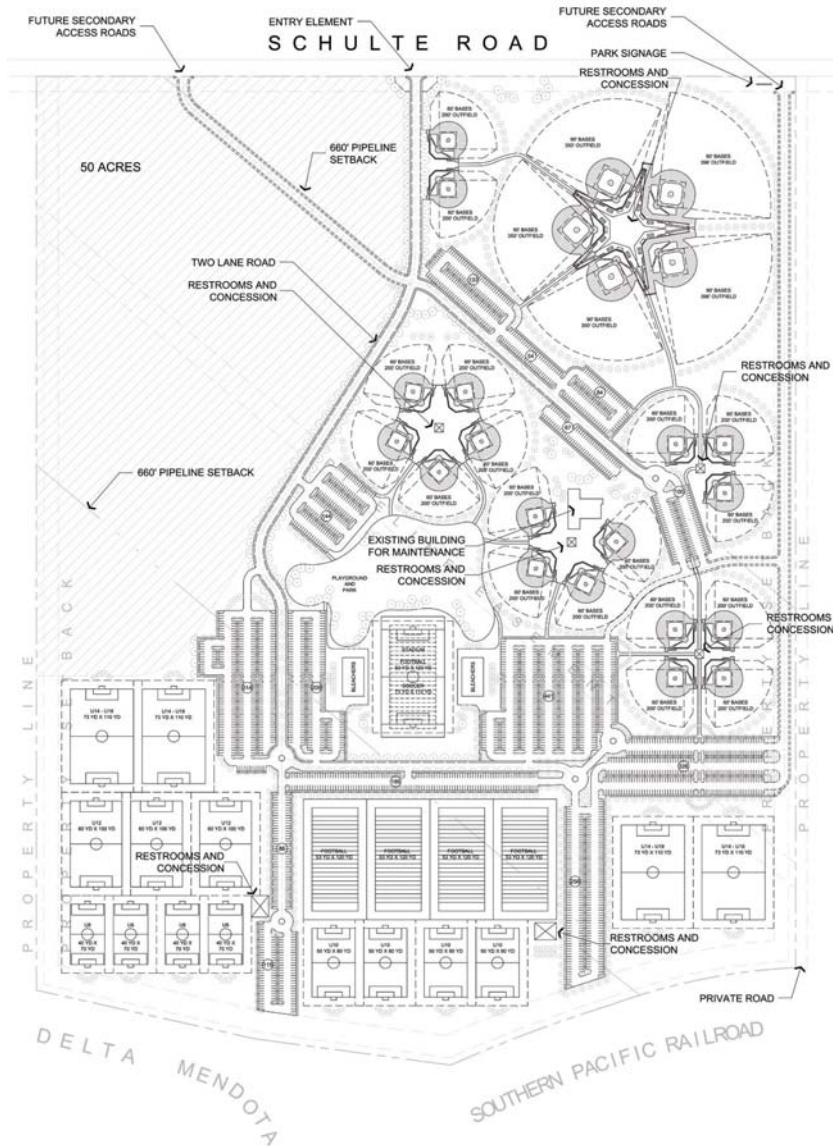


TRACY YOUTH SPORTS FACILITY 15178 W. SCHULTE ROAD, TRACY

DRAFT ENVIRONMENTAL IMPACT REPORT

SCH# 2004022139



PREPARED FOR

CITY OF TRACY
DEVELOPMENT AND
ENGINEERING
DEPARTMENT

PREPARED BY



1440 BROADWAY, SUITE
1008
OAKLAND, CA 94612
(510) 272-4491

SEPTEMBER 2005

Tracy Youth Sports Facility
City of Tracy
15178 W. Schulte Road, Tracy
Draft Environmental Impact Report

Prepared for:

CITY OF TRACY
Development and Engineering Department
520 Tracy Boulevard
Tracy, CA 95376



Prepared by:

1440 Broadway, Suite 1008
Oakland, CA 94612
(510) 272-4491
www.pacificmunicipal.com

September 2005

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1.0 INTRODUCTION

This section summarizes the purpose of the Environmental Impact Report (EIR) for the Tracy Youth Sports Facility proposed by the City of Tracy (City) (the "project"). The following discussion addresses the environmental procedures that are to be followed according to State law, the intended uses of the EIR, the project's relationship to the City's General Plan, the EIR scope and organization, contact person, impact terminology, and definitions of commonly used terms and acronyms used throughout this EIR.

1.1 BACKGROUND AND PURPOSE

This EIR has been prepared in conformance with the California Environmental Quality Act (CEQA) to evaluate the environmental effects of the proposed project, which consists of purchase of 50 acres and transfer of 150 acres of land from the United States Bureau of Prisons, the construction of a multi-use sports facility, buildings and temporary structures, parking, ball field lighting, spectator improvements, landscaping, infrastructure improvements, site access, and security fencing on approximately 200 acres.

The project site is located at 15178 W. Schulte Road west of the City of Tracy on unincorporated lands in San Joaquin County. The project site is 200 acres in size, formerly used as an antenna and radio transmission facility operated by the FAA until 1981. The construction of initial facilities in Phase I will consist of securing the infrastructure and utility needs to the site, as well as the construction of play fields planned for the northeast & southwest sectors of the project site, to meet ball field needs for current and five-year projections. With the completion of Phase I, the project site is proposed to have three football fields, ten baseball/softball fields, and thirteen soccer fields on 150 acres.

What is a "Lead Agency"?

The "Lead Agency" is the agency (in this case, the City of Tracy), which will be primarily responsible for approving and overseeing the implementation of a project.

Phase II of the project would add an additional thirteen baseball/softball fields, one sports/football stadium, one football field, two soccer fields, and 50 acres of a general park/passive recreational area.

The City, acting as **lead agency**, has prepared this Draft EIR to provide the public and responsible and trustee agencies with information about the potential environmental effects of the

proposed project. As described in CEQA Guidelines Section 15121(a), an EIR is a public **informational document** that assesses potential environmental effects of a proposed project, and identifies mitigation measures and alternatives to the proposed project that to avoid adverse environmental impacts of proposed development that could reduce or avoid its adverse environmental impacts. Public agencies are charged with the duty to consider and minimize environmental impacts of proposed development where feasible, and an obligation to balance a variety of public objectives, including economic, environmental, and social factors.

CEQA requires the preparation of an environmental impact report prior to approving any "project" which may have a significant effect on the environment. For the purposes of CEQA, the term "project" refers to the whole of an action, which has the potential for resulting in a direct physical change or a reasonably foreseeable indirect physical change in the environment (CEQA Guidelines Section (15378[a])). With respect to the proposed project, Tracy has determined the development is a "project" within the definition of CEQA, and that it has the potential for resulting in significant environmental effects.

1.0 INTRODUCTION

1.2 TYPE OF DOCUMENT

CEQA identifies several types of EIRs, each applicable to different project circumstances. This EIR has been prepared as a **Project EIR** pursuant to CEQA Guidelines Section 15161. This type of analysis focuses primarily on the changes in the environment that would occur as a result of implementing the proposed project, and examines all phases of a particular project (i.e. planning, construction, and operation).

The project-level analysis in this report addresses impact associated with the development and operation of the project, and provision of infrastructure and services for the project.

Ultimately, the EIR is intended to be used by the City as a tool in evaluating a proposed project's environmental impacts and can be further used to modify, approve, or deny approval of the proposed project based on the analysis provided in the EIR.

1.3 INTENDED USES OF THE EIR

This EIR has been prepared in accordance with the California Environmental Quality Act and the CEQA Guidelines. The EIR is intended to evaluate the environmental impacts of the proposed project to the greatest extent possible. This EIR, in accordance with CEQA Guidelines Section 15126, should be used as the primary environmental document to evaluate all subsequent planning and permitting actions associated with the project. Subsequent actions include, but are not limited to the following:

- Purchase of 50 acres and transfer of 150 acres of land from the U.S. Bureau of Prison in accordance with House of Representatives Bill 2508;
- Memorandum of Understanding, agreement or lease with the Youth Sports Alliance of Tracy (YSAT)¹ for construction, operation and maintenance of the project;
- Project approval by the Tracy City Council;
- National Pollution Discharge Elimination System Permit;
- Easements and Encroachment Permits;
- California Public Utilities Commission action;
- U.S. General Services Agency approval;
- Grading plans and Improvement Plans;
- Building permits; and
- Permits as required by the San Joaquin County Public Health Services Department.

¹ YSAT is a nonprofit corporation comprised of representatives of the City's youth sports organizations.

1.4 ORGANIZATION AND SCOPE

Sections 15122 through 15132 of the CEQA Guidelines identify the content requirements for Draft and Final EIRs. An EIR must include a description of the environmental setting, an environmental impact analysis, mitigation measures, alternatives, growth-inducing impacts, significant non-avoidable impacts, and cumulative impacts.

The environmental issues addressed in the Draft EIR were established through review of environmental documentation developed for the project, environmental documentation for nearby projects, and responses to the Notice of Preparation (NOP) (Included in **Appendix A**). Based on these comments, and agency consultation, City of Tracy determined the scope for this EIR.

This Draft EIR is organized as follows:

Section 1.0 - Introduction

Section 1.0 provides an introduction and overview describing the intended use of this EIR and the review and certification process.

Section 2.0 - Executive Summary

This section summarizes the proposed project and provides a concise summary matrix of the project's environmental impacts and associated mitigation measures.

Section 3.0 - Project Description

This section provides a detailed description of the proposed project, including intended objectives, background information, and physical and technical characteristics.

Section 4.0 Environmental Setting, Impacts and Mitigation Measures

Section 4.0 contains an analysis of environmental topic areas as identified below. Each subsection contains a description of the existing setting of the project area, identifies project-related impacts, and recommends mitigation measures.

The following major environmental topics are addressed in this section:

- **Land Use Planning:** This section addresses the land use impacts associated with implementation of the project, including consistency with City land use goals and policies.
- **Health Hazards/Risk of Upset:** Addresses the presence of hazardous conditions or materials on the site, or associated with the project, and the manner in which such hazards can be mitigated. This section concludes that the project would have a less-than-significant effect with regard to this issue.
- **Transportation/Traffic:** Addresses the impacts on the local and regional road system. In addition, the section assesses impacts on transit, bicycle, and pedestrian facilities.

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- **Noise:** Examines noise impacts during construction and at project buildout, as related to potential noise generation from mobile and stationary sources. This section also addresses the impact of noise generation on neighboring residential uses.
- **Air Quality:** Discusses the local and regional air quality impact associated with the proposed project.
- **Hydrology and Water Quality:** Examines the impacts of the project on local hydrological conditions, including drainage areas, groundwater, and changes in drainage flow rates.
- **Geology and Soils:** Addresses the potential impacts the project may have on soils, soil suitability for development, and seismic hazards.
- **Biological Resources:** Examines the project's impacts on habitat, vegetation and wildlife, with special consideration to the potential impacts on listed, proposed, and candidate threatened and endangered species.
- **Cultural and Paleontological Resources:** Addresses the potential impacts on cultural and paleontological resources on the project site.
- **Public Services and Utilities:** Addresses the impact of the project on public services, water, wastewater, electrical service, natural gas, telephone and cable television service. This section discusses the ability of the existing utility systems to provide service to the project.
- **Agricultural Resources:** Discusses impact of the project on agricultural resources. This section concludes that the project would have a less-than-significant effect on agricultural resources.
- **Aesthetics:** This section assesses the overall increase in nighttime illumination produced by the project and the light spill-over into adjoining uses, as well as overall aesthetic impacts of the development and operation of the proposed project.

The following sections were not addressed in this EIR, as there were no potential effects from the project to this resource:

Mineral Resources

Population and Housing

Section 5.0 – Cumulative Impacts Summary

This section examines impacts that are individually not significant, but become significant when combined with the effects of other projects or existing uses.

Section 6.0 - Alternatives to the Project

CEQA Guidelines Section 15126.6 requires that an EIR describe a range of reasonable alternatives to the project, which could feasibly attain the basic objectives of the project and avoid and/or lessen the environmental effects of the project. This alternatives

analysis provides a comparative analysis between the project and the selected alternatives, which include:

- **No Project:** CEQA Guidelines Section 15126.6(e) requires that a “no-project” alternative be evaluated in an EIR. This alternative considers the environmental effects of not approving the proposed project and the future development of the entire project site consistent with the Industrial designation under the City's adopted General Plan. Using the allowable land uses by designations in the General Plan, the No Project Alternative would result in the development of heavy industrial, light industrial, fabrication/assembly, warehousing, or professional offices and support uses on the site. The project site would not be developed for use as a Youth Sports Facility. This alternative is examined in Section 6.2.1
- **Chrisman Road Alternative:** This alternative would include a similar development scenario, but would only develop approximately 105 buildable acres at the City-owned Chrisman property located north of Eleventh Street. This alternative is examined in Section 6.2.2

The alternatives analysis also included an examination of a variety of other alternatives, which were dismissed from detailed analysis. See the Alternatives section for a detailed discussion of these dismissed alternatives and the reasons why they were not examined in detail.

Section 7.0 – Long-Term Implications of the Project

This section examines a variety of topics which are required by state law, including:

- **Significant Unavoidable Environmental Effects:** Any impacts, which cannot be avoided or reduced to an acceptable level.
- **Growth Inducement And Secondary Effects Of Growth:** The ability of the proposed project to cause other growth or to cause other projects to be constructed.

Section 8.0 - Report Preparers

This section lists the authors and agencies that assisted in the preparation of the report by name, title, and company or agency affiliation.

Appendices

This section includes all notices and other procedural documents pertinent to the EIR, as well as all technical material prepared to support the analysis. Technical reports are included in a separate bound appendices volume.

1.5 ENVIRONMENTAL REVIEW PROCESS

The review and certification process for the EIR will involve the following procedural steps. (“☑” Indicates that a step has been completed; “☐” shows a step to be completed in the future.)

1.0 INTRODUCTION

☒ **Notice of Preparation and Initial Study** (Already Completed)

In accordance with Section 15082 of the CEQA Guidelines, the City of Tracy prepared a Notice of Preparation (NOP) of an EIR, which began circulating for review by the public and other agencies on February 27, 2004. The City of Tracy was identified as the lead agency for the proposed project. The NOP is shown in **Appendix A**. This notice was circulated to the public, local, State, and Federal agencies, and other interested parties to solicit comments on the proposed project. Concerns raised in response to the NOP were considered during preparation of the Draft EIR and are presented in **Appendix B**.

☒ **Draft EIR** (This document)

This document constitutes the Draft EIR (DEIR). The DEIR contains a description of the project, description of the environmental setting, identification of project impacts, and mitigation measures for impacts found to be significant, as well as an analysis of project alternatives. Upon completion of the DEIR, the City will file the Notice of Completion (NOC) with the State Office of Planning and Research to begin the public review period (Public Resources Code, Section 21161).

☒ **Public Notice/Public Review** (Public review has begun with the publishing of this document—please contact the City of Tracy for the beginning and end dates of the public and agency review period)

Concurrent with the NOC, the City will provide public notice of the availability of the DEIR for public review, and invite comment from the general public, agencies, organizations, and other interested parties. The public review and comment period should be no less than 30 days or longer than 90 days. The review period in this case is expected to be 45 days. Public comment on the DEIR will be accepted both in written form and orally at public hearings. Although no public hearings to accept comments on the EIR are required by CEQA, the City expects to hold a public comment meeting during the 45-day review period prior to EIR certification. Notice of the time and location of the hearing will be published prior to the hearing. All comments or questions regarding the DEIR should be addressed to:

John Palmer, Associate Planner
City of Tracy
520 Tracy Boulevard
Tracy, CA 95376
E-Mail: john.palmer@ci.tracy.ca.us
Web: <http://www.ci.tracy.ca.us>

The City will accept comments on the Draft EIR which are Emailed to Mr. Palmer, provided that the Email message contains the following:

- An Email address to which a receipt confirmation can be sent.
- The name and mailing address of the commentor.
- A phone number should be provided, but is optional.
- If the commentor represents an organized group, this must be disclosed.

□ **Response to Comments/Final EIR** (Future step)

Following the public review period, a Final EIR (FEIR) will be prepared. The FEIR will respond to written comments received during the public review period and to oral comments made at any public hearing. The City Council will review and consider the FEIR prior to their decision to approve, revise, or reject the proposed project.

□ **Certification of the EIR/Project Consideration** (Future step)

If the City finds that the FEIR is "adequate and complete", the City may certify the FEIR. The rule of adequacy generally holds that the EIR can be certified if: 1) it shows a good faith effort at full disclosure of environmental information; and 2) provides sufficient analysis to allow decisions to be made regarding the project in contemplation of its environmental consequences.

Upon review and consideration of the FEIR, the City may act upon the project. A decision to approve the project would be accompanied by written findings in accordance with CEQA Guidelines Section 15091 and, if applicable, Section 15093. The City would also adopt a Mitigation Monitoring Program, as described below, for mitigation measures that have been incorporated into or imposed upon the project to reduce or avoid significant effects on the environment. This Mitigation Monitoring Program will be designed to ensure that these measures are carried out during project implementation.

□ **Mitigation Monitoring** (Future step)

CEQA Section 21081.6(a) requires lead agencies to adopt a mitigation monitoring and reporting program (MMRP) to describe measures, which have been adopted or made a condition of project approval in order to mitigate or avoid significant effects on the environment. The specific "reporting or monitoring" program required by CEQA is not required to be included in the EIR, however it will be presented to the planning commission for adoption. Throughout the EIR, however, mitigation measures have been clearly identified and presented in language that will facilitate establishment of a monitoring and reporting program. Any mitigation measures adopted by the City as conditions for approval of the project will be included in a Mitigation Monitoring and Reporting Program to verify compliance.

What is "Mitigation"?

"Mitigate" is defined by Webster's Dictionary as "1. to lessen in force or intensity . . . 2. to make less severe . . . 3. to make milder or more gentle . . ." As used in this report, "mitigation" is a change which is imposed on the project to make a potential impact less severe (for instance, a measure which reduces noise would "mitigate" a potential noise impact. Some mitigation measures are more effective than others; this document will identify when they are effective enough to reduce impacts to acceptable levels, or whether some unacceptable impacts would result even if proposed measures are implemented.

1.6 TERMS USED IN THIS REPORT'S ANALYSIS OF ENVIRONMENTAL IMPACTS

This Draft EIR uses the following terminology to describe environmental effects of the proposed project:

Standards of Significance: A set of criteria used by the lead agency to determine at what level or "threshold" an impact would be considered significant. Significance criteria used in this EIR

1.0 INTRODUCTION

include the CEQA Guidelines; factual or scientific information; regulatory performance standards of local, state, and federal agencies; and City goals, objectives, and policies.

Less Than Significant Impact: A less than significant impact would cause no substantial change in the environment (no mitigation required).

Significant Impact: A significant impact would cause (or would potentially cause) a substantial adverse change in the physical conditions of the environment. Significant impacts are identified by the evaluation of project effects using specified standards of significance. Mitigation measures and/or project alternatives are identified to reduce project effects to the environment.

Significant Unavoidable Impact: A significant and unavoidable impact would result in a substantial change in the environment that cannot be avoided or mitigated to a less than significant level if the project is implemented.

Cumulative Significant Impact: A cumulative significant impact would result in a new substantial change in the environment from effects of the project when evaluated in the context of reasonably foreseeable development in the surrounding area.

2.0 EXECUTIVE SUMMARY

This section provides an overview of the project and the environmental analysis. For additional detail regarding specific issues, please consult the appropriate chapter of Section 4.0, Environmental Setting, Impacts, and Mitigation Measures.

2.1 PURPOSE AND SCOPE OF THE EIR

The EIR provides an analysis of the potential environmental effects associated with the project. The EIR analysis focuses on potential impacts arising from construction and operation of the project. The EIR provides a credible worst-case scenario of the impacts resulting from project implementation. In addition to site-specific impacts that relate to development of the project itself, the EIR also analyzes the cumulative effects of the project when considered with other projects in the surrounding area or region that create similar impacts.

2.2 PROJECT CHARACTERISTICS

The City is in the process of the land acquisition procedure for the proposed project site, which includes purchasing 50 acres and a transfer of an additional 150 acres from the United States Bureau of Prisons in accordance with House of Representative Bill 2508. Subsequent to the land acquisition, the City will retain ownership and through a Memorandum of Understanding, agreement or lease with YSAT, YSAT will construct, maintain and operate the project.

Phase I of the project includes construction of the infrastructure and utility needs for the site, as well as the construction of play fields planned for the northeast and southwest sectors of the project site, to meet ball field needs for current and five-year projections. With the completion of Phase I, the project site is proposed to have three football fields, ten baseball/softball fields, and thirteen soccer fields.

Phase II of the project would add an additional thirteen baseball/softball fields, one sports/football stadium, one football field, two soccer fields, and a general park/passive recreational area (50 acres) will be constructed as part of Phase II buildout of the project.

The principal objectives of the project, as identified by the City, are:

- Provide youth athletic facilities for the City and surrounding communities' growing populations.¹
- Develop an unused 200 acres of property currently owned by the United States Bureau of Prisons
- Provide facilities that are flexible, sustainable, and relevant.

2.3 PROJECT ALTERNATIVES SUMMARY

CEQA Guidelines Section 15126.6 requires that an EIR describe a range of reasonable alternatives to the project, which could feasibly attain the basic objectives of the project and reduce the degree of environmental impact. Section 6.0, (Alternatives to the Project), provides a qualitative analysis of three scenarios that include:

¹ Use of the project will not be limited to City residents.

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- **No Project Alternative:** The site would remain vacant. No field sports facilities would be constructed under this alternative and no development would occur on the project site.
- **Chrisman Road Alternative:** A smaller project would be constructed on a 112-acre city-owned parcel at Chrisman Road and Brichetto Road in the north section of the City of Tracy.
- **Environmentally Superior Alternative:** This scenario identifies which of the alternative projects analyzed in the EIR has the fewest environmental impacts and would therefore be the Environmentally Superior Alternative.

2.4 ISSUES EXAMINED IN THIS REPORT

Based on an initial review of the proposed project by City staff, the following issues were identified as having potentially significant impacts. These issues are examined in the EIR:

- **Land Use:** This section addresses the land use impacts associated with implementation of the project, including consistency with City land use goals and policies. The project's impacts on agricultural resources are also addressed in this section.
- **Health Hazards/Risk of Upset:** Addresses the presence of hazardous conditions or materials on the site, or associated with the project, and the manner in which such hazards can be mitigated.
- **Traffic and Circulation:** Addresses the impacts on the local and regional road system. In addition, this section assesses impacts on transit, bicycle, and pedestrian facilities.
- **Noise:** Examines noise impacts during construction and project buildout as related to potential noise generation from mobile and stationary sources. This section also addresses the impact of noise generation on neighboring residential uses.
- **Air Quality:** Discusses the local and regional air quality impacts associated with the proposed project.
- **Hydrology and Water Quality:** Examines the impacts of the project on local hydrological conditions, including drainage areas, groundwater, and changes in drainage flow rates.
- **Geology and Soils:** Addresses the potential impacts the project may have on soils, soil suitability for development, and seismic hazards.
- **Biological Resources:** Examines the project's impacts on habitat, vegetation and wildlife, with special consideration to the potential impacts on listed, proposed, and candidate threatened and endangered species.
- **Cultural and Paleontological Resources:** Addresses the potential impacts on cultural and paleontological resources at the project site.
- **Public Services and Utilities:** Addresses the impact of the project on public services, water, wastewater, electrical service, natural gas, telephone and cable television service. This section discusses the ability of the existing utility systems to provide service to the project.

- **Agricultural Resources:** Discusses impact of the project on agricultural resources. This section concludes that the project would have a less-than-significant effect on agricultural resources.
- **Visual Resources/Light and Glare:** This section assesses the overall increase in nighttime illumination produced by the project and the light spill-over into adjoining uses, as well as overall aesthetic impacts of the development and operation of the proposed project.

The NOP and Initial Study for the proposed project identified that the project would not result in significant impacts to mineral resources or population and housing. Therefore, these issues are not evaluated in the EIR.

- **Mineral Resources:** No mineral resources are located on the project site.
- **Population and Housing:** The project would not construct or displace existing housing, nor would it have a direct or indirect effect on population growth.

2.5 SUMMARY OF ENVIRONMENTAL IMPACTS

Table 2-1 presents a summary of project impacts and proposed mitigation measures that would avoid or minimize potential impacts. The table indicates both the level of significance of each environmental impact prior to the application of any mitigation measures and the level of significance after the application of the recommended mitigation measure(s), if appropriate.

For detailed discussions of all project impacts and mitigation measures, the reader is referred to Sections 4.1 through 4.12 of the EIR.

Abbreviations used in **Table 2-1** include the following:

- **Less Than Significant Impact (LTS):** A less than significant impact would cause no substantial change in the environmental (no mitigation required).
- **Potentially Significant Impact (PS):** An impact that may have a "substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project" (State CEQA Guidelines §15382); however, the occurrence of the impact cannot be immediately determined with certainty.
- **Significant Unavoidable Impact (SU):** A significant and unavoidable impact would result in a substantial change in the environment that cannot be avoided or mitigated to a less than significant level if the project is implemented.

TABLE 2-1
PROJECT IMPACTS AND PROPOSED MITIGATION MEASURES

| Impact | Level of Significance Without Mitigation | MITIGATION MEASURE | Resulting Level of Significance |
|---|--|---|---------------------------------|
| Land Use | | | |
| Physical Effects Upon an Established Community Impact 4.1.1 The project site is approximately 200 acres, which includes 150 acres of field sports facilities and 50 acres of general park/recreational area. These land uses are proposed on an underutilized site, in an area absent of an established residential community. The nearest community or neighborhood is located within newly developed subdivisions to the east and northeast. | LTS | None required. | LTS |
| Conflict with a Planning Policy Established to Mitigate an Environmental Effect Impact 4.1.2 The project would place 150 acres of field sports facilities and 50 acres of general park/passive recreational area immediately adjacent to one residence to the south, industrial uses to the east, and active agricultural operations to the north, east and west. | PS | MM 4.1.2a The entire play fields shall be set back approximately 50 feet from its property line to provide a buffer from the immediate boundary with active agricultural and industrial areas. <i>Timing/Implementation: During final site design and ongoing during operations.</i> <i>Enforcement/Monitoring: City's Department of Parks and Community Services.</i> MM 4.1.2b The operator of the Tracy Youth Sports Facility will provide each of its agricultural and industrial neighbors with a complete draft schedule of the games for each season and coordinate said schedules to ensure that no game will be under way when an adjacent field is being treated with an aerially applied pesticide or herbicide or other potentially toxic substance. | LTS |

| Impact | Level of Significance Without Mitigation | MITIGATION MEASURE | Resulting Level of Significance |
|--|--|--|---------------------------------|
| | | <i>Timing/Implementation: During final site design and ongoing during operations.</i> <i>Enforcement/Monitoring: City's Department of Parks and Community Services.</i> | |
| Conformance with the City's General Plan Impact 4.1.3 The existing City General Plan designation of the site is Industrial. Under this designation, community facilities are an allowable use. Furthermore, with the City's update to the General Plan, the land use designation of the site is proposed to change to Park. Under the Park designation the Youth Sports Facility would remain an allowable use. | LTS | None required. | LTS |
| Conflict with Applicable Habitat Conservation Plan or Natural Community Conservation Plan Impact 4.1.4 The project will place 150 acres of field sports facilities and 50 acres of general park/recreational area in a location known to be a part of a Habitat Conservation Plan (HCP) or a Natural Community Conservation Plan (NCCP) as defined by CEQA. | LTS | None required. | LTS |
| Cumulative Increase in Density Impact 4.1.5 This project in combination with other reasonably foreseeable projects would increase the density of development in the area. | LTS | None required. | LTS |
| Health Hazards/Risk of Upset | | | |
| Pesticides and Potential Soil Contamination Impact 4.2.1 Development of the Tracy Youth Sports Facility on lands previously utilized for agricultural | PS | MM 4.2.1 Prior to the initiation of grading or site clearing activities, soil sampling and analysis for soil contamination shall be conducted. The results of | LTS |

2.0 EXECUTIVE SUMMARY

| Impact | Level of Significance Without Mitigation | MITIGATION MEASURE | Resulting Level of Significance |
|---|--|--|---------------------------------|
| production could expose people or property to a potential risk associated with soil contamination from pesticides and herbicides. | | <p>the soil sampling and analysis shall be incorporated into a soils report submitted to the City for review. Soil sampling shall include the following:</p> <ul style="list-style-type: none"> An agrochemical impact assessment involving recovery of near surface soil samples from selected areas of the property with laboratory analysis for organochlorine pesticides. The sample shall be statistically evaluated to determine the need for further sampling or remediation; Documentation that exposed soils do not contain soil contamination in excess of regulatory action levels. If chemicals are detected at concentrations that could pose a health hazard, remediation of the affected areas shall be undertaken prior to construction in accordance with the requirements of the San Joaquin County Department of Public Health Services, and the Regional Water Quality Control Board. Assessments and remediation will be the responsibility of the project sponsors. <p><i>Timing/Implementation: Prior to issuance of the first grading permit.</i></p> <p><i>Enforcement/Monitoring: City of Tracy, San Joaquin County and CVRWQCB.</i></p> | |
| Hazardous Material Exposure Impact 4.2.2 The potential exists for possible exposure to hazardous materials from the existing concrete building currently located on the project site, a former underground storage tank, underground | PS | MM 4.2.2 Prior to the initiation of grading or site clearing activities, a Phase II environmental assessment of the project site shall be conducted. Included in this assessment shall be soil sampling in the vicinity of the underground storage tank, | LTS |

| Impact | Level of Significance Without Mitigation | MITIGATION MEASURE | Resulting Level of Significance |
|--|--|--|---------------------------------|
| pipelines crossing the site, and transformers previously existing on site. | | <p>underground pipelines, former transformer location and an interior inspection of the concrete structure conducted by an environmental professional to identify ACMs.</p> <p>The result of this assessment and analysis shall be incorporated into a report submitted to the City and County for review. If contamination exists at levels that present a health hazard, remediation of the affected areas shall take place prior to construction in accordance with the requirements of the San Joaquin County Department of Public Health Services and the Regional Water Quality Control Board.</p> <p><i>Timing/Implementation: Prior to initiation of grading or site clearing activities.</i></p> <p><i>Enforcement/Monitoring: City of Tracy, San Joaquin County and CVRWQCB.</i></p> | |
| <p>Risk of Upset Hazards</p> <p>Impact 4.2.3 Development of the site in the vicinity of the two underground natural gas pipelines may expose people to risk of upset conditions associated with a potential natural gas release or explosion.</p> | PS | <p>MM 4.2.3</p> <p>Prior to the initiation of grading or site clearing activities, the City shall coordinate with PG&E and Chevron representatives to ensure proper information is exchanged and protocols followed so that existing pipelines are not disturbed in accordance with the California Public Utilities Commission ("CPUC") approved Pipeline Safety Plan for the Tracy Youth Sports Facility on December 16, 2004. Digging in the immediate vicinity surrounding the pipeline shall be monitored during construction and the pipeline right of way shall be accurately marked prior to any grading or construction in accordance with the CPUC approved Pipeline Safety Plan for the Tracy Youth Sports Facility on December 16, 2004.</p> | LTS |

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| Impact | Level of Significance Without Mitigation | Mitigation Measure | Resulting Level of Significance |
|---|--|---|---------------------------------|
| | | <p><i>Timing/Implementation: Prior to any grading or construction.</i></p> <p><i>Enforcement/Monitoring: City of Tracy and PG&E.</i></p> | |
| <p>Existing Adjacent Industrial Uses</p> <p>Impact 4.2.4 Existing industrial plants adjacent to the project site store and utilize hazardous materials, which, in the unlikely event of a catastrophic release, could potentially result in hazardous conditions at the project site.</p> | PS | <p>MM 4.2.4</p> <p>The City shall prepare an emergency response plan applicable to all Tracy Youth Sports Facility uses. Such a plan should include emergency evacuation routes and general information regarding the relative risk and activities of neighboring industries. The Plan should be prepared with input and coordination from Tracy Peaker Plant, Owens-Brockway, Tracy Biomass, Tracy Fire Department and the County Office of Emergency Services (OES).</p> <p><i>Timing/Implementation: Prior to any grading or construction.</i></p> <p><i>Enforcement/Monitoring: City of Tracy.</i></p> | LTS |
| <p>Canal Failure</p> <p>Impact 4.2.5 The relative risk of flooding from failure of the Delta Mendota Canal could result in adverse environmental impacts to the TYSF project site.</p> | LTS | None required. | LTS |
| <p>Airport Operations</p> <p>Impact 4.2.6 The TYSF project site is not located within the Area of Influence, as indicated in the County's Airport Land Use Plan (ALUP).</p> | LTS | None required. | LTS |

| Impact | Level of Significance Without Mitigation | MITIGATION MEASURE | Resulting Level of Significance |
|---|--|--|---------------------------------|
| Railroad Operations | | | |
| Impact 4.2.7 The TYSF project site is located adjacent to a Southern Pacific rail line and could result in impacts to rail operations. | LTS | None required. | LTS |
| Transportation and Handling of Hazardous Materials | | | |
| Impact 4.2.8 The TYSF project would include the limited transportation, handling, and use of hazardous materials that could result in adverse environmental impacts. | LTS | None required. | LTS |
| Cumulative Hazards and Risks | | | |
| Impact 4.2.9 This project, in combination with other reasonably foreseeable projects, would increase the density of development in the area, thus increasing the chance for hazardous materials release and other threats related to human health and safety. | LTS | None required. | LTS |
| Traffic and Circulation | | | |
| Existing Plus Proposed Project Traffic Scenario | | | |
| Impact 4.3.1. Under Existing plus Phase I project conditions, the project would contribute traffic to the intersection of Mountain House Parkway/I-580 Eastbound Ramps, which is already operating at an unacceptable level. Additionally, under Existing plus Phase I plus Phase II project conditions, the project's contribution to existing area traffic would result in unacceptable LOS levels at Hansen Road/Schulte Road and Lammers Road/Schulte Road and would continue to contribute traffic to the intersection of Mountain House Parkway/I-580 Eastbound Ramps. | S | <p>The roadway improvements identified in Table 4.3-14 would mitigate the existing unacceptable LOS conditions at Mountain House Parkway/I-580 Eastbound Ramps and all future unacceptable LOS levels under this scenario. However, all roadway improvements under this scenario would require coordination with the County to implement since the affected intersections are not under control of the City.</p> <p>CEQA Guidelines acknowledge the discretionary power of public agencies in that an agency does not have unlimited authority to impose mitigation measures (or alternatives) that would reduced environmental impacts to a less than significant level. CEQA does not grant an agency new powers independent of the powers granted to the agency by other laws (CEQA Guidelines Sections 15040 and 15041).</p> <p>The affected study intersections are within the jurisdiction of San</p> | SU |

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| Impact | Level of Significance Without Mitigation | MITIGATION MEASURE | Resulting Level of Significance |
|---|--|---|---------------------------------|
| | | Joaquin County and the County currently has no improvement plans for any of the affected study sections. Subsequently, there is no existing traffic impact mitigation fee program in place to collect funds to support future improvements for the affected intersections. | |
| Year 2010 Plus Proposed Project Traffic Scenario Impact 4.3.2 Under Year 2010 Base plus Phase I plus Phase II project conditions, the project would contribute traffic to four intersections that are projected to be operating at unacceptable or failure levels at that time | S | M.M. 4.3.2 Phase II of the project shall not be implemented until such time that a Capital Improvement Program (CIP) or similar program is in place for affected intersections within the City's jurisdiction. <i>Timing/Implementation: Prior to Building Permit Issuance.</i> <i>Enforcement/Monitoring: City of Tracy Department of Public Works.</i> | SU |
| Air Traffic Impact Impact 4.3.3 The proposed project would not result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks. | LTS | None Required | LTS |
| Design Hazards Impact Impact 4.3.4 The proposed project would not substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment). | LTS | None Required | LTS |
| Emergency Access Impact 4.3.5 The proposed project would not result in inadequate emergency access. | LTS | None Required | LTS |

| Impact | Level of Significance Without Mitigation | MITIGATION MEASURE | | Resulting Level of Significance |
|--|--|--|--|---------------------------------|
| Inadequate Parking Capacity Impact 4.3.6 The proposed project would not result in inadequate parking capacity. | LTS | None Required | | LTS |
| Future (Year 2025) Traffic Scenario Impact 4.3.7 Under this scenario, five of the thirteen study intersections are expected to operate acceptably during the p.m. peak hour. The eight that will not include the intersections of Mountain House Parkway/I-205 Westbound Ramps, Mountain House Parkway/I-205 Eastbound Ramps, Mountain House Parkway/I-580 Westbound Ramps, Mountain House Parkway/I-580 Eastbound Ramps, Lammers Road/Schulte Road, Lammers Road/11th Street, Corral Hollow Road/11th Street, and Corral Hollow Road/Schulte Road, which are expected to operate at LOS F, LOS F, LOS F, LOS F, LOS F, and LOS F, LOS D, and LOS D, respectively (see Table 4.3-11). | CS | MM 4.3.7 Phase II of the project shall not be implemented until such time that a Capital Improvement Program (CIP) or similar program is in place for affected intersections within the City's jurisdiction. <i>Timing/Implementation: Prior to Building Permit Issuance.</i> <i>Enforcement/Monitoring: City of Tracy Department of Development and Engineering Services.</i> | | SU |
| Cumulative Fair Share Analysis Future (Year 2025 Plus Project Traffic Scenario) Impact 4.3.8 Under this scenario, the same study intersections as those of Year 2025 scenario are expected to continue to operate at unacceptable service levels. | CS | MM 4.3.8 Phase II of the project shall not be implemented until such time that a Capital Improvement Program (CIP) or similar program is in place for affected intersections within the City's jurisdiction. <i>Timing/Implementation: Prior to Building Permit Issuance.</i> <i>Enforcement/Monitoring: City of Tracy Department of Development and Engineering Services.</i> | | SU |

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| Impact | Level of Significance Without Mitigation | MITIGATION MEASURE | | Resulting Level of Significance |
|---|--|--|--|---------------------------------|
| Noise | | | | |
| Existing Pus Project Traffic Noise Impact 4.4.1 Existing plus project traffic noise levels will not exceed the 75 dB Ldn exterior noise level standard. | LTS | None Required | | LTS |
| Project-related Traffic Noise Impact 4.4.2 Project-related traffic is expected to result in traffic noise level increases over no-project levels ranging from 0 to 4 dB Ldn on the roadways in the immediate project vicinity. | LTS | None Required | | LTS |
| Construction Noise Impacts Impact 4.4.3 During the construction phases of the project, noise from construction activities would add to the noise environment in the immediate project vicinity. The level and duration of this noise will be short-term in nature. | LTS | None Required | | LTS |
| Noise Impacts Associated with On-Site Activities Impact 4.4.4 Noise generated by outdoor playing fields would not result in exceedance of the 75 dB standard for Industrial designated property or substantial increases in ambient noise levels at the existing residence located to the south of the project site. | LTS | None Required | | LTS |
| Maintenance Noise Operations Impact 4.4.5 Noise generated by property maintenance equipment may result in significant short-term increases in ambient noise levels and exceedances of City noise standards at the nearest residence to the south of the project site. | PS | MM 4.4.5a MM 4.4.5b | Grounds maintenance activities should be limited to the hours of 7 a.m. to 5 p.m. All maintenance equipment utilizing internal combustion engines shall be properly muffled in accordance with manufacturers specifications. <i>Timing/Implementation: Ongoing during and after project construction.</i> <i>Enforcement/Monitoring: City of Tracy Public Works Department.</i> | LTS |

| Impact | Level of Significance Without Mitigation | MITIGATION MEASURE | | Resulting Level of Significance |
|--|--|--------------------|---|---------------------------------|
| Public Address System Noise Impact 4.4.6 Noise generated by public address system usage during softball or soccer games may exceed the 75 dB standard at the property lines applicable to Industrial designated property. | PS | MM 4.4.6 | Prior to the issuance of an electrical permit for any public address systems proposed for the playing fields located near the southern property line, City Parks and Community Services Department staff will test the sound system to ensure that it was designed to not to generate noise levels in excess of 75dB Leq at the property line. <i>Timing/Implementation: Prior to the issuance of building permits.</i> <i>Enforcement/Monitoring: City of Tracy Planning Department.</i> | LTS |
| Noise Impacts From Nearby Industrial Uses Impact 4.4.7 Noise levels generated by nearby industrial uses (Tracy Biomass & and Owens Brockway Glass Container) were measured to be below the applicable San Joaquin County noise standards applicable to public outdoor uses during an ambient noise survey conducted by Bollard & Brennan, Inc. staff. | LTS | None required. | | LTS |
| Cumulative Traffic Noise Impact 4.4.8 Cumulative plus project traffic is expected to result in traffic noise level increases over cumulative no-project baseline levels of 0 to 8 dB Ldn (Table 6) on the roadways in the immediate project vicinity. | LTS | None required. | | LTS |
| Cumulative Plus Project Traffic Noise Impact 4.4.9 Cumulative plus project traffic noise levels may exceed the 75 dB Ldn exterior noise level standard at proposed outdoor recreation areas in | PS | MM 4.4.9 | Prior to the issuance of an electrical permit for any public address systems proposed for the playing fields located near the southern property line, City Parks and Community Services Department staff will test the sound system to | LTS |

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| Impact | Level of Significance Without Mitigation | Mitigation Measure | Resulting Level of Significance |
|---|--|--|---------------------------------|
| the Tracy Youth Sports Complex Development which are located within 96 feet of the centerline of Schulte Road. | | <p>ensure that it was designed to not to generate noise levels in excess of 75dB Leq at the property line.</p> <p><i>Timing/Implementation: Include as a requirement in plans.</i></p> <p><i>Enforcement/Monitoring: City of Tracy Parks and Community Services Department.</i></p> | |
| Air Quality | | | |
| <p>Increased PM10 Levels During Construction</p> <p>Impact 4.5.1 Construction of the proposed project would result in temporarily increased Particulate Matter (PM10 and PM2.5) levels in the immediate vicinity during construction.</p> | PS | <p>MM 4.5.1</p> <p>The following measures are appropriate dust control strategies to be implemented that go beyond the requirements of SJVUAPCD Regulation VIII:</p> <ul style="list-style-type: none"> • Limit traffic speeds on unpaved roads to 15 mph. • Install wheel washers for all exiting trucks, or wash off all trucks and equipment leaving the site. • Suspend excavation and grading activities when winds exceed 20 mph. • Limit size of area subject to excavation, grading or other construction activity at any one time to avoid excessive dust. • Install sandbags or other erosion control measures to prevent silt runoff to public roadways from sites with a slope greater than one percent. • Expeditiously remove the accumulation of | LTS |

| Impact | Level of Significance Without Mitigation | MITIGATION MEASURE | Resulting Level of Significance |
|---|--|---|---------------------------------|
| | | <p>mud or dirt from adjacent public streets at least once every 24 hours when operations are occurring.</p> <p><i>Timing/Implementation: Include as a note on all grading and improvement plans; "comply with EIR Mitigation Measure 4.5.1 during all grading and construction phases of the project".</i></p> <p><i>Enforcement/Monitoring: City of Tracy Development and Engineering Services Department.</i></p> | |
| Increased Carbon Monoxide Concentrations Impact 4.5.2 Development of the project would result in an increase in carbon monoxide concentrations. | LTS | None required. | LTS |
| Increased Ozone Precursors and PM₁₀ Emissions During Project Operation Impact 4.5.3 Development of the project would result in increases in emission of both ozone precursors and Particulate Matter (PM ₁₀ and PM _{2.5}). | LTS | None required | LTS |
| Exposure of Sensitive Receptors to Objectionable Odors and Toxic Air Contaminants Impact 4.5.4 Development of the project would place a sensitive receptor in proximity to potential sources of odors and existing sources of Toxic Air Contaminants. | LTS | None required | LTS |
| Exposure to Toxic Air Contaminants Impact 4.5.5 Development of the project would place a sensitive receptor in proximity to potential sources of Toxic Air Contaminants. | LTS | None required | LTS |

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| Impact | Level of Significance Without Mitigation | MITIGATION MEASURE | | Resulting Level of Significance |
|---|--|--------------------|---|---------------------------------|
| <p>Cumulative Regional Air Quality Impacts</p> <p>Impact 4.5.6 This project in combination with other reasonably foreseeable projects would increase regional air emissions well beyond the SJVAPCD significance threshold.</p> | PS | MM 4.5.6 | <p>Require the following design features be implemented:</p> <ul style="list-style-type: none"> • Use energy efficient design including automated control system for heating/air conditioning and energy efficiency, utilize lighting controls and energy-efficient lighting in buildings and use light colored roof materials to reflect heat. • Plant deciduous trees on the south and westerly facing sides of buildings. • Provide low nitrogen oxide (NOx) emitting and/or high efficiency water heaters. • Appropriate easements should be reserved to provide for future improvements such as bus turnouts, loading areas, and shelters. • Purchase low-emission, alternatively fueled or electrical-driven maintenance vehicles and equipment. • Promote pedestrian, bicycle and transit modes of travel through informational programs and provision of amenities such as transit shelters, secure bicycle parking, and attractive pedestrian pathways. <p><i>Timing/Implementation: Include as a requirement in plans.</i></p> <p><i>Enforcement/Monitoring: City of Tracy Parks and Community Services Department.</i></p> | SU |

| Impact | Level of Significance Without Mitigation | MITIGATION MEASURE | | Resulting Level of Significance |
|--|--|--|-----|---------------------------------|
| Water Quality and Hydrology | | | | |
| Storm Water Runoff Generation and Surface Water Drainage Patterns Impact 4.6.1 The project will significantly increase storm water runoff rates generated within the project site when compared with existing conditions. Given the absence of downstream storm drainage facilities having sufficient capacity to accommodate increased quantities of site runoff. | PS | MM 4.6.1 The City shall ensure that the development of the project site shall incorporate the construction of one or more on-site temporary retention basins to capture site runoff in conformance with City's Standards. Said on-site temporary retention basins shall remain in operation at least until adequate downstream storm drainage facilities associated with the future Lammers Drainage System are constructed and operational, and beyond this time frame if necessary. Onsite temporary retention basins shall collect and store all "first flush" runoff generated within the site. Sediments accumulating within the on-site temporary retention basins shall be periodically monitored and shall be removed prior to the occurrence of any toxic concentrations of deleterious constituents. <i>Timing/Implementation: Prior to the initiation of grading or site clearing activities.</i> <i>Enforcement/Monitoring: City of Tracy Development & Engineering Services Department.</i> | LTS | |

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| Impact | Level of Significance Without Mitigation | MITIGATION MEASURE | | Resulting Level of Significance |
|--|--|--------------------|---|--|
| <p>Surface Water Quality</p> <p>Impact 4.6.2 The project would introduce constituents typically associated with urban development into storm water runoff generated within the project site.</p> | PS | MM 4.6.2a | <p>Construction. The City shall ensure that the development of the project site shall incorporate the construction of one or more on-site temporary retention basins to capture site runoff in conformance with City Design Standards as described in MM 4.6.1. In addition, site construction and maintenance practices shall adhere to any and all applicable provisions and ordinances resulting from the City's implementation of its SWMP, to the extent to which they exist at the time of construction and/or maintenance activities. The following list is intended as an outline summary and the City may impose additional requirements:</p> <p>Non-Structural BMPs</p> <ul style="list-style-type: none"> • Minimizing Disturbance • Preserving Natural Vegetation (where possible) • Good Housekeeping, e.g., daily clean-up of construction site <p>Structural BMPs</p> <p><i>Erosion Controls</i></p> <ul style="list-style-type: none"> • Mulch • Grass • Stockpile Covers <p><i>Sediment Controls</i></p> <ul style="list-style-type: none"> • Silt Fence • Inlet Protection • Check Dams • Stabilized Construction Entrances • Sediment Traps <p><i>Timing/Implementation: Prior to the initiation of grading or site clearing activities.</i></p> <p><i>Enforcement/Monitoring: City of Tracy Development and Engineering Services Department.</i></p> | LTS |
| <p><i>Tracy Youth Sports Facility</i> <i>Draft Environmental Impact Report</i></p> | 2.0-18 | | | <p><i>City of Tracy</i> <i>September 2005</i></p> |

| Impact | Level of Significance Without Mitigation | MITIGATION MEASURE | Resulting Level of Significance |
|--------|--|---|---------------------------------|
| | | <p>MM 4.6.2b</p> <p>Post-Construction. The Plans and Specifications of the proposed retention facilities should meet the standards of the City of Tracy Development and Engineering Services Department as an adequate engineering product. The City would review the design criteria and monitor for proper installation, if necessary. New development and significant redevelopment projects that begin after February of 2005 will be required to comply with numeric standards for post-construction stormwater BMPs in the re-issued permit. Treatment BMPs are to be constructed that incorporate, at a minimum, the required hydraulic sizing design criteria for volume and flow to treat stormwater runoff.</p> <p><i>Timing/Implementation:</i> Prior to the initiation of grading or site clearing activities.</p> <p><i>Enforcement/Monitoring:</i> City of Tracy Development and Engineering Services Department.</p> | |

2.0 EXECUTIVE SUMMARY

| Impact | Level of Significance Without Mitigation | MITIGATION MEASURE | Resulting Level of Significance |
|--|--|--|---------------------------------|
| Groundwater Quality and Resources Impact 4.6.3 Runoff generated within the project site during storms would be collected and stored in on-site temporary retention basins. Stored runoff captured within these on-site temporary retention basins would drain via percolation, evaporation, and possibly restricted outflow into local downstream facilities. To the extent that captured runoff is drained via percolation, it is possible that some percolated water would reach the underlying aquifer (water table) beneath. Estimated depth to groundwater fluctuates between 90 and 125 feet, depending upon hydrologic conditions. To the extent that there are typical pollutants associated with urban runoff that are contained in the storm water that drains to the on-site temporary retention basins, there is little or no opportunity for these pollutants to percolate down to local groundwater, as these pollutants would be filtered by the underlying soils and accumulated near the ground surface. | LTS | None required. | LTS |
| Exposure of Structures and Facilities to Flood Hazards and Potential Damage Impact 4.6.4 During significant storm events, the northern portions of the project site would experience shallow, sheet flooding derived from a local offsite watershed. Buildings and other site facilities would be placed in these portions of the project site. | PS | MM 4.6.4 YSAT shall be required to ensure that the development of the project site shall incorporate Provisions <i>1 through 4</i> (above) into the design of any buildings or other site facilities that are to be placed within the area of the site that has been identified to experience a potential for shallow, sheet flooding as derived from an offsite watershed. <i>Timing/Implementation: Prior to the initiation of grading or site clearing activities.</i> <i>Responsible Agency: City of Tracy Development and Engineering Services Department.</i> | LTS |

| Impact | Level of Significance Without Mitigation | MITIGATION MEASURE | Resulting Level of Significance |
|---|--|--------------------|---------------------------------|
| Conflicts with Applicable Local, State, and/or Federal Policies and Standards Impact 4.6.5 The proposed Tracy Youth Sports Facility development does not conflict with applicable local, state, and/or federal policies and standards associated with hydrology and water quality. | LTS | None required. | LTS |
| Cumulative Storm Water Runoff Generation and Surface Water Drainage Patterns Impact 4.6.6 Development within the Lammers Watershed will increase storm water runoff generation and alter surface water drainage patterns. | LTS | None required. | LTS |
| Cumulative Surface Water Quality Impact 4.6.7 Development within the Lammers Watershed will introduce pollutants generally associated with construction activities and land development into storm water runoff. | LTS | None required. | LTS |
| Cumulative Groundwater Quality Impact 4.6.8 Storm water generated within new development areas in the Lammers Watershed will be intercepted and stored within detention and retention basins. | LTS | None required. | LTS |
| Cumulative Exposure of Structures and Facilities to Flood Hazards and Potential Damage Impact 4.6.9 Storm water generated within new development areas in the Lammers Watershed will be collected in detention and retention basins and conveyed in storm drainage facilities that will retain adequate capacity to accepted regulated discharges from the basins. | LTS | None required. | LTS |

2.0 EXECUTIVE SUMMARY

| Impact | Level of Significance Without Mitigation | MITIGATION MEASURE | | Resulting Level of Significance |
|--|--|---|-----|---------------------------------|
| Geology and Soils | | | | |
| Seismic Settlement Impact 4.7.1 Development of the project may expose structures and people to hazards associated with seismic settlement. | PS | MM 4.7.1 In accordance with the California Building Code (Title 24, Part 2) Section 18O4A.3 and A.5, liquefaction and seismic settlement potential shall be addressed in the design level geotechnical engineering investigations. The City's Building Official shall ensure that all the pertinent sections of the California Building Code shall be adhered to in the construction of service buildings on site, prior to the issuance of a Building Permit. <i>Timing/Implementation: Prior to the initiation of grading or site clearing activities.</i> <i>Enforcement/Monitoring: City of Tracy Development and Engineering Services Department.</i> | LTS | |
| Expansive Soils Impact 4.7.2 Development of the project may subject new development to geologic hazards associated with expansive soils. | PS | MM 4.7.2 Prior to the issuance of a building permit, the City shall employ the following mitigation measures: <ul style="list-style-type: none">• Expansive soils can be excavated and replaced with non-expansive materials. The required depth of excavation shall be specified by a registered civil engineer based on actual soil conditions;• Expansive soils may be treated in place by mixing them with lime. Lime-treatment alters the chemical composition of the expansive clay minerals such that the soil becomes non-expansive; or,• Implement alternative engineering practices for mitigation expansive soil conditions | LTS | |

| Impact | Level of Significance Without Mitigation | MITIGATION MEASURE | Resulting Level of Significance |
|--|--|---|---------------------------------|
| | | <p>considered appropriate by the City's Development and Engineering Services.</p> <p><i>Timing/Implementation: Prior to the initiation of grading or site clearing activities.</i></p> <p><i>Enforcement/Monitoring: City of Tracy Development and Engineering Services Department.</i></p> | |
| Cumulative Geological and Soil Impacts Impact 4.7.3 Development of the proposed project in addition to other proposed and approved projects in the Tracy area would result in urbanization of the area by increasing the density of residential, commercial, office, recreational and public facility uses in the region. | LTS | None required. | LTS |
| Biological Resources | | | |
| Loss of Cropland Habitat Impact 4.8.1 Construction of the project would remove cropland habitat. | LTS | None required. | LTS |
| Removal of Migratory Wildlife Habitat Impact 4.8.2 Development of the project would remove habitat for regionally abundant resident and migratory wildlife currently utilizing the project site. | LTS | None required. | LTS |
| Removal of Foraging Habitat Impact 4.8.3 Development of the project will remove foraging habitat (cropland) for Swainson's hawk. This species is threatened in California and its foraging habitat is protected by the CDFG. | LTS | None required. | LTS |

2.0 EXECUTIVE SUMMARY

| Impact | Level of Significance Without Mitigation | MITIGATION MEASURE | | Resulting Level of Significance |
|---|--|--------------------|--|---------------------------------|
| Disturbance to Burrowing Owl Habitat Impact 4.8.4 Development of the project may result in the disturbance of potentially active burrowing owl burrows. Burrowing owls are a California Species of Special Concern and are protected by the CDFG and the MBTA. | PS | MM 4.8.4 | <p>A focused survey for burrowing owls shall be conducted by a qualified biologist within 30 days prior to the onset of construction activities (during the breeding season) to determine if active burrows exist onsite. If burrowing owls are found to occupy the project site, then the following measures shall be implemented:</p> <ul style="list-style-type: none"> During the non-breeding season (September 1 through January 31) burrowing owls occupying the project site should be evicted from the project site by passive relocation as described in the California Department of Fish and Game's Staff Report on Burrowing Owls (Oct., 1995) During the breeding season (February 1 through August 31) occupied burrows shall not be disturbed and shall be provided with a 75 meter protective buffer until and unless the Technical Advisory Committee of San Joaquin County, with concurrence of the CDFG verifies through non-invasive means that either: 1) the birds have not begun egg laying, or 2) juveniles from the occupied burrows are foraging independently and are capable of independent survival. Once the fledglings are capable of independent survival, the burrow can be destroyed. <p><i>Timing/Implementation: Prior to the initiation of grading or site clearing activities.</i></p> <p><i>Enforcement/Monitoring: The City of Tracy and a qualified biologist shall conduct surveys and relocate owls as required.</i></p> | LTS |

| Impact | Level of Significance Without Mitigation | MITIGATION MEASURE | Resulting Level of Significance |
|---|--|---|---------------------------------|
| <p>Disturbance to Active Kit Fox Den</p> <p>Impact 4.8.5 Development of the project site may result in the disturbance of potentially active kit fox dens on the project site.</p> | PS | <p>MM 4.8.5</p> <p>Focused surveys for active kit fox dens should be conducted by a qualified biologist within 30 days prior to the onset of construction activities. Surveys shall be conducted by qualified biologists. When surveys identify potential dens (potential dens are defined as burrows at least four inches in diameter which open up within two feet), potential den entrances shall be dusted for three calendar days to register track of any San Joaquin kit fox present. If San Joaquin kit fox activity is identified, potential dens may be destroyed. If San Joaquin kit fox activity is identified, then dens shall be monitored to determine if occupation is by an adult fox only or is a natal den (natal dens usually have multiple openings). If the den is occupied by an adult only, the den may be destroyed when the adult fox has moved or is temporarily absent. If the den is a natal den, a buffer zone of 250 feet shall be maintained around the den until the biologist determines that the den has been vacated. Where San Joaquin kit fox are identified, the provision of the U.S. Fish and Wildlife Service's published <i>Standardized Recommendations for Protection of the San Joaquin Kit Fox Prior to or During Ground Disturbance</i> shall apply. These standards include provisions for educating construction workers regarding the kit fox, keeping heavy equipment operating at safe speeds, checking construction pipes for kit fox occupation during construction and similar low or no-cost activities.</p> <p><i>Timing/Implementation: Prior to the initiation of grading or site clearing activities.</i></p> | LTS |

2.0 EXECUTIVE SUMMARY

| Impact | Level of Significance Without Mitigation | MITIGATION MEASURE | Resulting Level of Significance |
|--|--|--|---------------------------------|
| | | <i>Enforcement/Monitoring: The City of Tracy and qualified biologists shall conduct surveys, conduct educational seminars and monitor activities.</i> | |
| Disturbance to Kit Fox Habitat Impact 4.8.6 Development of the project site could result in the removal of potential kit fox habitat. | LTS | None required. | LTS |
| Cumulative Impacts to Biological Resources Impact 4.8.7 Conversion of existing open lands to housing and urban uses or infrastructure uses results in an overall loss of suitable habitat for special status species, general wildlife, and habitats. | LTS | None required. | LTS |
| Cultural Resources | | | |
| Potential Archaeological Resources Impact 4.9.1 The potential exists for the discovery of buried deposits or features of Tracy's archaeological and/or historical past. Northern Valley Yokuts occupied the Tracy vicinity. Discovery of any villages, camps or artifacts of the Northern Yokuts would have the potential to add new information about this ancient culture. Such sites are exceedingly rare and would constitute a valuable heritage resource for San Joaquin County and the people of California. | PS | MM 4.9.1a If any prehistoric or historic artifacts, or other indications of archaeological resources are found during grading and construction activities, an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards in prehistoric or historical archaeology, as appropriate, shall be consulted to evaluate the finds and recommend appropriate mitigation measures. MM 4.9.1b Similarly, if human remains are discovered, all work must stop in the immediate vicinity of the find, and the County Coroner must be notified, according to Section 7050.5 of California's Health and Safety Code. If the remains are Native American, the coroner will notify the Native American Heritage Commission, which in turn will inform a most likely descendant. The descendant will then recommend to the landowner appropriate disposition of the remains and any grave goods. | LTS |

| Impact | Level of Significance Without Mitigation | MITIGATION MEASURE | | Resulting Level of Significance |
|--|--|--------------------|---|---------------------------------|
| | | | <i>Timing/Implementation: During construction activities.</i> <i>Enforcement/Monitoring: City of Tracy Development and Engineering Services Department.</i> | |
| Potential Paleontological Resources Impact 4.9.2 The potential exists for the discovery of buried deposits or features of paleontological resources. | PS | MM 4.9.2 | If any fossils are encountered, there shall be no further disturbance of the area surrounding this find until the materials have been evaluated by a qualified paleontologist, and appropriate treatment measures have been identified. <i>Timing/Implementation: During construction activities.</i> <i>Enforcement/Monitoring: City of Tracy Development and Engineering Services Department.</i> | LTS |
| Cumulative Impacts to Cultural Resources Impact 4.9.3 The proposed project in addition to other development projects within the greater Tracy area could potentially disturb previously unknown cultural resources. | LTS | None required. | | LTS |
| Public Services | | | | |
| Water supply Impact 4.10.1 The proposed project will contribute to an increase in demand for an adequate domestic water supply and water distribution facilities over the existing conditions. | LTS | None required. | | LTS |

2.0 EXECUTIVE SUMMARY

| Impact | Level of Significance Without Mitigation | MITIGATION MEASURE | | Resulting Level of Significance |
|--|--|---|---|---------------------------------|
| <p>Water Treatment, Distribution, Pump and Storage Facilities</p> <p>Impact 4.10.2 Development of the project may require expansion of existing water treatment and distribution systems.</p> | PS | MM 4.10.2 | <p>Prior to approval of the project, the City shall demonstrate that water treatment and distribution facilities are constructed or available to meet project water demands. The project sponsor will contribute to the project's fair-share funding of water treatment and distribution facilities and improvements associated with providing service to the project site in accordance with the Water Master Plan and City Design Standards.</p> <p><i>Timing/Implementation: Prior to the approval of the project.</i></p> <p><i>Enforcement/Monitoring: City of Tracy Development and Engineering Services Director.</i></p> | LTS |
| <p>Utility Services</p> <p>Impact 4.10.3 Development of the project would result in an increase in demand necessitating the expansion of utility services.</p> | PS | <p>MM 4.10.3a</p> <p>MM 4.10.3b</p> | <p>The project sponsors shall coordinate with PG&E and Pacific Bell regarding the proper extension of electrical, natural gas and telephone services to the project site. This shall include the development of detailed plans for utility placement and the project's participation in energy conservation programs provided by PG&E. Utility placement shall not conflict with other planned infrastructure improvements such as water distribution systems and project site drainage facilities. Evidence of this coordination with PG&E and Pacific Bell shall be provided to the City's Department of Development and Engineering Services.</p> <p>The on-site facilities shall be designed according to the California Code of Regulations, Title 24, "Energy Standards for Nonresidential Buildings", or be designed to not exceed the energy consumption requirements of those standards.</p> | LTS |

| Impact | Level of Significance Without Mitigation | MITIGATION MEASURE | | Resulting Level of Significance |
|--|--|---|--|---------------------------------|
| | | | <p><i>Timing/Implementation: Prior to completion of final improvement plans.</i></p> <p><i>Enforcement/Monitoring: City's Development and Engineering Services Department.</i></p> | |
| <p>Law Enforcement and Police Services</p> <p>Impact 4.10.4 Implementation of the project would increase the demand for police protection services and facilities.</p> | PS | <p>MM 4.10.4a</p> <p>The project sponsor will coordinate directly with the San Joaquin County Sheriff's Department and/or the Tracy Police Department to prepare a police services plan for proposed project. The plan will determine service requirements for all project land uses and ratios for public/private patrolling which are acceptable to the Sheriff's and/or the Tracy Police Departments performance standards for response times. Prior to site plan approvals for each phase of the project the City may be required to provide fair-share contribution to any applicable County public service fees in place at that time.</p> <p>MM 4.10.4b</p> <p>The County Sheriff's Department shall be given the opportunity to review site specific proposals and make recommendations to improve public safety and emergency access.</p> <p><i>Timing/Implementation: Prior to finalization of final site design.</i></p> <p><i>Enforcement/Monitoring: City of Tracy Parks and Community Services Department</i></p> | LTS | |
| <p>Fire Protection Services</p> <p>Impact 4.10.5 Development of the project would result in an increase in demand for fire protection services.</p> | PS | <p>MM 4.10.5</p> <p>The City's Fire Department shall be provided the opportunity to review development plans for the project site to ensure that the following items are addressed:</p> <ul style="list-style-type: none"> Project site accesses and internal roadways shall be adequately designed to ensure | LTS | |

2.0 EXECUTIVE SUMMARY

| Impact | Level of Significance Without Mitigation | MITIGATION MEASURE | Resulting Level of Significance |
|--|--|--|---------------------------------|
| | | <p>adequate access for emergency vehicles. Any gates shall be designed to allow access for emergency vehicles.</p> <ul style="list-style-type: none"> • Buildings shall be designed in accordance with Tracy Fire Department and Uniform Fire Code standards. • Fire hydrants spacing and location shall be consistent with Tracy Fire Department standards. • Acceptable response time can be ensured. <p><i>Timing/Implementation: Prior to start of construction activities.</i></p> <p><i>Enforcement/Monitoring: City's Development and Engineering Services Department.</i></p> | |
| Cumulative Water Supply and Treatment Impact 4.10.6 The delivery and use of the proposed potable and non-potable water supplies to serve the Proposed Project, in combination with other urban and non-urban uses in the City of Tracy served by regional supplies would not result in any significant cumulative water supply impacts. | LTS | None required. | LTS |
| Cumulative Electrical Service Impact 4.10.7 The proposed project, in combination with other reasonably foreseeable development, would cumulatively increase the demand for electrical service in the City of Tracy. Adequate infrastructure has been planned to accommodate the uses identified in the proposed project. | LTS | None required. | LTS |

| Impact | Level of Significance Without Mitigation | MITIGATION MEASURE | Resulting Level of Significance |
|--|--|--------------------|---------------------------------|
| Cumulative Natural Gas Service Impact 4.10.8 The proposed project, in combination with other reasonably foreseeable development, would cumulatively increase the demand for natural gas service in the project area. Infrastructure has been planned to accommodate the uses identified in the City of Tracy. | LTS | None required. | LTS |
| Cumulative Telephone Service Impact 4.10.9 The proposed project, in combination with other reasonably foreseeable development, would cumulatively increase the demand for telephone service in the project vicinity. Adequate infrastructure has been planned to accommodate the uses identified in the City of Tracy. | LTS | None required. | LTS |
| Cumulative Police Services Impact 4.10.10 The proposed project, in combination with other reasonably foreseeable development, would increase the need for police protection services. Future developments have identified potential impacts to the Department and have proposed mitigation measures to lessen potential impacts. | LTS | None required. | LTS |
| Cumulative Fire Protection Services Impact 4.10.11 The proposed project, in combination with other reasonably foreseeable development, would increase the need for fire protection services. Future developments have identified potential impacts to the Department and have proposed mitigation measures to lessen potential impacts. | LTS | None required. | LTS |
| Cumulative Parks and Recreation Impact 4.10.12 Development of the proposed TYSF in combination with other development planned in | LTS | None required. | LTS |

2.0 EXECUTIVE SUMMARY

| Impact | Level of Significance Without Mitigation | MITIGATION MEASURE | Resulting Level of Significance |
|--|--|--------------------|---------------------------------|
| the City of Tracy would result in additional demands for parks and recreational facilities. | | | |
| Cumulative Solid Waste Impact 4.10.13 This project in combination with other reasonably foreseeable projects would increase the demand for solid waste generation, service, and disposal in the area. | LTS | None required. | LTS |
| Agricultural Resources | | | |
| Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) Impact 4.11.1 The project site is not considered Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) since it has only been used to farm dry crops since the early 1960s. | LTS | None required. | LTS |
| Conflict with existing zoning for agricultural use, or a Williamson Act contract Impact 4.11.2 The project site is not under a Williamson Act agricultural contract. The existing County General Plan designation of the site is General Agriculture and the property is zoned AG - 40. Under this designation, recreational facilities are an allowable use. | LTS | None required. | LTS |
| Conversion of Agricultural Land Impact 4.11.3 The project would convert approximately 200 acres of previously productive farmland to non-agricultural uses. Although not farmed since the 1960's except for dryland crops, the site is surrounded by lands with prime farmland characteristics and may also contain prime soil characteristics. | LTS | None required. | LTS |

| Impact | Level of Significance Without Mitigation | MITIGATION MEASURE | | Resulting Level of Significance |
|--|--|--------------------|--|---------------------------------|
| Impairment to Productivity/Land Use Compatibility Impact 4.11.4 The project would urban land uses adjacent to primarily agricultural uses, which may impair agricultural production and result in land use compatibility conflicts. | PS | MM 4.11.4 | <p>The applicant has proposed a 50-foot buffer for the proposed project site to physically separate the facility from the agricultural and industrial uses that may pose compatibility problems for land applications of herbicides and pesticides. For materials applied via aerial spraying the following measures are included:</p> <ul style="list-style-type: none"> • The Youth Sports Alliance will contact the identified adjacent landowners and distribute the yearly schedule to ensure that no person will be on the field when an adjacent field is sprayed with any type of pesticide. • If games or park reservations are to be performed that are not on the pre-notification schedule, notice shall be given by phone calls to the affected parties. • The Youth Sports Alliance shall distribute additional notice of scheduled games added during the year that are known in advance. <p><i>Timing/Implementation: Prior to finalization of site design and project construction. Prior to the current year's scheduled games and activities and prior to any games/activities added during the current season.</i></p> <p><i>Enforcement/Monitoring: City of Tracy Parks and Community Services Department.</i></p> | LTS |
| Cumulative Agricultural Conversion/Conflicts Impact 4.11.5 The project would convert approximately 200 acres of grazing land to urban and recreational uses. This loss would contribute to the | LTS | None required. | | LTS |

2.0 EXECUTIVE SUMMARY

| Impact | Level of Significance Without Mitigation | MITIGATION MEASURE | Resulting Level of Significance |
|---|--|--|---------------------------------|
| cumulative loss of farmland in the region and could contribute to cumulative conflicts with agricultural uses. | | | |
| Aesthetics, Visual Resources, Light and Glare | | | |
| View Obstruction Impacts Impact 4.12.1 The project would result in a change in the project site from surplus style, predominately unused land to a sports facility. This could impact distant views of the Diablo Range and the Altamont pass. | LTS | None required. | LTS |
| Impacts to Scenic Resources Impact 4.12.2 The project would not impact any existing scenic resources, as none are located on the project site or in the vicinity. | LTS | None required. | LTS |
| Visual Character Impacts Impact 4.12.3 The project would change the visual character of the project site. | LTS | None required. | LTS |
| Light and Glare Impacts Impact 4.12.4 The project would introduce new sources of light and glare to the project site. | PS | MM 4.12.4 A building permit shall be required prior to the installation of the project's lighting. The building permit plans shall demonstrate that site lighting and exterior building light fixtures that are designed to reduce the effects of light pollution and glare off of glass and metal surfaces. The site lighting shall be of a type that casts light downward onto the fields and shall also have control boxes that allow operation of the lighting only when teams need the field to be illuminated. | LTS |

| Impact | Level of Significance Without Mitigation | MITIGATION MEASURE | Resulting Level of Significance |
|--|--|---|---------------------------------|
| | | <p><i>Timing/Implementation: Prior to issuance of an electrical permit for each field lighting system.</i></p> <p><i>Enforcement/Monitoring: City of Tracy Department of Development & Engineering Services</i></p> | |
| <p>Cumulative View Obstruction Impacts</p> <p>Impact 4.12.5 Development of areas in the vicinity of the western Tracy City Limit would contribute to obstruction of short-range views of agricultural lands and long-range views of the Diablo Range.</p> | LTS | None required. | LTS |

3.0 PROJECT DESCRIPTION

The project is a proposed 200-acre youth park and recreational facility to be developed by the City on Schulte Road west of the City of Tracy on unincorporated lands in San Joaquin County. The project description is based on information provided by the City, YSAT, TJKM Transportation Consultants and by the project architect (*Beals Sport*).

3.1 PROJECT SETTING

REGIONAL LOCATION

The project site is located within the greater Tracy Planning Area (TPA), which is located in San Joaquin County and totals 72,570 acres. The TPA is delineated by the San Joaquin County line on the west, Old River to the north, the Southern Pacific Railroad and Chrisman Road to the east, and portions of Corral Hollow Road to the south (**Figure 3.0-1**).

3.2 EXISTING SETTING

PROJECT SITE

The site address is 15178 W. Schulte Road (APN 209-230-03). The 200-acre project site is in unincorporated San Joaquin County, within one mile of the City of Tracy's city limits and within the City's Sphere of Influence. The City has no current plans to annex the site to the City. The site is adjacent to and accessible by Schulte Road, ½ mile east of Hansen Road and one mile west of Lammers Road. Regional access to the site is provided via I-205, I-5, and I-580. The City of Tracy's General Plan designates the project site as Industrial, and located within the Patterson Pass Community Area, one of six areas planned for development. **Figure 3.0-2** shows the project location.

SURROUNDING LAND USES

Adjacent land uses are predominately agricultural and industrial. To the east are three heavy industrial uses, the Owens Brockway Glass Plant, the Tracy Biomass Plant, and the Tracy Peaker Plant. Located to the south is the Southern Pacific Railroad line and the Delta Mendota canal. Adjacent to the site at the southwest corner of Hansen Road and Schulte Road is the Tracy Rural Fire Protection District Station Number 93, and a California Dept. of Forestry Fire and Fire Protection Station.

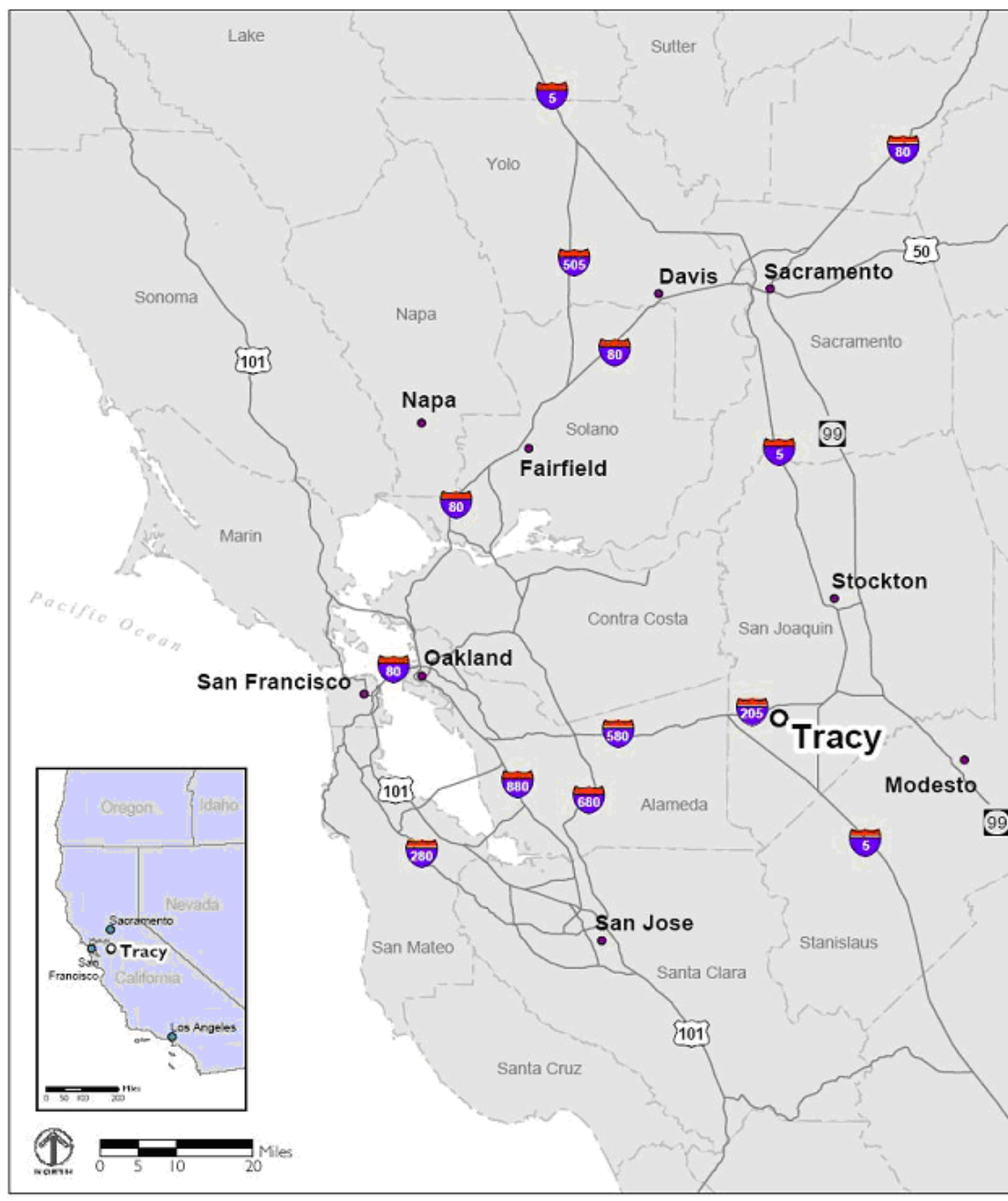
The Tracy Peaker Plant project, a 169 MW natural gas-fired, simple-cycle electric generating facility, is located immediately southwest of the site. The Tracy Biomass Plant, Approximately ½ mile west of the site is the Summit Distribution Center, which serves as a facility for Safeway and Costco trucking and food distribution. Adjacent land uses include agricultural land to the north and west, and a single residence to the south. **Figure 3.0-3** shows the project site and surrounding land uses.

3.3 EXISTING PHYSICAL SITE CONDITIONS

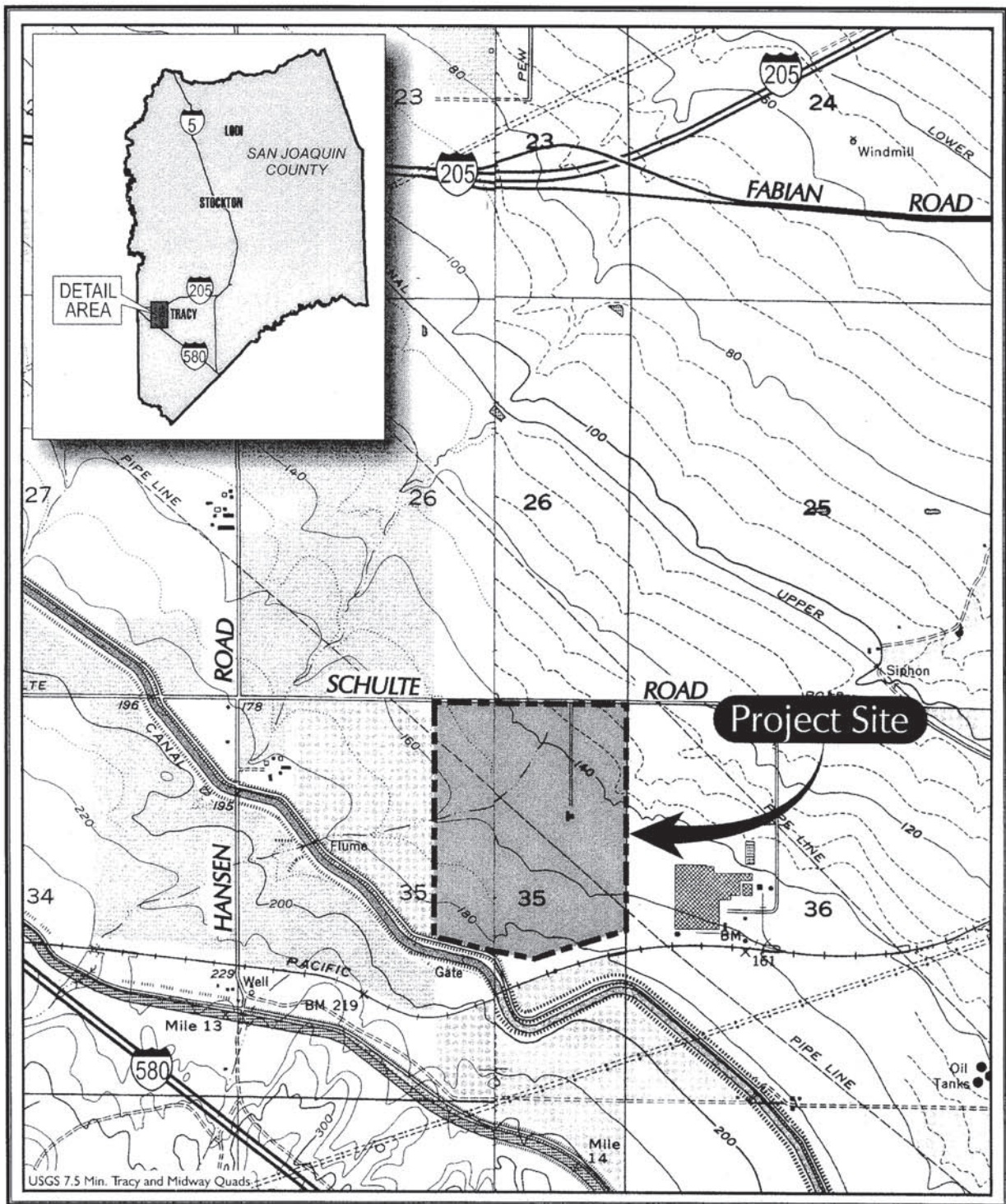
Currently distributed throughout the project site are approximately 40 wooden antenna poles, which range in height from approximately 60 to 140 feet. The poles are anchored by guy wires. Six of the poles are adjoined by metal junction boxes at their bases. The site also contains an abandoned Federal Aviation Administration (FAA) building, approximately 50 smaller power transmission poles, and a paved and graveled driveway. Adjacent to the FAA building are water well and turbine pump, three pine trees, apiary (bee keeping) hives, and abandoned farm equipment.

3.0 PROJECT DESCRIPTION

A residential access easement exists along the western site boundary. The site also contains northwest- to southeast-running easements for 26" and 36" diameter Pacific Gas and Electric (PG&E) natural gas pipelines, and for an 18" Chevron Corporation crude oil pipeline, located approximately mid-point on the project site. **Figures 3.0-4** through **3.0-6** show different views of the project site.



Source: City of Tracy General Plan Update



Source: Foothill Associates



Source: Foothill Associates



Photo 1: Existing abandoned FAA building on site



Photo 2: Existing antennas



Photo 3: Existing antennas close up



Photo 4: Abandoned farm equipment



Photo 5: Access road to abandoned FAA building with antennas to the right



Photo 6: View of site from Schulte Road

3.4 PROJECT BACKGROUND

Until 1981, the FAA operated the site as an antenna and radio transmission facility. In 1986, the site was transferred to the United States Bureau of Prisons. Most recently, the site was a considered location for development of the proposed Tracy Learning Center, a charter school campus for up to approximately 2,400 Kindergarten through 12th grade students proposed to be developed and operated by the Tracy Unified School District, a community college campus operated by the San Joaquin Delta Community College District, and lands for general economic development by the City. At that time, the property was being transferred from the federal government to the City, the Tracy Unified School District, and the San Joaquin Delta Community College District through a negotiated purchase/dedication. Plans to construct the project on the site have since been abandoned.

In late 2002, the City and YSAT began meeting to identify a site to accommodate youth athletic facilities needed to serve the City's and surrounding communities' growing populations. An inventory and analysis of current and expected youth sports participation, in conjunction with available sports facilities, was conducted by *Beals Sport*, with the cooperation of YSAT. The analysis focused primarily on field sports, including baseball, softball, football, and soccer. See **Table 3.0-1** for the identified ball field needs.

The following needs were identified for the City and YSAT (which includes the needs of the surrounding communities):

TABLE 3.0-1
IDENTIFIED BALL FIELD NEEDS FOR CITY OF TRACY AND YSAT

| Type of Ball Field | Number Needed | Number Planned | Dimensions |
|-------------------------------------|---------------|----------------|--|
| Baseball (90' basepads) | 15 | 5 | 3 @ 350' outfield 2 @ 396' outfield |
| Baseball/Softball (60' basepads) | 32/11 | 18 | 18 @ 200' outfield |
| Football | 5 | 5* | 5 @ 159' x 360' |
| Soccer (all sizes) | 15 | 16* | 5 @ 219' x 330' 4 @ 150' x 240' 3 @ 180' x 300' 4 @ 120' x 210' |
| TOTAL | 78 | 44 | |

**The stadium field is intended for use as both a soccer and football field.*

3.5 PROJECT CHARACTERISTICS

LEASE AGREEMENT

The City would purchase 50 acres and another 150 acres would be transferred from the United States Bureau of Prisons in accordance with House of Representatives Bill 2508. The City would retain ownership and, through a Memorandum of Understanding (MOU), agreement or lease with YSAT, construct, operate and maintain the project. The MOU, agreement or lease would clarify responsibilities of the City and YSAT.

3.0 PROJECT DESCRIPTION

PROJECT PHASING

The project site is approximately 200 acres, which would include 150 acres of field sports facilities and 50 acres of general park/recreational area. The proposed project would be built in two phases. The purpose of phasing is to provide lower up-front costs for facility use, in addition to providing the opportunity to adjust project programming and funding mechanisms during project development.

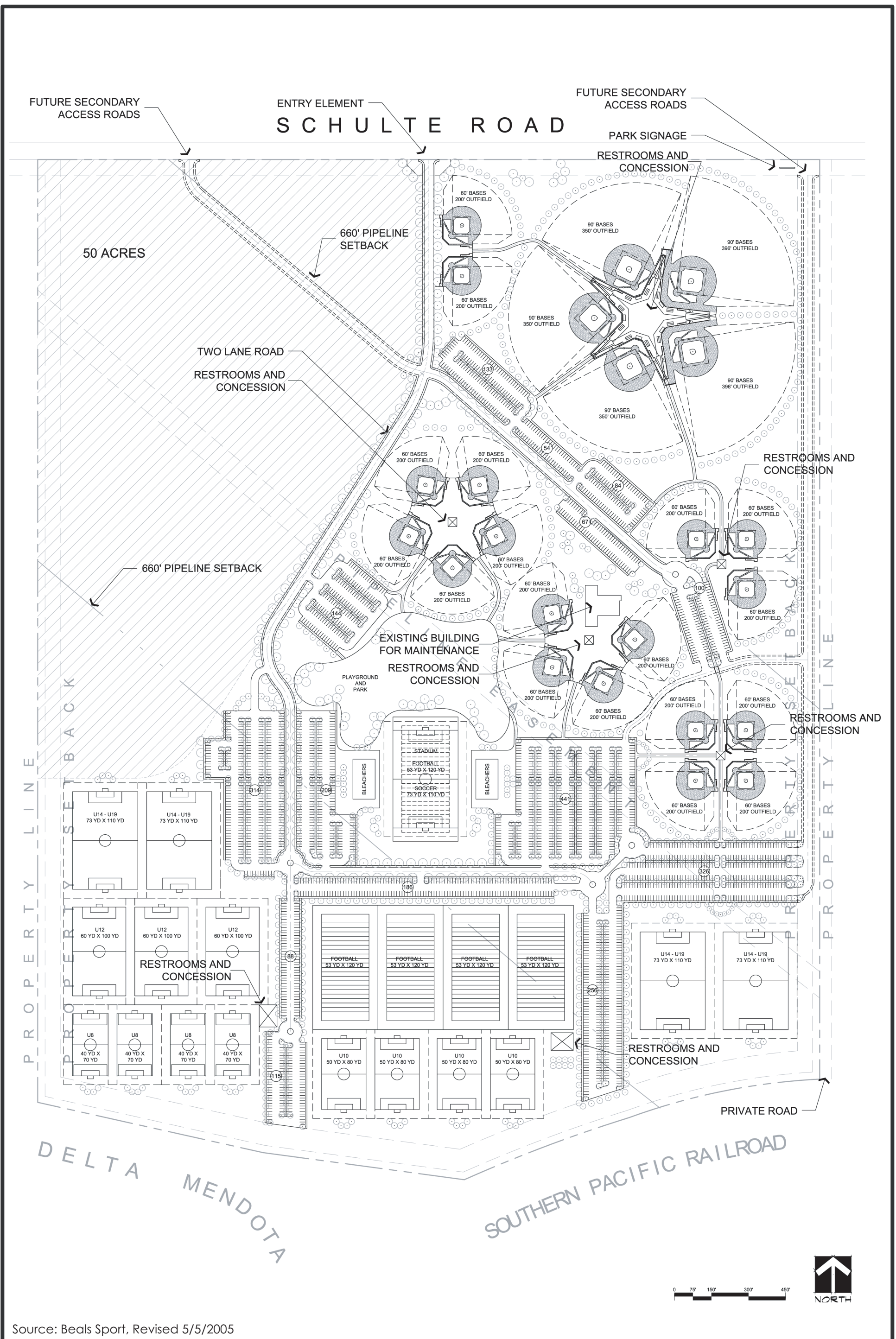
Phase I would consist of securing the infrastructure and utility needs to the site, as well as the construction of play fields planned for the northeast and southwest regions of the project site, to meet ball field needs for current and five-year projections. With the completion of Phase I, the project site is proposed to have three football fields, ten baseball/softball fields, and thirteen soccer fields.

As part of Phase II build out of the project, in addition to the fields built in Phase I, thirteen baseball/softball fields, one sports/football stadium, one football field, two soccer fields, and 50 acres of general park/recreational use would be constructed. The 50-acre portion of the site would be used as a passive recreation area with the following tentative uses:

- Three to four picnic areas, some with shade structures
- Walking paths made of decomposed granite throughout site
- Tot lot
- Horse trails
- Overflow, unimproved parking area
- Disk golf practice area
- BMX practice area
- Fenced dog park

OVERALL LAYOUT OF FACILITY

The proposed site plan includes four football fields and fifteen soccer fields on the southern side of the site. Also in the southern area of the site, the one sport/football stadium would be located. In addition twenty-three baseball/softball fields are planned within pie-shaped clusters, consisting of three to five ball fields each, with two separate ball fields adjacent to the northern site boundary. Each baseball and softball field would have permanent backstops. Also integrated into the site are eight storm water detention basins, 50 acres of general park/recreation area, a corporation yard, (portable) restrooms, concession stands, field and vehicular lighting, signs, storage buildings, parking and associated landscaping. **Figure 3.0-7** shows the layout of both Phase I and Phase II of the project.



Source: Beals Sport, Revised 5/5/2005

ASSOCIATED RECREATION ELEMENTS

The proposed site plan includes various associated program elements:

Buildings and Temporary Structures

The site plan provides the opportunity for the incorporation of both permanent and portable buildings, as site development progresses. Concession and restroom facilities would be contained on either concrete pads with mobile trailers, or "Tuff Shed"-type transitory structures. The locations of five of these temporary structures are in the center of each "pie" shaped ball field configuration with two additional facilities situated amongst the football and soccer fields. The existing concrete FAA building would be retained and used as a corporation yard for maintenance.

Parking

Parking areas would be located throughout the project site, providing access to each of the ball fields. A total of approximately 2,100 parking spaces would be created.

Ballfield Lighting

Lighting is assumed at the end of five years from the start of the project on four soccer fields, one football stadium, and two ninety-foot baseball diamonds. Additional field lighting is assumed at the end of ten years from the start of the project on eight soccer fields, one football stadium, one football field, and seven baseball/softball fields.

Spectator Improvements

Bleacher systems would be limited to one "premiere" field with permanent bleacher-type systems.

Landscaping

Trees and vegetation would be located throughout the site to provide shade, water absorption, windbreaks, noise break, traffic calming, erosion control, and aesthetic enhancement.

Site Access

The project site is proposed to have three project driveways along Schulte Road. One full movement driveway centered along the property frontage would be provided with initial improvements and two secondary accesses would be provided as future improvements. Schulte Road borders the north of the project site, and is an east-west four lane arterial that extends west from Lammers Road to Mountain House Parkway. The project driveways are proposed to be two-lane roads that would provide access to various on-site parking lots to/from Schulte Road. The site road design incorporates no cul-de-sacs that would inhibit emergency vehicle access and turn-around.

Security

Security fencing would surround the site perimeter. The site design provides the potential for gated parking lots to regulate access to various site locations.

3.0 PROJECT DESCRIPTION

Infrastructure Improvements

Storm Water Retention

Although the site is relatively flat, there is a gentle slope from southwest to northeast. Onsite drainage and runoff would be accommodated by onsite retention and detention facilities. A large retention pond would be located at the northeast corner of the site. Additional small, intermittent detention basins may be required. The basins would contain native grasses as a vegetative buffer and filter. Basins along the perimeter would also serve as a buffer to move and retain storm water.

Water Supply

Non-potable water would initially be supplied by on-site wells. Potable water would be supplied to the site via vendors. Potable water would also be obtained from the City's water line within Schulte Road. An SB 610 Assessment has determined that adequate water supplies exist to serve the built out facilities.

Wastewater

Wastewater would be handled through septic systems for bathroom facilities. Permits would be required to be obtained from San Joaquin County for the septic systems.

Electricity

Infrastructure for electric power does not currently exist on the site, and would need to be brought to the site for the project from current locations along Schulte Road.

3.6 STATEMENT OF OBJECTIVES

Consistent with CEQA Guidelines Section 15124(b), a clear statement of objectives and the underlying purpose of the project shall be discussed. The following is a Statement of the Project Objectives based on information provided by the project applicant.

Why a Statement of Objectives?

CEQA Guidelines Section 15124(b) requires identification of "A statement of objectives sought by the proposed project. A clearly written statement of objectives would help the lead agency develop a reasonable range of alternatives to evaluate in the EIR...The statement of objectives should include the underlying purpose of the project."

- Provide youth field athletic facilities for the City of Tracy and surrounding communities' growing populations.
- Develop an unused 200 acres of property currently owned by the United States Bureau of Prisons.
- Provide facilities that are flexible, sustainable, and relevant.

3.7 REQUIRED PERMITS AND APPROVALS

The City would be the agency responsible for consideration and approval of the environmental assessment for this project. No other entitlements or discretionary permits are required for this project.

Construction of new buildings on the site would also require the approval of building permits; these permits are not discretionary (issuance of building permits is mandatory if the requirements of the applicable Building Code standards are met).

REFERENCES

Census 2000. American Fact Finder: <http://www.census.gov/>. Site accessed September 14, 2004.

DES Staff. (City of Tracy), and Janet Meth (PMC), personal communication, December 20, 2004.

San Joaquin Council of Governments. Research and Forecasting Center, Population: http://www.sjcog.org/sections/departments/planning/research/projections.php?table_id=140§ion_id=36&historic=0. Site accessed September 19, 2004.

Twining Laboratories, 1999. Inc. *Phase I Environmental Site Assessment Proposed Tracy Learning Center, San Joaquin County, California*. May 10, 1999.

4.0 ENVIRONMENTAL SETTING, IMPACTS, AND MITIGATION MEASURES

4.1 Land Use

This section of the EIR describes the existing land uses of the project site, characterizes surrounding uses, and discusses the proposed project in the context the City's General Plan and other adopted plans and policies.

4.1.1. EXISTING SETTING

REGIONAL LAND USE CONTEXT

Tracy Planning Area (TPA) and General Plan

The Tracy Planning Area (TPA) covers all territory within the boundary of the City of Tracy, as well as land outside its boundary that has been determined to bear a relation to the City's planning efforts. The TPA consists of all area within the city limits and another 100 square miles in the unincorporated area, some of which is included within the City's sphere of influence. The total acreage within the TPA is approximately 72,570 acres.

Completed in July 1993, the City's General Plan is the principal planning document for the City and is designed to direct future growth within the TPA. The General Plan sets forth the fundamental goals and policies for City growth while the Implementation Programs, Final General Plan EIR mitigation measures and Master Facilities Plans indicate how this strategy can be implemented. The General Plan identifies six "Community Areas", which are large geographic centers intended for comprehensive planning through the implementation of Specific Plans. The Tracy Youth Sports Facility is located within the Patterson Pass Community Area.

EXISTING PROJECT SITE AND LAND USES

Project Site

The site address is 15178 W. Schulte Road (APN 209-230-03) within one mile of the City's limit line and within the City's Sphere of Influence. The site is adjacent to and accessible by Schulte Road, ½ mile east of Hansen Road and one mile west of Lammers Road. Existing property improvements on the project site consist of a concrete structure near the eastern/central portion of the property, a series of power distribution "telephone" poles and approximately 40 wood antenna poles, ranging in height from approximately 60 to 140 feet. Metal boxes appearing to be electrical junctions adjoin six of the antenna poles. The concrete building had formerly been used by the FAA as a radio transmission facility and was constructed between 1952 and 1963, and abandoned in 1981. A water well with a turbine pump constructed in 1961 adjoins the concrete building. Prior to use by the FAA as an "antenna farm", the site was used for agricultural purposes. The project site is not under a Williamson Act agricultural contract. There are currently no active uses on the site other than dryland farming, apiary uses (bee keeping) and periodic discing.

SURROUNDING LAND USES

Land uses surrounding the project site are primarily agricultural and industrial. The parcels west and north of the site consist of active agricultural properties. A single rural residence on a two-acre parcel is located south of the site near the Delta Mendota canal. Beyond the canal is the westernmost extent of the South Schulte Community Area, which forms a thin "finger" of land designated for future residential land uses.

4.1 LAND USE

The Owens Illinois, Inc. (Owens-Brockway) glass plant and the Tracy Biomass facility are industrial facilities and the closest non-agricultural uses east of the site. The Tracy Biomass Plant is a multi-story incinerator that operates 24 hours per day, seven days a week, processing discarded wood and vegetation into energy. Owens Brockway manufactures and recycles glass products, and has expanded its distribution facility to the parcel immediately adjacent to the project site. A remaining agricultural parcel, approximately 40 acres in size, is located immediately to the east and provides separation between the project site and Tracy Biomass. A Southern Pacific rail line right of way runs along the southern edge of the site.

Adjacent to the site at the southwest corner of Hansen Road and Schulte Road is the Tracy Rural Fire Protection District Station Number 93, and a California Dept. of Forestry Fire Station.

Approximately ½ mile west of the site is the Summit Distribution Center, which serves as a facility for Safeway and Costco trucking and food distribution. The Tracy Peaker Plant project, a 169 MW natural gas-fired, simple-cycle electric generating facility, is also located southwest of the site.

4.1.2. REGULATORY FRAMEWORK

ENTITLEMENT AND DEVELOPMENT PROCESSES

The City of Tracy is the Lead Agency for environmental review, as defined by CEQA. Although the project lies within San Joaquin County, the City would retain ownership of the site and would oversee construction of the project. However, there are some improvements associated with the project that are under the jurisdiction of San Joaquin County. These include: any improvements to the existing non-potable well; drilling of a new non-potable well for irrigation purposes; and food service permits (these may require approval by the San Joaquin County Public Health Services Department). Further, any improvements to public rights-of-way in County's jurisdiction may require encroachment permits and approval and review by the San Joaquin County Public Works Department.

RELEVANT PLANNING PROGRAMS¹

City General Plan

Approved in 1993, the General Plan includes a land use map, which is a graphic representation of future land use classifications for all parcels of land in the TPA. The General Plan plans for Core Contiguous development expanding from the City's existing urban core and also envisions self-sustaining development that would contribute to the sense of community without detracting

¹ Under Government Code section 53091, cities and counties are exempt from each other's building and zoning ordinances (including each other's general plans). (See *Lawler v. City of Redding* (1992) 7 Cal.App.4th 778.) Nevertheless, Government Code section 65402, subdivision (b) provides in relevant part that: "... a city shall not ... construct or authorize a public building or structure, in ... unincorporated territory, if ... the county in which such unincorporated territory is situated has adopted a general plan ... and such general plan ... is applicable thereto, until the location, purpose and extent of such ... public building or structure have been submitted to and reported upon by the planning agency having jurisdiction, as to conformity with said adopted general plan ..."

Under the County's General Plan, the project site is designated as Agriculture. This designation allows for recreational facilities.

from the existing Tracy downtown core. The General Plan plans for six urban centers targeted for development over a 20-year horizon.

As a policy document, the General Plan sets forth a wide range of goals, policies, and implementation measures intended to guide the type, character, and intensity of growth within the City. Every project considered by the City must be either consistent with the General Plan, or found to further the goals of the General Plan if modified.

The City's General Plan identifies specific policies regarding land use. While this EIR analyzes the project's consistency with the City's General Plan pursuant to CEQA Section 15125(d), the City Council would ultimately make the determination of the project's consistency with the General Plan. Environmental impacts associated with inconsistency with General Plan policies are addressed under the impact discussions of this EIR.

The following General Plan goals and policies related to safety are relevant to the project:

Chapter 1: Land Use Element

POLICY LU 1.1: Provide a balanced distribution of land uses between residential, employment-generating, and public facilities.

POLICY LU 6.1: RETAIN EXISTING INDUSTRY WHEN IT IS CONSISTENT WITH OVERALL INTENT OF THE PLAN.

POLICY LU 7.2: Environmental impacts generated by land development proposed within the Tracy area would be fully assessed, and wherever feasible mitigated.

POLICY LU 7.3: LOCATE COMPATIBLE DEVELOPMENT NEAR AND ALONG FREEWAY CORRIDORS, AND PROVIDE ADEQUATE ENVIRONMENTAL PROTECTION TO LESS COMPATIBLE USES.

POLICY LU 8.10: Limit urban encroachment into agricultural areas, except where consistent with the Urban Management Plan.

POLICY LU 9.1: REVIEW LAND USE PROPOSALS FOR THEIR EFFECT ON FINANCIAL RESOURCES.

The City is currently in the process of updating its General Plan. The City's General Plan currently designates the project site as Industrial, and located within the Patterson Pass Community Area, one of six areas planned for development. In the update of the City's General Plan the land use designation of the 200-acre project site is proposed to be changed from Industrial to a Park designation. As such, it is anticipated that the project would not conflict with new or revised policies in the updated General Plan.

Sphere of Influence

The City is reviewing its current Sphere of Influence (SOI) to be finalized and included in the General Plan update. For the General Plan update, an Urban Reserve designation is being discussed for several surrounding parcels of land. This designation is used for areas in the SOI where comprehensive planning under policies and statistical profiles for each Urban Reserve is expected to occur in the future and where land use designations are not assigned to specific parcels of land.

4.1 LAND USE

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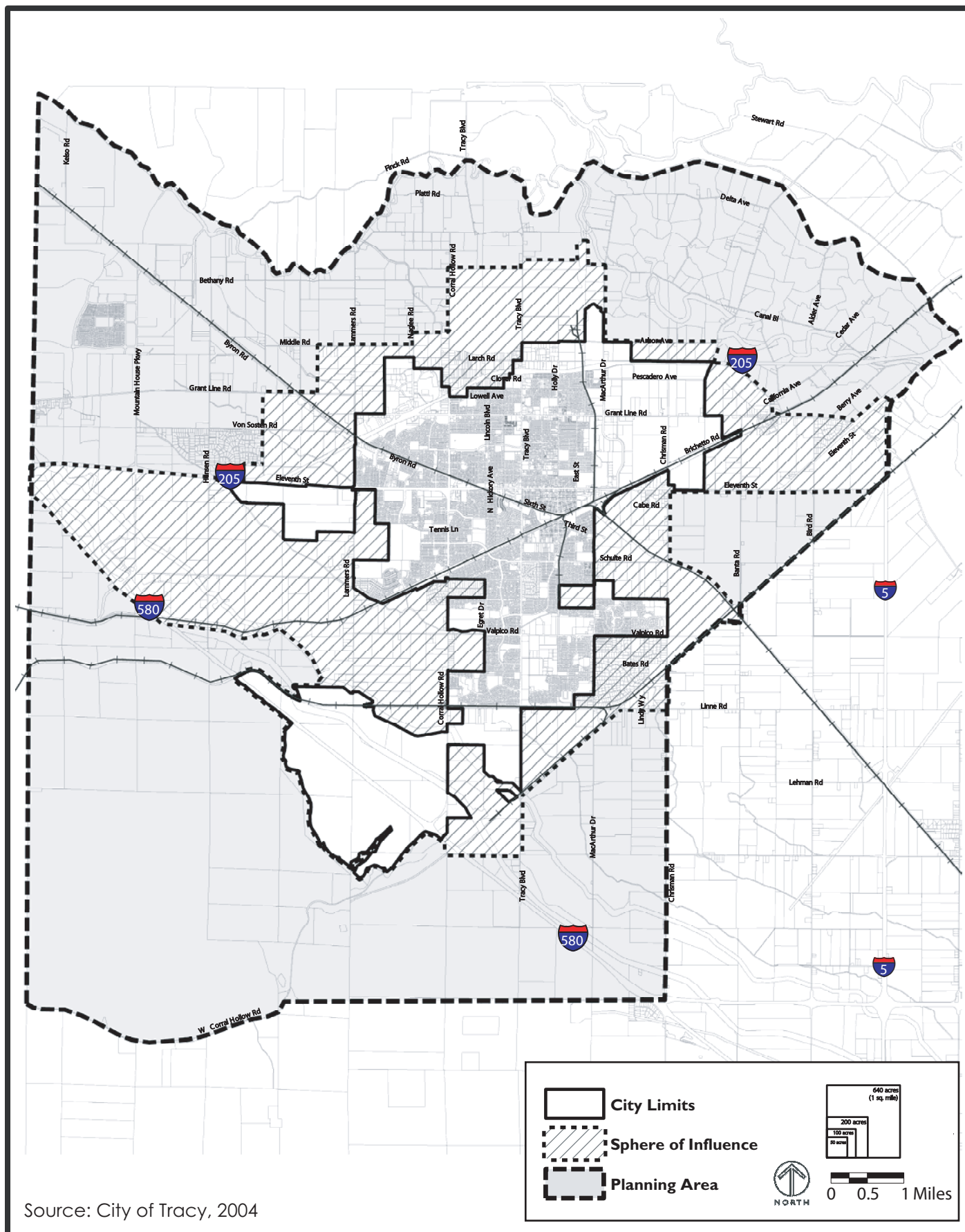
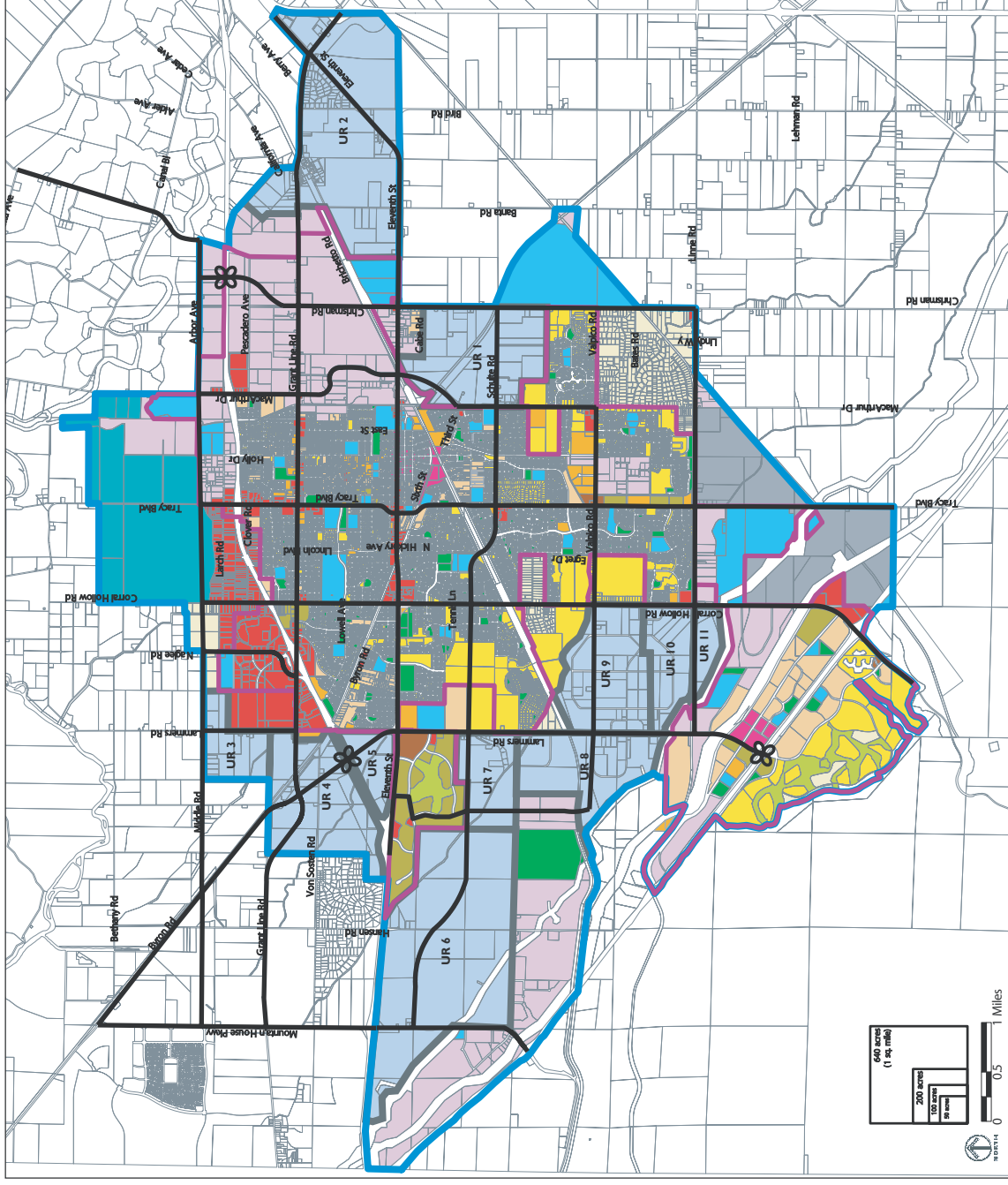


FIGURE 4.1-1
Tracy City Limits
Sphere of Influence and Planning Area

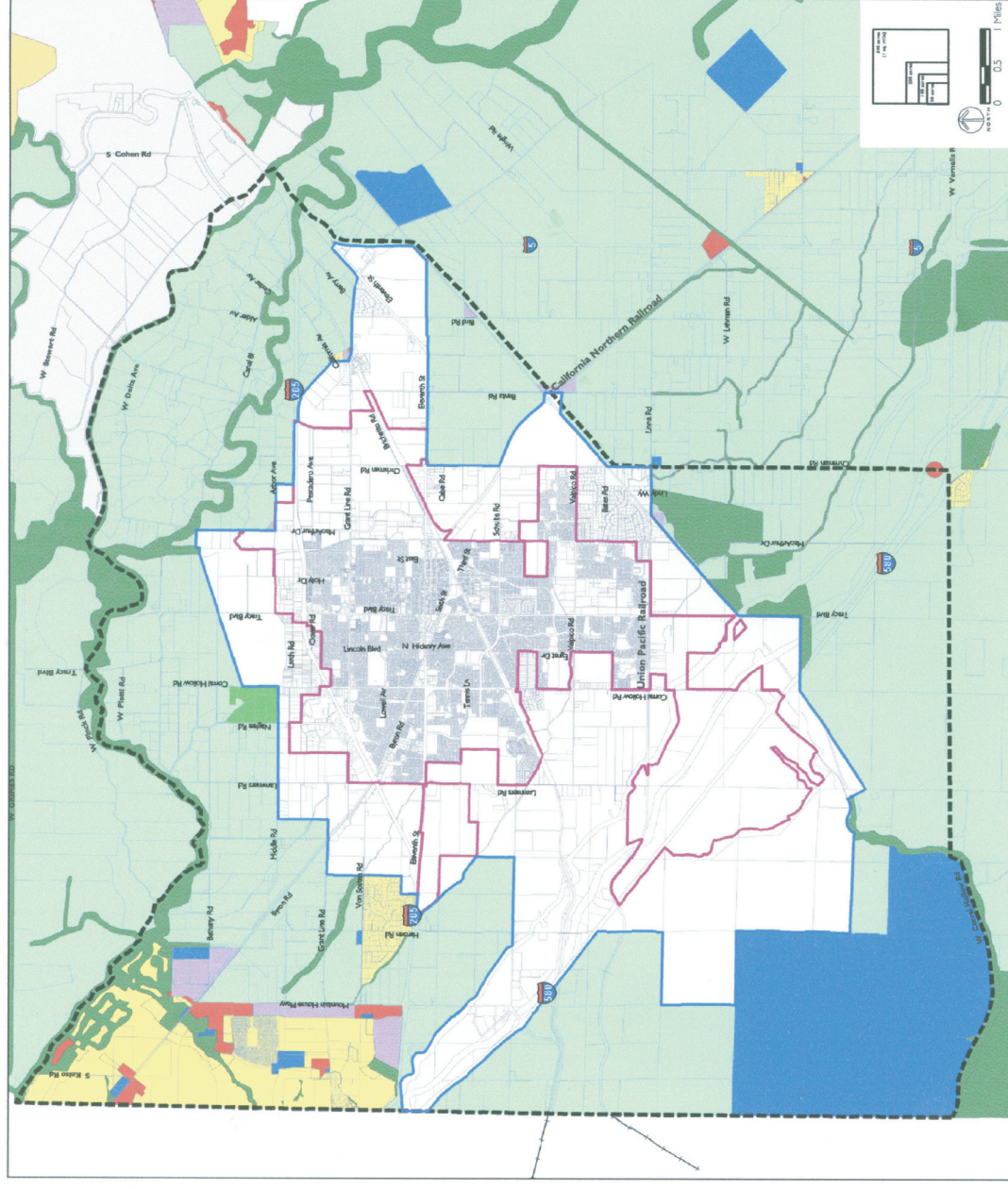


- Residential Very Low
- Residential Low
- Residential Medium
- Residential High
- Commercial
- Office
- Industrial
- Village Center
- Urban Center
- Public Facilities
- Park
- Golf Course
- Open Space
- Agriculture
- Aggregate
- Urban Reserve
- City Limits
- Sphere of Influence
- Major Arterial/Expressway/Boulevard

Source: City of Tracy



FIGURE 4.1-2a
City of Tracy General Plan Designations (Proposed)



Source: City of Tracy



FIGURE 4.1-2b
San Joaquin County General Plan designations within the Tracy Planning Area

4.1.3. IMPACTS AND MITIGATION MEASURES

STANDARDS OF SIGNIFICANCE

The following thresholds for measuring the project's environmental impacts are based upon the Initial Study conducted for the project and the most recent CEQA Guidelines. Land use impacts are considered significant if implementation of the project would:

- 1) Physically divide an established community;
- 2) Conflict with any applicable land use plan, policy or regulation of an agency with jurisdiction over the project (including, but not limited to, the general plan, specific plan, local coastal program or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect;
- 3) Conflict with any applicable habitat conservation plan or natural community conservation plan.

PROJECT IMPACTS AND MITIGATION MEASURES

Physical Effects Upon an Established Community

Impact 4.1.1 The project site is approximately 200 acres, which includes 150 acres of field sports facilities and 50 acres of general park/recreational area. These land uses are proposed on an underutilized site, in an area absent of an established residential community. The nearest community or neighborhood is located within newly developed subdivisions to the east and northeast. For these reasons, physical effects upon an established community or existing area are considered **less than significant**.

Mitigation Measures

None required.

Conflict with a Planning Policy Established to Mitigate an Environmental Effect

Impact 4.1.2 The project would place 150 acres of field sports facilities and 50 acres of general park/passive recreational area immediately adjacent to one residence to the south, industrial uses to the east, and active agricultural operations to the north, east and west. The interface between the project and these uses may result in **potentially significant** land use conflicts.

Land use impacts are primarily a function of a project's compatibility with surrounding adjacent land uses, which in this case are agricultural, industrial and residential. Land use compatibility is measured in terms of specific environmental effects such as noise, air quality (including dust and odor), aesthetics/light and glare, health risks, and traffic. To the greatest degree possible, the EIR uses quantifiable data to measure such impacts, which can have an effect upon the quality of daily life in a defined area. For this reason, the land use analysis is supported by other specific discussions within the EIR including Section 4.2, Health Hazards/Risk of Upset, Section 4.3, Traffic and Circulation; Section 4.4, Noise; Section 4.5, Air Quality; and, Section 4.11, Visual Resources/Light and Glare.

4.1 LAND USE

Adjacent Agricultural Uses

As indicated above, the project proposes to develop 150 acres of field sports facilities and 50 acres of general park/recreational area immediately adjacent to active agriculture located to the north, east and west. Agriculture is also active across the residential parcel, Delta Mendota Canal and railroad to the south. Project land uses may pose compatibility problems considering that agricultural operations can generate periods of dust and noise, and may require the application of pesticides or herbicides through aerial spraying or other means.

Adjacent Industrial Uses

The Owens Brockway glass plant, the Tracy Peaker Plant and Tracy Biomass facility are also located immediately to the east. All of these facilities generate and utilize potentially hazardous materials, as detailed within Section 4.2, Health Hazards/Risk of Upset of this EIR. Active industrial facilities located near recreational facilities could create problems associated with noise and public safety.

Mitigation Measures

MM 4.1.2a All play fields shall be set back approximately 50 feet from its property line to provide a buffer from the immediate boundary with active agricultural and industrial areas.

Timing/Implementation: During final site design and ongoing during operations.

Enforcement/Monitoring: City's Department of Parks and Community Services.

MM 4.1.2b YSAT shall be required to provide each of its agricultural and industrial neighbors with a complete draft schedule of the games for each season and coordinate said schedules to ensure that no game shall be under way when an adjacent field is being treated with an aerially applied pesticide or herbicide other potentially toxic substance.

Timing/Implementation: During final site design and ongoing during operations.

Enforcement/Monitoring: City's Department of Parks and Community Services.

Implementation of Mitigation Measure **MM 4.1.2a** and **MM 4.1.2b** would result in a **less than significant** impact.

Conformance with the City's General Plan

Impact 4.1.3 The existing City General Plan designation of the site is Industrial. Under this designation, community facilities are an allowable use. Furthermore, with the City's update to the General Plan, the land use designation of the site is proposed to change to Park. Under the Park designation the Youth Sports Facility would remain an allowable use. This is a **less than significant** impact.

Considering that: 1) the project will not have a detrimental impact on surrounding agricultural uses or future urban uses as envisioned; 2) the proposed uses within the Tracy Youth Sports Facility project are consistent with allowable uses within the City's General Plan; and, 3) the site is not in a highly productive agricultural use, the project is therefore considered consistent with the major land use provisions of the City's General Plan.

Mitigation Measures

None required.

Conflict with Applicable Habitat Conservation Plan or Natural Community Conservation Plan

Impact 4.1.4 The project will place 150 acres of field sports facilities and 50 acres of general park/recreational area in a location known to be a part of a Habitat Conservation Plan (HCP) or a Natural Community Conservation Plan (NCCP) as defined by CEQA. This is a **less than significant** impact.

As discussed in Section 4.8, Biological Resources, this site is known to be the potential habitat of the San Joaquin Kit Fox, potential nesting habitat for the Burrowing Owl, and would remove foraging habitat (cropland) for Swainson's hawk. There is the potential to impact three federally and/or state protected species.

The project is located in an area covered by the San Joaquin Multi-Species Habitat Conservation and Open Space Plan ("SJMSCP"), adopted by the San Joaquin Council of Governments on December 7, 2000 and the Tracy City Council on November 6, 2001, which is incorporated by reference. The SJMSCP compensates for conversions of open space for a wide variety of ground disturbing activity, including urban development. This project site is located within an area covered by the SJMSCP as a site that is eligible to convert to non-open space uses, and therefore does not conflict with the SJMSCP.

The details of this analysis are discussed in the Biological Resources section (4.8) of this document.

Mitigation Measures

None required.

4.1 LAND USE

REFERENCES

- City of Tracy. 1993a. *City of Tracy Urban Management Plan/General Plan*. Tracy, California. July 19, 1993.
- City of Tracy. 1993b. *Final EIR for the City of Tracy Urban Management Plan/General Plan*. Tracy, California. July 19, 1993.
- County of San Joaquin. 1992. *General Plan 2010*, Volumes I, II and III. San Joaquin County, California, July 29, 1992.

4.2 Health Hazards/Risk of Upset

This section describes the potential presence of hazardous materials and conditions within the project area; outlines the regulatory context for addressing health hazards and then evaluates the potential risk of hazards relative to the proposed development and human activities.

4.2.1. EXISTING SETTING

EXISTING SITE CONDITIONS

Remnant FAA Facilities

Existing property improvements consist of a T-shaped concrete structure in the northwestern area of the site and approximately 40 abandoned wood antenna poles, ranging in height from approximately 60 to 140 feet. The poles are anchored by guy wires, and six of the poles are adjoined by metal junction boxes at their bases. The site also contains approximately 50 smaller "telephone" poles that appear to have been used for power distribution. The concrete building had formerly been used by the Federal Aviation Administration (FAA) as a radio transmission facility and was constructed between 1952 and 1963. A water well with a turbine pump constructed in 1961 adjoins the concrete building.

Potential Hazardous Materials

Information for this section was compiled from an exhaustive research effort conducted in 1999 in conjunction with the environmental impact report for the proposed Tracy Learning Center project for the site (City of Tracy, 2000) and recent research conducted for the site in 2004. This research included site reconnaissance on April 20 and 21, 1999 and 2004 by an Environmental Assessor, interviews about prior land use in 1999, and records review in 1999 and 2004. The site reconnaissance entailed examining the site for hazardous materials storage, surficial staining or discoloration, debris, stressed vegetation, or other conditions, which may be indicative of potential sources of soil or groundwater contamination. The site was also inspected for fill/ventilation pipes, ground subsidence, or other evidence of existing or preexisting underground storage tanks. The (1999) records review entailed examining of federal, state and local government agency records of the site and properties within a 1-mile radius of the site to identify potential impacts. Further information on the site was obtained from aerial photographs and from 1999 interviews with Alex Gulyas of the Federal Aviation Administration and Jose Lopez, the current owner of the residential parcel to the south.

The following summary describes the results of the site reconnaissance and records review.

Prior Agricultural Uses

The site was previously used for agricultural row cropping until about 1952. It is therefore considered possible that environmentally persistent organochloride pesticide residues are present in subsurface soils onsite. The presence of these materials could present an environmental concern if residues exceed the Total Threshold Limit Concentration as defined by Title 22 of the California Code of Regulations.

Electrical Equipment

Electrical transformers can contain polychlorinated biphenyls (PCBs) in the cooling fluid. PCBs are industrial compounds that are primarily an environmental pollutant resulting in pathogenic (disease causing) and teratogenic (birth defect related) effects. Radio junction boxes adjoin six

4.2 HEALTH HAZARDS/RISK OF UPSET

antenna poles onsite. Upon inspection these boxes did not contain cooling fluid, and leakage or spillage was not observed from the junction boxes.

Transformers, now removed, may have existed adjoining the concrete building. Transformers of this size and age typically contained PCBs. No visible evidence from leakage or spillage, including soil discoloration, was observed near the concrete building. However, environmental concerns are present on site because of the potential soil contamination from these former transformers.

Underground Pipelines

Three underground pipelines traverse the site occupying a common utility corridor. Two of the pipelines are owned by PG&E and are 26-inch ("PG&E Line 002") and 36-inch ("PG&E Line 401") diameter high-pressure natural gas pipelines. Chevron Corporation owns the third pipeline, an 18-inch line containing crude oil. Chevron's historical database indicates that there have been no documented releases of crude oil in the area of the site. According to the California State Fire Marshals Office, there are no recorded leaks or spills from any of the pipelines located in this area.

To ensure the continued integrity of the gas transmission lines running through the Project, PG&E is proposing the following integrity assessments, additional measures during construction and increased maintenance:

- Integrity Assessments
 - 1) A high-resolution in-line inspection (smart pig) will be performed on 110 miles of Line 401 and on 26 miles of Line 002 as a primary means of initially verifying the integrity of the pipeline segments in the sports park and the neighboring segments. Additionally, a caliper tool inspection will be performed to detect any geometric abnormalities.
 - 2) In conjunction with the in-line inspections, close interval surveys of the cathodic protection systems will be performed on both pipeline segments in the identified Youth Sports Facility parcel. This will ensure that the existing cathodic protection systems are adequately protecting against external corrosion.
 - 3) On-going re-assessments of the pipelines' integrity will occur at intervals not to exceed seven years.
 - 4) Additional measures to ensure protection during construction of the Tracy Youth Sports Facility
 - 5) Public Safety Education will be conducted with the City of Tracy and all contractors working at the Project site. The education will clarify the special requirements for excavation within or crossing of the PG&E gas transmission easement.
 - 6) PG&E will install temporary protective fencing with warning signs around the easement to clearly delineate the area of concern.
 - 7) PG&E personnel will "Stand-by" whenever construction occurs within the pipeline easement. This will ensure against 3rd party damage when construction activities are near the pipelines.

- 8) PG&E personnel will visit the site daily to check on the progress of the construction and ensure the contractors are working safely near the pipeline easement.
- Additional maintenance measures throughout the life of the pipelines
 - 1) Perform monthly leak surveys of both pipelines to verify integrity of the pipeline.
 - 2) Perform Bi-monthly patrols of the pipelines. These patrols will focus on detecting any construction that may be taking place, or evidence of construction since the last patrol.
 - 3) Perform Bi-monthly verification of the cathodic protection levels at the monitoring locations. The increased verification will allow prompt remediation in the event protection falls below desired criterion.
 - 4) Quarterly reporting to California Public Utilities Commission (CPUC) to verify additional measures have been taken.
 - 5) PG&E has worked with the City of Tracy and regulatory officials to develop a safety plan for the pipelines running through the Project site. The additional integrity assessments, safety measures and maintenance frequencies will ensure a higher level of public safety at the Project than required by existing pipeline safety regulations. On December 16, 2004 the Public Utilities Commission accepted this plan in Resolution SU-58.¹

Former Underground Storage Tank (UST)

A former UST reportedly existed south of the concrete building on site. The UST was removed from the site in 1984. However, a database search found no records in regards to the UST and its removal. It is not known what the tank contained or if it had leaked.

Ponding Basin

A small ponding basin, approximately 50 feet by 20 feet in size, is located at the northeast corner of the site and appears to have been used for irrigation purposes. Vegetation was lacking at the bottom of the pond. Empty five-gallon containers and rubbish were observed within the pond. No soil staining was found on the containers and no information was discovered indicating the pond had been used for wastewater disposal. The site had been observed being used only as a duck pond as of 1984, but is currently dry.

Storage Drum

An empty 30-gallon storage drum is located on the east side of the concrete building. The drum was empty with no evidence of soil staining underlying the drum. Hazardous materials were not known to be used at the FAA facility. The environmental concern presented to the site from the drum is considered low.

¹ Source: Emily Barnett, Government Relations Representative with PG&E, Presentation to City of Tracy City Council on March 2, 2005.

4.2 HEALTH HAZARDS/RISK OF UPSET

Stressed Vegetation

The stressed vegetation in the areas surrounding the base of the antennas and support wires could be the result of paving or herbicide use, although no specific information is contained within site records. The presence of residual herbicides could present an environmental concern, considering the proposed use of the site for recreational facilities.

Asbestos Containing Materials

The existing building on-site is a concrete building built between 1952 and 1963. An inspection of the interior of the building was not conducted as part of the site reconnaissance. Given the age of the building, it is conceivable that asbestos containing materials (ACMs) were used in construction. The existence of these ACMs cannot be determined without conducting an asbestos survey.

Adjacent Conditions and Uses

Land uses surrounding the project site include agricultural and industrial uses. The parcels west and north of the site consist of undeveloped agricultural properties. A single rural residential parcel is located south of the site. The Owens Illinois Inc. (Owens-Brockway) glass and recycling plant, the Tracy Peaker Plant and the Tracy Biomass facility are industrial uses located east of the site. A Union Pacific Rail Line, the Delta Mendota and the California Aqueduct run along southern edge of the property.

Owens-Illinois Inc.

The Owens-Illinois Inc. glass plant (Owens-Brockway) is a glass manufacturing facility. Based on the records search for the property, the Owens Illinois Inc. glass plant was listed on the Leaking Underground Storage Tank, Hazardous Air Emissions and RCRA Hazardous Waste Generators listings. The plant has a record of underground storage tanks that have experienced leakage, and a history of air quality violations. However, the facility is currently in compliance with applicable air quality standards. According to the AQCB, the plant is tested biannually and source-tested yearly. Testing reports indicate that hazardous or toxic emissions from this facility are unlikely.

Tracy Biomass Plant

The Tracy Biomass Plant, located immediately northeast of the Owens-Brockway facility, produces electricity from burning biomass fuel in a boiler and is monitored for compliance with applicable standards and regulations. The facility's Risk Management and Prevention Program, on file with the County, indicates that a catastrophic release of ammonia could potentially result in hazardous conditions. Testing reports also indicate, however, that hazardous or toxic emissions from this facility are also unlikely.

Tracy Peaker Plant

The Tracy Peaker Plant is a nominal 169 MW natural gas-fired power plant that began commercial operation on June 1, 2003. It is located on a 10.3-acre fenced site within a 40-acre parcel, approximately 0.6 miles to the southeast of the Biomass Plant. The site also includes an onsite 230-kilovolt (kV) switchyard, an onsite natural gas supply interconnection, and an approximately 1,470-foot water supply pipeline (as measured from the fence line).

Delta Mendota Canal and California Aqueduct

The Delta Mendota Canal (DMC) is located to the south of the project site, and the California Aqueduct is located a few hundred yards south of the DMC. The rail line bisects the canals in this location. The facilities are the main water conveyance facilities of the Central Valley Project, moving large quantities (approximately 10,000 cubic feet per second) of agricultural and municipal water north to south.

Tracy Municipal Airport

The Tracy Municipal Airport is a general aviation facility, located approximately 2.5 miles southeast of the site. This facility is primarily used for business, flight training, and recreational flights. The airport has two active runways, which are classified as visual runways. There is a non-precision approach procedure to the Tracy airport. This designation means that a navigational aid is available together with an FAA approved flight procedure, to assist in landing during low visibility conditions on any runway utilizing a circle-to-land maneuver. The TYSF site does not fall within the Area of Influence of the County Airport Land Use Plan (ALUP).

4.2.2. REGULATORY FRAMEWORK

HAZARDOUS MATERIALS DEFINED

A material is considered hazardous if it appears on a list of hazardous materials prepared by a federal, state, or local agency, or if it has characteristics defined as hazardous by such an agency. A hazardous material is defined in Title 22 of the California Code of Regulations (CCR) as:

a substance or combination of substances which, because of its quantity, concentration, or physical, chemical or infectious characteristics, may either (1) cause, or significantly contribute to, an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness; or (2) pose a substantial present or potential hazard to human health or environment when improperly treated, stored, transported or disposed of or otherwise managed (California Code of Regulations, Title 22, Section 66260. 1 0).

Chemical and physical properties cause a substance to be considered hazardous, including the properties of toxicity, ignitability, corrosivity, and reactivity. Toxicity, ignitability, corrosivity, and reactivity are defined in the CCR, Title 22, Sections 66261.20-66261.24. Factors that influence the health effects of exposure to hazardous material include the dose to which the person is exposed, the frequency of exposure, the exposure pathway, and individual susceptibility.

Hazardous materials are subject to numerous laws and regulations at all levels of government. Most hazardous materials regulation and enforcement in San Joaquin County is managed by the Department of Public Health Services, which refers large cases of hazardous materials contamination or violations to the Central Valley Regional Water Quality Control Board (RWQCB) and the state Department of Toxic Substances Control (DTSC). Additionally, the County Office of Emergency Services (OES) administers the Emergency Planning Community Right to Know program for Tracy. This program requires that any business which stores a quantity of a total volume of 55 gallons or 200 cubic feet or total weight of 50 pounds of hazardous substances at any one time during the year are subject to both state and federal disclosure and emergency planning requirements. It is not at all uncommon for other agencies to become involved when issues of hazardous materials arise such as the San Joaquin Valley Air Pollution

4.2 HEALTH HAZARDS/RISK OF UPSET

Control District (SJVAPCD), and both the federal and state Occupational Safety and Health Administrations (OSHA).

"Hazardous Air Emissions" means emissions into the ambient air of air contaminants, which have been identified as a toxic air contaminant by the State Air Resources Board or by the air pollution control officer for the jurisdiction in which the project is located.

As determined by the air pollution control officer, hazardous air emissions also means emissions into the ambient air from any substance identified in subdivisions (a) to (f), inclusive, of Section 44321 of the Health and Safety Code.

"Hazardous Substance", "Acutely Hazardous Material", "Hazardous Waste" and "Hazardous Waste Disposal Site" follow the definitions of the Health and Safety Code.

CITY GENERAL PLAN

The City of Tracy General Plan contains a Safety Elements, which identifies goals, policies, and action items that relate to environmental conditions that have the potential to adversely impact the community as well as personal safety and management of hazardous materials.

4.2.3. IMPACTS AND MITIGATION MEASURES

STANDARDS OF SIGNIFICANCE

The following thresholds for measuring the project's environmental impacts are based upon the 1999 CEQA Guidelines and the Initial Study prepared for the project. For the purposes of this EIR, impacts are considered to be significant if the following could result from implementation of the proposed Project:

- 1) Create a significant hazard to the public or the environment through the routine transport, use or disposal of hazardous materials;
- 2) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment;
- 3) Expose people or property to hazards, including explosives, canal failure, groundwater contamination, or soil contamination;
- 4) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances or waste within one-quarter mile of an existing or proposed school;
- 5) Impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan; or

METHODOLOGY

The Environmental Services Division of The Twining Laboratories, Inc. (Twining) prepared the Phase I Environmental Site Assessment for the site in 1999, following American Society for Testing and Materials (ASTM) Practice E-1527-97 guidelines. The purpose of the Phase I assessment was to analyze the environmental conditions of the site based on the past and current existence (or absence) of impairments or hazards. The assessment researched past activities, practices, and

materials that are subject to environmental regulation governing contamination of soil and/or groundwater. The scope of the assessment included a reconnaissance of the site and accessible areas within one-quarter mile.

PROJECT IMPACTS AND MITIGATION MEASURES

Pesticides and Potential Soil Contamination

Impact 4.2.1 Development of the Tracy Youth Sports Facility on lands previously utilized for agricultural production could expose people or property to a potential risk associated with soil contamination from pesticides and herbicides. This is considered a **potentially significant** impact.

Prior to 1952, the project site was used for active agriculture. The following pesticides with a history of use in the Tracy area have the greatest potential for being an environmental hazard: Atrazine, Chlordane, DBCP, DDT, Diuron, Silvex, Simazine and Toxaphene. Several of these pesticides have also been identified as having the potential to contaminate groundwater, which include Atrazine, Diuron, Prometon, Simazine, and Tillam. Among the problems that can be caused by the presence of the above-mentioned pesticides are contamination of groundwater, surface water and the degradation of biological resources. These chemicals, although discontinued many years ago, pose a potential threat to the future project population even years after their active use has ceased.

The use of persistent agrochemicals was generally discontinued in the 1970s, and more recent chemicals in use have high rates of degradation and limited half-lives. Because of the potential presence of persistent chemical agents, the potential (although unlikely) exists for detectable concentrations of substances even 52 years later. In some soil samples taken within the City of Tracy, pesticide levels documented in near surface soil have exceeded health risk based exposure levels (Twining Labs, 1999).

Mitigation Measure

MM 4.2.1 Prior to the initiation of grading or site clearing activities, soil sampling and analysis for soil contamination shall be conducted. The results of the soil sampling and analysis shall be incorporated into a soils report submitted to the City for review. Soil sampling shall include the following:

- An agrochemical impact assessment involving recovery of near surface soil samples from selected areas of the property with laboratory analysis for organochlorine pesticides. The sample shall be statistically evaluated to determine the need for further sampling or remediation;
- Documentation that exposed soils do not contain soil contamination in excess of regulatory action levels. If chemicals are detected at concentrations that could pose a health hazard, remediation of the affected areas shall be undertaken prior to construction in accordance with the requirements of the San Joaquin County Department of Public Health Services, and the Regional Water Quality Control Board. Assessments and remediation will be the responsibility of the project sponsors.

Timing/Implementation: Prior to issuance of the first grading permit.

4.2 HEALTH HAZARDS/RISK OF UPSET

Enforcement/Monitoring: City of Tracy, San Joaquin County and CVRWQCB.

Implementation of the above mitigation measure will reduce potential impacts associated with past pesticide use to **less than significant** by mandating compliance with state and local performance standards.

Hazardous Material Exposure

Impact 4.2.2 The potential exists for possible exposure to hazardous materials from the existing concrete building currently located on the project site, a former underground storage tank, underground pipelines crossing the site, and transformers previously existing on site. The presence of such materials is considered a **potentially significant** impact.

One concrete building is located on site. The existing building would be retained and used in conjunction with the corporation yard for the Tracy Youth Sports Facility. Until 1980, numerous types of building materials, such as roofing paper, shingles, drywall, drywall texturing, linoleum, and mastic, contained considerable amounts of asbestos. The building located on the project site was constructed between 1952 and 1963. Given the age of the concrete building, it is conceivable that friable asbestos containing materials were used in its construction.

As previously described, an underground storage tank south of the concrete building was previously in operation on the site until its removal in 1984. Given that this tank was not likely designed to current standards for spill prevention (e.g. double wall with leak detection), there is a potential for subsurface contamination. Records searches have revealed little information about the use of this tank.

Three underground pipelines were identified on the site. Two of these pipes are owned by PG&E and are high-pressure natural gas pipelines. The third pipeline is owned by Chevron Corporation and is an 18-inch pipeline containing crude oil. There are no recorded leaks or spills from these pipelines. However, if undetected leaks have occurred, they may pose a threat to surrounding soil and groundwater.

As discussed in the existing setting, polychlorinated biphenyls (PCBs) may have been used in the former onsite electric transformers as cooling fluid. These electrical transformers appear to have been located on pads adjoining the concrete building. Although no evidence of leakage or spillage from the existing boxes was observed on site, the existence of the transformers may indicate a potential contamination issue.

Mitigation Measure

MM 4.2.2 Prior to the initiation of grading or site clearing activities, a Phase II environmental assessment of the project site shall be conducted. Included in this assessment shall be soil sampling in the vicinity of the underground storage tank, underground pipelines, former transformer location and an interior inspection of the concrete structure conducted by an environmental professional to identify ACMs.

The result of this assessment and analysis shall be incorporated into a report submitted to the City and County for review. If contamination exists at levels that present a health hazard, remediation of the affected areas shall take

place prior to construction in accordance with the requirements of the San Joaquin County Department of Public Health Services and the Regional Water Quality Control Board.

Timing/Implementation: Prior to initiation of grading or site clearing activities.

Enforcement/Monitoring: City of Tracy, San Joaquin County and CVRWQCB.

Implementation of the above mitigation measure will reduce potential soil contamination and asbestos impacts to **less than significant** by providing additional testing for contaminants and demonstrating compliance with state and local performance standards prior to any site grading.

Risk of Upset Hazards

Impact 4.2.3 Development of the site in the vicinity of the two underground natural gas pipelines may expose people to risk of upset conditions associated with a potential natural gas release or explosion. This is considered a **potentially significant** impact.

Two Pacific Gas and Electric (PG&E) pipelines traverse the site from the southeast to northwest, bisecting the site in a diagonal manner. The pipelines are 26-inch (PG&E Line 002) and 36-inch (PG&E Line 401) diameter high-pressure natural gas pipelines. If disturbed during construction activities or in the unlikely event of other accidental rupture, there is a risk of explosion and fire from these lines in a newly populated area.

Mitigation Measures

MM 4.2.3 Prior to the initiation of grading or site clearing activities, the City shall coordinate with PG&E and Chevron representatives to ensure proper information is exchanged and protocols followed so that existing pipelines are not disturbed in accordance with the California Public Utilities Commission ("CPUC") approved Pipeline Safety Plan for the Tracy Youth Sports Facility on December 16, 2004. Digging in the immediate vicinity surrounding the pipeline shall be monitored during construction and the pipeline right of way shall be accurately marked prior to any grading or construction in accordance with the CPUC approved Pipeline Safety Plan for the Tracy Youth Sports Facility on December 16, 2004.

Timing/Implementation: Prior to any grading or construction.

Enforcement/Monitoring: City of Tracy and PG&E.

Implementation of the above mitigation measure will reduce potential risk of upset to **less than significant** by averting the potential for unintentional pipeline disturbance.

Existing Adjacent Industrial Uses

Impact 4.2.4 Existing industrial plants adjacent to the project site store and utilize hazardous materials, which, in the unlikely event of a catastrophic release, could potentially result in hazardous conditions at the project site. This is a **potentially significant** impact.

4.2 HEALTH HAZARDS/RISK OF UPSET

The Federal Resource Conservation and Recovery Act (RCRA) program controls hazardous waste from origin to ultimate disposal. Under RCRA, hazardous wastes are regulated and tracked from the point of generation, through transportation and treatment, to storage and disposal or destruction. Adjacent industrial users are subject to this program.

The San Joaquin Valley Air Pollution Control District utilizes the Facility Prioritization Guidelines (July 1990) to establish the priority for health risk assessment according to the following variables: emissions quantity released by the facility, the potency or toxicity of these emissions, and the proximity of potential receptors. Both the Owens-Brockway and Tracy Biomass Plant are categorized as having "intermediate" prioritization, meaning that no health risk assessment is deemed necessary. It is important to note that the "intermediate" categorization refers to prioritization for performing a health risk assessment, and not to actual risk from facility emissions.

As described within the existing setting, the Owens-Brockway glass plant was listed on the Leaking Underground Storage Tank, Hazardous Air Emissions and RCRA Hazardous Waste Generators listings. Review of records regarding the USTs at the SJCEHD indicated that two USTs were removed from the facility in 1986. Soil samples underlying the USTs indicated that lead and petroleum product constituent levels are currently below regulatory action levels. The investigation of the USTs was closed in 1997. In addition, a diesel spill occurred at the plant in September 1997. The impacted soil was excavated, manifested and removed. No further pertinent information regarding leaking USTs at this facility was found, and off-site USTs would not have an impact at the project site.

In terms of air emissions, the plant is currently in compliance with applicable air quality standards, although they have experienced permit violations in the past. According to Craig Mitchell with the AQCB (March 1997), the plant is tested biannually and source-tested yearly. Testing reports indicate that hazardous or toxic emissions from this facility are unlikely and that nitrogen dioxide, sulfur dioxide, carbon monoxide, volatile compounds and particulate matter emissions are all below federal and state standards (based upon the AQCB's model of the plant's emissions).

The Tracy Biomass Plant, directly north of Owens-Brockway, is a power plant that produces electricity from burning biomass fuel in a boiler. Several hazardous chemicals, including ammonia and sulfuric acid are stored onsite. The facility has a Risk Management and Prevention Program (RMPP) on file with the County that indicates if a catastrophic release of ammonia were to occur, potentially hazardous conditions at the site could exist. Appropriate safety measures are in place pursuant to the RMPP, and the probability of such a release is considered unlikely.

The Tracy Peaker Plant, southeast from the Biomass power plant is also a power plant. It received approval from the California Energy Commission and the San Joaquin Valley Air Pollution Control District and went on line in June 2003. The plant uses two natural gas fired combustion turbine generators (CTG) operating in simple-cycle mode. The combustion turbines use a dry-low nitrogen oxide (NOx) combustion system to minimize air emissions. The plant utilizes an evaporative cooling system on the inlet air for use at higher ambient temperatures. It is powered by natural gas is supplied by Pacific Gas & Electric Company via an outside interconnection with an existing transmission pipeline.

Despite the unlikely occurrence of an uncontrolled or catastrophic release at any plant, however, project design and response measures should be employed to minimize the potential for impacts to the Tracy Youth Sports Facility and its users.

Mitigation Measures

MM 4.2.4 The City shall prepare an emergency response plan applicable to all Tracy Youth Sports Facility uses. Such a plan should include emergency evacuation routes and general information regarding the relative risk and activities of neighboring industries. The Plan should be prepared with input and coordination from Tracy Peaker Plant, Owens-Brockway, Tracy Biomass, Tracy Fire Department and the County Office of Emergency Services (OES).

Timing/Implementation: Prior to any grading or construction.

Enforcement/Monitoring: City of Tracy.

Implementation of the above mitigation measure will reduce potential impacts associated with adjacent industrial uses to a **less than significant** level by establishing proper response procedures in the unlikely event of a hazardous emissions release.

Canal Failure

Impact 4.2.5 The relative risk of flooding from failure of the Delta Mendota Canal could result in adverse environmental impacts to the TYSF project site. This is considered to be a **less than significant** impact.

The Delta Mendota Canal is located to the south of the project site, carrying up to 10,000 cfs and storing approximately 4 acre feet of water for every 100 feet of linear canal distance. The issue of concern is that, during a seismic event, the water within the canal has a potential to flood the subject site due to canal failure or as a result of oscillations within the canal known as seiche. However, there is no historic record of a catastrophic occurrence or break in the California Aqueduct or Delta Mendota Canal and therefore this impact is considered to be **less than significant**.

Mitigation Measure

None required.

Airport Operations

Impact 4.2.6 The TYSF project site is not located within the Area of Influence, as indicated in the County's Airport Land Use Plan (ALUP). The effects of the airport relative to safety are therefore considered **less than significant**.

The nearest airport, the Tracy Municipal Airport, is located approximately 2.5 miles southeast of the site. The airport is used as a general aviation facility. The TYSF project site is not located within the Area of Influence and therefore is considered a **less than significant** impact.

Mitigation Measure

None required.

4.2 HEALTH HAZARDS/RISK OF UPSET

Railroad Operations

Impact 4.2.7 The TYSF project site is located adjacent to a Southern Pacific rail line and could result in impacts to rail operations. This would be a **less than significant** impact.

A Southern Pacific rail line runs along the southeast edge of the TYSF project site. This line is an east-west track used primarily for freight. The Public Utilities Commission is responsible for regulating any hazardous materials transported by rail. The rail line is approximately level at this location. Given that there are no existing or proposed at-grade rail crossings at the TYSF project location and that the project site will be fenced, hazards associated with the rail line are considered **less than significant**.

Mitigation Measure

None required.

Transportation and Handling of Hazardous Materials

Impact 4.2.8 The TYSF project would include the limited transportation, handling, and use of hazardous materials that could result in adverse environmental impacts. This is considered a **less than significant** impact.

The proposed project would include the use of hazardous materials in both the construction and operational phases of the development. During the construction phase and site preparation, construction equipment and other activities would involve the transport and use of hazardous materials. The majority of hazardous materials would be associated with the proposed sport fields operations of the project. Additionally, the hazardous materials used during the construction phase of the project must comply with federal, state and local regulations regarding the handling and transportation of such materials. Therefore, this impact is considered **less than significant**.

Mitigation Measures

None required.

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- United States Department of Justice. 1997. *Northern California Service Processing Center, Draft Environmental Impact Statement*. August, 1997.
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4.3 Traffic and Circulation

The Traffic and Circulation Section analyzes traffic impacts associated with development of the Tracy Youth Sports Facility. The traffic analysis provided in this section is based on the Tracy Youth Sports Facility Analysis prepared by TJKM Transportation Consultants, 2004. A copy of the Tracy Youth Sports Facility Traffic Analysis Report is provided in the Technical Appendices.

4.3.1. EXISTING SETTING

The project site is located on the south of Schulte Road, approximately half a mile east of Hansen Road and one mile west of Lammers Road in the City of Tracy. The proposed project site is approximately 200 acres, which includes 150 acres of field sports facilities and 50 acres of general park/recreational area. The project site and its vicinity are shown in **Figure 4.3-1**. The project site access and circulation plan is shown on **Figure 4.3-2**.

ROADWAY SYSTEM

The project site and surrounding study area are illustrated in **Figure 4.3-1** and the important roadways serving the project site are discussed below.

Interstate 205 is an east west freeway located just south of the project site and on the northern side of the City of Tracy. It provides access to Tracy and to the greater San Francisco Bay Area and Silicon Valley job centers to the west.

Corral Hollow Road is a major north-south arterial that connects to Grant Line Road to the north and 11th Street in the south. Both Grant Line Road and 11th Street provide access to I-205 freeway. In the vicinity of the project area, Corral Hollow Road is a four-lane road with landscape median. The area is generally a residential community.

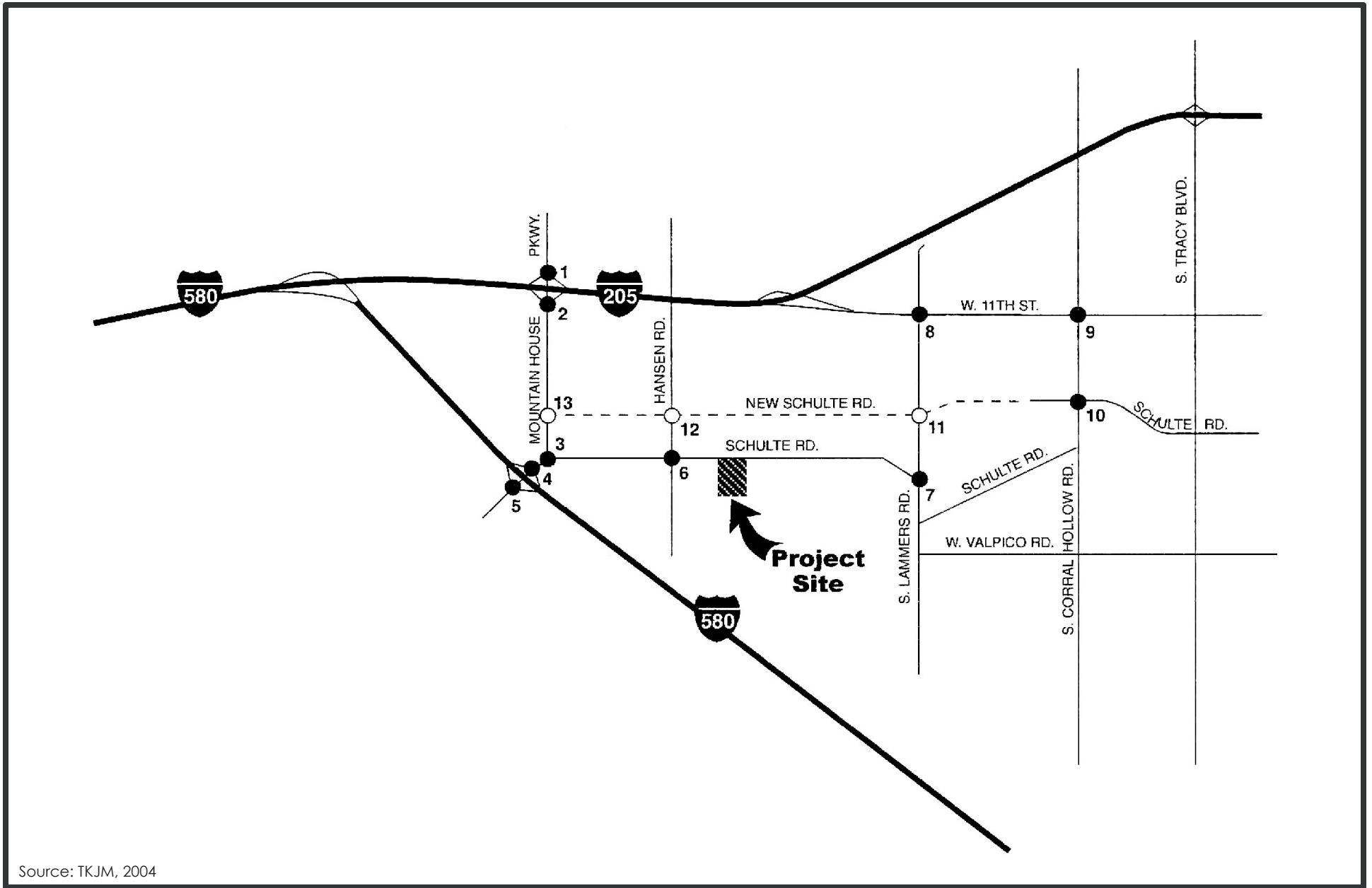
Mountain House Parkway is a north-south two to four lane arterial, which has interchanges at I-205 and I-580. The roadway is fronted mainly by commercial and industrial land uses.

Lammers Road is a two-lane roadway that runs north and south. The roadway is fronted mainly by industrial land use on the east side and residential land use on the west side.

Schulte Road is a discontinuous east-west roadway and the project site is located just south of Schulte Road, west of Lammers Road. From Chrisman Road to Corral Hollow Road, Schulte Road is four lanes wide with primarily residential land uses fronting it. From Lammers Road to Patterson Pass Road, Schulte Road is primarily two lanes wide with agricultural uses fronting it.

Old Schulte Road is a two-lane east-west road currently providing a connection between the eastern and western portion of Schulte Road. Fronting land uses on Old Schulte Road are primarily agriculture.

Tracy Boulevard is a four-lane arterial from I-205 to Linne Road. It has been widened on the west side from Vaplico Road to Linne Road. It is located to the west of the project site.



Source: TKJM, 2004

FIGURE 4.3-1
VICINITY MAP

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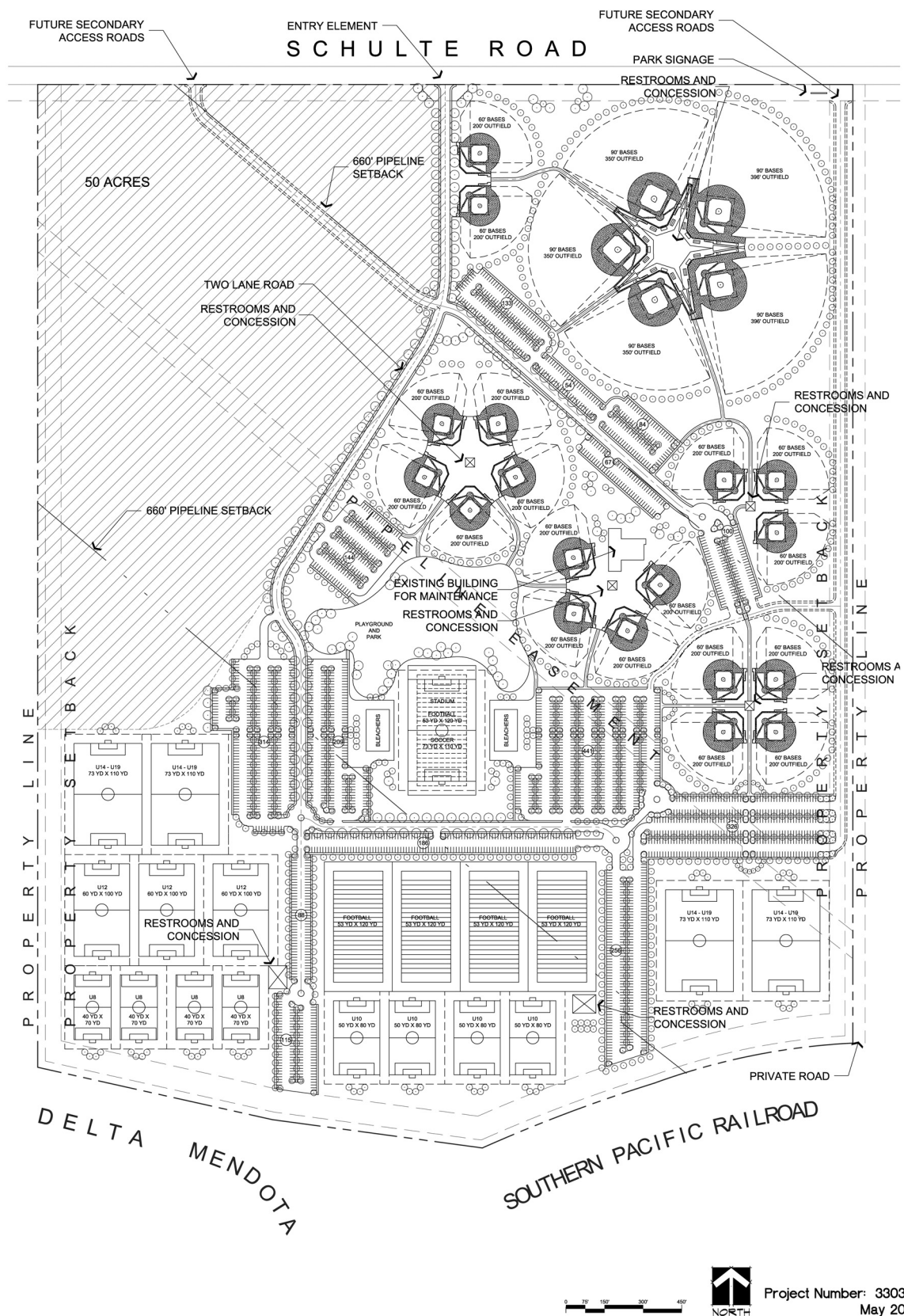


FIGURE 4.3-2
PREFERRED PLAN, TRACY YOUTH SPORTS COMPLEX

4.3 TRAFFIC AND CIRCULATION

TRAFFIC CONDITIONS AND OPERATIONS

Intersection Level of Service Analysis

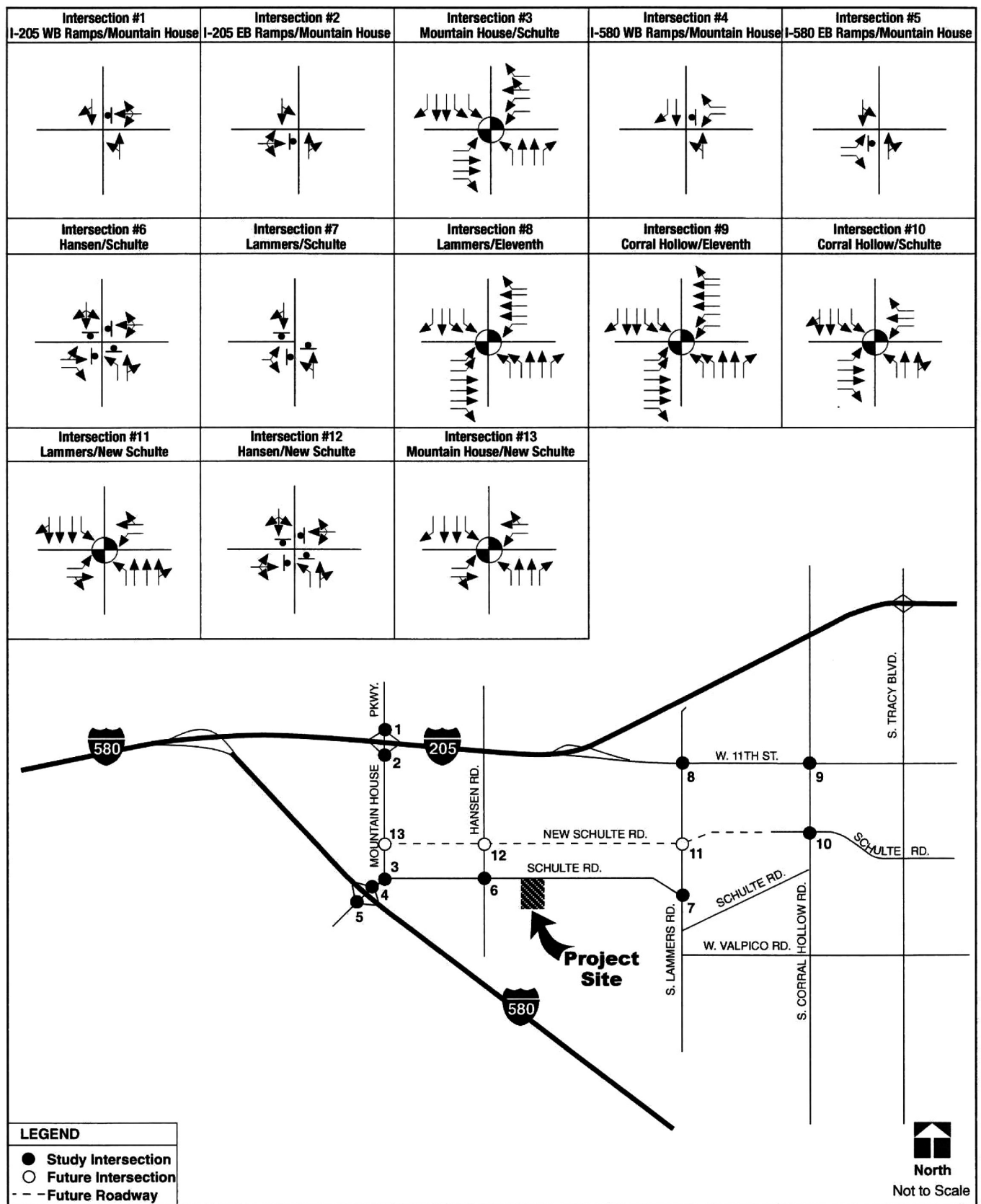
Segment counts were conducted on Schulte Road west of Lammers Road between 3/17/2004 (Wednesday) and 3/21/2004 (Sunday). On a typical weekday, the average daily traffic on Schulte Road west of Lammers Road was estimated to be 11,990 vehicles per day (vpd). The average daily traffic on Schulte Road west of Lammers Road was estimated to be 4,140 vehicles per day (vpd). Thus, segment counts show that the traffic volumes are generally higher on the weekday compared to the weekend. The trip generation for the proposed Youth Sports Park would most likely be peaking during the morning and early afternoon of a Saturday or during the evening of a typical weekday. Therefore, the worst-case scenario is expected to be the weekday p.m. peak hour when the streets are expected to be relatively busy with the peak trip generation from the proposed Youth Sports Park in use. Based on the rationale explained above, the intersection analysis was completed only for the weekday p.m. peak hour traffic conditions.

The existing p.m. peak hour traffic volume counts were conducted at the ten study intersections by TJKM during January and February of 2004. **Figure 4.3-3** illustrates the existing intersection lane configurations/geometry for ten study intersections and the assumed lane configurations/geometry for the three future study intersections. **Figure 4.3-4** shows the current p.m. peak hour turning movement volumes at the ten study intersections. Under the existing conditions, all the ten study intersections are expected to operate at acceptable levels of service or better except for the intersection of Mountain House Parkway/I-580 Eastbound Ramps, which operates at LOS E during the p.m. peak hour. Signalizing the intersection is expected to improve the service level to LOS B during the p.m. peak hour under existing conditions. All study intersections are in San Joaquin County with the exception of Corral Hollow Road/11th Street and Corral Hollow Road/Schulte Road.

The study intersections in the project vicinity are as follows:

- Mountain House Parkway/ I-205 Westbound Ramps (One-way Stop)
- Mountain House Parkway/ I-205 Eastbound Ramps (One-way Stop)
- Mountain House Parkway/Schulte Road (Signal)
- Mountain House Parkway/ I-580 Westbound Ramps (One-way Stop)
- Mountain House Parkway/ I-580 Eastbound Ramps (One-way Stop)
- Hansen Road/Schulte Road (Four-way Stop)
- Lammers Road/Schulte Road (Three-way Stop)
- Lammers Road/11th Street (Signal)
- Corral Hollow Road/11th Street (Signal)
- Corral Hollow Road/Schulte Road (Signal)
- Lammers Road/New Schulte Road (Future Signal)
- Hansen Road/New Schulte Road (Future Four-way Stop)
- Mountain House Parkway/New Schulte Road (Future Signal)

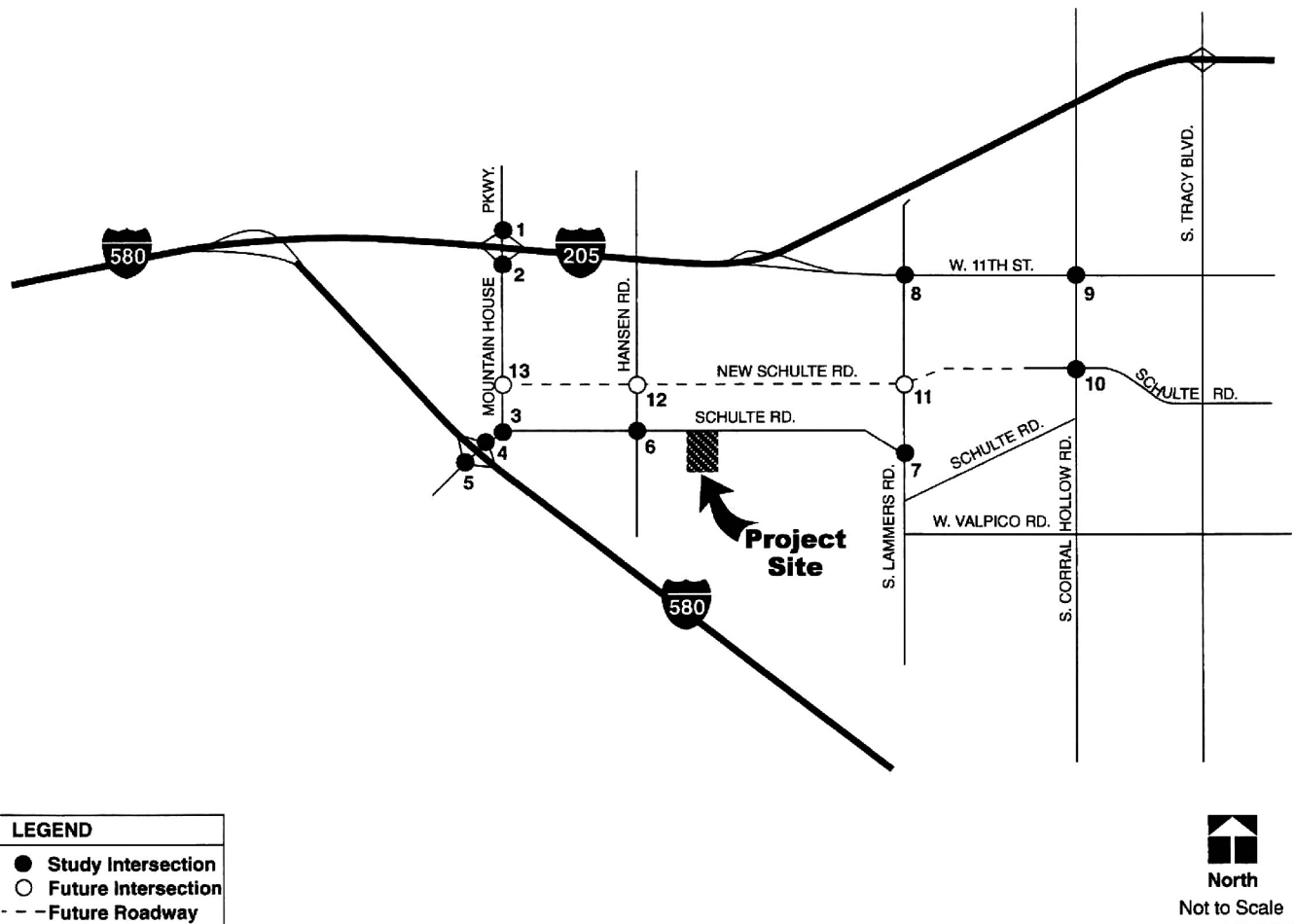
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Source: TKJM, 2004

FIGURE 4.3-3
INTERSECTION LANE CONFIGURATIONS

| Intersection #1 I-205 WB Ramps/Mountain House | Intersection #2 I-205 EB Ramps/Mountain House | Intersection #3 Mountain House/Schulte | Intersection #4 I-580 WB Ramps/Mountain House | Intersection #5 I-580 EB Ramps/Mountain House |
|--|--|---|--|--|
| | | | | |
| Intersection #6 Hansen/Schulte | Intersection #7 Lammers/Schulte | Intersection #8 Lammers/Eleventh | Intersection #9 Corral Hollow/Eleventh | Intersection #10 Corral Hollow/Schulte |
| | | | | |



Source: TKJM, 2004

FIGURE 4.3-4
EXISTING PM PEAK HOUR TURNING MOVEMENT VOLUMES

Level of Service Criteria

Transportation engineers and planners commonly use a grading system called level of service (LOS) to measure and describe the operational status of the local roadway network. LOS is a description on the quality of a roadway facility's operation, ranging from LOS A (indicating free-flow traffic conditions with little or no delay) to LOS F (representing over-saturated conditions where traffic flows exceed design capacity, resulting in long queues and delays).

Unsignalized Intersections

For unsignalized (all-way stop-controlled and side-street stop-controlled) intersections, the 2000 Highway Capacity Manual (Transportation Research Board, National Research Council) methodology for unsignalized intersections was utilized. For side-street stop-controlled intersections, operations are defined by the average control delay per vehicle (measured in seconds), with delay typically represented for each movement. For all-way, stop-controlled intersections, operations are defined by the average control delay for the entire intersection (measured in seconds per vehicle). The delay at an unsignalized intersection incorporates delay associated with deceleration, acceleration, stopping, and moving up in the queue. **Table 4.3-1** summarizes the relationship between delay and LOS for unsignalized intersections.

Signalized Intersections

The 2000 Highway Capacity Manual methodology was also utilized for signalized intersections. With this methodology, operations are defined by the average control delay per vehicle (measured in seconds). For a signalized intersection, control delay is the portion of the total delay attributed to traffic signal operation. This includes delay associated with deceleration, acceleration, stopping, and moving up in the queue. **Table 4.3-2** summarizes the relationship between delay and LOS for signalized intersections.

TABLE 4.3-1
UNSIGNALIZED INTERSECTION LOS CRITERIA

| Level of Service | Description | Average Control Delay (Seconds Per Vehicle) |
|------------------|--|--|
| A | Little or no delays | < 10.0 |
| B | Short traffic delays | 10.1 to 15.0 |
| C | Average traffic delays | 15.1 to 25.0 |
| D | Long traffic delays | 25.1 to 35.0 |
| E | Very long traffic delays | 35.1 to 50.0 |
| F | Extreme traffic delays with intersection capacity exceeded | > 50.0 |

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

4.3 TRAFFIC AND CIRCULATION

TABLE 4.3-2
SIGNALIZED INTERSECTION LOS CRITERIA

| Level of Service | DESCRIPTION | Average Control Delay (Seconds Per Vehicle) |
|------------------|---|---|
| A | Operations with very low delay occurring with favorable progression and/or short cycle length. | < 10.0 |
| B | Operations with low delay occurring with good progression and/or short cycle lengths. | 10.1 to 20.0 |
| C | Operations with average delays resulting from fair progression and/or longer cycle lengths. Individual cycle failures begin to appear. | 20.1 to 35.0 |
| D | Operations with longer delays due to a combination of unfavorable progression, long cycle lengths, or high V/C ratios. Many vehicles stop and individual cycle failures are noticeable. | 35.1 to 55.0 |
| E | Operations with high delay values indicating poor progression, long cycle lengths, and high V/C ratios. Individual cycle failures are frequent occurrences. This is considered to be the limit of acceptable delay. | 55.1 to 80.0 |
| F | Operation with delays unacceptable to most drivers occurring due to over saturation, poor progression, or very long cycle lengths. | > 80.0 |

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

Existing Transit Services

Transit service in the area is provided by the San Joaquin Regional Transit District's SMART Transit Service, the Tracy Hopper, and the Tracy Tracer. Bus stops are provided on Corral Hollow Road, Eleventh Street, Schulte Road, and Valpico Road. Interregional service is provided at the Tracy Park-and-Ride lots. Transit service does not currently serve the project site.

Existing Bicycle and Pedestrian Facilities

A Class I (physically separated) bike path is provided in the study area along portions of Sycamore Parkway, Schulte Road, and Corral Hollow Road. Class II (signed and striped bicycle lanes) bicycle paths are provided on sections of Lammers Road, Corral Hollow Road, Eleventh Street, Tracy Boulevard, and MacArthur Drive in the study area.

Table 4.3-3 summarizes the results of the intersection level of service analysis for existing conditions.

Existing Traffic Conditions

Existing (without Project) Traffic Conditions

The existing p.m. peak hour traffic volume counts were conducted at the ten study intersections by TJKM during January and February of 2004. **Figure 4.3-3** illustrates the existing intersection lane configurations/geometry for the ten existing study intersections (and the assumed lane configurations/geometry for the three future study intersections. These future intersections are further discussed later in this section). **Figure 4.3-3** shows the current p.m. peak hour turning movement volumes at the ten study intersections.

Currently, all ten study intersections operate at acceptable level of service (LOS) during the p.m. peak hour, except for the intersection of Mountain House Parkway/I-580 Eastbound Ramps, which operates at LOS E. **Table 4.3-3** summarizes the results of the intersection level of service analysis for existing conditions.

TABLE 4.3-3
INTERSECTION LEVELS OF SERVICE EXISTING CONDITIONS (WITHOUT PROJECT)

| Intersection | Control | P.M. Peak Hour | |
|---|----------------|----------------------|----------------|
| | | Delay | LOS |
| 1. Mountain House Pkwy/I-205 WB Ramps | One-Way STOP | 4.1 (16.1) | A (C) |
| 2. Mountain House Pkwy/I-205 EB Ramps | One-Way STOP | 6.1 (16.1) | A (C) |
| 3. Mountain House Pkwy/Schulte Rd | Signal | 24.8 | C |
| 4. Mountain House Pkwy/I-580 WB Ramps | One-Way Stop | 1.1 (14.8) | A (B) |
| 5. Mountain House Pkwy/I-580 EB Ramps | One-Way Stop | 13.7 (46.3) | B (E) |
| –With Mitigation | Signal | 16.3 | B |
| 6. Hanson Rd/Schulte Rd | Four-Way Stop | 14.0 | B |
| 7. Lammers Rd./Schulte Rd. | Three-Way Stop | 11.7 | B |
| 8. Lammers Rd | Signal | 16.9 | B |
| 9. Corral Hollow Rd./11 th St. | Signal | 32.5 | C |
| 10. Corral Hollow Rd./Schulte Rd. | Signal | 29.9 | C |

Notes: LOS = Level of Service

X.X (X.X) = Overall intersection delay (minor approach delay) in seconds per vehicle

Delay = Average stopped delay at signalized intersections and average delay for all movements at Stop controlled intersections. Values in parenthesis indicated average delay for the critical movement at One-and Two-Way STOP-controlled intersections.

4.3.2. REGULATORY FRAMEWORK

CITY GENERAL PLAN

The following City of Tracy General Plan policies are applicable to the project:

- **Policy CI 2.3:** Levels of Service should meet the City standard on major streets and intersections within the General Plan Area.
- LOS C within existing Tracy City limits and future streets. This includes the following study intersections:
 - Lammers Road/11th Street,
 - Corral Hollow Road/11th Street,
 - Corral Hollow Road/Schulte Road.

4.3 TRAFFIC AND CIRCULATION

- LOS D on streets and at intersections within one-quarter (1/4) mile of any freeway, to prevent Tracy streets from becoming attractive detours for inter-regional travel¹. This includes the following study intersections:
 - Mountain House Parkway/I-205 Eastbound Ramps,
 - Mountain House Parkway/I-205 Westbound Ramps,
 - Mountain House Parkway/I-580 Eastbound Ramps,
 - Mountain House Parkway/I-580 Westbound Ramps,
 - Mountain House Parkway/Schulte Road,
 - Hansen Road/Schulte Road,
 - Lammers Road/Schulte Road.
- **Action CI 2.3.3:** Require site-specific and impact area traffic studies for all major developments to determine the potential to exceed acceptable Levels of Service.
- **Action CI 2.3.4:** Require developers to implement the mitigation measures identified in site-specific traffic studies, in addition to making contributions to the city-wide systems through traffic impact fees or other area-wide assessment.

COUNTY OF SAN JOAQUIN

The following San Joaquin County Measure K Ordinance and Expenditure Plan is applicable to the project:

Measure K is the 1/2-cent sales tax dedicated to transportation projects in San Joaquin County. The program is aimed at remedying the existing over \$1.0 billion deficiency in transportation funding in San Joaquin County while promoting improved air quality and quality of life. With its passage in November 1990, Measure K began laying the groundwork for two decades of funding for a system of improved highways and local streets, new passenger rail service, regional and interregional bus routes, park-and-ride lots, new bicycle facilities, and railroad crossings. In its 20-year life, the Measure K program is expected to generate approximately \$735 million in revenues. The Measure K program is administered by the San Joaquin Council of Governments (SJCOG) as the Local Transportation Authority for San Joaquin County.

¹ The LOS for intersections that are not within the City is LOS D. There is the same LOS established in the San Joaquin County General Plan.

4.3.3 TRAFFIC IMPACT ANALYSIS

SIGNIFICANCE CRITERIA

The impact analysis provided below is based on the following State CEQA Guidelines Appendix G:

- a) Cause an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume-to-capacity ratio on roads, or congestion at intersections).
- b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways.
- c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks.
- d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).
- e) Result in inadequate emergency access.
- f) Result in inadequate parking capacity.
- g) Conflict with adopted policies, plans or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks).

Conditions without and with the project have been compared to identify significant impacts according to the following criteria specific to the project area:

- 1) If a facility is projected to operate acceptably (i.e., LOS E or better) without the project and the project is expected to cause the facility to operate at an unacceptable LOS, the impact is considered significant under thresholds of significance (a) and (b) above.
- 2) If a facility is projected to operate unacceptably (i.e., LOS F) without the project, and the project is expected to cause an increase in delay (volume-to-capacity ratio increase of 0.05 or greater for roadway segments and signalized intersections or an increase in delay of 5 seconds or greater at a movement or approach at an unsignalized intersections that meets signal warrants), the impact is considered significant under thresholds of significance (a) and (b) above.
- 3) Failure to comply with the transportation and circulation policies and standards of the City of Tracy, Caltrans, and San Joaquin County would result in a significant impact under thresholds of significance (f) and (g) above. In addition, the project is considered to have a significant effect on bike and pedestrian facilities if it would result in adverse effects to existing bikeways or pedestrian facilities that would discourage their use and result in safety issues (thresholds of significance (d) and (g) above).

The City of Tracy 2010 General Plan specifies minimum acceptable level of service standards. For City roadways and intersections, the minimum standard is LOS C. However, within the City of Tracy sphere of influence, the City has adopted LOS D as the standard for roadways and intersections within ¼-mile of a freeway.

4.3 TRAFFIC AND CIRCULATION

Based on the above criteria, the minimum acceptable LOS standard for the intersections was assumed to be LOS C for the intersections of Hansen Road/Schulte Road, Lammers Road/Schulte Road, Corral Hollow Road/11th Street, Corral Hollow Road/Schulte Road and LOS D for the intersections of Mountain House Parkway/I-205 Eastbound Ramps, Mountain House Parkway/I-205 Westbound Ramps, Mountain House Parkway/I-580 Eastbound Ramps, I-580 Westbound Ramps, Mountain House Parkway/Schulte Road, and Lammers Road/11th Street. A project that causes a roadway facility to fall below these thresholds is considered to significantly impact the facility. Mitigation measures must be identified for any impacted facility.

METHODOLOGY AND RESULTS

Assumptions

The proposed project is a multi-activity youth park and a recreational facility located along the south side of Schulte Road, approximately one mile west of Lammers Road and the westerly City limits of Tracy. The proposed project consists of multi-purpose ball fields, general recreation and picnic facilities and support elements such as parking and sports lighting. The traffic analysis will focus primarily on field sports, including baseball, softball, football and soccer. The project site is proposed to have three project driveways along Schulte Road.

The Existing plus Project scenario adds traffic from the proposed project to existing traffic. The proposed project is assumed to be built in two phases. Therefore, the Existing plus Project scenario is analyzed as two separate scenarios: Existing plus Phase I project, and Existing plus Phase I plus Phase II project Conditions.

The following assumptions as to the numbers of players, spectators and concurrent game overlap are based on conversations with City of Tracy Parks and Community Services Director and Beals Sports. The City Engineer established the vehicle occupancy rate of 4 persons per vehicle.

Level of Service Analysis

The level of service measurement is a qualitative description of traffic operating conditions including expected traffic conflicts and delay. Levels of service describe these conditions in terms of such factors as speed, travel time, delays, and freedom to maneuver, traffic interruptions, comfort, convenience and safety. Levels of service are given letter designations ranging from A to F. Level of Service (LOS) A indicates free-flow conditions with little or no delay and LOS F indicates congested conditions with excessive delays and long backups. Various methodologies are used to determine levels of service at specific roadway facilities, including signalized and unsignalized intersections, rural two-lane and multi-lane highways, urban arterials and freeways.

Unsignalized study intersections were evaluated using the appropriate methodologies for One-, Two- and All-Way STOP-controlled intersections contained in the *2000 Highway Capacity Manual*.¹ These methodologies report peak hour operating conditions as the control delay (length of time a vehicle waits to pass through the intersection from the end of a queue) for all vehicles entering the intersection. The control delay is also reported for only those critical movements subject to delay (stopping and yielding movements).

Signalized intersections were evaluated using the corresponding methodology contained in the *2000 Highway Capacity Manual*. This methodology reports peak hour operating conditions as the control delay for all vehicles entering the intersection.

Existing (without Project) Traffic Conditions

As discussed above in the Existing Setting section, all ten study intersections currently operate at acceptable level of service (LOS) during the p.m. peak hour, except for the intersection of Mountain House Parkway/I-580 Eastbound Ramps, which operates at LOS E (see Figure 4.3-3 and Table 4.3-3 above).

Recommendations

Signalizing the intersection is expected to improve the service level to LOS B during the p.m. peak hour under existing conditions.

Existing plus Project (Phase I) Traffic Conditions

Figures 4.3-5 and 4.3-6 show the Existing plus Phase I project, and Existing plus Phase I plus Phase II project p.m. peak hour traffic volume projections at the study intersections. **Tables 4.3-4 and 4.3-5** summarize the intersection levels of service under Existing plus Phase I project and Existing plus Phase I plus Phase II project scenarios.

Under Existing plus Phase I project Conditions, all ten study intersections are expected to operate acceptably during the p.m. peak hour, except for the intersection of Mountain House Parkway/I-580 Eastbound Ramps, which is expected to continue to operate at LOS E and currently meets rural peak hour signal warrants.

TABLE 4.3-4
EXISTING PLUS PHASE I PROJECT INTERSECTION LEVELS OF SERVICE

| Intersection | Control | P.M. Peak Hour | |
|---|----------------|----------------------|----------------|
| | | Delay | LOS |
| 1. Mountain House Pkwy./I-205 WB Ramps | One-Way STOP | 4.2 (18.0) | A (C) |
| 2. Mountain House Pkwy./I-205 EB Ramps | One-Way STOP | 6.4 (18.3) | A (C) |
| 3. Mountain House Pkwy./Schulte Rd. | Signal | 26.4 | C |
| 4. Mountain House Pkwy./I-580 WB Ramps | One-Way Stop | 1.2 (12.0) | A (B) |
| 5. Mountain House Pkwy./I-580 EB Ramps | One-Way Stop | 17.5 (46.6) | C (E) |
| –With Mitigation | Signal | 16.7 | B |
| 6. Hansen Rd./Schulte Rd. | Four-Way Stop | 16.9 | C |
| 7. Lammers Rd./Schulte Rd. | Three-Way Stop | 23.1 | C |
| 8. Lammers Rd./11 th St | Signal | 21.0 | C |
| 9. Corral Hollow Rd./11 th St. | Signal | 32.7 | C |
| 10. Corral Hollow Rd./Schulte Rd. | Signal | 30.2 | C |

Notes: LOS = Level of Service

X.X(X.X) = Overall intersection delay (minor approach delay) in seconds per vehicle

Delay = Average stopped delay at signalized intersections and average delay for all movements at Stop controlled intersections. Values in parenthesis indicated average delay for the critical movement at One- and Two-Way STOP controlled intersections.

4.3 TRAFFIC AND CIRCULATION

Recommendations

Signalizing the intersection of Mountain House Parkway/I-580 Eastbound Ramps (same mitigation as Existing Conditions) is expected to improve the LOS to B during the p.m. peak hour under Existing plus Phase I project Conditions. Signalizing this intersection will improve the LOS to B during the p.m. peak hour for Existing and Existing plus phase I Conditions. It is important to note that the LOS E or worse conditions and the need for signalization occur with or without the addition of project traffic. Alternatively, since no improvements are currently proposed at the interchange of Mountain House Parkway /I-580, and future development is in the beginning planning stages with developments such as Cordes Ranch and others, signalizing the intersection of Mountain House Parkway/I-580 Eastbound Ramps could potentially become a throw away improvement when more development occurs and widening of the interchange and possibly the addition of Loop Ramps are needed. Therefore, an alternative mitigation to signalization would be to make Mountain House Parkway/I-580 Eastbound Ramps an all-way stop controlled intersection, which would improve its operation to LOS B.

Existing plus Project (Phase I plus Phase II) Traffic Conditions

Under Existing plus Phase I plus Phase II project Conditions, all ten study intersections are expected to continue to operate at acceptable levels of service except for the intersections of Mountain House Parkway/I-580 Eastbound Ramps, Hansen Road/Schulte Road, and Lammers Road/Schulte Road, which are expected to operate at LOS F, LOS E, and LOS F, respectively.

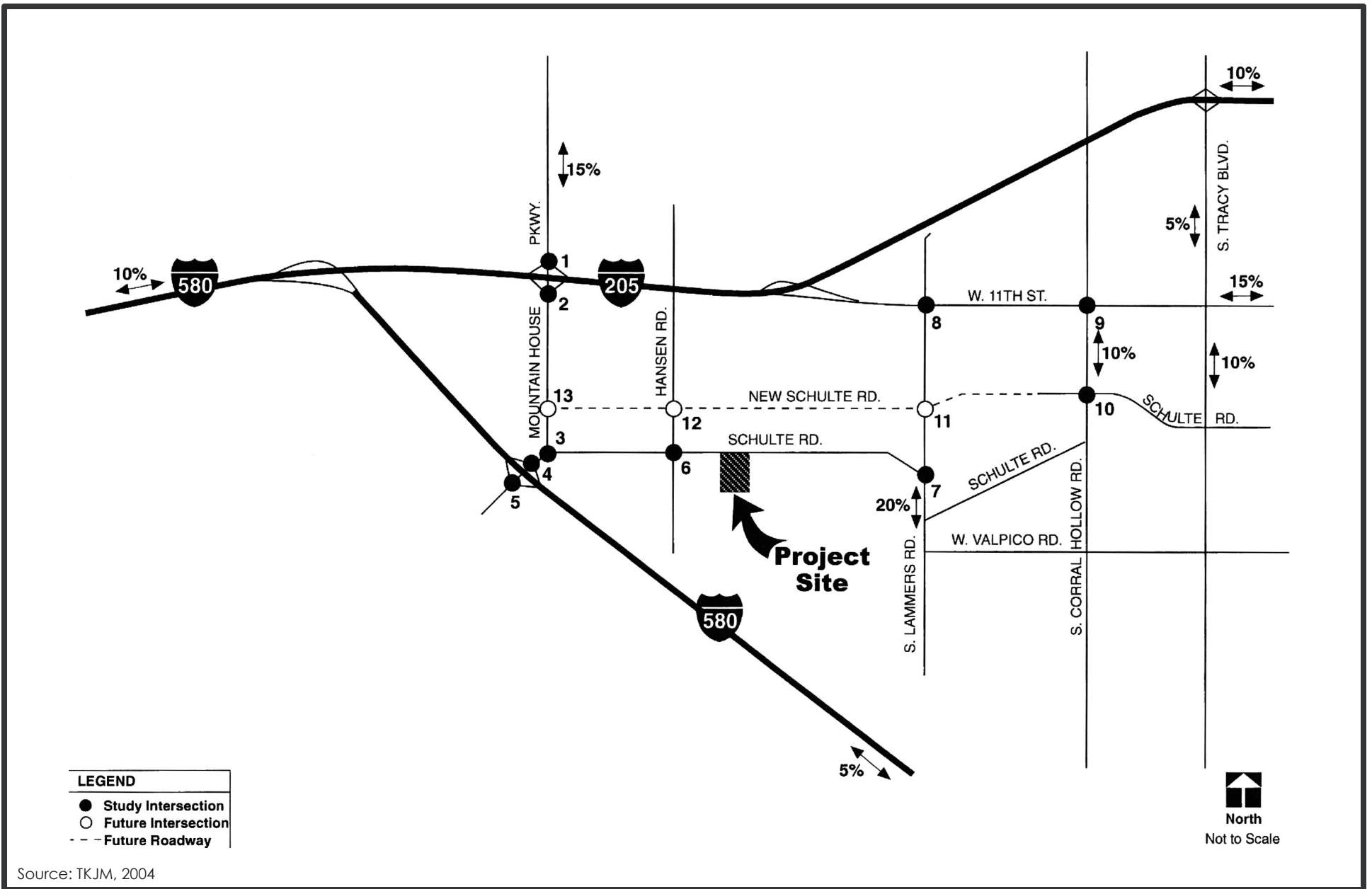
TABLE 4.3-5
EXISTING PLUS PHASE I PLUS PHASE II PROJECT INTERSECTION LEVELS OF SERVICE

| Intersection | Control | P.M Peak Hour | |
|---|----------------|---------------|-------|
| | | Delay | LOS |
| 1. Mountain House Pkwy./I-205 WB Ramps | One-Way STOP | 4.8 (24.6) | A (C) |
| 2. Mountain House Pkwy./I-205 EB Ramps | One-Way STOP | 7.8 (26.6) | A (D) |
| 3. Mountain House Pkwy./Schulte Rd. | Signal | 29.7 | C |
| 4. Mountain House Pkwy./I-580 WB Ramps | One-Way Stop | 1.5 (14.8) | A (B) |
| 5. Mountain House Pkwy./I-580 EB Ramps | One-Way Stop | 33.8 (90.7) | D (F) |
| –With Mitigation | Signal | 17.6 | B |
| 6. Hansen Rd./Schulte Rd. | Four-Way Stop | 35.5 | E |
| –With Mitigation | Four-Way Stop | 12.0 | B |
| 7. Lammers Rd./Schulte Rd. | Three-Way Stop | 185.1 | F |
| –With Mitigation | Signal | 21.6 | C |
| 8. Lammers Rd./11 th St. | Signal | 34.7 | C |
| 9. Corral Hollow Rd./11 th St. | Signal | 33.5 | C |
| 10. Corral Hollow Rd./Schulte Rd. | Signal | 30.2 | C |

Notes: LOS = Level of Service

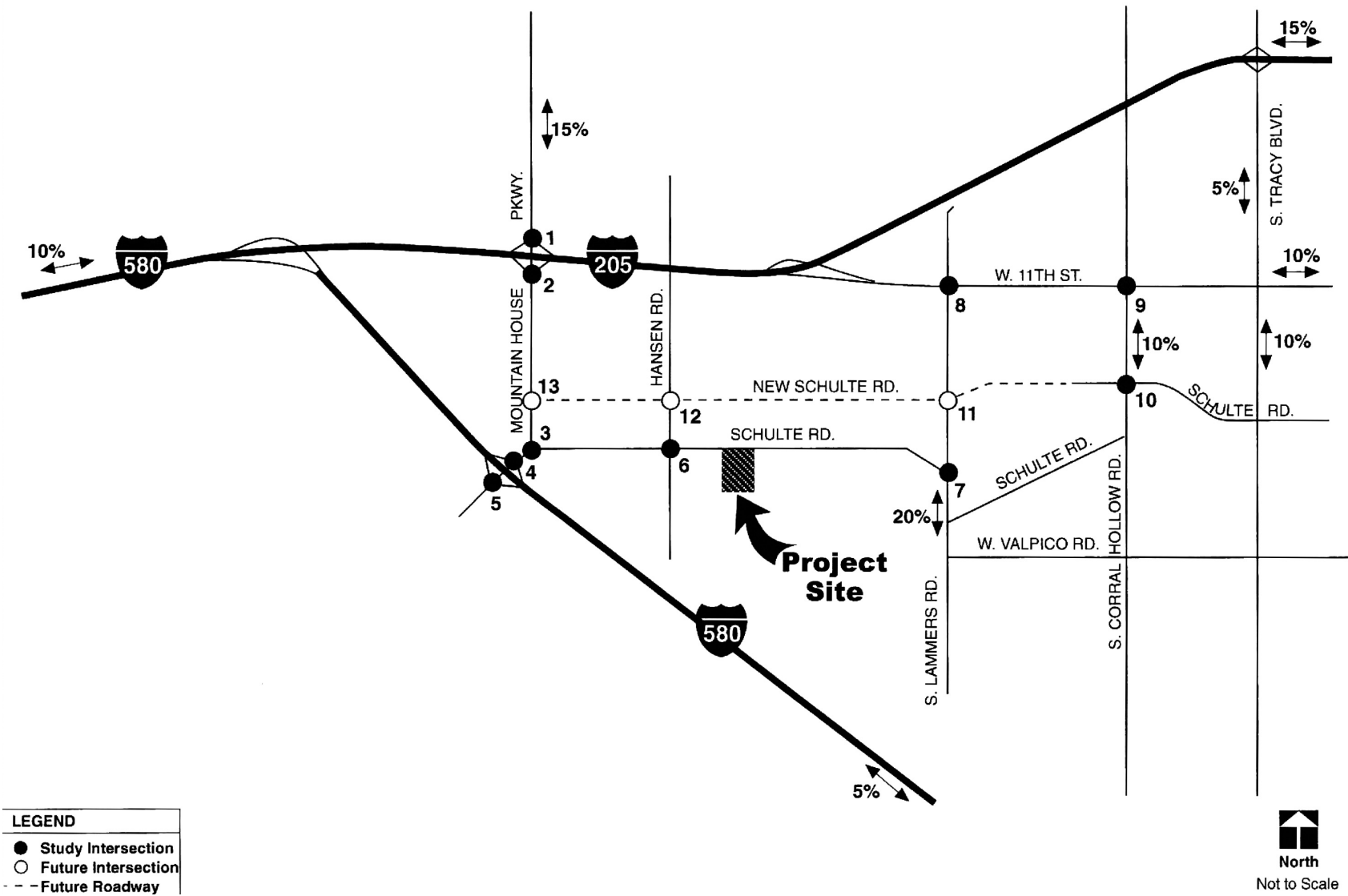
X.X(X.X) = Overall intersection delay (minor approach delay) in seconds per vehicle

Delay = Average stopped delay at signalized intersections and average delay for all movements at Stop controlled intersections. Values in parenthesis indicated average delay for the critical movement at One-and Two-Way STOP-controlled intersections.



Source: TKJM, 2004

FIGURE 4.3-5
PROJECT TRIP DISTRIBUTION (NEAR TERM)



Source: TKJM, 2004

FIGURE 4.3-6
PROJECT TRIP DISTRIBUTION (YEAR 2025)

Recommendations

Signalizing the intersection of Mountain House Parkway/I-580 Eastbound Ramps (same mitigation as Existing Conditions) is expected to improve the service level to LOS B during the p.m. peak hour under Existing plus Phase I plus Phase II project Conditions. The full project (Phase I + Phase II) contribution is estimated to be approximately 8 percent of the total traffic under Existing plus Phase I plus Phase II project Conditions.

Modifying the lane configuration on the eastbound Schulte Road approach at the intersection of Hansen Road/Schulte Road to have a shared left turn-through lane and a shared through-right turn lane (currently, the eastbound approach has a shared left turn-through lane and an exclusive right turn lane) is expected to improve the service level to LOS B during the p.m. peak hour under Existing plus Phase I plus Phase II project Conditions. The full project (Phase I + Phase II) contribution is estimated to be approximately 41 percent of the total traffic under Existing plus Phase I plus Phase II project Conditions.

Signalizing the intersection of Lammers Road/Schulte Road and modifying the eastbound Schulte Road approach to have an exclusive left turn lane and an exclusive right turn lane (currently one shared left turn-right turn lane along the eastbound approach) is expected to improve the service level to LOS C during the p.m. peak hour under Existing plus Phase I plus Phase II project Conditions. The full project (Phase I + Phase II) contribution is estimated to be approximately 58 percent of the total traffic under Existing plus Phase I plus Phase II project Conditions.

Near-Term (2010) Conditions Without Project

The near-term 2010 base condition is based on Year 2025 traffic projections from the City of Tracy travel demand-forecasting model. Year 2010 traffic volumes were derived using the method of interpolation between the existing traffic volumes and the Year 2025 traffic volumes from the City of Tracy travel demand-forecasting model. Year 2010 p.m. peak hour turning movement volumes are shown in **Figure 4.3-7**.

The results of the near-term 2010 Base Conditions LOS analysis are shown below in **Table 4.3-6**. The detailed LOS calculation sheets are contained in Appendix E. Under Year 2010 Base Conditions, all ten study intersections are expected to operate acceptably except for the intersections of Mountain House Parkway/I-205 Westbound Ramps, Mountain House Parkway/I-205 Eastbound Ramps, Mountain House Parkway/I-580 Eastbound Ramps, and Lammers Road/Schulte Road, which are expected to operate at LOS F.

4.3 TRAFFIC AND CIRCULATION

**TABLE 4.3-6
NEAR TERM 2010 BASE CONDITIONS INTERSECTION LEVELS OF SERVICE**

| Intersection | Control | P.M. Peak Hour | |
|--|----------------|--------------------|--------------|
| | | Delay | LOS |
| 1. Mountain House Pkwy/I-205 WB Ramps | One-Way STOP | 120+ (120+) | F (F) |
| –With Mitigation | Signal | 36.0 | D |
| 2. Mountain House Pkwy/I-205 EB Ramps | One-Way STOP | 120+ (120+) | F (F) |
| –With Mitigation | Signal | 24.6 | C |
| 3. Mountain Pkwy House/Schulte Rd | Signal | 22.2 | C |
| 4. Mountain House Pkwy/I-580 WB Ramps | One-Way Stop | 2.5 (15.1) | A (C) |
| 5. Mountain House Pkwy/I-580 WB Ramps | One-Way Stop | 120+ (120+) | F (F) |
| –With Mitigation | Signal | 37.2 | D |
| 6. Hansen Rd./Schulte Rd | Four-Way Stop | 12. | B |
| 7. Lammers Rd./Schulte Rd. | Three-Way Stop | 109.9 | F |
| –With Mitigation | Signal | 16.3 | B |
| 8. Lammers Rd. /11 th St | Signal | 25.7 | C |
| 9. Corral Hollow Rd./ 11 th St. | Signal | 33.4 | C |
| 10. Corral Hollow Rd./Schulte Rd. | Signal | 30.9 | C |

Notes: LOS = Level of Service

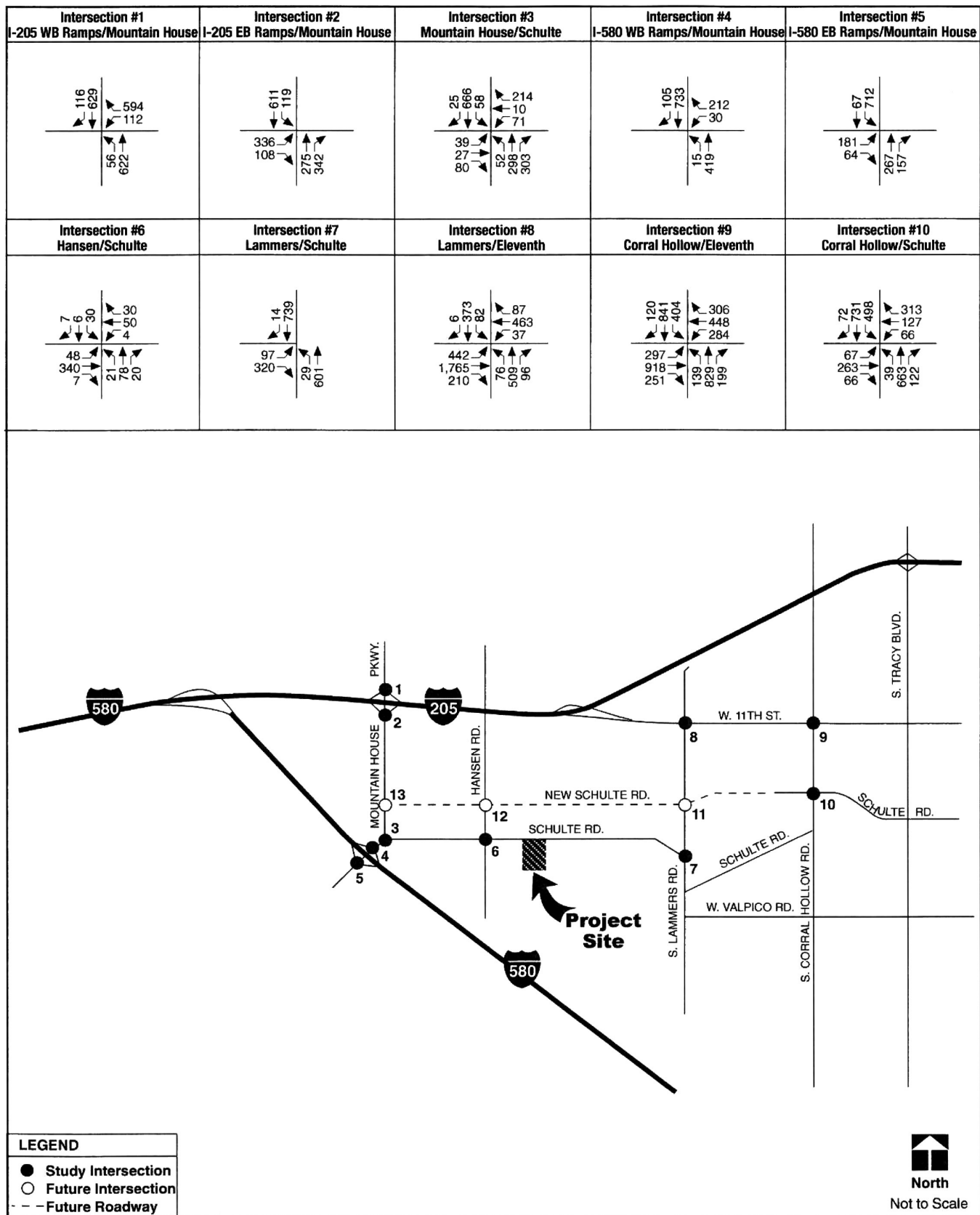
X.X(X.X) = Overall intersection delay (minor approach delay) in seconds per vehicle

Delay = Average stopped delay at signalized intersections and average delay for all movements at Stop controlled intersections. Values in parenthesis indicated average delay for the critical movement at One-and Two-Way STOP controlled intersections.

Recommendations

- Signalizing the intersection of Mountain House Parkway/I-205 Westbound Ramps is expected to improve the service level to LOS D during the p.m. peak hour under Year 2010 Base Conditions.
- Signalizing the intersection of Mountain House Parkway/I-205 Eastbound Ramps is expected to improve the service level to LOS C during the p.m. peak hour under Year 2010 Base Conditions.
- Signalizing the intersection (same as Existing Conditions) and modifying the southbound Mountain House Parkway approach to have an exclusive left turn lane and a through lane (currently a shared left turn-through lane on the southbound approach) at the intersection of Mountain House Parkway/I-580 Eastbound Ramps is expected to improve the service level to LOS B during the p.m. peak hour under Year 2010 Base Conditions. The mitigation described under Existing plus Phase I plus Phase II project Conditions is expected to improve the service level at the intersection of Lammers Road/Schulte Road to LOS B during the p.m. peak hour under Year 2010 Base Conditions.

T:\Tracy Youth Sports\Revised Figures_Sep12005\Figure 4.3-7 at September 2005



Source: TKJM, 2004

FIGURE 4.3-7
YEAR 2010 PM PEAK HOUR TURNING MOVEMENT VOLUMES

4.3 TRAFFIC AND CIRCULATION

Near Term (2010) Conditions with Project

Trip Generation and Assignment

PHASE I

With the completion of Phase I, the project site is proposed to have three football fields, ten baseball/softball fields, and thirteen soccer fields.

Softball and Baseball

For the baseball and softball fields, 30 players (15 per team) are assumed to use each ball field.

Assuming two overlaps with 30 players arriving and leaving during the p.m. peak hour, a total of 60 participants ($2 \times 30 = 60$) are expected for each ball field. In addition to 60 participants per field, a total of 15 spectators, officials, and coaches would result in **a total of 75 field users** for each softball/baseball field.

Football

For the football fields, 50 players (25 per team) are assumed to use each ball field. A total of 100 participants assuming two overlaps ($2 \times 50 = 100$) are expected for each ball field. In addition to 100 participants per field, a total of 25 spectators would result in **a total of 125 field users** for each football field.

Soccer

For the soccer fields, 28 players (14 per team) are assumed to use each ball field. A total of 56 participants assuming two overlaps ($2 \times 28 = 56$) are expected for each ball field. In addition to 56 participants per field, a total of 14 spectators would result in **a total of 70 field users** for each soccer field.

Football Stadium

For the football stadium, 80 players (40 per team) are assumed to use each ball field. A total of 160 participants assuming two overlaps ($2 \times 80 = 160$) are expected for the stadium. In addition to 160 participants per stadium, a total of 600 spectators would result in **a total of 760 field users** for the football stadium.

Multiple Field User Trips

Considering the concurrent operation of various fields during different times of the year, the months of July and August are expected to experience peak weekday utilization (p.m. peak hour) during Phase I with three football fields and seven baseball/softball fields operating concurrently. During this peak period, the three football fields and seven baseball/softball fields are expected to have **a total of 900 field users** (75 users per softball/baseball field and 125 users per football field) with **225 cars** assuming a vehicle occupancy rate of four persons per car. Thus, the Phase I build out of the project is expected to generate **225** inbound and **225** outbound trips during the p.m. peak hour of a typical weekday.

PHASE II

In addition to the fields built in Phase I, thirteen baseball/softball fields, one sports/football stadium, one football field, two soccer fields, and a general park/recreational use (50 acres) will be constructed as part of Phase II build out of the project. Again, similar to Phase I conditions, the project with full build out (Phase I + Phase II) is expected to experience peak weekday utilization during the months of July and August with four football fields, twenty baseball/softball fields, and one football stadium operating concurrently.

During this peak period, the thirteen additional baseball/softball fields, one additional football field, and one sports/football stadium are expected to generate **a total of 1,860 field users** (75 users per softball/baseball field, 125 users per football field, and 760 users for the stadium) with **465 cars** assuming a vehicle occupancy rate of four persons per car.

Park Area

The general park use is expected to have **a total of 165 users** consisting of 100 general recreational users, 40 picnic area users, and 25 playgrounds users. Assuming four persons per car and estimating conservatively, the general park is expected to generate **41 cars** inbound and 41 cars outbound during the p.m. peak hour. Thus, the Phase II build out of the project is expected to generate 506 (=465+41) inbound and 506 (=465+41) outbound trips during the p.m. peak hour of a typical weekday. **Table 4.3-7** summarizes the project trip generation assumptions.

**TABLE 4.3-7
PROJECT WEEKDAY PM PEAK HOUR PEAK GENERATION**

| Project Phasing | Vehicle Trips | |
|--------------------------|---------------|-----|
| | In | Out |
| With Phase I completion | 225 | 225 |
| With Phase II completion | 506 | 506 |
| Total | 731 | 731 |

Effects of Field Lighting on Traffic Generation

Lighting is assumed at the end of five years on four soccer fields, one football stadium, and two ninety-foot baseball diamonds. Additional field lighting is assumed at the end of ten years on eight soccer fields, one football stadium, one football field, and seven baseball/softball fields. However, lighting is not expected to affect the peak hour traffic conditions (July and August) because in general lighting is only needed during the winter months when concurrent uses of different sports fields are comparatively lower.

TRIP DISTRIBUTION AND ASSIGNMENT

Trip distribution assumptions for the proposed project were developed based on existing travel patterns, knowledge of the study area and input from the City staff. Project trips were assigned to the study intersections based on these distribution assumptions.

4.3 TRAFFIC AND CIRCULATION

Under the near term scenario, traffic from the proposed project is expected to travel to and from the park according to the distribution assumptions shown on Figure 5 and described below:

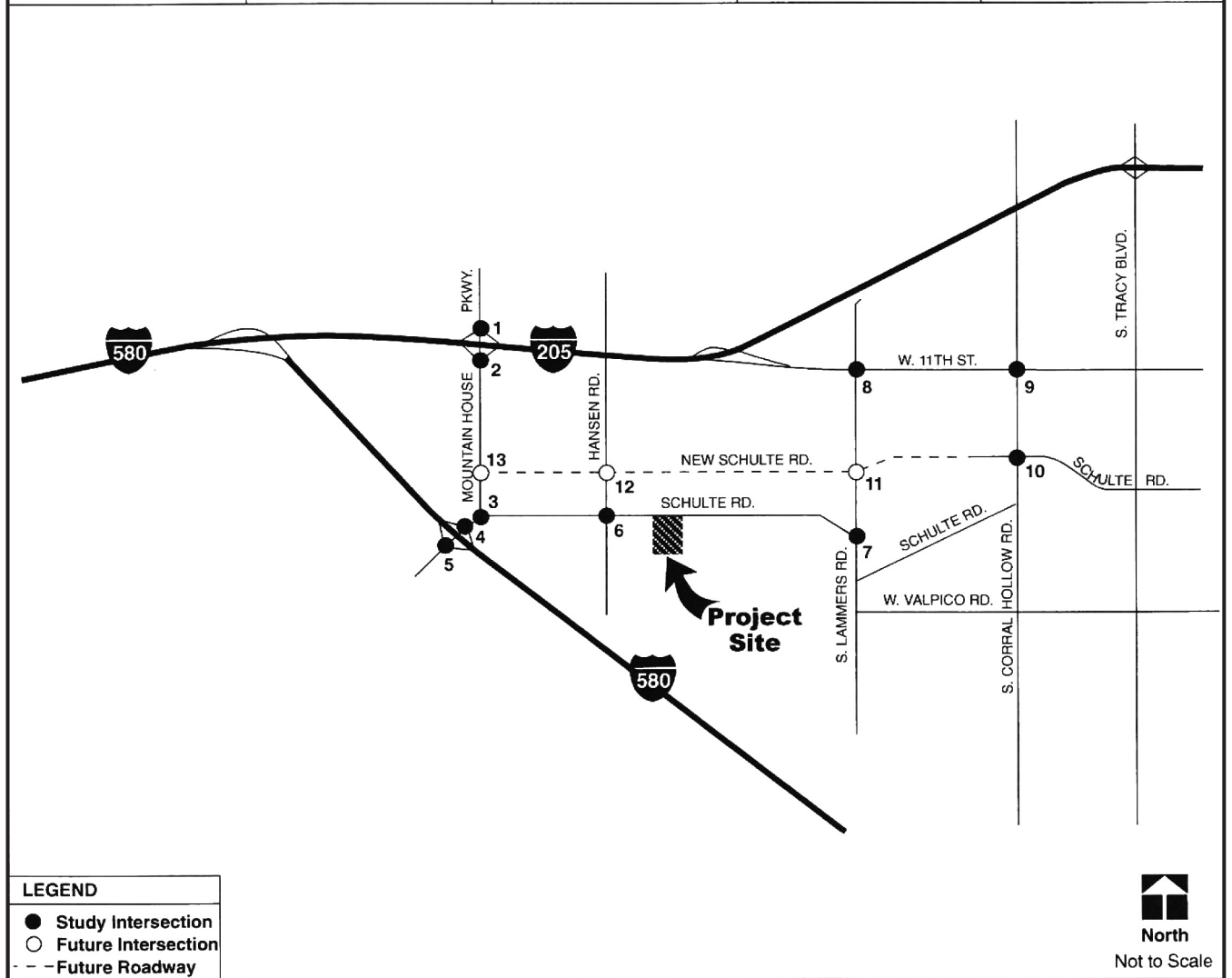
- 20% will travel to/from the south via Lammers Road
- 15% will travel to/from the north via Mountain House Parkway
- 15% will travel to/from the east via 11th Street
- 10% will travel to/from the east via State Route 205
- 10% will travel to/from the west via State Route 580
- 10% will travel to/from the south via Tracy Boulevard
- 10% will travel to/from the south via Corral Hollow Road
- 5% will travel to/from the north via Tracy Boulevard
- 5% will travel to/from the southeast via State Route 580

Under the Year 2025 scenario, traffic from the proposed project is expected to travel to and from the park according to the distribution assumptions described below:

- 20% will travel to/from the south via Lammers Road
- 15% will travel to/from the east via State Route 205
- 15% will travel to/from the north via Mountain House Parkway
- 10% will travel to/from the west via State Route 580
- 10% will travel to/from the south via Tracy Boulevard
- 10% will travel to/from the south via Corral Hollow Road
- 10% will travel to/from the east via 11th Street
- 5% will travel to/from the north via Tracy Boulevard
- 5% will travel to/from the southeast via State Route 580

Figures 4.3-8 and 4.3-9 show the Phase I project, and Phase I plus Phase II project trip assignments, respectively.

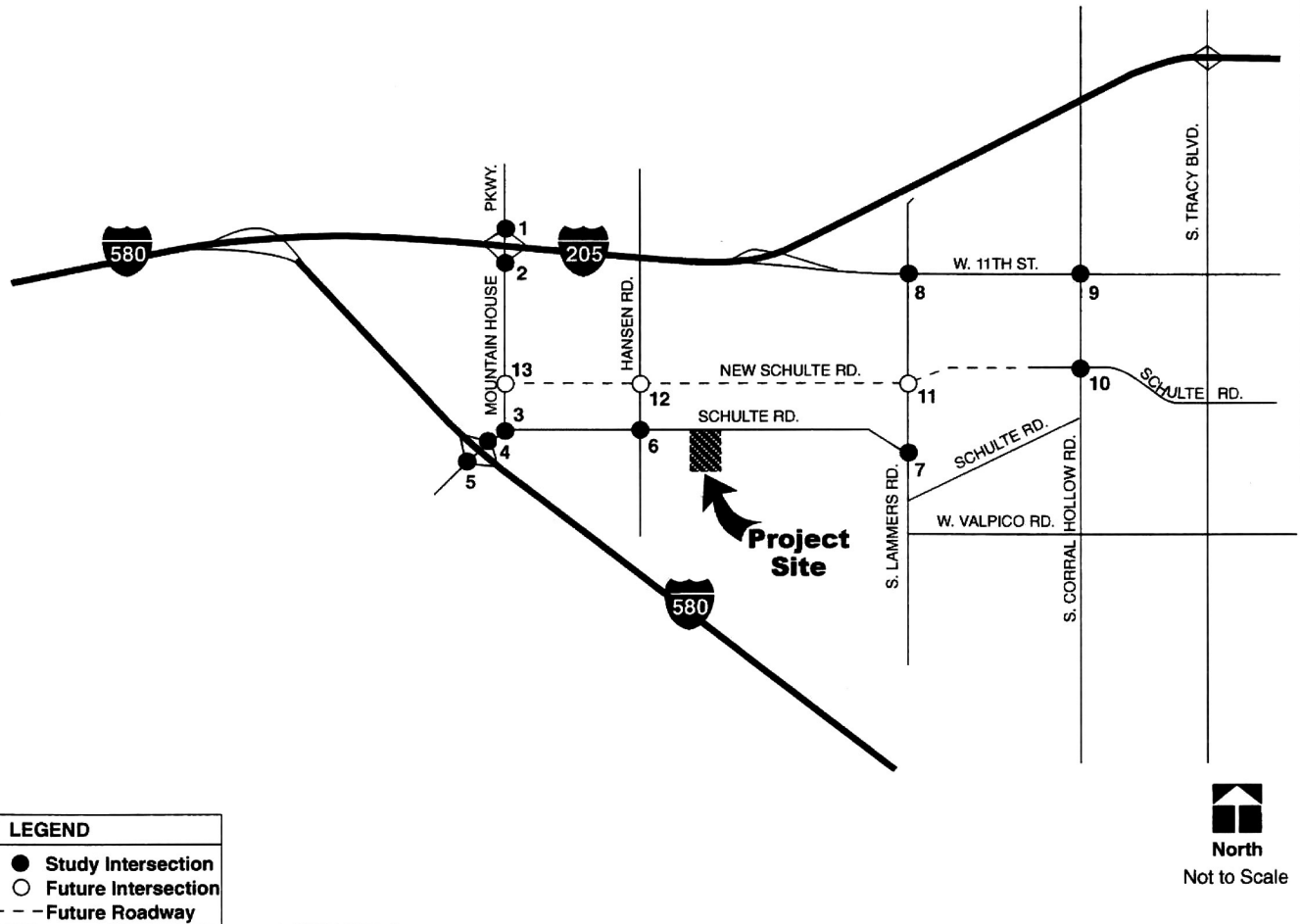
| Intersection #1 -205 WB Ramps/Mountain House | Intersection #2 I-205 EB Ramps/Mountain House | Intersection #3 Mountain House/Schulte | Intersection #4 I-580 WB Ramps/Mountain House | Intersection #5 I-580 EB Ramps/Mountain House |
|---|--|---|--|--|
| | | | | |
| Intersection #6 Hansen/Schulte | Intersection #7 Lammers/Schulte | Intersection #8 Lammers/Eleventh | Intersection #9 Corral Hollow/Eleventh | Intersection #10 Corral Hollow/Schulte |
| | | | | |



Source: TKJM, 2004

FIGURE 4.3-8
PROJECT (PHASE 1) PM PEAK HOUR TURNING MOVEMENT VOLUMES

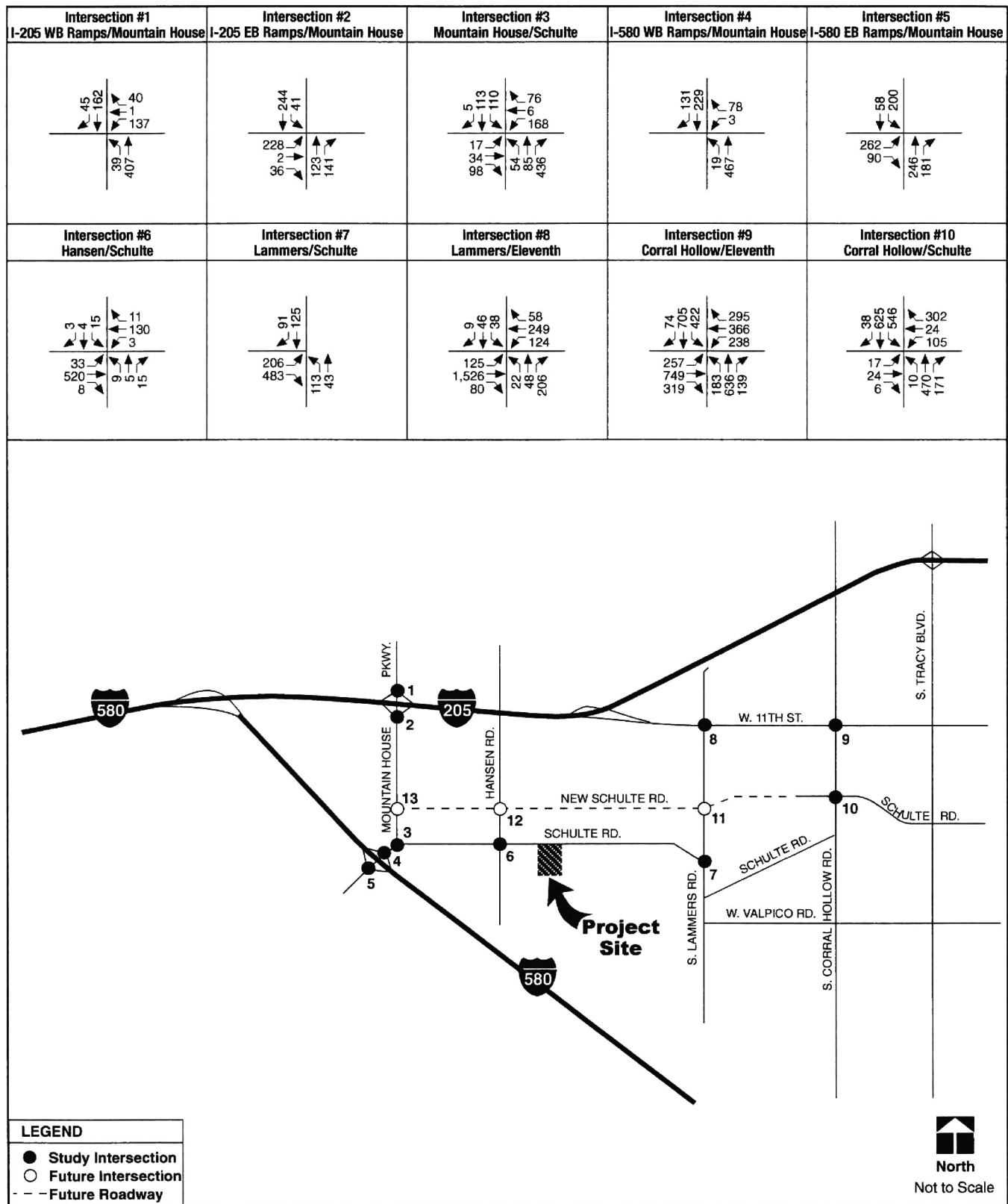
| Intersection #1 I-205 WB Ramps/Mountain House | Intersection #2 I-205 EB Ramps/Mountain House | Intersection #3 Mountain House/Schulte | Intersection #4 I-580 WB Ramps/Mountain House | Intersection #5 I-580 EB Ramps/Mountain House |
|--|--|---|--|--|
| | | | | |
| Intersection #6 Hansen/Schulte | Intersection #7 Lammers/Schulte | Intersection #8 Lammers/Eleventh | Intersection #9 Corral Hollow/Eleventh | Intersection #10 Corral Hollow/Schulte |
| | | | | |



Source: TKJM, 2004

FIGURE 4.3-9
PROJECT (PHASE I + PHASE II) TRIP ASSIGNMENT

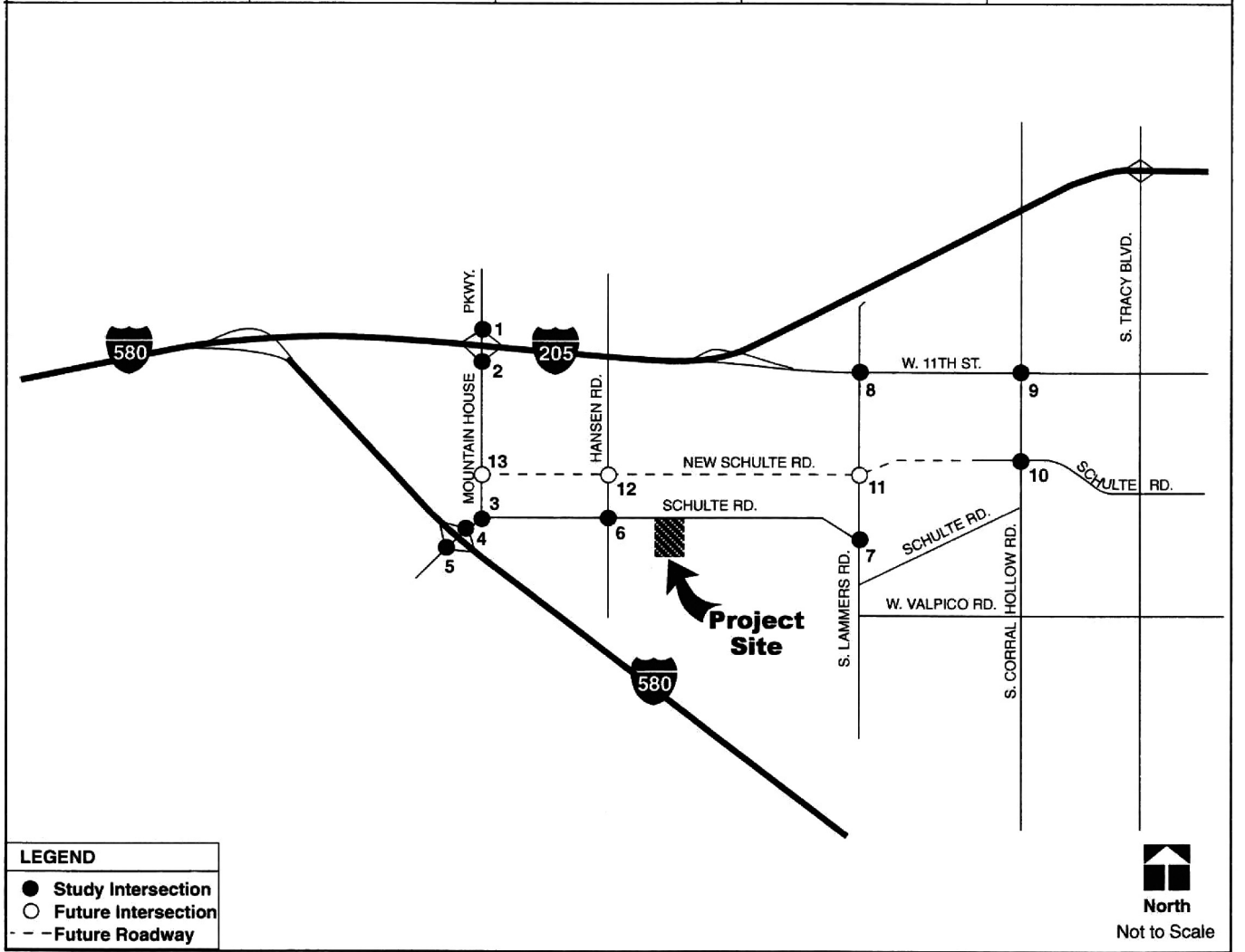
T:\Tracy Youth Sports\Revised Figures_Sep12005\Figure 4.3-10.ci, September 2005



Source: TKJM, 2004

FIGURE 4.3-10
EXISTING + PROJECT (PHASE I) PM PEAK HOUR TURNING MOVEMENT VOLUMES

| Intersection #1 I-205 WB Ramps/Mountain House | Intersection #2 I-205 EB Ramps/Mountain House | Intersection #3 Mountain House/Schulte | Intersection #4 I-580 WB Ramps/Mountain House | Intersection #5 I-580 EB Ramps/Mountain House |
|--|--|---|--|--|
| | | | | |
| Intersection #6 Hansen/Schulte | Intersection #7 Lammers/Schulte | Intersection #8 Lammers/Eleventh | Intersection #9 Corral Hollow/Eleventh | Intersection #10 Corral Hollow/Schulte |
| | | | | |



Source: TKJM, 2004

FIGURE 4.3-11

EXISTING + PROJECT (PHASE I + PHASE II) PM PEAK HOUR TURNING MOVEMENT VOLUMES

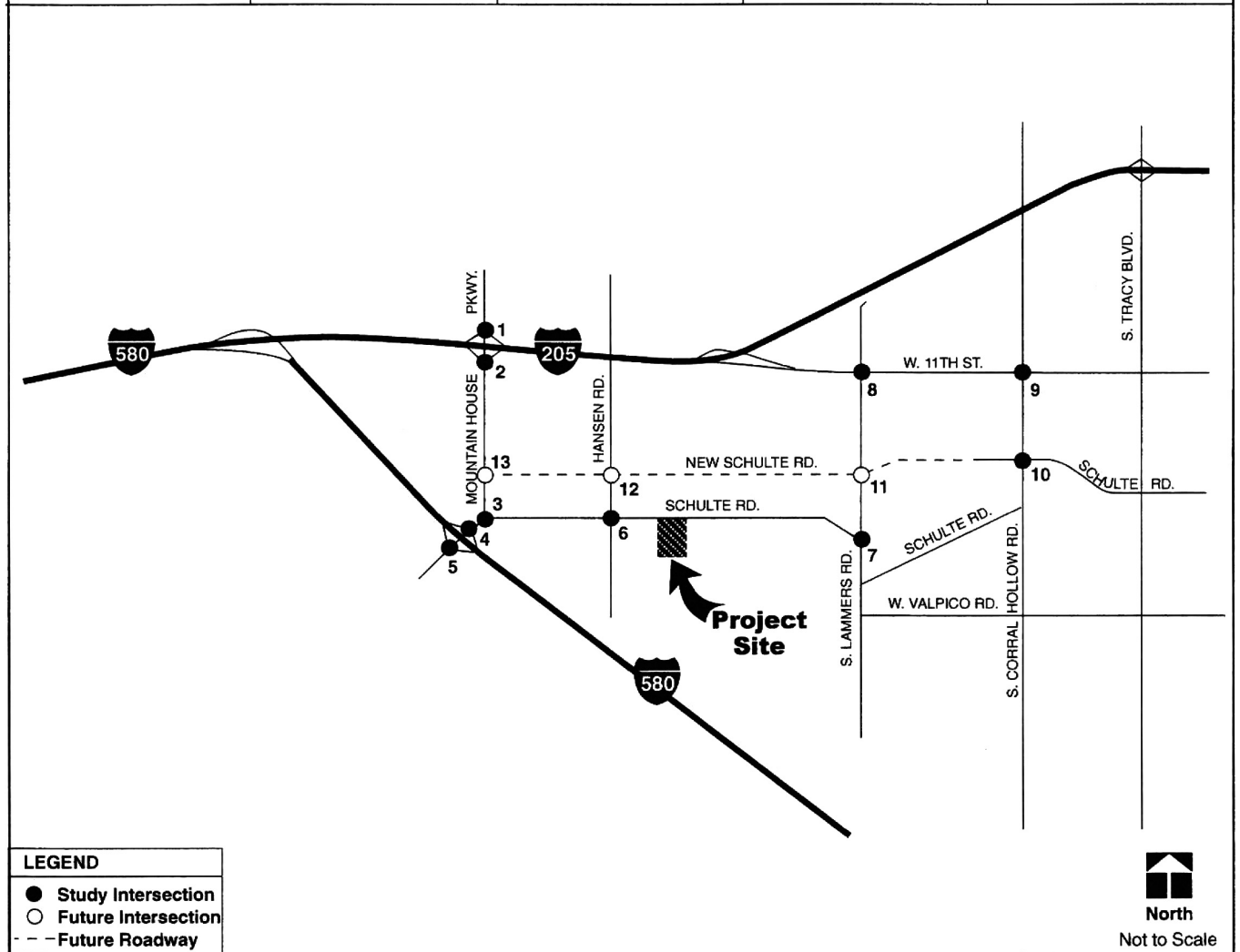
The Year 2010 plus Project scenario adds traffic from the proposed project to Year 2010 base conditions traffic. The proposed project is assumed to be built in two phases. Therefore, the Year 2010 plus Project scenario is analyzed as two separate scenarios: Year 2010 plus Phase I project, and Year 2010 plus Phase I plus Phase II project Conditions.

Figures 4.3-12 and 4.3-13 show the projected peak hour turning movement volumes for Year 2010 plus Phase I project, and Year 2010 plus Phase I plus Phase II project scenarios, respectively. **Table 4.3-8 and 4.3-9** show the intersection level of service analysis results for Year 2010 plus Phase I project, and Year 2010 plus Phase I plus Phase II project scenarios, respectively.

Near Term (2010) (Phase I) Traffic Conditions

Under Year 2010 Base plus Phase I project Conditions, all ten-study intersections are expected to continue to operate acceptably except for the intersections of Mountain House Parkway/I-205 Westbound Ramps, Mountain House Parkway/I-205 Eastbound Ramps, Mountain House Parkway/I-580 Eastbound Ramps, and Lammers Road/Schulte Road, which are expected to continue to operate at LOS F.

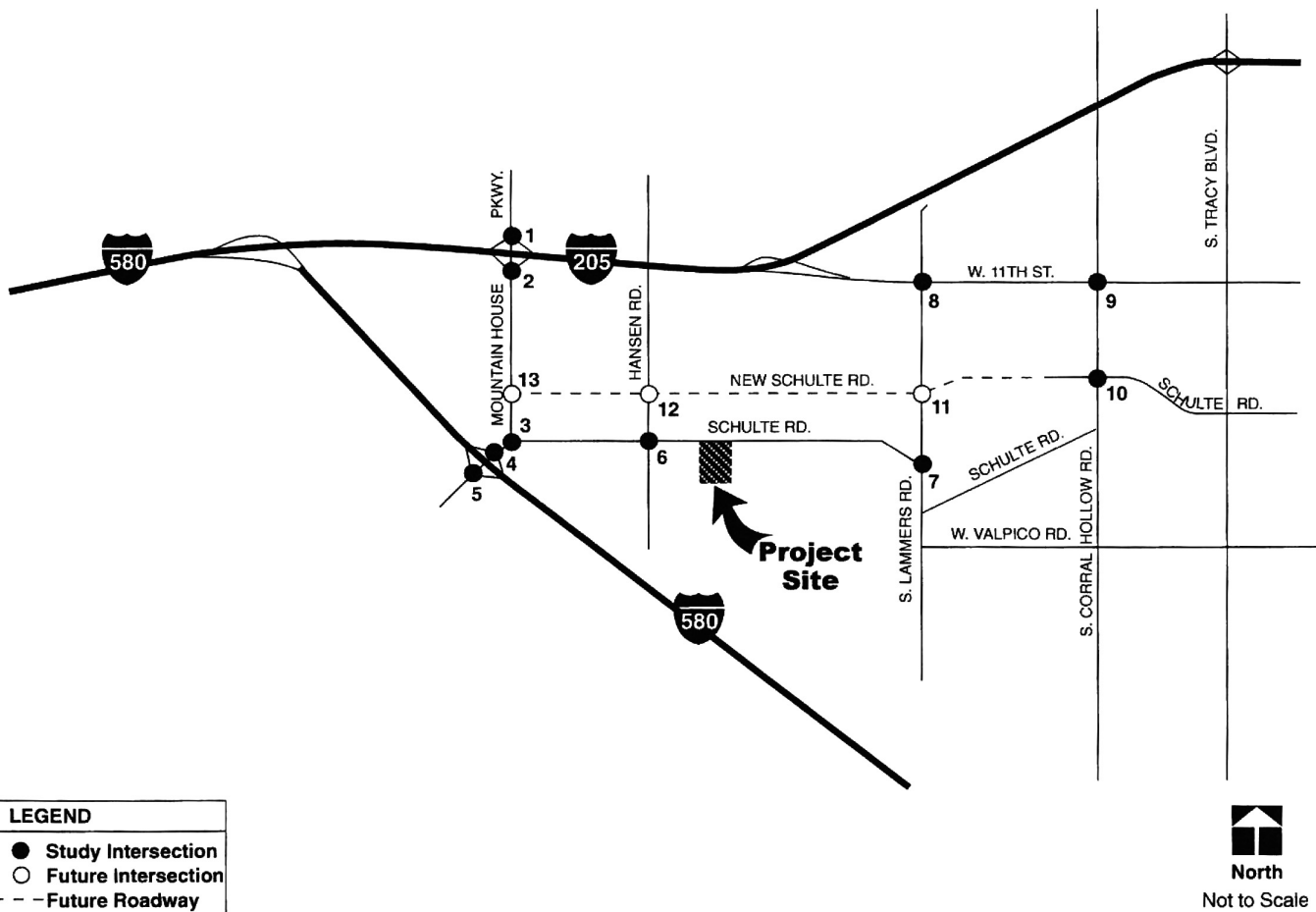
| Intersection #1 I-205 WB Ramps/Mountain House | Intersection #2 I-205 EB Ramps/Mountain House | Intersection #3 Mountain House/Schulte | Intersection #4 I-580 WB Ramps/Mountain House | Intersection #5 I-580 EB Ramps/Mountain House |
|--|--|---|--|--|
| | | | | |
| Intersection #6 Hansen/Schulte | Intersection #7 Lammers/Schulte | Intersection #8 Lammers/Eleventh | Intersection #9 Corral Hollow/Eleventh | Intersection #10 Corral Hollow/Schulte |
| | | | | |



Source: TKJM, 2004

FIGURE 4.3-12
YEAR 2010 + PROJECT (PHASE I) PM PEAK HOUR TURNING MOVEMENT VOLUMES

| Intersection #1 I-205 WB Ramps/Mountain House | Intersection #2 I-205 EB Ramps/Mountain House | Intersection #3 Mountain House/Schulte | Intersection #4 I-580 WB Ramps/Mountain House | Intersection #5 I-580 EB Ramps/Mountain House |
|--|--|---|--|--|
| | | | | |
| Intersection #6 Hansen/Schulte | Intersection #7 Lammers/Schulte | Intersection #8 Lammers/Eleventh | Intersection #9 Corral Hollow/Eleventh | Intersection #10 Corral Hollow/Schulte |
| | | | | |



Source: TKJM, 2004

FIGURE 4.3-13

YEAR 2010 + PROJECT (PHASE I + PHASE II) PM PEAK HOUR TURNING MOVEMENT VOLUMES

4.3 TRAFFIC AND CIRCULATION

TABLE 4.3-8
YEAR 2010 BASE CONDITIONS + PHASE I PROJECT INTERSECTION LEVELS OF SERVICE

| Intersection | Control | P.M. Peak Hour | |
|---|----------------|----------------|-------|
| | | Delay | LOS |
| 1. Mountain House Pkwy./I-205 WB Ramps | One-Way STOP | 120+ (120+) | F (F) |
| –With Mitigation | Signal | 38.9 | D |
| 2. Mountain House Pkwy./I-205 EB Ramps | One-Way STOP | 120+ (120+) | F (F) |
| –With Mitigation | Signal | 25.9 | C |
| 3. Mountain House Pkwy./Schulte Rd. | Signal | 23.2 | C |
| 4. Mountain House Pkwy./I-580 WB Ramps | One-Way Stop | 2.6 (15.6) | A (C) |
| 5. Mountain House Pkwy./I-580 EB Ramps | One-Way Stop | 120+ (120+) | F (F) |
| –With Mitigation | Signal | 39.1 | D |
| 6. Hansen Rd./Schulte Rd. | Four-Way Stop | 14.2 | B |
| 7. Lammers Rd./Schulte Rd. | Three-Way Stop | 120+ | F |
| –With Mitigation | Signal | 21.3 | C |
| 8. Lammers Rd./11 th St. | Signal | 26.3 | C |
| 9. Corral Hollow Rd./11 th St. | Signal | 33.7 | C |
| 10. Corral Hollow Rd./Schulte Rd. | Signal | 31.1 | C |

Notes: LOS = Level of Service

X.X(X.X) = Overall intersection delay (minor approach delay) in seconds per vehicle

Delay = Average stopped delay at signalized intersections and average delay for all movements at Stop controlled intersections. Values in parenthesis indicated average delay for the critical movement at One-and Two-Way STOP-controlled intersections.

Recommendations

The mitigations described under Year 2010 Base Conditions (above) are expected to improve the service levels at all study intersections that operate unacceptably to acceptable service levels during the p.m. peak hour under Year 2010 Base plus Phase I project Conditions.

Near Term (2010) (Phase II) Traffic Conditions

Under Year 2010 Base plus Phase I plus Phase II project Conditions, all the ten study intersections are expected to continue to operate acceptably except for the intersections of Mountain House Parkway/I-205 Westbound Ramps, Mountain House Parkway/I-205 Eastbound Ramps, Mountain House Parkway/I-580 Eastbound Ramps, Hansen Road/Schulte Road, and Lammers Road/Schulte Road, which are expected to operate at LOS F, LOS F, LOS F, LOS D, and LOS F, respectively.

TABLE 4.3-9
YEAR 2010 BASE CONDITIONS + PHASE I + PHASE II PROJECT INTERSECTION LOS

| Intersection | Control | P.M. Peak Hour | |
|--|----------------|--------------------|--------------|
| | | Delay | LOS |
| 1. Mountain House Pkwy./I-205 WB Ramps | One-Way STOP | 120+ (120+) | F (F) |
| –With Mitigation | Signal | 48.0 | D |
| 2. Mountain House Pkwy./I-205 EB Ramps | One-Way STOP | 120+ (120+) | F (F) |
| –With Mitigation | Signal | 30.5 | C |
| 3. Mountain House Pkwy./Schulte Rd. | Signal | 25.2 | C |
| 4. Mountain House Pkwy./I-580 WB Ramps | One-Way Stop | 2.9 (17.0) | A (C) |
| 5. Mountain House Pkwy./I-580 EB Ramps | One-Way Stop | 120+ (120+) | F (F) |
| –With Mitigation | Signal | 44.2 | D |
| 6. Hansen Rd/Schulte Rd. | Four-Way Stop | 28.1 | D |
| –With Mitigation | Four-Way Stop | 12.5 | B |
| 7. Lammers Rd./Schulte Rd. | Three-Way Stop | 120+ | F |
| –With Mitigation | Signal | 31.6 | C |
| 8. Lammers Rd./11 th St. | Signal | 34.9 | C |
| 9. Corral Hollow Rd./11 th St | Signal | 34.2 | C |
| 10. Corral Hollow Rd./Schulte Rd. | Signal | 32.7 | C |

Notes: LOS = Level of Service

X.X(X.X) = Overall intersection delay (minor approach delay) in seconds per vehicle

Delay = Average stopped delay at signalized intersections and average delay for all movements at Stop controlled intersections. Values in parenthesis indicated average delay for the critical movement at One- and Two-Way STOP-controlled intersections.

Recommendations

For the intersections of Mountain House Parkway/I-205 Westbound Ramps, Mountain House Parkway/I-205 Eastbound Ramps, Mountain House Parkway/I-580 Eastbound Ramps, the recommendations described under Year 2010 Base Conditions (above) are expected to improve the service levels to acceptable limits during the p.m. peak hour under Year 2010 Base plus Phase I plus Phase II project Conditions. The full project (Phase I + Phase II) contributions for the intersections of Mountain House Parkway/I-205 Westbound Ramps, Mountain House Parkway/I-205 Eastbound Ramps, Mountain House Parkway/I-580 Eastbound Ramps are estimated to be approximately 10 percent, 13 percent, and 6 percent of the total traffic under Year 2010 Base plus Phase I plus Phase II project Conditions, respectively.

For the intersection of Hansen Road/Schulte Road, the mitigation described under Existing plus Phase I plus Phase II project Conditions is expected to improve the service level to acceptable limit during the p.m. peak hour under Year 2010 Base plus Phase I plus Phase II project Conditions. The mitigation recommended under Existing plus Phase I plus Phase II project, and Year 2010 Base plus Phase I plus Phase II project Conditions for the intersection of Hansen Road/Schulte Road should be considered as an interim mitigation because the intersection is expected to operate acceptably under both Cumulative Year 2025 Base, and Cumulative Year 2025 Base plus Project Conditions. The full project (Phase I + Phase II) contribution is estimated to be approximately 41 percent of the total traffic under Year 2010 Base plus Phase I plus Phase II project Conditions.

4.3 TRAFFIC AND CIRCULATION

For the intersection of Lammers Road/Schulte Road, in addition to the mitigation measures recommended under Year 2010 Base Conditions, 1) Adding a through lane along the northbound Lammers Road and modifying the lane geometry to have an exclusive left turn lane and a through lane (currently, a shared left turn-through lane), 2) Adding a through lane along the southbound Lammers Road and modifying the lane geometry to have a through lane and a shared through-right turn lane (currently, a shared through-right turn lane), and 3) Facilitating “free” right turns from eastbound Schulte Road approach into southbound Lammers Road, is expected to improve the level of service to an acceptable level under Year 2010 Base plus Phase I plus Phase II project Conditions. The full project (Phase I + Phase II) contribution is estimated to be approximately 36 percent of the total traffic under Year 2010 Base plus Phase I plus Phase II project Conditions.

Cumulative 2025 Base (without Project) Conditions

The cumulative 2025 base condition is based on Year 2025 traffic projections from the City of Tracy travel demand-forecasting model. Year 2010 p.m. peak hour turning movement volumes are shown in **Figure 4.3-14**. It was assumed that the new Schulte Road extension would be fully built extending from Lammers Road to Mountain House Parkway by Year 2025. As a result of the new Schulte Road extension, three future intersections such as Lammers Road/New Schulte Road, Hansen Road/New Schulte Road, and Mountain House Parkway/New Schulte Road were studied under Year 2025 Base, and Year 2025 Base plus Full Project Conditions. The lane configurations/geometry assumed for these three future study intersections are shown in **Figure 4.3-3**.

The results of the near-term 2010 Base Conditions LOS analysis are shown in **Table 4.3-10**. The detailed LOS calculation sheets are contained in Appendix H.

Under Cumulative Year 2025 Base scenario, five of the thirteen study intersections are expected to operate acceptably. The eight that will not include the intersections of Mountain House Parkway/I-205 Westbound Ramps, Mountain House Parkway/I-205 Eastbound Ramps, Mountain House Parkway/I-580 Westbound Ramps, Mountain House Parkway/I-580 Eastbound Ramps, Lammers Road/Schulte Road, Lammers Road/11th Street, Corral Hollow Road/11th Street, and Corral Hollow Road/Schulte Road.

TABLE 4.3-10
YEAR 2025 BASE INTERSECTION LEVELS OF SERVICE

| Intersection | Control | P.M. Peak Hour | |
|--|---------------|----------------|-------|
| | | Delay | LOS |
| 1. Mountain House Pkwy./I-205 WB Ramps | One-Way STOP | 120+ (120+) | F (F) |
| –With Mitigation | Signal | 9.0 | A |
| 2. Mountain House Pkwy./I-205 EB Ramps | One-Way STOP | 120+ (120+) | F (F) |
| –With Mitigation | Signal | 45.9 | D |
| 3. Mountain House Pkwy./Schulte Rd. | Signal | 37.0 | D |
| 4. Mountain House Pkwy./I-580 WB Ramps | One-Way Stop | 35.6 (120+) | E (F) |
| –With Mitigation | Signal | 22.1 | C |
| 5. Mountain House Pkwy./I-580 WB Ramps | One-Way Stop | 120+ (120+) | F (F) |
| –With Mitigation | Signal | 25.0 | C |
| 6. Hansen Rd./Schulte Rd. | Four-Way Stop | 10.2 | B |

| Intersection | Control | P.M. Peak Hour | |
|---|----------------|----------------|-----|
| | | Delay | LOS |
| 7. Lammers Rd./Schulte Rd. | Three-Way Stop | 120+ | F |
| –With Mitigation | Signal | 2.7 | A |
| 8. Lammers Rd./11 th St. | Signal | 120+ | F |
| –With Mitigation | Signal | 42.8 | D |
| 9. Corral Hollow Rd./11 th St. | Signal | 47.0 | D |
| –With Mitigation | Signal | 31.5 | C |
| 10. Corral Hollow Rd./Schulte Rd. | Signal | 40.3 | D |
| –With Mitigation | Signal | 33.9 | C |
| 11. Lammers Rd./New Schulte Rd. | Signal | 18.0 | B |
| 12. Hansen Rd./New Schulte Rd. | Four-Way Stop | 10.9 | B |
| 13. Mountain House Pkwy./New Schulte Rd. | Signal | 5.9 | A |

Recommendations

For the intersection of Mountain House Parkway/I-205 Westbound Ramps, in addition to signalization (same mitigation as that of Year 2010 Base scenario), 1) Adding a through lane along the northbound Mountain House Parkway and modifying the lane geometry to have an exclusive left turn lane and a through lane (currently, a shared left turn-through lane), 2) Adding a through lane along the southbound Mountain House Parkway and modifying the lane geometry to have a through lane and a shared through-right turn lane (currently, a shared through-right turn lane), and 3) Modifying the lane geometry on westbound off-ramp approach to have a shared left turn-through lane and an exclusive right turn lane (currently, a shared left turn-through-right turn lane) and facilitating “free” right turns from westbound off-ramp approach into northbound Mountain House Parkway, is expected to improve the level of service to an acceptable level under Year 2025 Base Conditions.

For the intersection of Mountain House Parkway/I-205 Eastbound Ramps, in addition to signalization (same mitigation as that of Year 2010 Base scenario), 1) Adding a through lane along the northbound Mountain House Parkway and modifying the lane geometry to have an exclusive right turn lane and a through lane (currently, a shared through-right turn lane), 2) Adding two through lanes along the southbound Mountain House Parkway and modifying the lane geometry to have an exclusive left turn lane and two through lanes (currently, a shared left turn-through lane), and 3) Modifying the lane geometry on eastbound off-ramp approach to have two exclusive left turn lanes and a shared through right turn lane (currently, a shared left turn-through-right turn lane), is expected to improve the level of service to an acceptable level under Year 2025 Base Conditions.

For the intersection of Mountain House Parkway/I-580 Westbound Ramps, 1) Signalizing the intersection, 2) Modifying the lane geometry along southbound Mountain House Parkway to have a through lane and a shared through-right turn lane (currently, a through lane and an exclusive right turn lane), and 3) Modifying the lane geometry on westbound off-ramp approach to have a shared left turn-right turn lane and an exclusive right turn lane (currently, an exclusive left turn lane and an exclusive right turn lane), is expected to improve the level of service to an acceptable level under Year 2025 Base Conditions.

4.3 TRAFFIC AND CIRCULATION

For the intersection of Mountain House Parkway/I-580 Eastbound Ramps, in addition to the mitigation recommended under Year 2010 Base scenario, adding a left turn lane along the southbound Mountain House Parkway approach is expected to improve the level of service to an acceptable level under Year 2025 Base Conditions.

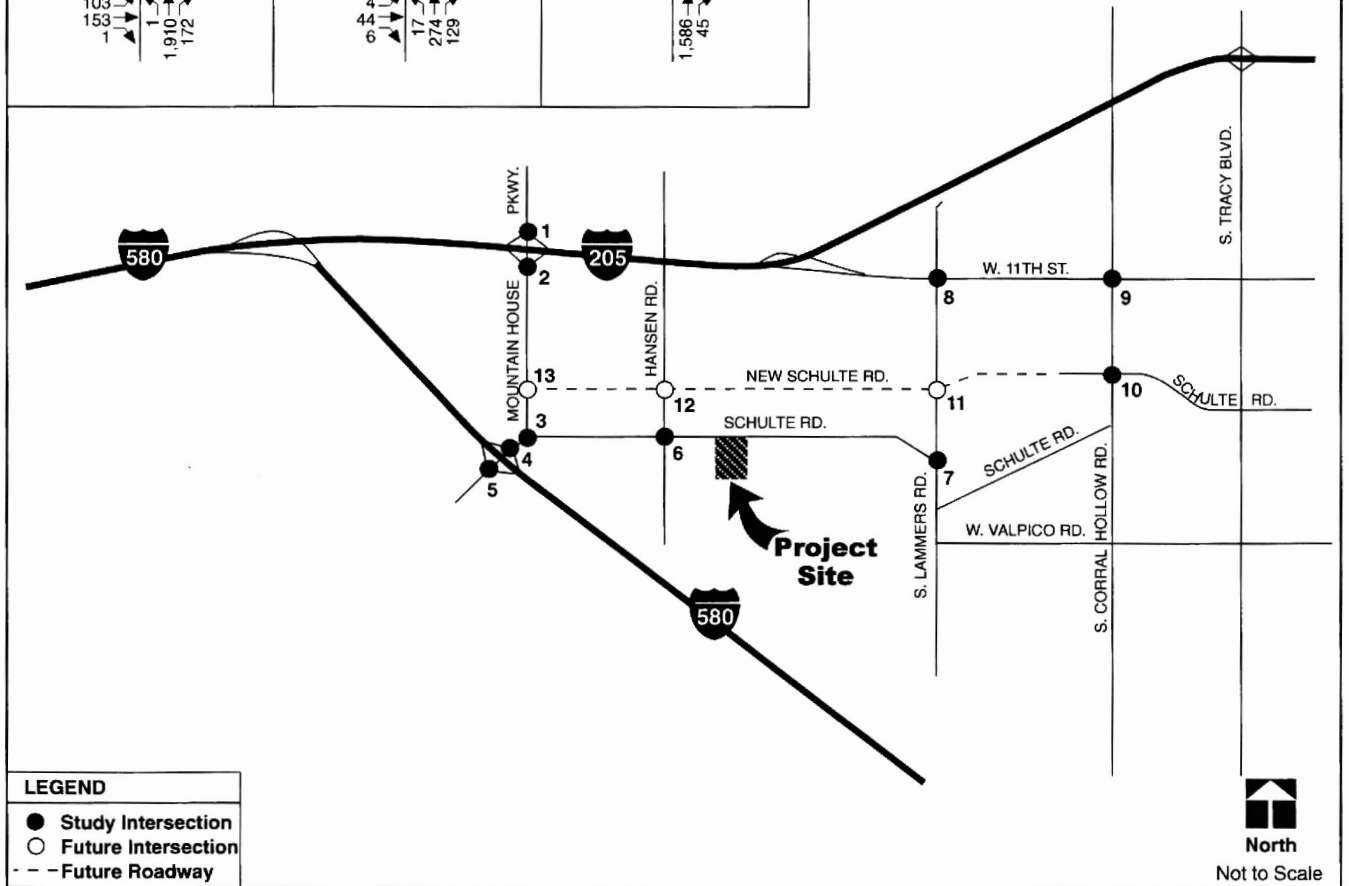
For the intersection of Lammers Road/Schulte Road, in addition to the mitigation recommended under Year 2010 Base plus Phase I plus Phase II project scenario, adding a through lane along northbound Lammers Road is expected to improve the level of service to an acceptable level under Year 2025 Base Conditions.

For the intersection of Lammers Road/11th Street, 1) Modifying the lane geometry along northbound Lammers Road approach to have two exclusive left turn lanes, two through lanes, and a shared through-right turn lane (currently, two exclusive left turn lanes, two through lanes and an exclusive right turn lane), 2) Adding a through lane along the southbound Lammers Road approach and modifying the lane geometry to have two exclusive left turn lanes, two through lanes, and a shared through-right turn lane (currently, two exclusive left turn lanes, one through lane and an exclusive right turn lane), and 3) Adding a left turn lane along eastbound 11th Street approach, would be needed to improve the level of service to acceptable level under Year 2025 Base Conditions.

For the intersection of Corral Hollow Road/11th Street, adding a through lane each on northbound and southbound Corral Hollow Road approaches is expected to improve the level of service to an acceptable level under Year 2025 Base Conditions.

For the intersection of Corral Hollow Road/Schulte Road, 1) Adding a through lane along the northbound Corral Hollow and modifying the lane geometry to have an exclusive left turn lane, two through lanes, and an exclusive right turn lane (currently, an exclusive left turn lane, one through lane and one shared through-right turn lane), and 2) Utilizing "overlap" phasing for vehicles turning right into northbound Corral Hollow Road from westbound Schulte Road approach.

| Intersection #1 I-205 WB Ramps/Mountain House | Intersection #2 I-205 EB Ramps/Mountain House | Intersection #3 Mountain House/Schulte | Intersection #4 I-580 WB Ramps/Mountain House | Intersection #5 I-580 EB Ramps/Mountain House |
|--|--|--|--|--|
| | | | | |
| Intersection #6 Hansen/Schulte | Intersection #7 Lammers/Schulte | Intersection #8 Lammers/Elventh | Intersection #9 Corral Hollow/Elventh | Intersection #10 Corral Hollow/Schulte |
| | | | | |
| Intersection #11 Lammers/New Schulte | Intersection #12 Hansen/New Schulte | Intersection #13 Mountain House/New Schulte | | |
| | | | | |



Source: TKJM, 2004

FIGURE 4.3-14
YEAR 2025 PM PEAK HOUR TURNING MOVEMENT VOLUMES

4.3 TRAFFIC AND CIRCULATION

Year 2025 Base Plus Project Conditions

The Year 2025 plus Project scenario adds traffic from the proposed project to Year 2025 base conditions traffic. It was assumed that the proposed Youth Sports Park would be fully built with the completion of Phases II and I by Year 2025. **Figure 4.3-15** shows the project trip assignment at the study intersections with the new Schulte Road extension by Year 2025. **Figure 4.3-16** shows the projected peak hour turning movement volumes for Year 2025 Base plus Project scenario. **Figure 4.3-14** shows the Year 2025 PM peak hour turning movements. **Table 4.3-11** shows the intersection level of service analysis results for Year 2025 Base plus Project scenario.

Under Cumulative Year 2025 Base plus Project scenario, five of the thirteen study intersections are expected to continue to operate acceptably. The eight that will not include (same intersections as under the Year 2025 Base scenario) the intersections Mountain House Parkway/I-205 Westbound Ramps, Mountain House Parkway/I-205 Eastbound Ramps, Mountain House Parkway/I-580 Westbound Ramps, Mountain House Parkway/I-580 Eastbound Ramps, Lammers Road/Schulte Road, Lammers Road/11th Street, Corral Hollow Road/11th Street, and Corral Hollow Road/Schulte Road.

TABLE 4.3-11
YEAR 2025 BASE PLUS PROJECT INTERSECTION LEVELS OF SERVICE

| Intersection | Control | P.M. Peak Hour | |
|---|----------------|--------------------|--------------|
| | | Delay | LOS |
| 1. Mountain House Pkwy./I-205 WB Ramps | One-Way STOP | 120+ (120+) | F (F) |
| –With Mitigation | Signal | 11.3 | B |
| 2. Mountain House Pkwy./I-205 EB Ramps | One-Way STOP | 120+ (120+) | F (F) |
| –With Mitigation | Signal | 48.5 | D |
| 3. Mountain House Pkwy./Schulte Rd. | Signal | 41.6 | D |
| 4. Mountain House Pkwy./I-580 WB Ramps | One-Way Stop | 43.3 (120+) | E (F) |
| –With Mitigation | Signal | 25.1 | C |
| 5. Mountain House Pkwy./I-580 WB Ramps | One-Way Stop | 120+ (120+) | F (F) |
| –With Mitigation | Signal | 31.7 | C |
| 6. Hansen Rd./Schulte Rd. | Four-Way Stop | 15.0 | C |
| 7. Lammers Rd./Schulte Rd. | Three-Way Stop | 120+ | F |
| –With Mitigation | Signal | 34.2 | C |
| 8. Lammers Rd./11 th St. | Signal | 120+ | F |
| –With Mitigation | Signal | 54.5 | D |
| 9. Corral Hollow Rd./11 th St. | Signal | 52.9 | D |
| –With Mitigation | Signal | 34.4 | C |
| 10. Corral Hollow Rd./Schulte Rd | Signal | 53.2 | D |
| –With Mitigation | Signal | 34.2 | C |
| 11. Lammers Rd./New Schulte Rd. | Signal | 30.2 | C |
| 12. Hansen Rd./New Schulte Rd. | Four-Way Stop | 11.0 | B |
| 13. Mountain House Pkwy./New Schulte Rd. | Signal | 7.8 | A |

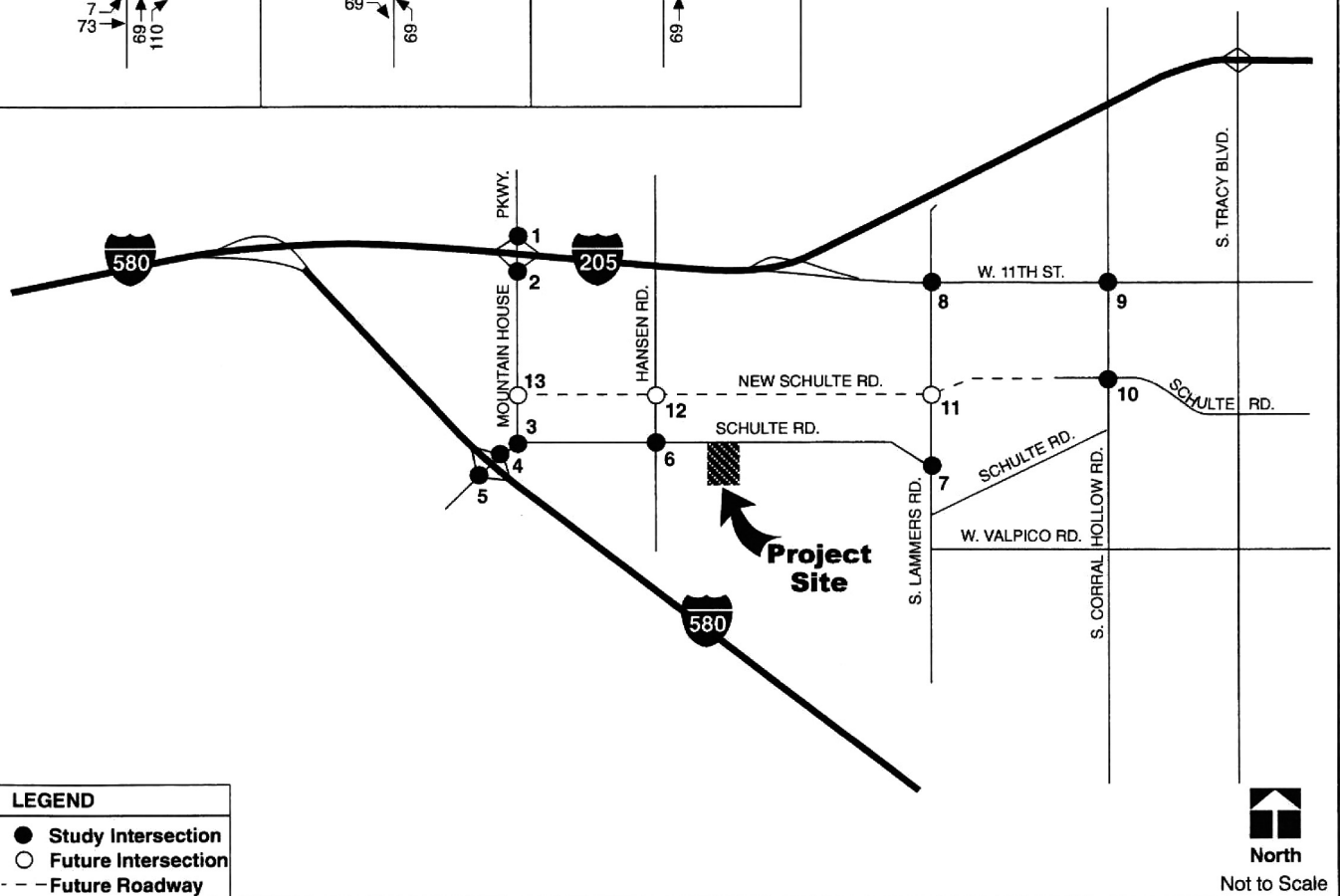
Recommendations

For the intersections of Mountain House Parkway/I-205 Westbound Ramps and Mountain House Parkway/I-205 Eastbound Ramps, Mountain House Parkway/I-580 Westbound Ramps, Mountain House Parkway/I-580 Eastbound Ramps, Lammers Road/Schulte Road, and Lammers Road/11th Street, the recommendations under Year 2025 Base scenario are expected to improve the levels of service to an acceptable level under Year 2025 Base plus Project scenario.

For the intersection of Corral Hollow Road/11th Street, in addition to the mitigation recommended under Year 2025 Base scenario, utilizing "overlap phasing for vehicle turning right into eastbound 11th Street from northbound Corral Hollow Road is expected to improve the level of service to an acceptable level under Year 2025 Base plus Project Conditions.

For the intersection of Corral Hollow Road/Schulte Road, in addition to the mitigation recommended under Year 2025 Base scenario, 1) Adding a through lane along the westbound Schulte Road, and 2) Adding a through lane along southbound approach and modifying the lane geometry to have two exclusive left turn lanes, two through lanes and an exclusive right turn lane (currently, two exclusive left turn lane, one through lane and one shared through-right turn lane), is expected to improve the level of service to an acceptable level under Year 2025 Base plus Project Conditions.

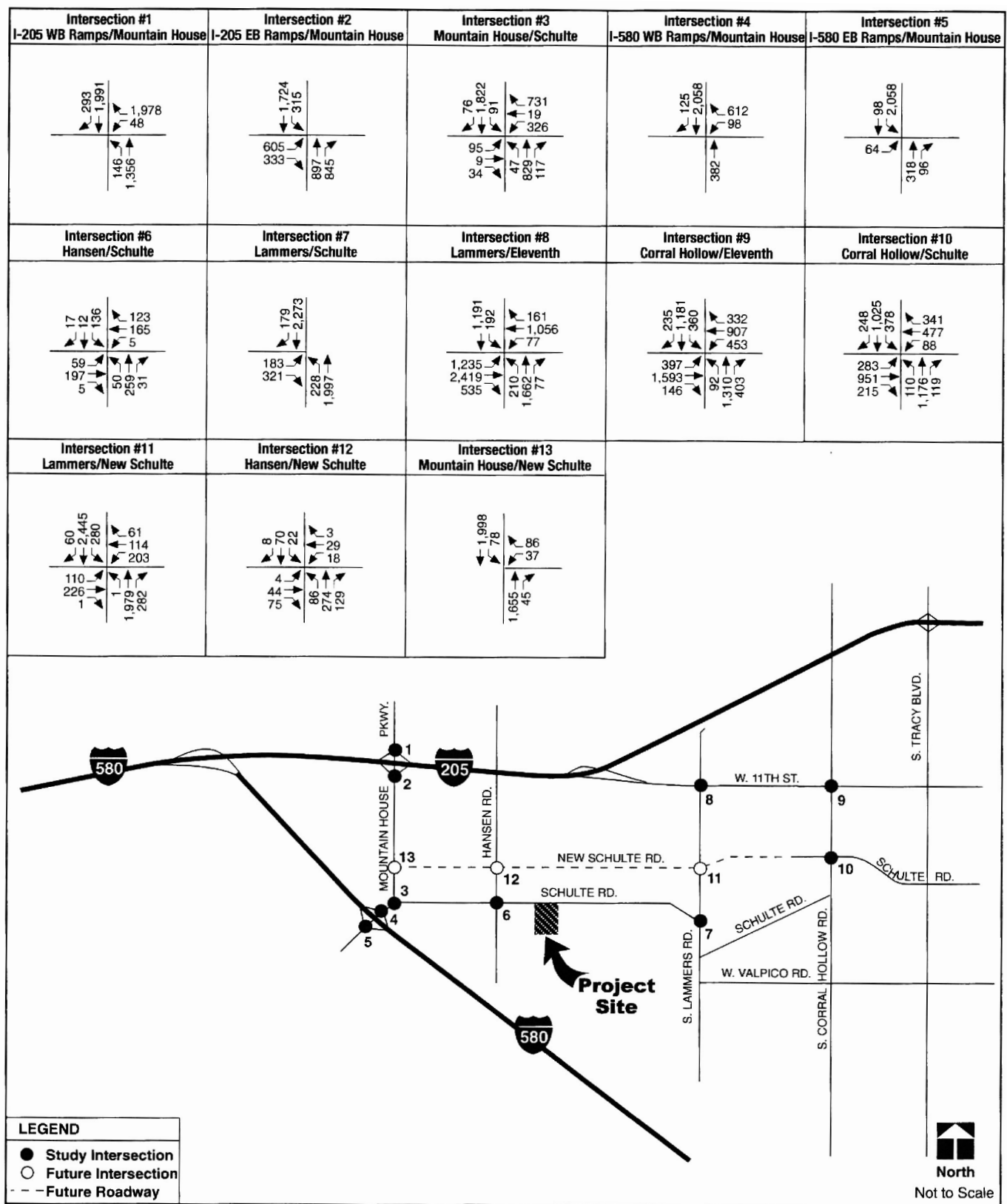
| Intersection #1 I-205 WB Ramps/Mountain House | Intersection #2 I-205 EB Ramps/Mountain House | Intersection #3 Mountain House/Schulte | Intersection #4 I-580 WB Ramps/Mountain House | Intersection #5 I-580 EB Ramps/Mountain House |
|--|--|--|--|--|
| | | | | |
| Intersection #6 Hansen/Schulte | Intersection #7 Lammers/Schulte | Intersection #8 Lammers/Eleventh | Intersection #9 Corral Hollow/Eleventh | Intersection #10 Corral Hollow/Schulte |
| | | | | |
| Intersection #11 Lammers/New Schulte | Intersection #12 Hansen/New Schulte | Intersection #13 Mountain House/New Schulte | | |
| | | | | |



Source: TKJM, 2004

FIGURE 4.3-15
PROJECT TRIP ASSIGNMENT WITH NEW SCHULTE ROAD EXTENSION

I:\Tracy Youth Sports\Revised Figures_Sep12005\Figure 4.3-16.ci, September 2005



Source: TKJM, 2004

FIGURE 4.3-16

YEAR 2025 + PROJECT (PHASE I + PHASE II) PM PEAK HOUR TURNING MOVEMENT VOLUMES

4.3 TRAFFIC AND CIRCULATION

Cumulative Fair Share Analysis

Table 4.3-12 shows the project fair share analysis under Year 2025 Base plus Project scenario. The project fair share at intersections that operate unacceptably under Year 2025 Base plus Project scenario was calculated by dividing the project trips by the cumulative traffic volume increment from Existing Conditions to Year 2025 plus Project Conditions. At this time, there is no existing traffic impact mitigation fee program in place to collect funds to support future improvements for the affected intersections.

TABLE 4.3-12
CUMULATIVE PROJECT FAIR SHARE ANALYSIS

| Intersection | Project Traffic | Cumulative Increment | Percent Project Fair Share |
|---|-----------------|----------------------|----------------------------|
| 1. Mountain House Pkwy./I-205 WB Ramps | 249 | 5056 | 4.9 |
| 2. Mountain House Pkwy./I-205 EB Ramps | 278 | 3986 | 7.0 |
| 4. Mountain House Pkwy./I-580 WB Ramps | 162 | 2402 | 6.7 |
| 5. Mountain House Pkwy./I-580 EB Ramps | 81 | 1624 | 5.0 |
| 7. Lammers Rd./Schulte Rd. | 746 | 4436 | 16.8 |
| 8. Lammers Rd./11 th St. | 270 | 6508 | 4.1 |
| 9. Corral Hollow Rd./11 th St. | 380 | 3172 | 12.0 |
| 10. Corral Hollow Rd./Schulte Rd. | 458 | 3155 | 14.5 |

Signal Warrant Analysis

The justification for the installation of a traffic signal at an intersection is based on the warrants stated in the Caltrans Manual and in the Manual On Uniform Traffic Control Devices (MUTCD) published by the Federal Highway Administration (FHWA). There is a total of 11 warrants that evaluate the need for a signal based on many reasons including excessive delay to minor street traffic, large pedestrian volumes, school crossing, signal progression, accident experience and excessive delay during the peak hour. When the design speed/85th percentile speed of traffic on the major street exceeds 40 miles per hour in either in urban or rural area, or when the intersection lies within the built-up area of an isolated community having a population of less than 10,000, the location is considered rural. Based on the above criteria, the rural warrants were considered to complete the signal warrant analysis for the seven selected study intersections.

The decision to install a signal should not be based solely upon the warrants, since the installation of traffic signals may increase certain types of collisions. Delay, congestion, approach conditions, driver confusion, future land use or other evidence of the need for right of way assignment beyond that which could be provided by stop signs must be demonstrated.

The most congested and critical time of day on a roadway usually occurs during the peak hour at the intersection. Therefore, if a signal is warranted based on the peak hour warrant, it is an indication that there is a need to further investigate the need for a signal based on the other 10 warrants. **Table 4.3-13** shows the peak hour signal warrant analysis for the existing unsignalized study intersections that are expected to operate unacceptably under different scenarios and two future study intersections that were analyzed as signalized intersections in Year 2025.

**TABLE 4.3-13
PM PEAK HOUR SIGNAL WARRANT ANALYSIS**

| Intersection | | Existing Control | Scenarios Where a Signal is Recommended | Rural Peak-Hour Warrant Met? |
|--------------|--------------------------------------|------------------|--|--|
| 1 | Mountain House Pkwy./I-205 WB Ramps | 1-Way Stop | 2010, 2010 + Prj, 2025, 2025 + Prj | Yes under all scenarios |
| 2 | Mountain House Pkwy./I-205 EB Ramps | 1-Way Stop | 2010, 2010 + Prj, 2025, 2025 + Prj | Yes under all scenarios |
| 4 | Mountain House Pkwy./I-508 WB Ramps | 1-Way Stop | 2025, 2025 + Prj | Yes under all scenarios |
| 5 | Mountain House Pkwy./I-580 EB Ramps | 1-Way Stop | Ex, Ex + Prj, 2010 + Prj, 2025, 2025 + Prj | Yes under all scenarios |
| 7 | Lammers Rd./Schulte Rd. | 3-Way Stop | Ex + Prj, 2010 + Prj, 2025, 2025 + Prj | Yes under all scenarios |
| 11 | Lammers Rd./New Schulte Rd. | Future | 2025, 2025 + Prj | Yes under all scenarios |
| 13 | Mountain House Pkwy./New Schulte Rd. | Future | 2025, 2025 + Prj | No under 2025 without project scenario, Yes under 2025 with project scenario |

Notes: Ex=Existing Conditions
Ex + Prj=Existing plus Project Conditions
2010= Year 2010 Base Conditions
2025= Year 2025 Base Conditions
2010 + Prj= Year 2010 Base plus Project Conditions
2025 + Prj= Year 2025 Base Plus Project Conditions

4.3.6 SITE ACCESS, CIRCULATION AND PARKING

The project site is proposed to have three project driveways along Schulte Road. Schulte Road borders the north of the project site, and is an east-west four lane arterial that extends west from Lammers Road to Mountain House Parkway. One full movement driveway centered along the property frontage will be provided with initial improvements and two secondary accesses will be provided as a component of future improvements. The project driveways are proposed to be two-lane roads that would provide access to various on-site parking lots to/from Schulte Road. The site road design incorporates no cul-de-sacs that would inhibit emergency vehicle access and turn-around. A residential access easement exists along the western site boundary, but no plans to utilize this secondary route have been identified. There is a potential for extended traffic queuing to enter the site during peak usage. A number of recommendations have been identified that would lessen this effect.

These suggestions include the use of storage lanes along Schulte Road in both directions, the creation of through lanes along Schulte Road and the installation of a signal.

Circulation internal to site continued from the access road and weaves throughout the site, connecting the various fields and services, including parking lots. The parking lots will be completed as needed to serve the sports facilities.

4.3 TRAFFIC AND CIRCULATION

4.3.7 IMPACTS AND MITIGATION MEASURES

The following section summarizes the potentially significant impacts of the project to the study intersections. Analysis of Cumulative 2025 plus project scenario is evaluated in **Section 5.0 Cumulative Impact Summary**. The impact statements are followed by mitigation measures intended to reduce the impacts to less-than-significant levels, if appropriate.

Existing Plus Proposed Project Traffic Scenario

Impact 4.3.1 Under Existing plus Phase I project Conditions, the project would contribute traffic to the intersection of Mountain House Parkway/I-580 Eastbound Ramps, which is already operating at an unacceptable level. Additionally, under Existing plus Phase I plus Phase II project conditions, the project's contribution to existing area traffic would result in unacceptable LOS levels at Hansen Road/Schulte Road and Lammers Road/Schulte Road and would continue to contribute traffic to the intersection of Mountain House Parkway/I-580 Eastbound Ramps. The project's additional contribution to these unacceptable levels of service is a **significant impact** of the project.

Under Existing plus Phase I project conditions, the project would exacerbate an existing unacceptable level of service (i.e., LOS E) at the intersection of Mountain House Parkway/I-580 Eastbound Ramps. Existing plus Phase I plus Phase II project conditions, the intersections of Mountain House Parkway/I-580 Eastbound Ramps, Hansen Road/Schulte Road, and Lammers Road/Schulte Road, which are expected to operate at LOS F, LOS E, and LOS F, respectively (see **Tables 4.3-4 and 4.3-5**).

Improvements to mitigate unacceptable LOS conditions at all of these intersections are identified in **Table 4.3-14**. It is important to note that improvements at the intersection of Mountain House Parkway/I-580 Eastbound Ramps would be necessary regardless of whether or not Phase I of the proposed project is built. Phase I would not create an exceedence at this intersection since this intersection is currently operating at LOS E. However, it would contribute to the total future growth at this intersection requiring mitigation.

Mitigation Measures

TABLE 4.3-14
EXISTING PLUS PROJECT (PHASE I PLUS PHASE II) RECOMMENDED MITIGATIONS

| Intersection | Existing | | Recommendations | |
|---------------------------------------|-------------|-----------------|-----------------|--|
| | PM Peak LOS | Type of Control | PM Peak LOS | Mitigation |
| Mountain House Parkway/I-580 EB Ramps | F | One way STOP | B | Signalizing All-way stop controlled |
| Hansen Road/ Schulte Road | E | Four-Way Stop | B | Modify (EB) shared left turn through land and an exclusive right turn land |
| Lammers Road/Schulte Road | F | Three-Way Stop | B | Signalizing and modifying (EB) – exclusive left and right turn lanes |

The roadway improvements identified in **Table 4.3-14** would mitigate the existing unacceptable LOS conditions at Mountain House Parkway/I-580 Eastbound Ramps and all future unacceptable LOS levels under this scenario. However, all roadway improvements under this scenario would require coordination with the County to implement since the affected intersections are not under control of the City.

CEQA Guidelines acknowledge the discretionary power of public agencies in that an agency does not have unlimited authority to impose mitigation measures (or alternatives) that would reduced environmental impacts to a less than significant level. CEQA does not grant an agency new powers independent of the powers granted to the agency by other laws (CEQA Guidelines Sections 15040 and 15041).

The affected study intersections are within the jurisdiction of San Joaquin County and the County currently has no improvement plans for any of the affected study sections. Subsequently, there is no existing traffic impact mitigation fee program in place to collect funds to support future improvements for the affected intersections. Under this condition, this impact will remain **significant and unavoidable**.

Year 2010 Plus Proposed Project Traffic Scenario

Impact 4.3.2 Under Year 2010 Base plus Phase I plus Phase II project conditions, the project would contribute traffic to four intersections that are projected to be operating at unacceptable or failure levels at that time. The project's additional contribution to these unacceptable levels of service is a **significant** impact of the project.

Under Year 2010 Base plus Phase I plus Phase II project conditions, the project would exacerbate projected unacceptable levels of service at the intersections of Mountain House Parkway/I-205 Westbound Ramps, Mountain House Parkway/I-205 Eastbound Ramps, Mountain House Parkway/I-580 Eastbound Ramps, Hansen Road/Schulte Road, and Lammers Road/Schulte Road, which are expected to operate at LOS F, LOS F, LOS F, LOS D, and LOS F, respectively (see **Tables 4.3-8 and 4.3-9**).

Improvements to mitigate unacceptable LOS conditions at all of these intersections are identified in **Table 4.3-15**. It is important to note that improvements at these intersections would be necessary regardless of whether or not Phase I of the proposed project is built. Phase I would not create an exceedence at this intersection since this intersection is currently operating at LOS E. However, it would contribute to the total future growth at this intersection requiring mitigation.

TABLE 4.3-15
NEAR-TERM (2010) BASE CONDITIONS PLUS PROJECT (PHASE I PLUS PHASE II) RECOMMENDED MITIGATIONS

| Intersection | Existing | | Recommendations | |
|---------------------------------------|-------------|-----------------|-----------------|-------------|
| | PM Peak LOS | Type of Control | PM Peak LOS | Mitigation |
| Mountain House Parkway/I-205 WB Ramps | F | One way STOP | D | Signalizing |
| Mountain House Parkway/I-205 EB Ramps | F | One way STOP | C | Signalizing |

4.3 TRAFFIC AND CIRCULATION

| | | | | |
|---------------------------------------|---|----------------|---|---|
| Mountain House Parkway/I-580 WB Ramps | F | One way STOP | B | Signalizing and modifying SB Mountain House Parkway approach to have an exclusive left turn land and a through land |
| Hansen Road/ Schulte Road | D | Four-Way Stop | B | Modify (EB) shared left turn through land and an exclusive right turn land |
| Lammers Road/Schulte Road | F | Three-Way Stop | B | Signalizing and modifying (EB) – exclusive left and right turn lanes |

As part of the conditions of approval for a separate previously approved project under the County's jurisdiction, the Mountain House Development, an interchange improvement project is currently under design, which will improve the level of service at the Mountain House Parkway/I-205 Eastbound and Westbound Ramps to acceptable conditions.

Mitigation Measures

MM 4.3.2 Phase II of the project shall not be implemented until such time that a Capital Improvement Program (CIP) or similar program is in place for affected intersections within the City's jurisdiction.

Timing/Implementation: Prior to Building Permit Issuance.

Enforcement/Monitoring: City of Tracy Department of Public Works.

Implementation of **MM 4.3.2** would avoid project impacts to affected intersections under the jurisdiction of the City of Tracy associated with implementation of Phase II of the project. **Table 4.3-16** below depicts which intersections in the study are under the jurisdiction of the City of Tracy and which are under the jurisdiction of the San Joaquin County.

TABLE 4.3-16
JURISDICTIONAL AUTHORITY OVER INTERSECTION

| San Joaquin County Intersections |
|---|
| 1. Mountain House Pkwy/I-205 WB Ramps |
| 2. Mountain House Pkwy/I-205 EB Ramps |
| 3. Mountain House Pkwy/Schulte Rd |
| 4. Mountain House Pkwy/I-580 WB Ramps |
| 5. Mountain House Pkwy/I-580 EB Ramps |
| 6. Hanson Rd/Schulte Rd |
| 7. Lammers Rd./Schulte Rd. |
| 8. Lammers Rd/11 th St. |
| City of Tracy Intersections |
| 9. Corral Hollow Rd./11 th St. |
| 10. Corral Hollow Rd./Schulte Rd. |

The roadway improvements identified in **Table 4.3-15** would mitigate all future unacceptable LOS conditions under this scenario. However, some roadway improvements under this scenario would require coordination with the County to implement since not all of the affected intersections are not under control of the City (see **Table 4.3-16**).

The County currently has no improvement plans for any of the affected study sections within the jurisdiction of San Joaquin County. Subsequently, there is no existing traffic impact mitigation fee program in place to collect funds to support future improvements for the affected intersections. Therefore, since **MM 4.3.2** would only avoid impacts to intersections under the jurisdiction of the City of Tracy, this impact will remain **significant and unavoidable**.

Air Traffic Impact

Impact 4.3.3 The proposed project would not result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks. This is a **less than significant** impact.

The proposed project is not in an area where it would change or increase traffic patterns and levels resulting in a substantial safety risk. Therefore, this is a **less than significant** impact

Mitigation Measures

None required.

Design Hazards Impact

Impact 4.3.4 The proposed project would not substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment). This is a **less than significant** impact.

The project does not propose any hazardous design features or incompatible uses resulting in a substantial hazard or safety risk. Therefore, this is a **less than significant** impact

Mitigation Measures

None required.

Emergency Access

Impact 4.3.5 The proposed project would not result in inadequate emergency access. This is a **less than significant** impact.

The project site is proposed to have three project driveways along Schulte Road. The site road design incorporates no cul-de-sacs that would inhibit emergency vehicle access and turn-around. Therefore, this is a **less than significant** impact

Mitigation Measures

None required.

4.3 TRAFFIC AND CIRCULATION

Inadequate Parking Capacity

Impact 4.3.6 The proposed project would not result in inadequate parking capacity. This is a **less than significant** impact.

Circulation internal to site continued from the access road and weaves throughout the site, connecting the various fields and services, including parking lots. The parking lots will be completed as needed to serve the sports facilities. Therefore, this is a **less than significant** impact

Mitigation Measures

None required.

REFERENCES

City of Tracy. 1993a. *City of Tracy General Plan*. Tracy, California. July 19, 1993.

City of Tracy. 1993b. *Final EIR for the City of Tracy General Plan*. Tracy, California. July 19, 1993.

County of San Joaquin. 1992. *General Plan 2010*, Volumes I, II and III. San Joaquin County, California, July 29, 1992.

1 *Highway Capacity Manual*, Transportation Research Board, 1994

4.4 Noise

INTRODUCTION

This section describes the existing noise environment of the project site and analyzes the noise impacts from the proposed project.

4.4.1 EXISTING SETTING

BACKGROUND AND TERMINOLOGY

Noise is often described as unwanted sound. Sound is defined as any pressure variation in air that the human ear can detect. If the pressure variations occur frequently enough (at least 20 times per second) they can be heard and are called sound. The number of pressure variations per second is called the frequency of sound, and is expressed as cycles per second, called Hertz (Hz).

Measuring sound directly in terms of pressure would require a very large and awkward range of numbers. To avoid this, the decibel scale was devised. The decibel scale uses the hearing threshold (20 micropascals of pressure), as a point of reference, defined as 0 dB. Other sound pressures are then compared to the reference pressure, and the logarithm is taken to keep the numbers in a practical range. The decibel scale allows a million-fold increase in pressure to be expressed as 120 dB. Another useful aspect of the decibel scale is that changes in decibel levels correspond closely to human perception of relative loudness. **Figure 4.4-3** illustrates common noise levels associated with various sources.

The perceived loudness of sounds is dependent upon many factors, including sound pressure level and frequency content. However, within the usual range of environmental noise levels, perception of loudness is relatively predictable, and can be approximated by weighing the frequency response of a sound level meter by means of the standardized A-weighting network. There is a strong correlation between A-weighted sound levels (expressed as dBA) and community response to noise. For this reason, the A-weighted sound level has become the standard tool of environmental noise assessment. All noise levels reported in this section are in terms of A-weighted levels.

Community noise is commonly described in terms of the “ambient noise level, which is defined as the all-encompassing noise level associated with a given noise environment. A common statistical tool to measure the ambient noise level is the average, or equivalent, sound level (Leq). The Leq is the foundation of the day/night average noise descriptor, Ldn, and shows very good correlation with community response to noise.

The Day-night Average Level (Ldn) is based upon the average noise level over a 24-hour day, with a +10 decibel weighting applied to noise occurring during nighttime (10:00 p.m. to 7:00 a.m.) hours. The nighttime penalty is based upon the assumption that people react to nighttime noise exposures as though they were twice as loud as daytime exposures. Because Ldn represents a 24-hour average, it tends to disguise short-term variations in the noise environment.

PROJECT DESCRIPTION

The proposed site plan includes a 32-acre playing field on the southwest side of the site, on which football and soccer fields are planned. Baseball and softball fields are planned within seven pie-shaped clusters, consisting of four to five ball fields each, in addition to five separate ball fields adjacent to the southern site boundary. **Figure 4.4-2** shows the proposed locations of the playing fields.

4.4 NOISE

EXISTING LAND USES IN THE PROJECT VICINITY

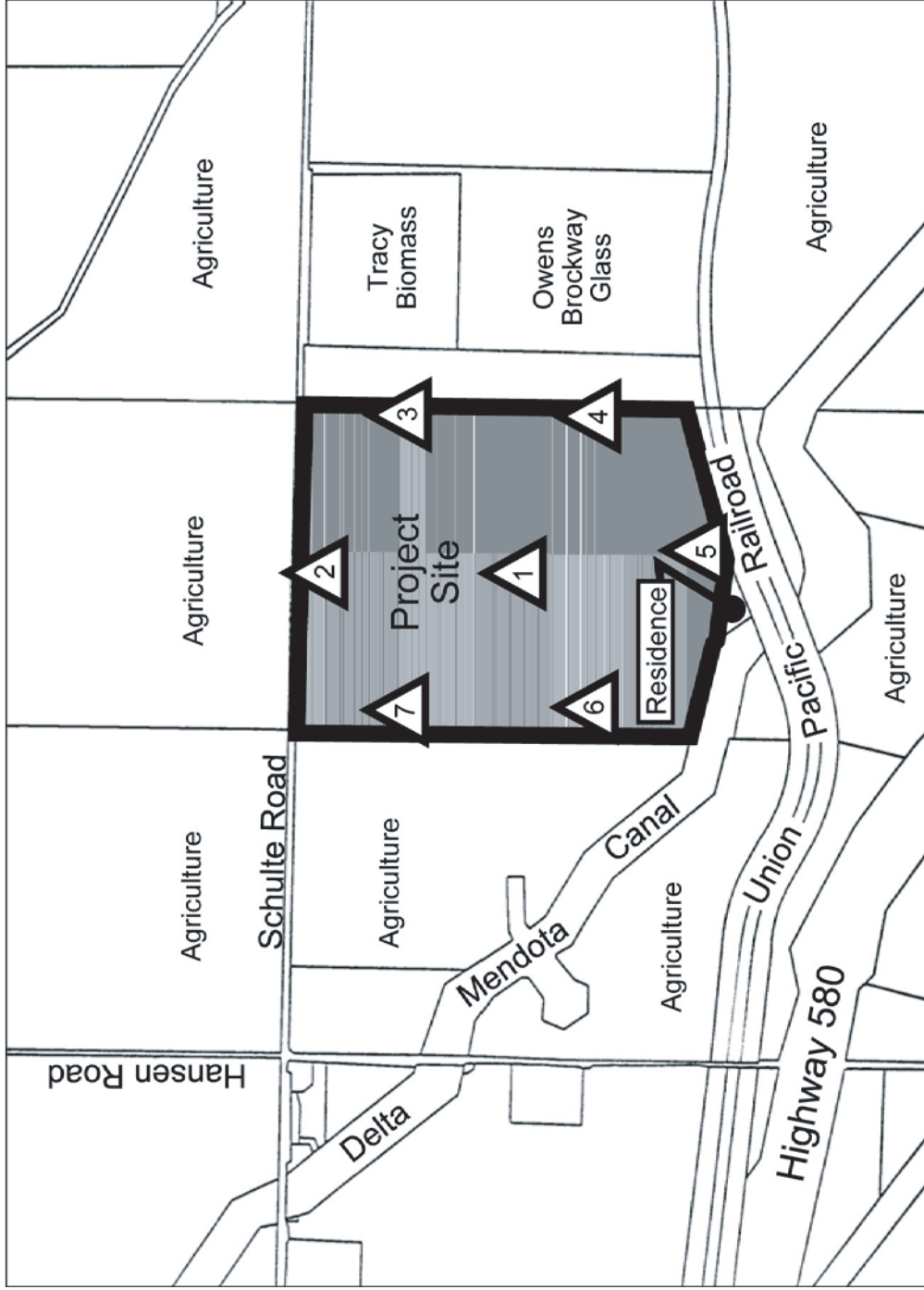
Land uses in the immediate project vicinity consist of agricultural parcels, some of which are in use for row crops whereas others are unimproved fields. In addition to the surrounding agricultural properties, the Tracy Biomass and Owens-Brockway Glass plants are located just east of the project site. Finally, the parcel located immediately south of the project site contains a residence.

EXISTING NOISE ENVIRONMENT IN THE PROJECT VICINITY

The ambient noise environment in the immediate project vicinity is defined primarily by local traffic on Schulte Road, and distant traffic noise from Highway 580. Operations at the Tracy Biomass Plant and Owens-Brockway Glass Plant also generate noise, but noise levels from those facilities are fairly low at the project site. Small aircraft overflights result in brief intermittent increases in the ambient noise environment, despite the project site being located well outside of the airports noise impact boundary. Finally, farm equipment associated with agricultural activities occasionally affects ambient noise conditions at the project site.

To quantify the existing ambient noise environment in the project vicinity, Bollard and Brennan Inc. used file data obtained from a short-term ambient noise level measurement survey conducted for the Tracy Learning Center Project on the afternoon of August 24, 1999. Short-term ambient noise levels were measured at seven locations on the project site. The noise measurement locations are shown on **Figure 4.4-1**.

Larson Davis Laboratories (LDL) Model 820 precision integrating sound level meters was used for the noise level measurement survey. The meters were calibrated before and after use with an LDL Model CA200 acoustical calibrator to ensure the accuracy of the measurements. The equipment used meets all pertinent specifications of the American National Standards Institute for Type 1 sound level meters (ANSI S1.4).



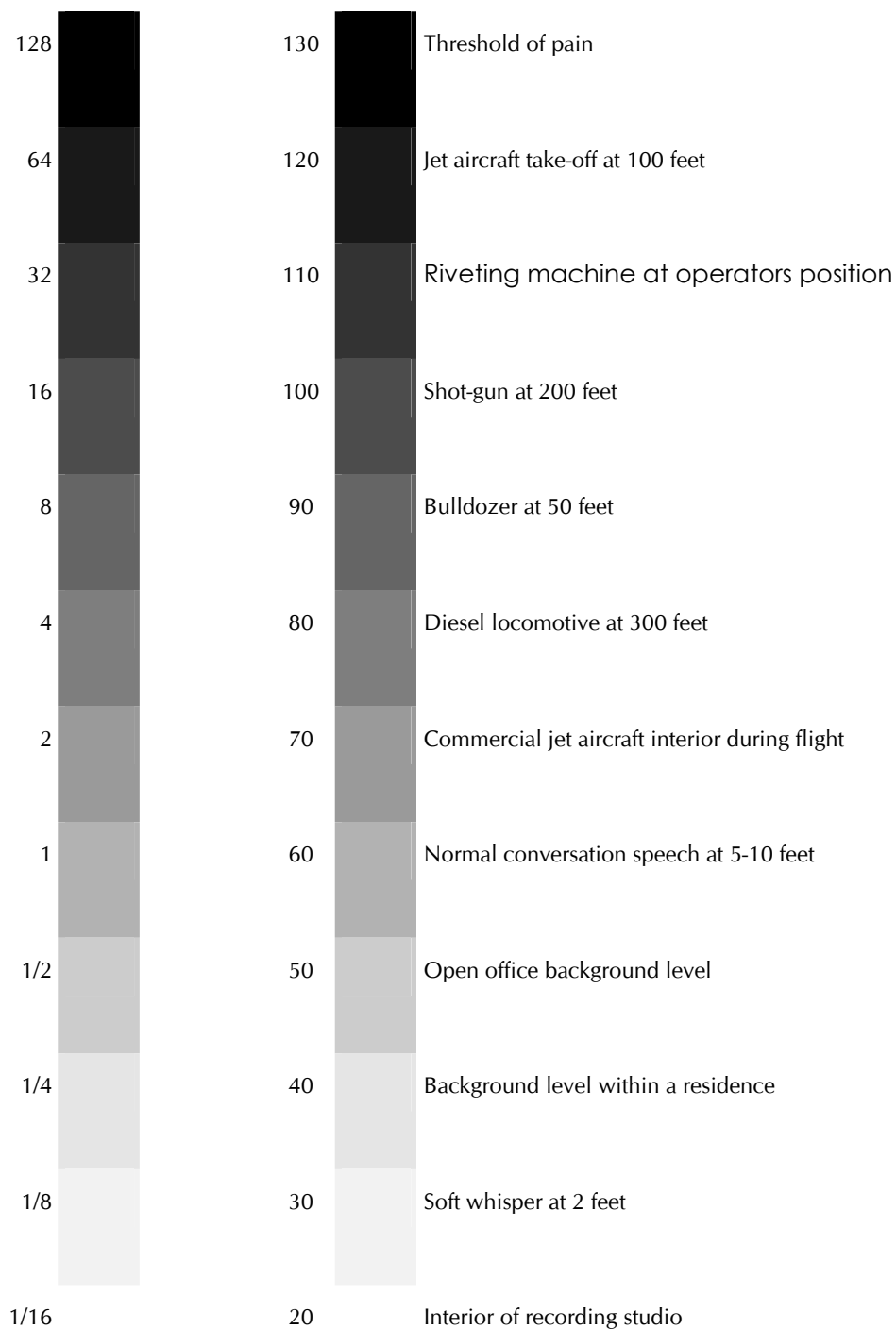
: Ambient Noise Measurement Locations

Source: Bollard & Brennan Inc.

Source:

FIGURE 4.4-2
Proposed Site Plan

FIGURE 4.4-3
TYPICAL A-WEIGHTED SOUND LEVELS OF COMMON NOISE SOURCES
LOUDNESS RATIO—LEVEL A-WEIGHTED SOUND LEVEL (DBA)



4.4 NOISE

The noise level measurement survey results are provided below in **Table 4.4-1**. The ambient noise monitoring survey revealed that ambient noise levels in the immediate project vicinity are typical of rural areas affected primarily by distant noise sources.

TABLE 4.4-1
AMBIENT NOISE MONITORING RESULTS
TRACY LEARNING CENTER PROJECT VICINITY - FEBRUARY 10, 1999

| Site | Location | Average (Leq) | Maximum (Lmax) | Noise Sources |
|------|--|---------------|----------------|---------------------------------|
| 1 | Center of project site | 46 | 61 | Small aircraft, distant traffic |
| 2 | 50 Feet south of Schulte Road centerline | 65 | 73 | Schulte Road traffic |
| 3 | Eastern P/L - 400 ft. south of Schulte | 44 | 58 | Biomass plant traffic |
| 4 | Eastern P/L - 1,500 ft. south of Schulte | 44 | 49 | Distant traffic |
| 5 | Southern P/L - center of site | 44 | 52 | Small aircraft overflight |
| 6 | Western P/L - 1500 ft. south of Schulte | 42 | 47 | Small aircraft overflight |
| 7 | Western P/L - 400 ft. south of Schulte | 45 | 51 | Small aircraft, traffic |

Source: *Bollard & Brennan, Inc.; Noise measurement locations are shown on Figure -1.*

4.4.2 REGULATORY FRAMEWORK

CITY GENERAL PLAN

The Noise Element of the City's General Plan provides the following goals, policies, and actions, which are germane to the project:

Goal NO 1:

Provide appropriate exterior and interior noise level standards for land uses to protect citizens from excessive noise.

Policy NO 1.1: Discourage noise sensitive land uses in noisy exterior environments unless measures can be implemented to reduce exterior and interior noise to acceptable levels. Alternatively, encourage less sensitive land uses in areas adjacent to major noise generators but require appropriate interior working environments.

Actions NO 1.1.1: Incorporate measures into all development projects to attenuate exterior and/or interior noise levels to acceptable levels. Noise standards for land use compatibility are provided in City of Tracy General Plan Table 6-1 "Noise Maximums within Zoning Districts". This table is reproduced below as Table 4.4-2 (re-insert table).

Goal NO 2:

Facilitate proper land use planning by separating significant noise generators from sensitive receptor areas.

Policy NO 2.1: Locate noise tolerant land uses in areas irrevocably committed to noise producing uses, such as adjacent to master planned roadways.

Action NO 2.1.1: Require that projects include a review of noise impacts meeting a minimum standard of performance.

Goal NO 3:

Promote the Control of Noise Between Land Uses

Policy NO 3.1: Establish the maximum permitted noise levels at property lines to minimize impact on adjacent land uses.

4.4.3 PROJECT IMPACTS AND MITIGATION MEASURES

SIGNIFICANCE CRITERIA

CEQA guidelines and the Noise Element of the City's General Plan have been used to establish impact standards for this section.¹ Implementation of the project would result in significant noise impacts if the project would result in any of the following:

- N-a:** Exposure of persons to or generation of noise levels in excess of standards established in the Noise Element of the City's General Plan (75 Ldn at the property line).
- N-b:** A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project.
- N-c:** A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.

METHODOLOGY

A combination of use of existing literature, and application of accepted noise prediction and sound propagation algorithms, were used to predict changes in ambient noise levels resulting from the Tracy Youth Sports Facility. Specific noise sources evaluated in this section include off-site traffic, and on-site noise sources associated with the outdoor playing fields. Potential noise impacts of each of these major noise sources are described below.

Off-Site Traffic Noise Impact Assessment Methodology

Traffic Noise Prediction Model

To describe existing and projected noise levels due to traffic, the Federal Highway Administration Highway Traffic Noise Prediction Model (FHWA RD-77-108) was used. The FHWA model is the analytical method currently favored for traffic noise prediction by most state and local agencies. The model is based upon the Calven reference noise factors for automobiles, medium trucks and

¹ The project site is designated as industrial in the City's General Plan. However, because the project site is outside of the City's boundaries, it has no City zoning designation. Nevertheless, the standards relied on for the purposes of this EIR are those set forth in the Noise Element of the City's General Plan for industrial "zoning districts."

It should also be noted that, because the project site is outside of the City's boundaries, it is not subject to the City's Noise Ordinance (Tracy Municipal Code, Article 9 of Chapter 4.12.) However, if it was subject to the Ordinance, it would be subject to the same industrial standards as referenced in the Noise Element of the General Plan. (Tracy Municipal Code, section 4.12.750.)

4.4 NOISE

heavy trucks, with consideration given to vehicle volume, speed, roadway configuration, distance to the receiver, and the acoustical characteristics of the site.

The FHWA model was developed to predict hourly Leq values for free-flowing traffic conditions. To predict Ldn values, it is necessary to determine the day/night distribution of traffic and adjust the traffic volume input data to yield an equivalent hourly traffic volume.

FHWA Traffic Noise Prediction Model Inputs and Results

Average daily traffic (ADT) volumes for year Existing and Future 2025 conditions were obtained from TJKM Transportation Consultants for both project and no-project scenarios. This analysis focuses on the Existing and Future 2025 conditions since those most closely represent baseline and cumulative conditions. The FHWA Model inputs are contained in the Technical Appendices. The predicted traffic noise levels at a representative distance of 100 feet from the centerlines of the project-area roadways are shown in **Table 4.4-4**.

TABLE 4.4-2
PREDICTED EXISTING TRAFFIC NOISE LEVELS (LDN @ 100 FEET FROM ROADWAY CENTERLINES)
TRACY YOUTH SPORTS FACILITY PROJECT VICINITY ROADWAYS - CITY OF TRACY, CALIFORNIA

| Roadway | Segment | Existing Conditions | | | |
|---------------------|--------------------------|---------------------|--------------|----------|---|
| | | Without Project | With Project | Increase | Distance to 75 dB Ldn with Project ¹ |
| Schulte Road | Patterson Pass to Hansen | 64 | 66 | 2 | 24 |
| | East of Hansen | 63 | 65 | 2 | 25 |
| | West of Lammers | 63 | 67 | 4 | 30 |
| Patterson Pass Road | North of Schulte | 60 | 63 | 3 | 15 |
| Hansen Road | North of Schulte | 54 | 54 | 0 | 4 |
| Lammers Road | North of Schulte | 60 | 64 | 4 | 20 |
| | South of Schulte | 62 | 66 | 4 | 24 |

Notes: FHWA Model input data are provided in Appendix B.

Source: FHWA-RD-77-108 with inputs from Transportation Consultant and Bollard & Brennan, Inc.

Distances to 65 dB Ldn traffic noise contours are measured in feet from the centerlines of the roadways

Outdoor Playing Field Noise Assessment Methodology

Children playing on school playgrounds are often considered potentially significant noise sources, which could adversely affect adjacent noise-sensitive land uses. Typical noise levels associated with groups of approximately 50 children playing at a distance of 50 feet generally range from 55 to 60 dB Leq, with maximum noise levels ranging from 70 to 75 dB.

Given the proximity of the nearest residence to the south of the project, the potential for adverse noise impacts at that location exists.

Construction Noise Impact Assessment Methodology

During the construction phases of the project, noise from construction activities would add to the noise environment in the immediate project vicinity. Activities involved in construction would generate maximum noise levels, as indicated in **Table 4.4-5**, ranging from 85 to 90 dB at a distance

of 50 feet. Construction activities would be temporary in nature and are anticipated to occur during normal daytime working hours.

Noise would also be generated during the construction phase by increased truck traffic on area roadways. A significant project-generated noise source would be truck traffic associated with transport of heavy materials and equipment to and from construction sites. This noise increase would be of short duration, and would likely occur primarily during daytime hours.

**TABLE 4.4-3
CONSTRUCTION EQUIPMENT NOISE**

| Type of Equipment | Maximum Level, dB at 50 feet |
|-------------------|------------------------------|
| Bulldozers | 87 |
| Heavy Trucks | 88 |
| Backhoe | 85 |
| Pneumatic Tools | 85 |

Source: *Environmental Noise Pollution*, Patrick R. Cuniff, 1977.

TRAFFIC NOISE IMPACTS

Existing Plus Project Traffic Noise

Impact 4.4.1 Existing plus project traffic noise levels will not exceed the 75 dB Ldn exterior noise level standard. This impact is considered **less than significant**.

Existing plus project traffic noise levels are not predicted to exceed 75dB Ldn within 30 feet of the centerline of Schulte Road under existing plus project conditions. Therefore, this impact is considered **less than significant** and subject to mitigation according to significance criteria N-a.

Mitigation Measures

None required.

Project-related Traffic Noise

Impact 4.4.2 Project-related traffic is expected to result in traffic noise level increases over no-project levels ranging from 0 to 4 dB Ldn on the roadways in the immediate project vicinity. This impact is considered **less than significant**.

Pursuant to Significance Criteria N-b, a substantial increase in traffic noise levels is typically defined as 5 dB. Because the project-related increase in traffic noise on the local roadway network is less than that threshold, this impact is considered to be **less than significant** based on significance criteria N-b.

Mitigation Measures

None required.

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Construction Noise Impacts

Impact 4.4.3 During the construction phases of the project, noise from construction activities would add to the noise environment in the immediate project vicinity. The level and duration of this noise will be short-term in nature. The impact is considered **less than significant**.

Activities involved in construction would typically generate maximum noise levels ranging from 85 to 90 dB at a distance of 50 feet. Construction activities would be temporary in nature and are anticipated to occur during normal daytime working hours. Although construction activities would result in periods of elevated noise levels, these increases would be relatively short-term in nature. Therefore, this impact is considered **less than significant** according to significance criteria N-b.

Mitigation Measures

None required.

Noise Impacts Associated with On-Site Activities

Impact 4.4.4 Noise generated by outdoor playing fields would not result in exceedance of the 75 dB standard for Industrial designated property or substantial increases in ambient noise levels at the existing residence located to the south of the project site. This impact is considered **less than significant**.

The project's proposed site plan indicates that soccer fields are planned to be located approximately 150 feet from the nearest residence to the south. At this distance noise levels associated with activities at the soccer fields are predicted to be approximately 58 dB Leq. Therefore, it is predicted that the project will not exceed the 75 dB Ldn standard applicable to industrial designated properties. Therefore, this impact is considered a **less than significant** impact.

Mitigation Measures

None required.

Maintenance Noise Operations

Impact 4.4.5 Noise generated by property maintenance equipment may result in significant short-term increases in ambient noise levels and exceedances of City noise standards at the nearest residence to the south of the project site. This impact is considered **potentially significant**.

Mowers, blowers, weed cutters and tractors can produce relatively high noise levels, up to 90 dB at a distance of 50 feet. Some types of equipment are quieter than others, due to better mufflers or the type of mechanical operation. Use of powered maintenance equipment is typically of short duration. For example, lawn-mowing noise would consist of repeated passages in a given area. Although ambient noise levels in the immediate vicinity would increase during lawn maintenance operations, lawn mowing equipment at the project site is generally expected to produce similar noise emissions landscaping activities at the existing residence to the south of the site or existing agricultural operations. As a result, those levels are not expected to adversely affect the nearest noise-sensitive land use provided that such activity occurs in daytime hours and provided that the equipment used has adequate mufflers. Therefore, this impact is considered **potentially significant** requiring mitigation according to significance criteria N-b and N-c.

Mitigation Measures

MM 4.4.5a Grounds maintenance activities should be limited to the hours of 7 a.m. to 5 p.m.

MM 4.4.5b All maintenance equipment utilizing internal combustion engines shall be properly muffled in accordance with manufacturers specifications.

Timing/Implementation: Ongoing during and after project construction.

Enforcement/Monitoring: City of Tracy Public Works Department.

Implementation of Mitigation Measures **MM 4.4.5a** and **MM 4.4.5b** would reduce this impact to **less than significant**.

Public Address System Noise

Impact 4.4.6 Noise generated by public address system usage during softball or soccer games may exceed the 75 dB standard at the property lines applicable to Industrial designated property. This impact is considered **potentially significant**.

Public address (PA) systems are often used at the outdoor sporting facilities. The noise emissions of P/A systems can vary considerably, depending on the type and orientation of the P/A speaker(s), as well as the amplifier settings. The maximum sound emissions of the P/A system are expected to be approximately similar to the maximum sound levels generated by the crowd noise plus 5 dB. Due to the number of variables surrounding the noise emissions of public address systems which may be used at the outdoor playing fields, this impact is considered **potentially significant** and in need of mitigation according to significance criteria N-a.

Mitigation Measure

MM 4.4.6 Prior to the issuance of an electrical permit for any public address systems proposed for the playing fields located near the southern property line, City Parks and Community Services Department staff will test the sound system to ensure that it was designed to not to generate noise levels in excess of 75dB Leq at the property line.

Timing/Implementation: Prior to the issuance of building permits.

Enforcement/Monitoring: City of Tracy Planning Department.

Implementation of Mitigation Measure **MM 4.4.6** would reduce this impact to **less than significant**.

Noise Impacts From Nearby Industrial Uses

Impact 4.4.7 Noise levels generated by nearby industrial uses (Tracy Biomass & and Owens Brockway Glass Container) were measured to be below the applicable San Joaquin County noise standards applicable to public outdoor uses during an ambient noise survey conducted by Bollard & Brennan, Inc. staff. This impact is considered **less than significant**.

The assessment of impacts associated with the nearby industrial noise sources were based primarily on field inspections and ambient noise survey results. Based on those surveys, the industrial noise sources are not expected to result in either a significant exceedance of existing ambient noise levels

4.4 NOISE

or exceedance of standards at the project site. Therefore, this impact is considered **less than significant** according to significance criteria N-a and N-c.

Mitigation Measures

None required.

REFERENCES

Bollard & Brennan, 1999. *Noise Analysis for the Tracy Learning Center*. July, 1999.

Bollard, Paul, 2005. *Revised Noise Analysis for the Tracy Youth Sports Facility Complex*. July 2005.

City of Tracy. *City of Tracy General Plan*. Tracy, California. July 19, 1993.

San Joaquin County General Plan, 2010, July, 1992.

4.4 NOISE

4.4.4 APPENDIX A

ACOUSTICAL TERMINOLOGY

Acoustics The science of sound.

Ambient Noise The distinctive acoustical characteristics of a given space consisting of all noise sources audible at that location. In many cases, the term ambient is used to describe an existing or pre-project condition such as the setting in an environmental noise study.

Attenuation The reduction of an acoustic signal.

A-Weighting A frequency-response adjustment of a sound level meter that conditions the output signal to approximate human response.

Decibel or dB Fundamental unit of sound, A Bell is defined as the logarithm of the ratio of the sound pressure squared over the reference pressure squared. A Decibel is one-tenth of a Bell.

CNEL Community Noise Equivalent Level. Defined as the 24-hour average noise level with noise occurring during evening hours (7 - 10 p.m.) weighted by a factor of three and nighttime hours weighted by a factor of 10 prior to averaging.

Frequency The measure of the rapidity of alterations of a periodic signal, expressed in cycles per second or hertz.

Ldn Day/Night Average Sound Level. Similar to CNEL but with no evening weighting.

Leq Equivalent or energy-averaged sound level.

Lmax The highest root-mean-square (RMS) sound level measured over a given period of time.

Loudness A subjective term for the sensation of the magnitude of sound.

Masking The amount (or the process) by which the threshold of audibility is for one sound is raised by the presence of another (masking) sound.

Noise Unwanted sound.

Peak Noise The level corresponding to the highest (not RMS) sound pressure measured over a given period of time. This term is often confused with the "Maximum" level, which is the highest RMS level.

RT₆₀ The time it takes reverberant sound to decay by 60 dB once the source has been removed.

Sabin The unit of sound absorption. One square foot of material absorbing 100% of incident sound has an absorption of 1 sabin.

**Threshold of
Hearing**

The lowest sound that can be perceived by the human auditory system, generally considered to be 0 dB for persons with perfect hearing.

**Threshold
of Pain**

Approximately 120 dB above the threshold of hearing.

4.5 Air Quality

This section describes the impacts of the proposed project on local and regional air quality. This section was prepared using methodologies and assumptions recommended within the air quality impact assessment recommendations of the San Joaquin Valley Unified Air Pollution Control District. In keeping with these recommendations, the section describes existing air quality, construction-related impacts, direct and indirect emissions associated with the project, the impacts of these emissions on both the local and regional scale, and mitigation measures warranted to reduce or eliminate any identified significant impacts.

4.5.1 EXISTING SETTING

AIR POLLUTION CLIMATOLOGY

The project is located in the San Joaquin Valley air basin, which is defined by the Sierra Nevada in the east, the Coast Ranges in the west, and the Tehachapi mountains in the south. The surrounding topographic features restrict air movement through and out of the basin and, as a result, impede the dispersion of pollutants from the basin. Inversion layers are formed in the San Joaquin Valley air basin throughout the year. (An inversion layer is created when a mass of warm dry air sits over cooler air near the ground, preventing vertical dispersion of pollutants from the air mass below). During the summer, the San Joaquin Valley experiences daytime temperature inversions at elevations from 2,000 to 2,500 feet above the valley floor. During the winter months, inversions occur from 500 to 1,000 feet above the valley floor (SJVAPCD 1998).

The climate of the project area is typical of inland valleys in California, with hot dry summers and cool, mild winters. Daytime temperatures in the summer often exceed 100 degrees, with lows in the 60's. In winter daytime temperatures are usually in the 50's, with lows around 35 degrees. Radiation fog is common in the winter, and may persist for days. Winds are predominantly up-valley (from the north) in all seasons, but more so in the summer and spring months. Winds in the fall and winter are generally lighter and more variable in direction (CARB 1974).

The pollution potential of the San Joaquin Valley is very high. Surrounding elevated terrain in conjunction with temperature inversions frequently restrict lateral and vertical dilution of pollutants. Abundant sunshine and warm temperatures in summer are ideal conditions for the formation of photochemical oxidant, and the Valley is a frequent scene of photochemical pollution.

AMBIENT AIR QUALITY STANDARDS

Both the U.S. Environmental Protection Agency and the California Air Resources Board have established ambient air quality standards for common pollutants. These ambient air quality standards are levels of contaminants that represent safe levels that avoid specific adverse health effects associated with each pollutant. The ambient air quality standards cover what are called "criteria" pollutants because the health and other effects of each pollutant are described in criteria documents.

The federal and state of California ambient air quality standards are summarized in **Table 4.5-1** for important pollutants. The federal and state ambient standards were developed independently with differing purposes and methods, although both processes attempted to avoid health-related effects. As a result, the federal and state standards differ in some cases. In general, the state standards are more stringent. This is particularly true for ozone and particulate matter (PM_{2.5} and PM₁₀).

4.5 AIR QUALITY

TABLE 4.5-1
FEDERAL AND STATE AMBIENT AIR QUALITY STANDARDS

| Pollutant | AVERAGING TIME | Federal Primary Standard | State Standard |
|-------------------|-----------------------------------|---|--|
| Ozone | 1-Hour 8-Hour | 0.12 ppm 0.08 ppm | 0.09 ppm – |
| Carbon Monoxide | 8-Hour 1-Hour | 9.0 ppm 35.0 ppm | 9.0 ppm 20.0 ppm |
| Nitrogen Dioxide | Annual 1-Hour | 0.05 ppm – | – 0.25 ppm |
| Sulfur Dioxide | Annual 24-Hour 1-Hour | 0.03 ppm 0.14 ppm – | – 0.04 ppm 0.25 ppm |
| PM ₁₀ | Annual 24-Hour | 50 ug/m ³ 150 ug/m ³ | 20 ug/m ³ 50 ug/m ³ |
| PM _{2.5} | Annual 24-Hour | 15 ug/m ³ 65 ug/m ³ | 12 ug/m ³ – |
| Lead | 30-Day Average 3-Month Average | – 1.5 ug/m ³ | 1.5 ug/m ³ – |

Notes: ppm = parts per million; ug/m³ = Micrograms per Cubic Meter.

Source: CARB 2003

The State of California regularly reviews scientific literature regarding the health effects and exposure to particulate matter and other pollutants. On May 3, 2002, the California Air Resources Board (CARB) staff recommended lowering the level of the annual standard for PM₁₀ and establishing a new annual standard for PM_{2.5} (particulate matter 2.5 micrometers in diameter and smaller). The new standards became effective on July 5, 2003.

In addition to the criteria pollutants discussed above, Toxic Air Contaminants (TACs) are another group of pollutants of concern. Toxic Air Contaminants (TACs), are injurious in small quantities and are regulated despite the absence of criteria documents. The identification, regulation and monitoring of TACs is relatively recent compared to that for criteria pollutants. Unlike criteria pollutants, TACs are regulated on the basis of risk rather than specification of safe levels of contamination.

AMBIENT AIR QUALITY

The California Air Resources Board (CARB) currently operates a monitoring site in Tracy that measures two gaseous pollutants: ozone and nitrogen dioxide. The CARB also operates four monitoring sites within metropolitan Stockton measuring these pollutants and two additional pollutants: carbon monoxide and PM₁₀. Data from these monitoring sites are shown in **Table 4.5-2**. Air quality in Tracy and San Joaquin County generally meets the state and federal ambient air quality standards except for ozone and PM₁₀.

The project site is near three existing industrial sources of air pollutants operating under permits from the San Joaquin Valley Air Pollution Control District. The closest is the Owens-Brockway Glass Container Facility located east of the site at 14800 W. Shulte Road. Further to the east on

W. Schulte Road is the Tracy Biomass Plant, which generates electricity by burning agricultural waste and urban wood waste materials. The Tracy Peaker Plant, a natural gas fired generating plant, is located to the southeast of the project site.

Under the Air Toxic "Hot Spots" Information and Assessment Act facilities that emit identified Toxic Air Contaminants must provide the air district with detailed Toxic Emission Inventory Reports. The air district is then required to rank the health risk posed by each facility as "low", "medium" or "high" priority. Only those facilities ranked as high priority are required to perform health risk assessments.

The Owens-Brockway Glass Plant and Tracy Biomass Plant are identified sources of TACs subject to the Air Toxic "Hot Spots" Information and Assessment Act. Based on the SJVAPCD's prioritization analysis, both are considered to be "medium" priority. These facilities therefore do not require the preparation of a health risk assessment and are not subject to the public notification requirements of the Act.

The Air Toxic "Hot Spots" Information and Assessment Act requires that TAC sources be evaluated individually, but not cumulatively. Because of the persistence of northwesterly winds in the project area, any cumulative impacts of the two plants would occur south and east of the two plants and would not affect the project site.

In 1998 the California Air Resources Board identified particulate matter from diesel-fueled engines as a toxic air contaminant (TAC). CARB has completed a risk management process that identified potential cancer risks for a range of activities using diesel-fueled engines (CARB 2000). High volume freeways, stationary diesel engines and facilities attracting heavy and constant diesel vehicle traffic (distribution centers, truckstops) were identified as having the highest associated risk.

The Summit Distribution Center located ½ mile west of the site is a facility that attracts diesel trucks. Because of the persistence of northwesterly winds in the project area, this facility would not be upwind of the project site.

TABLE 4.5-2
AIR QUALITY DATA SUMMARY FOR TRACY AND STOCKTON, 2002-2004

| Pollutant | Standard | Monitoring Site | Number of Annual Violations During: | | |
|------------------|----------------|------------------------|-------------------------------------|------|------|
| | | | 2002 | 2003 | 2004 |
| Ozone | State 1-Hour | Stockton (Hazelton) | 2 | 3 | 1 |
| | | Stockton (E. Mariposa) | 5 | - | - |
| | | Tracy | 11 | 5 | 4 |
| Ozone | Federal 1-Hour | Stockton (Hazelton) | 0 | 0 | 0 |
| | | Stockton (E. Mariposa) | 0 | - | - |
| | | Tracy | 0 | 0 | 0 |
| Ozone | Federal 8-Hour | Stockton (Hazelton) | 0 | 1 | 0 |
| | | Stockton (E. Mariposa) | 1 | - | - |
| | | Tracy | 3 | 2 | 1 |
| PM ₁₀ | State 24-Hour | Stockton (Hazelton) | 10 | 3 | 3 |
| | | Stockton (Wagner Holt) | 6 | 3 | 0 |

4.5 AIR QUALITY

| Pollutant | Standard | Monitoring Site | Number of Annual Violations During: | | |
|-------------------|----------------------|------------------------|-------------------------------------|------|------|
| | | | 2002 | 2003 | 2004 |
| PM ₁₀ | Federal 24-Hour | Stockton (Hazelton) | 0 | 0 | 0 |
| | | Stockton (Wagner Holt) | 0 | 0 | 0 |
| PM _{2.5} | Federal 24-Hour | Stockton (Hazelton) | 0 | 0 | 0 |
| Carbon Monoxide | State/Federal 8-Hour | Stockton (Hazelton) | 0 | 0 | 0 |
| Nitrogen Dioxide | State 1-Hour | Stockton (Hazelton) | 0 | 0 | 0 |
| | | Tracy | 0 | 0 | 0 |

Source: CARB 2005

HEALTH EFFECTS OF POLLUTANTS

The primary air quality problems in the San Joaquin Valley Air Basin are ozone and particulate matter. Carbon monoxide has been a problem in the past within the San Joaquin Valley Air Basin in larger cities such as Fresno, Bakersfield, Modesto and Stockton. The following is a discussion of the health effects of these important pollutants.

Ozone

Ozone is produced by chemical reactions, involving nitrogen oxides (NO_x) and reactive organic gases (ROG) that are triggered by sunlight. Nitrogen oxides are created during combustion of fuels, while reactive organic gases are emitted during combustion and evaporation of organic solvents. Since ozone is not directly emitted to the atmosphere, but is formed as a result of photochemical reactions, it is considered a secondary pollutant. In the San Joaquin Valley Air Basin ozone is a seasonal problem, occurring roughly from April through October.

Ozone is a strong irritant that attacks the respiratory system, leading to the damage of lung tissue. Asthma, bronchitis and other respiratory ailments as well as cardiovascular diseases are aggravated by exposure to ozone. A healthy person exposed to high concentrations may become nauseated or dizzy, may develop headache or cough, or may experience a burning sensation in the chest.

Research has shown that exposure to ozone damages the alveoli (the individual air sacs in the lung where the exchange of oxygen and carbon dioxide between the air and blood takes place). Research has shown that ozone also damages vegetation.

Suspended Particulate

Suspended particulate matter (PM) is a complex mixture of tiny particles that consists of dry solid fragments, solid cores with liquid coatings, and small droplets of liquid. These particles vary greatly in shape, size and chemical composition, and can be made up of many different materials such as metals, soot, soil, and dust. "Inhalable" PM consists of particles less than 10 microns in diameter, and is defined as "suspended particulate matter" or PM₁₀. Particles between 2.5 and 10 microns in diameter arise primarily from natural processes, such as wind-blown dust or soil.

Fine particles are less than 2.5 microns in diameter (PM_{2.5}). PM_{2.5}, by definition, is included in PM₁₀. Fine particles are produced mostly from combustion or burning activities. Fuel burned in cars and trucks, power plants, factories, fireplaces and wood stoves produces fine particles.

The level of fine particulate matter in the air is a public health concern because it can bypass the body's natural filtration system more easily than larger particles, and can lodge deep in the lungs. The health effects vary depending on a variety of factors, including the type and size of particles. Research has demonstrated a correlation between high PM concentrations and increased mortality rates. Elevated PM concentrations can also aggravate chronic respiratory illnesses such as bronchitis and asthma.

Carbon Monoxide

Carbon monoxide is a local pollutant in that high concentrations are found only very near the source. The major source of carbon monoxide, a colorless, odorless, poisonous gas, is automobile traffic. Elevated concentrations, therefore, are usually only found near areas of high traffic volumes.

Carbon monoxide's health effects are related to its affinity for hemoglobin in the blood. At high concentrations, carbon monoxide reduces the amount of oxygen in the blood, causing heart difficulties in people with chronic diseases, reduced lung capacity and impaired mental abilities.

Carbon monoxide concentrations are highly seasonal, with the highest concentrations occurring in the winter. This is partly due to the fact that automobiles create more carbon monoxide in colder weather and partly due to the very stable atmospheric conditions that exist on cold winter evenings when winds are calm. Concentrations typically are highest during stagnant air periods within the period November through January.

Toxic Air Contaminants

In addition to the criteria pollutants discussed above, toxic air contaminants (TACs) are another group of pollutants of concern. Unlike criteria pollutants, no safe levels of exposure to TACs can be established. There are many different types of TACs, with varying degrees of toxicity. Sources of TAC's include industrial processes such as petroleum refining and chrome plating operations, commercial operations such as gasoline stations and dry cleaners, and motor vehicle exhaust. Public exposure to TACs can result from emissions from normal operations, as well as accidental releases of hazardous materials during upset conditions. The health effects of TACs include cancer, birth defects, neurological damage and death.

Diesel exhaust is a TAC of growing concern in California. The California Air Resources Board in 1998 identified diesel engine particulate matter as a TAC. The exhaust from diesel engines contains hundreds of different gaseous and particulate components, many of which are toxic. Many of these compounds adhere to the particles, and because diesel particles are so small, they penetrate deep into the lungs. Diesel engine particulate has been identified as a human carcinogen. Mobile sources, such as trucks, buses, automobiles, trains, ships and farm equipment are by far the largest source of diesel emissions.

SENSITIVE RECEPTORS

"Sensitive receptors" are defined as facilities where sensitive population groups (children, the elderly, the acutely ill and the chronically ill) are likely to be located. These land uses include residences, schools, playgrounds, childcare centers, retirement homes, convalescent homes, hospitals and medical clinics. There is a single residence south of project site.

4.5 AIR QUALITY

4.5.2 REGULATORY FRAMEWORK

ATTAINMENT STATUS

Federal and state air quality laws require identification of areas not meeting the ambient air quality standards. These areas must develop regional air quality plans to eventually attain the standards. Under both the federal and state Clean Air Acts, the San Joaquin Valley Air Basin is a non-attainment area (standards have not been attained) for ozone and particulate matter (PM₁₀ and PM_{2.5}). The air basin is either in attainment or unclassified for other ambient standards.

REGIONAL AIR QUALITY PLANS

To meet federal Clean Air Act requirements, the San Joaquin Valley Air Pollution Control District (SJVAPCD) has adopted an *Ozone Attainment Demonstration Plan* and in June 2003 adopted the *2003 PM₁₀ Plan*. The most recent federal ozone plan (*Amended 2002 and 2005 Rate of Progress Plan for San Joaquin Valley Ozone*, December 2002) determined that it could not be demonstrated that the federal ozone standards could be met by the required date of November 15, 2005. In December 2003, the SJVAPCD requested that the U.S. Environmental Protection Agency (EPA) downgrade the Valley's ozone status from "severe" to "extreme" non-attainment, and in April 2004 the U.S. EPA approved the downgrade. The downgrade avoids automatic sanctions and would extend the deadline for meeting attainment until November 15, 2010, but requires implementation of stricter controls on existing and future air pollutant sources.

On April 28, 2004, U.S. EPA finalized its approval of provisions of the San Joaquin Valley's *2003 PM₁₀ Plan* and Plan Amendments as meeting the Clean Air Act requirements for serious PM₁₀ non-attainment areas. The *2003 PM₁₀ Plan* and Plan Amendments address the Clean Air Act requirements for serious PM₁₀ non-attainment areas such as the San Joaquin Valley, including but not limited to a demonstration that best available control measures (BACM) are implemented for all significant sources and a demonstration that attainment is to be achieved as expeditiously as practicable.

To meet California Clean Air Act requirements, the SJVAPCD is currently drafting the *2003 Triennial Plan* for updating the Air Quality Attainment Plan (AQAP) and addressing the California ozone standard. The California Legislature, when it passed the California Clean Air Act in 1988, excluded PM₁₀ from the basic planning requirements of the Act. The Act did require the CARB to prepare a report to the Legislature regarding the prospect of achieving the state ambient air quality standard for PM₁₀. This report did not recommend imposing a planning process similar to that for ozone or other pollutants for achievement of the standard within a certain period of time.

CITY GENERAL PLAN

The following goals and policies within the City's General Plan relate to air quality and are relevant to the project:

Chapter Five. Air Quality Element

Goal AQ 1. Preservation and Improvement of Air Quality Through Land Use Planning in the Tracy Planning Area.

Goal AQ 2. Development that Minimizes Air Pollutant Emissions and Their Impact on Sensitive Receptors, as a Result of Indirect and Stationary Sources.

Policy AQ 2.1. Reduce air pollutant emissions by mitigating air quality impacts associated with development projects to the greatest extent feasible.

Policy AQ 2.2. Minimize land use conflicts between emission sources and sensitive receptors.

Policy AQ 2.3. Reduce impacts of environmentally damaging air pollutants.

4.5.3. IMPACTS AND MITIGATION MEASURES

STANDARDS OF SIGNIFICANCE

The San Joaquin Valley Air Pollution Control District (SJVAPCD) has established the following standards of significance (SJVAPCD 1998):

- 1) A project results in estimated carbon monoxide concentrations exceeding the California Ambient Air Quality Standard of 9 parts per million averaged over 8 hours and 20 ppm for 1-hour.
- 2) A project results in new direct or indirect emissions of ozone precursors (ROG or NO_x) in excess of 10 tons per year.
- 3) A project has the potential to frequently expose members of the public to objectionable odors would be deemed to have a significant impact.
- 4) A project has the potential to expose sensitive receptors (including residential areas) or the general public to substantial levels of toxic air contaminants would be deemed to have a potentially significant impact.

While San Joaquin Valley Unified Air Pollution Control District CEQA guidance recognizes that PM₁₀ is a major air quality issue in the basin, it has to date not established numerical thresholds for significance for PM₁₀. However, for the purposes of this analysis, a PM₁₀ emission of 15 tons per year (82 pounds per day) was used as a significance threshold. This emission is the SJVAPCD threshold level at which new stationary sources requiring permits for the District must provide emissions "offsets". This threshold of significance for PM₁₀ is consistent with the District's ROG and NO_x thresholds of ten tons per year, which are also the offset thresholds established in SJVAPCD Rule 2201 New and Modified Stationary Source Review Rule.

Despite the establishment of both federal and state standards for PM_{2.5} (particulate matter, 2.5 microns), the SJVAPCD has not developed a threshold of significance for this pollutant. For this analysis, PM_{2.5} impacts would be considered significant if project emissions of PM₁₀ (which includes PM_{2.5}) exceed 82 pounds per day.

SJVAPCD CEQA guidance does not recommend quantitative analysis of construction emissions. The SJVAPCD significance threshold for construction dust impacts is based on the appropriateness of construction dust controls. The SJVAPCD guidelines provide feasible control measures for construction emission of PM₁₀ beyond that required by district regulations. If the appropriate construction controls are to be implemented, then air pollutant emissions for construction activities would be considered less than significant.

4.5 AIR QUALITY

METHODOLOGY

Estimates of regional emissions generated by project traffic were made using a program called URBEMIS-2002. URBEMIS-2002 is a program that estimates the emissions that result from various land use development projects. Land use project can include residential uses such as single-family dwelling units, apartments and condominiums, and nonresidential uses such as shopping centers, office buildings, and industrial parks. URBEMIS-2002 contains default values for much of the information needed to calculate emissions. However, project-specific, user-supplied information can also be used when it is available.

Inputs to the URBEMIS-2002 program include trip generation rates, vehicle mix, average trip length by trip type and average speed. Average trip lengths, average speeds and vehicle mixes for the San Joaquin Valley Air Basin were used. Analysis year was 2007 for Phase I of the project and 2010 for Phase II of the project. The URBEMIS-2002 output is included in Appendix_.

Maintenance equipment emissions were estimated assuming that 4 motorized lawn mowers would be used a maximum of 8 hours each on the maximum day, and that 5 other maintenance equipment/vehicles would be used (infield groomer, aerator, seeder, etc.) would each be used 4 hours. Assuming each is gasoline powered and operates at 50 horsepower, daily emissions were calculated by multiplying horsepower-hours by generalized emission factors from the CARB's OFFROAD Emissions Model (CARB, 1998).

PROJECT IMPACTS AND MITIGATION MEASURES

Increased PM10 Levels During Construction

Impact 4.5.1 Construction of the proposed project would result in temporarily increased Particulate Matter (PM₁₀ and PM_{2.5}) levels in the immediate vicinity during construction. This impact is **potentially significant**.

Construction would result in numerous activities that would generate dust. The fine, silty soils in the project area and often strong afternoon winds exacerbate the potential for dust, particularly in the summer months. Grading, leveling, earthmoving and excavation are the activities that generate the most particulate emissions. Impacts would be localized and variable. Construction impacts would last for a period of several months. Construction dust impacts are considered to be potentially significant on a localized basis. Because of the prevailing northwest wind direction, properties east and south of the project would be most affected by construction emissions. Although no sensitive receptors are located downwind of the project site the potential for dust nuisance would exist during early stages of construction when disturbance of soil is greatest.

Construction equipment and vehicles would also generate exhaust emissions during active construction. Although operated temporarily at construction sites, construction equipment is a substantial source category within the San Joaquin Valley Air Basin, generating ozone precursors as well as particulate matter. Since construction equipment is normally considered part of the existing inventory of sources quantification of this emission is not recommended by the SJVAPCD except for very large projects.

The San Joaquin Valley Unified Air Pollution Control District regulates construction emissions through its Regulation VIII. The provisions of Regulation VIII pertaining to construction activities require:

Effective dust suppression for land clearing, grubbing, scraping, excavation, land leveling, grading, cut and fill and demolition activities.

Effective stabilization of all disturbed areas of a construction site, including storage piles, not used for seven or more days.

Control of fugitive dust from on-site unpaved roads and off-site unpaved access roads.

Removal of accumulations of mud or dirt at the end of the workday or once every 24 hours from public paved roads, shoulders and access ways adjacent to the site.

Regulation VIII requires that a dust control plan be prepared, and violations of the requirements of Regulation VIII are subject to enforcement action. Violations are indicated by the generation of visible dust clouds and/or generation of complaints.

Mitigation Measures

MM 4.5.1 The following measures are appropriate dust control strategies to be implemented that go beyond the requirements of SJVUAPCD Regulation VIII:

- Limit traffic speeds on unpaved roads to 15 mph.
- Install wheel washers for all exiting trucks, or wash off all trucks and equipment leaving the site.
- Suspend excavation and grading activities when winds exceed 20 mph.
- Limit size of area subject to excavation, grading or other construction activity at any one time to avoid excessive dust.
- Install sandbags or other erosion control measures to prevent silt runoff to public roadways from sites with a slope greater than one percent.
- Expeditiously remove the accumulation of mud or dirt from adjacent public streets at least once every 24 hours when operations are occurring.

Timing/Implementation: Include as a note on all grading and improvement plans; "comply with EIR Mitigation Measure 4.5.1 during all grading and construction phases of the project".

Enforcement/Monitoring: City of Tracy Development and Engineering Services Department.

With implementation of Regulation VIII controls and the above additional measures construction impacts would be reduced to a **less than significant** level.

Increased Carbon Monoxide Concentrations

Impact 4.5.2 Development of the project would result in an increase in carbon monoxide concentrations. This impact would be **less than significant**.

Project traffic would increase concentrations of carbon monoxide along streets providing access to the project. Carbon monoxide is a local pollutant (i.e., high concentrations are normally only found very near sources). The major source of carbon monoxide, a colorless, odorless, poisonous gas, is automobile traffic. Elevated concentrations, therefore, are usually only found near areas of high traffic volume and congestion.

The SJVAPCD's *Guide for Assessing and Mitigation Air Quality Impacts* provides the following screening criteria to identify situations where modeling is warranted:

The Level of Service (LOS) on one or more streets or at one or more intersections in the project vicinity would be reduced to LOS E or F, and

The project would substantially worsen an already existing LOS F on one or more streets or at one or more intersections in the project vicinity.

The traffic impact analysis examined Level of Service (LOS) for intersections affected by the project. No existing or future signalized intersection is forecast to operate at LOS E or worse through with addition of Phase I and II traffic with recommended mitigation. Since the project is within an attainment area for carbon monoxide (ambient air quality standards are currently attained) and in an area with low background concentrations, changes in carbon monoxide levels resulting from the project would not result in violations of the ambient air quality standards, and would represent a **less than significant** impact.

Mitigation Measures

None required.

Increased Ozone Precursors and PM₁₀ Emissions During Project Operation

Impact 4.5.3 Development of the project would result in increases in emission of both ozone precursors and Particulate Matter (PM₁₀ and PM_{2.5}). This impact would be **less than significant**.

The project would be an indirect source of air pollutants, in that it would attract and cause an increase in vehicle trips in the region. The project would also be an area source of emissions, primarily from the maintenance and landscaping activities. **Table 4.5-3** shows the new auto and maintenance equipment emissions of regional pollutants that would result from the proposed project. Also shown are the San Joaquin Valley Unified Air Pollution Control District's thresholds of significance.

The San Joaquin Valley Air Pollution Control District has established a threshold of significance for ozone precursors of 10 tons per year, and 15 tons per year has been assumed to represent a significant impact for PM₁₀. Project-related emissions are below the thresholds of significance for ozone precursors and PM₁₀, so project impacts on regional air quality would be **less than significant**.

TABLE 4.5-3
PROJECT AUTO AND MAINTENANCE EQUIPMENT EMISSIONS (TONS PER YEAR)

| | ROG | NOx | PM ₁₀ |
|----------------------------------|-------|-------|------------------|
| Phase 1 (2007) | | | |
| Auto Emissions | 2.39 | 3.69 | 3.07 |
| Maintenance Equip. | 0.89 | 1.79 | 0.14 |
| Total | 3.28 | 5.58 | 3.21 |
| Buildout (2010) | | | |
| Auto Emissions | 4.13 | 6.45 | 6.91 |
| Maintenance Equip. | 1.44 | 2.88 | 0.22 |
| Total | 5.57 | 9.33 | 7.13 |
| SJVUAPCD Significance Thresholds | 10.00 | 10.00 | 15.00 |

Mitigation Measures

None required.

Exposure of Sensitive Receptors to Objectionable Odors and Toxic Air Contaminants

Impact 4.5.4 Development of the project would place a sensitive receptor in proximity to potential sources of odors and existing sources of Toxic Air Contaminants. This impact would be **less than significant**.

The Tracy Biomass Plant, located about ¼ mile east of the project site, has outdoor storage piles of wood chips and other plant materials that are a potential source of odors. This facility is normally downwind from the proposed project. Wind records at Stockton show winds from this direction are rare, occurring about 3% of the time. The project would not have the potential to "frequently expose members of the public to objectionable odors" and thus would have a **less than significant** impact with respect to odors.

Mitigation Measures

None required.

4.5 AIR QUALITY

Exposure to Toxic Air Contaminants

Impact 4.5.5 Development of the project would place a sensitive receptor in proximity to potential sources of Toxic Air Contaminants. This impact would be **less than significant**.

The project would be located west and north of two identified industrial sources of Toxic Air Contaminants and due east of a distribution center that attracts substantial diesel truck traffic. Health risks from Toxic Air Contaminants are function of both concentration of the contaminant and duration of exposure. Concentration would be determined largely by wind direction and distance to the source. There are no TAC sources directly upwind from the site (to the northwest). Sources are located to the west and east of the site and the site would be infrequently be downwind of any of these sources. Therefore, the project would not expose site users to "substantial levels of toxic air contaminants" and thus would have a **less than significant** impact with respect to air toxics.

Mitigation Measures

None required.

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4.6 Hydrology and Water Quality

4.6 HYDROLOGY AND WATER QUALITY

This section describes watershed features within the project area, and addresses potential issues associated with storm drainage and flooding, site drainage design considerations, and measures to improve storm water quality.

4.6.1 EXISTING SETTING

REGIONAL HYDROLOGY

The Tracy area typically has lower rainfall than other areas in San Joaquin County. Lower rainfall is due to Tracy's location on the leeward side of the Diablo Mountain Range. Average annual precipitation in Tracy is about 10 inches, which occurs primarily from November to April.

Most of the area within the current Tracy corporate boundaries is located on nearly flat land with slopes ranging from 0.2 to 0.6 percent. The hills south of Tracy have relatively steep slopes with grades ranging from one to 33 percent. Rainfall in Tracy from all slopes generally drains from south to north, towards the San Joaquin Delta watershed. However, this drainage pattern is interrupted by manmade obstacles, including roads, railroads, berms, levees, irrigation supply ditches, the California Aqueduct, the Delta Mendota Canal, and irrigation tailwater ditches. The City's most recent Storm Drainage Master Plan (SDMP), completed in 1994, subdivided the City's sphere of influence area into six watersheds located within the larger Delta watershed. These watersheds include the Westside Channel, Eastside Channel, Lammers, Banta Area, I-205 Corridor Specific Plan and the Sugar Cut watersheds.

Natural drainages and major man-made drainage and water conveyance facilities in the Tracy area include Old River, Tom Paine Slough, Corral Hollow Creek, the California Aqueduct, the Delta-Mendota Canal, and the Upper and Lower Main Canals operated by the West Side Irrigation District (WSID).

Areas surrounding Tracy contribute little flow to the City's existing storm drainage facilities due to topographic conditions. Lands to the north and east of the City drain away from the City and toward the San Joaquin River system. Storm water south of the City drains to the east towards the valley floor where it dissipates into agricultural land. However, lands along the east side of the Diablo Mountain Range to the southwest and west of the City drain towards the northeast, and offsite runoff enters areas within the Lammers Watershed.

As delineated in the City's SDMP, the Lammers Watershed consists of a large area of mostly undeveloped properties within the western portion of the City's General Plan area. The SDMP depicts a future network of drainage facilities, consisting of open channels, detention basins, and underground storm drains, that is referred to as the Lammers Drainage System and that will serve future development. At this time, the only component of the planned system that is constructed is a storm water detention basin located adjacent to and west of the Safeway Distribution Center on the south side of Schulte Road about 1 mile west of the project site.

However, as a part of the environmental review process that was completed relevant to Supplement No. 1 to the Storm Drainage Master Plan, it has become apparent to the City that the Lammers Drainage System as presented in the SDMP will need to be re-evaluated and revised. The main element of future revisions to the SDMP relevant to the Lammers Drainage System will be the placement of a greater emphasis upon storm water detention and retention to facilitate an updated goal of limiting future outflow discharges from the overall Lammers Watershed to very low rates. Irrespective of the results of a redefinition of the Lammers Drainage

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System, the actual storm drainage facilities that will be a part of the revised drainage plan are not likely to be funded or constructed for quite some time.

SURFACE WATER

Watersheds and Peak Runoff

The project site resides in the Lammers Watershed. Existing drainage facilities in the area are limited to irrigation surface drainage and sub-drain systems, roadside ditches, and onsite storm drainage facilities (including detention/retention basins) that serve a limited number of local industrial developments. The project site slopes to the northeast at roughly a 1.5% grade and contains no substantial topographic features.

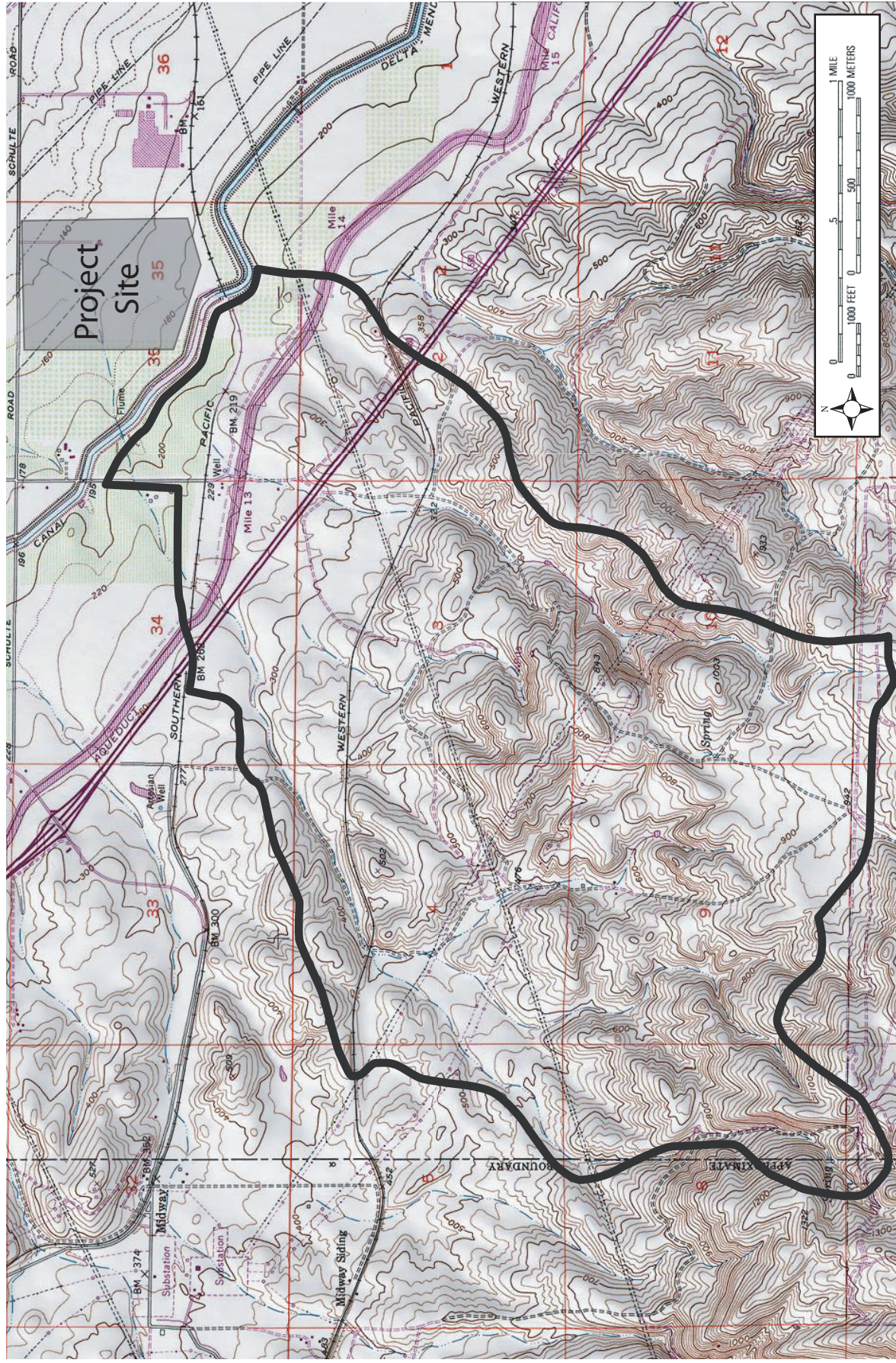
A single, but significant local offsite watershed contributes storm runoff to the proposed project site. This watershed extends upstream to the southwest of the project site and is approximately 7.2 square miles in area. The watershed is substantially undeveloped, but is traversed by I-580, the Union Pacific Railroad, the California Aqueduct, the Delta-Mendota Canal and a few local roadways. The headwaters of the watershed originate at elevation 1628, and the watershed slopes in a northeasterly direction with defined and semi-defined channels that drain toward I-580.

At I-580, flows are conveyed under the highway and over the California Aqueduct without any appreciable attenuation. The culvert serving the main flows derived from the watershed at this location is a 10' x 8' reinforced concrete box culvert, which also extends over the California Aqueduct as an overchute. Downstream of I-580 and the California Aqueduct, runoff passes under the Union Pacific Railroad via a 45-foot wide bridge and is subsequently collected in a manmade channel extending eastward along the south side of the existing Safeway Distribution center.

At Hansen Road, runoff spills to the northeast and collects on the upstream side of the Delta-Mendota Canal at an existing overchute that has a 10' x 4' opening at the inlet. This overchute controls the rate of discharge that is passed downstream. Runoff that crosses the Delta-Mendota Canal via this overchute becomes shallow, sheet flow on the downstream (east) side of the overchute, flows across private property for a distance of about 1,500 feet, and then enters the Project site along its west boundary.

Cella Barr Associates evaluated the offsite watershed contributing storm runoff to the Project site in December 1999. It is depicted on Exhibit B of the Cella Barr Associates' report, which is included as **Figure 4.6-1** herein. The U.S. Army Corps of Engineers' HEC-1 computer model was used to develop a rainfall/runoff computer simulation for the offsite watershed. The HEC-1 computer model develops a runoff hydrograph for individual sub-basins through the input of numerical representations of their physical and hydrological characteristics. The computed hydrographs are then routed and/or combined with other sub-basins to yield a dynamic numerical analysis of peak discharges that may be expected to occur at concentration points along a given flow path. The HEC-1 model was used to estimate the flow discharge that would be expected to concentrate on the upstream side of the Delta-Mendota Canal overchute during a 100-year storm event.

Rainfall for the 100-year storm event utilized in the HEC-1 model was determined from rain gauge data, along with a Log Pearson Type III distribution analysis obtained from the California.



Source: NATIONAL GEOGRAPHIC TOPO/GIS, 2003



FIGURE 4.6-1
Project Area Watershed

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Department of Water Resources for the rain gauges located in Section 28, T2S, R5E in the central part of the City of Tracy and in Section 34, T3S, R4E in the Diablo Mountains south of Tracy. The 100-year, 24-hour storm rainfall depth was used. For the portions of the offsite watershed residing north of I-580, the data from the rain gauge located in Section 28 was used (2.69 inches). The data from the rain gauge located in Section 34 was used for the portions of the watershed located south (upstream) of I-580 (2.82 inches).

Rainfall distribution for the areas north of I-580 was based on the standard Natural Resources Conservation Service (NRCS) 24-hour, Type I distribution. For the portions of the watershed south of I-580, the time distribution for precipitation was based on a symmetrical distribution with maximum depth occurring at the center of the storm.

For runoff computation from each sub-basin, the NRCS dimensionless Unit Hydrograph option was utilized in the HEC-1 computer model. The NRCS Curve Number Method was used to estimate the lag time for smaller sub-basins and the NRCS method of computing lag time based on time of concentration was used for the larger sub-basins. Other parameters input into the HEC-1 model or considered as a part of the modeling effort included Curve Numbers (CN), soil groups, land use, vegetative cover densities, antecedent moisture conditions, and flow routing.

The HEC-1 modeling effort resulted in an estimate for the 100-year peak discharge generated by the offsite watershed of 1,145 cfs, concentrated on the upstream side of the overchute at the Delta-Mendota Canal.

The invert elevation of the inlet at the Delta-Mendota Canal overchute is roughly three (3) feet higher than the surrounding upstream grade, and there is substantial detention volume available behind the overchute as the canal and adjacent access road are elevated an additional seven (7) feet above the invert of the overchute inlet. However, the existing detention storage is not sufficient to prevent overtopping of the access road during a 100-year, 24-hour storm event, and runoff in excess of the overchute/detention capacity will spill directly into the Delta-Mendota Canal under extreme storm conditions. The capacity of the overchute to convey runoff across the Delta-Mendota Canal is limited to about 420 cfs. For all intents and purposes, this rate of peak runoff is the value that needs to be considered in evaluating flooding concerns and site design elements for the Project site.

Flooding

According to Flood Insurance Rate Map (FIRM) Panels 0700 and 0705 published by the Federal Emergency Management Agency (FEMA) for San Joaquin County, California (Unincorporated Areas), the project site in its entirety is located in Zone C which represents "areas determined to be outside the 500-year floodplain". This designation indicates that the project site is either not prone to flooding or is considered to be of lesser concern by FEMA and has not been studied in detail.

However, there is a flood hazard associated with shallow, sheet flow entering the site as derived from the 7.2 square mile local offsite watershed extending upstream to the southwest. The magnitude of this shallow, sheet flow will be limited to the capacity of the overchute that crosses the Delta-Mendota Canal (420 cfs) about 1,500 feet upstream of the site. During major storms, excess runoff collected on the upstream side of the Delta-Mendota Canal will spill onto the contiguous agricultural parcel to the west of the project site and continue flowing in a northeasterly direction. The contiguous property to the west of the project site is currently under agricultural use and will not generally be a source of offsite runoff. The shallow, sheet flow

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derived from the offsite watershed will enter the Project site across roughly the north ½ of the west property boundary.

Based on site topography provided via U.S.G.S. quad maps and field investigation, Cella Barr Associates estimated that approximately the north 1/3 of the project site would likely be inundated by shallow, sheet flow having an average depth of 0.5 feet during a 100-year, 24-hour storm. The zone of shallow, sheet flooding will be wider at the west property boundary (approximately the width of the north ½ of the west property boundary) and taper to a narrower zone of flooding at the east property boundary (approximately the width of the north ¼ of the east property boundary). An approximate area of flooding was depicted on Exhibit C of the Cella Barr Associates' report, which is incorporated as **Figure 4.6-2** herein.

It is important to point out that the offsite watershed does not pose a "nuisance" source of flooding that will frequently impact the project site. Flooding as shallow, sheet flow will only occur during major, relatively rare storm events under existing conditions for the following reasons:

- There is a relatively significant amount of storage available on the upstream side of the Delta-Mendota Canal, and storm water must pond to a depth of more than 3 feet before any flow will pass downstream across the existing overchute.
- The agricultural use for the contiguous property between the Project site and the Delta-Mendota Canal will not contribute runoff to the project site except during major storms.

GROUNDWATER

The Project site is located upland from lower lying areas outside the city limits to the west of the City. Topography ranges from elevations of roughly 180 feet (msl) in the south portions of the project site to elevations of roughly 127 feet (msl) in the lowest lying portions of the northeast corner of the project site. The existing on-site well (non-potable) or potentially a new well (non-potable) may be required to be drilled for irrigation purposes. This may have result in a moderate impact to groundwater resources.

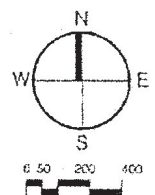
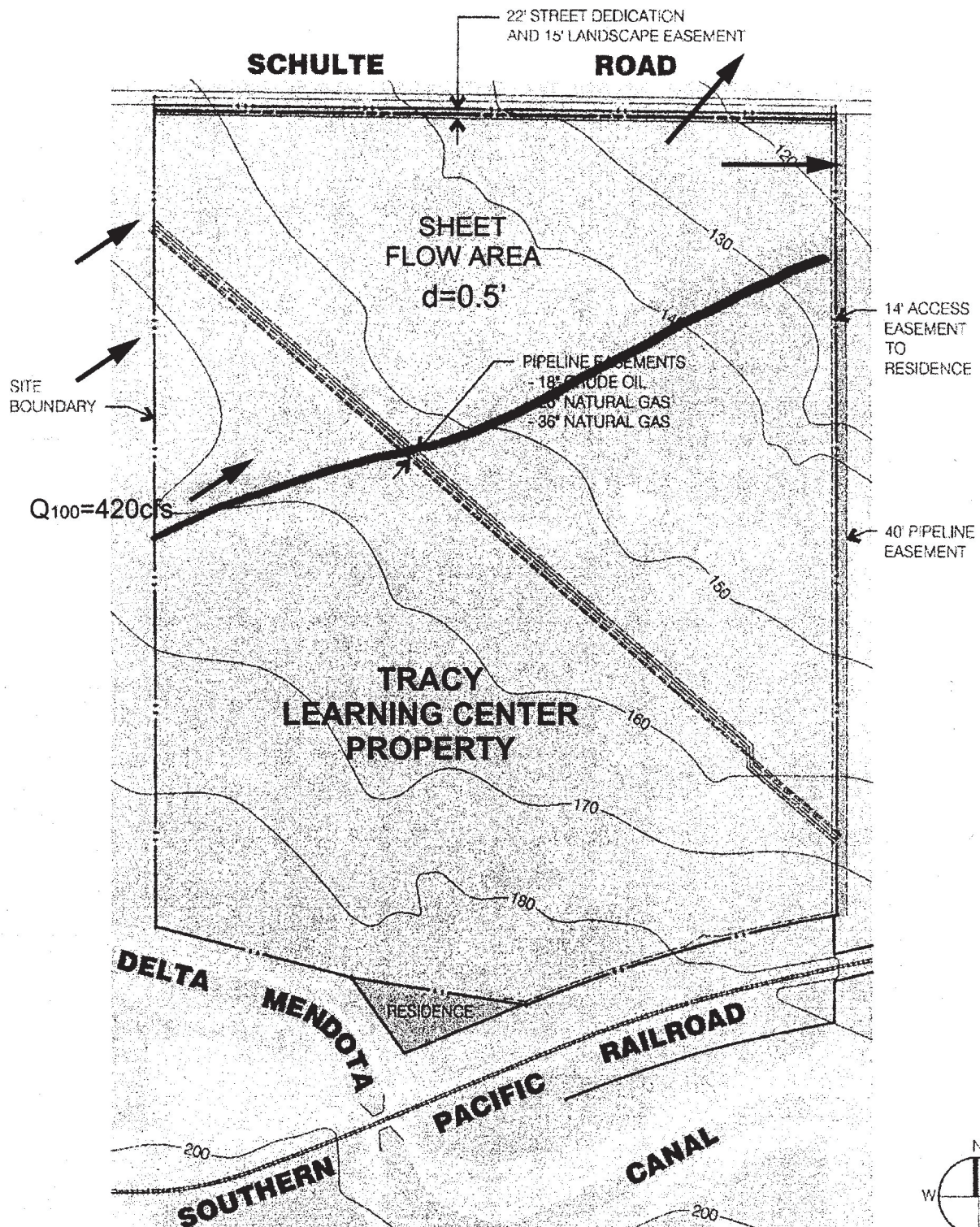
WATER QUALITY

There are no flowing rivers or streams in close proximity to the project site. To the extent that there are defined channels upstream of the project site, these channels are ephemeral in nature and only flow briefly during and following significant storm events and are fed solely by stormwater. Ditches and sub-drain systems that serve agricultural users in the project area and downstream exist, but are not sized or intended to accommodate urban runoff.

Development of the project site will increase local runoff production, and will introduce constituents into storm water that are typically associated with urban runoff. These constituents include heavy metals (such as lead, zinc, and copper), petroleum hydrocarbons, pesticides and fertilizers. Best management practices (BMPs) should be applied to the proposed site development to limit the concentrations of these constituents in any site runoff that is discharged into downstream facilities to acceptable levels.

— DENOTES APPROXIMATE BOUNDARY OF SHALLOW, SHEET FLOW FLOODING DURING 100-YEAR EVENT

$d=0.5'$ AVERAGE DEPTH OF SHEET FLOW



Source: Cella Barr Associates

4.6.2 REGULATORY FRAMEWORK

FEDERAL AND STATE

Clean Water Act (CWA)

The Clean Water Act (CWA), initially passed in 1972, regulates the discharge of pollutants into watersheds throughout the nation. Section 402(p) of the act establishes a framework for regulating municipal and industrial stormwater discharges under the NPDES Program. Section 402(p) requires that stormwater associated with industrial activity that discharges either directly to surface waters or indirectly through municipal separate storm sewers must be regulated by an NPDES permit. On December 8, 1999, U.S. EPA circulated regulations requiring permits for stormwater discharges from Small Municipal Separate Storm Sewer System operators, which includes the City of Tracy. Permits for small municipal storm sewer systems (MS4s) generally fall under the "Phase II" permits program, which regulate non-point source pollutants. In California, the NPDES Program is administered by the State.

The State Water Resources Control Board (SWRCB) is responsible for implementing the Clean Water Act and does so through issuing NPDES permits to cities and counties through regional water quality control boards. Federal regulations allow two permitting options for storm water discharges (individual permits and general permits). The SWRCB elected to adopt a statewide general permit (Water Quality Order No. 2003-0005-DWQ) for small MS4s covered under the CWA to efficiently regulate numerous storm water discharges under a single permit. Permittees must meet the requirements in Provision D of the General Permit, which require the development and implementation of a Storm Water Management Plan (SWMP) with the goal of reducing the discharge of pollutants to the maximum extent practicable. The SWMP must include the following six minimum control measures:

- 1) Public Education and Outreach on Storm Water Impacts
- 2) Public Involvement/Participation
- 3) Illicit Discharge Detection and Elimination
- 4) Construction Site Storm Water Runoff Control
- 5) Post-Construction Storm Water Management in New Development
- 6) Redevelopment and Pollution Prevention/Good Housekeeping for Municipal Operations

The State has approved the City's SWMP dated September 30, 2003 and the City is now implementing the program outlined in the SWMP.

Federal Emergency Management Agency (FEMA)

The City and San Joaquin County are participants in the National Flood Insurance Program (NFIP), a Federal program administered by FEMA. Participants in the NFIP must satisfy certain mandated floodplain management criteria. The National Flood Insurance Act of 1968 has adopted as a desired level of protection, an expectation that developments should be protected from floodwater damage of the Intermediate Regional Flood (IRF). The IRF is defined as a flood that has an average frequency of occurrence on the order of once in 100 years

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although such a flood may occur in any given year. Communities are occasionally audited by the Department of Water Resources to insure the proper implementation of FEMA floodplain management regulations.

Regional and Local

Central Valley Regional Water Quality Control Board

The Central Valley Regional Water Quality Control Board (RWQCB) issues permits activities that could cause impacts to surface waters and groundwater, including construction activities. Since development of the project site would result in the disturbance of five or more acres, an NPDES construction activities permit would be required. Details of the NPDES permit system are discussed above.

Groundwater Management Plan for the Northern Agencies in the Delta-Mendota Canal Service Area and a Portion of San Joaquin County

The Groundwater Management Plan for the Northern Agencies in the Delta-Mendota Canal Service Area and a Portion of San Joaquin County was prepared to address groundwater quality and resource concerns for the region and established the Groundwater Management Plan include the following:

- Banta Carbona Irrigation District
- Del Puerto Water District
- Patterson Water District
- Plain View Water District
- West Stanislaus Irrigation District
- West Side Irrigation District
- City of Tracy
- San Joaquin County Flood Control and Water Conservation District

City General Plan

The City General Plan provides limited discussion specific to storm drainage. The General Plan relies on the design criteria of the Storm Drainage Master Plan, requires design to accommodate 100-year flows and encourages efficient use of existing facilities.

Tracy Planning Area

The Tracy Planning Area (TPA) covers all territory within the Tracy City limits and the Sphere of Influence (SOI) as well as land outside the SOI that has been determined to bear a relationship to the City's planning efforts. The TPA consists of approximately 20 square miles inside the City limits and approximately 95 square miles in the unincorporated area. The project site is located

in the unincorporated area. The Tracy General Plan contains goals, policies and actions pertaining to storm drainage that would need to be applied to this project, where applicable.

The City's General Plan, adopted July 19, 1993, provides the following goals, policies, and actions relative to water conservation, which are germane to this project:

Chapter Eight Conservation

Goal CO 1: Attainment and Maintenance of Ambient Surface and Groundwater Quality Standards.

Policy CO 1.2: Begin to control discharges of non-point source pollution such as urban runoff and construction site runoff to receiving water and be prepared to respond to upcoming regulatory requirements for stormwater discharge permits.

4.6.3 IMPACTS AND MITIGATION MEASURES

STANDARDS OF SIGNIFICANCE

For the purposes of this EIR, a hydrologic or flooding impact of the project would be considered significant if it would result in any of the following impacts:

- 1) Generate substantial storm water runoff and/or alter surface water drainage patterns that would result in an increased severity of flooding either upstream or downstream;
- 2) Significantly degrade surface water quality directly or indirectly;
- 3) Significantly degrade groundwater quality directly or indirectly;
- 4) Place structures and facilities in an area or in a manner that would expose them to significant flood hazards and potential damage; or
- 5) Conflict with applicable local, state and/or federal policies and standards associated with water resources that would result in a physical effect on the environment.

METHODOLOGY

The hydrology and water quality analysis is based on a storm drainage analysis and onsite constraints analysis prepared by Cella Barr Associates for the Tracy Learning Center (a previous development proposal for the project site) dated December 1999).

IMPACT STATEMENTS AND MITIGATION MEASURES

Storm Water Runoff Generation and Surface Water Drainage Patterns

Impact 4.6.1 The project will significantly increase storm water runoff rates generated within the project site when compared with existing conditions. Given the absence of downstream storm drainage facilities having sufficient capacity to

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accommodate increased quantities of site runoff, this impact is considered to be **potentially significant**.

When land is in a natural or undeveloped condition, soils, mulch, vegetation, and plant roots absorb rainwater. This absorption process is called infiltration or percolation. Much of the rainwater that falls on natural or undeveloped land slowly infiltrates the soil and is stored either temporarily or permanently in underground layers of soil. When the soil becomes completely soaked or saturated with water or the rate of rainfall exceeds the infiltration capacity of the soil, the rainwater begins to flow on the surface of land to low lying areas, ditches, channels, streams, and rivers. Rainwater that flows off of a site is defined as storm water runoff. When a site is in a natural condition or is undeveloped, a larger percentage of rainwater infiltrates into the soil and a smaller percentage flows off the site as storm water runoff.

The infiltration and runoff process is altered when a site is developed with urban uses. Houses, buildings, roads, and parking lots introduce asphalt, concrete, and roofing materials to the landscape. These materials are relatively impervious, which means that they absorb less rainwater. As impervious surfaces are added to the ground conditions, the natural infiltration process is reduced. As a result, the volume and rate of storm water runoff increases. The increased volumes and rates of storm water runoff may result in flooding if adequate storm drainage facilities are not provided.

Development of the project site would replace essentially "undeveloped" site conditions with a combination of buildings and temporary structures, parking areas, baseball and softball fields, football fields, soccer fields, playgrounds, picnic areas, spectator seating areas, and landscaping elements. The sports facility elements would encompass approximately 70% of the interior of the site. Part of the site frontage along Schulte Road (approximately 50 acres) is designated to be set aside for passive recreational use.

The turf areas composing the various recreational fields and local landscape areas would not produce any significant increases in storm runoff production when compared with existing site conditions. However, parking facilities, buildings, and spectator seating areas would produce significant increases in storm runoff production when compared with existing site conditions.

The project site is situated within the Lammers Watershed, which consists of a large area of mostly undeveloped properties within the western portion of the City's General Plan Area. The SDMP depicts a future network of drainage facilities, consisting of open channels, detention basins, and underground storm drains, that are referred to as the Lammers Drainage System and that would serve future development. At this time, the only component of the planned system that is constructed is a storm water detention basin located adjacent to and west of the Safeway Distribution Center on the south side of Schulte Road about 1 mile west of the project site.

As a part of the environmental review process that was completed relevant to Supplement No. 1 to the Storm Drainage Master Plan, it has become apparent to the City that the Lammers Drainage System as presented in the SDMP would need to be re-evaluated and revised. The main element of future revisions to the SDMP relevant to the Lammers Drainage System would be the placement of a greater emphasis upon storm water detention and retention to facilitate an updated goal of limiting future outflow discharges from the overall Lammers Watershed to very low rates. Irrespective of the results of a redefinition of the Lammers Drainage System, the actual storm drainage facilities that would be a part of the revised drainage plan are not likely to be funded or constructed for quite some time. Development of the project would need to

assume a long-term absence of permanent drainage facilities that would ultimately serve the overall Lammers Watershed.

In the interim, development of the project must utilize an on-site temporary retention basin or basins to collect and store site runoff for metered release via percolation, evaporation, and/or restricted discharge into local downstream drainage features. For the project, one or more such on-site temporary retention basins shall be provided to accommodate site runoff. At least one such on-site temporary retention basin shall be provided at the northeast corner of the site (the lowest lying area of the site). At such time in the future as drainage facilities associated with the Lammers Drainage System are constructed, site drainage may be retrofitted to discharge into an appropriate outfall. At this time it is not known whether or not the on-site temporary retention basins would need to be a part of the future retrofit.

Mitigation Measure

The following mitigation measure is proposed to reduce the impact of storm water runoff generation on surface water drainage patterns:

MM 4.6.1 The City shall ensure that the development of the project site shall incorporate the construction of one or more on-site temporary retention basins to capture site runoff in conformance with City's Standards. Said on-site temporary retention basins shall remain in operation at least until adequate downstream storm drainage facilities associated with the future Lammers Drainage System are constructed and operational, and beyond this time frame if necessary. Onsite temporary retention basins shall collect and store all "first flush" runoff generated within the site. Sediments accumulating within the on-site temporary retention basins shall be periodically monitored and shall be removed prior to the occurrence of any toxic concentrations of deleterious constituents.

Timing/Implementation: Prior to the initiation of grading or site clearing activities.

Enforcement/Monitoring: City of Tracy Development & Engineering Services Department.

Implementation of **MM 4.6.1** would reduce **Impact 4.6.1** to a level that is **less than significant**.

Surface Water Quality

Impact 4.6.2 The project would introduce constituents typically associated with urban development into storm water runoff generated within the project site. Given the absence of downstream storm drainage facilities, including facilities that provide a reasonable element of storm water quality treatment, this impact is considered to be **potentially significant**.

Development of the project site would increase local runoff production, and would introduce constituents into storm water that are typically associated with urban runoff. These constituents include heavy metals (such as lead, zinc, and copper), petroleum hydrocarbons, pesticides and fertilizers. Best management practices (BMPs) shall be applied to the proposed site

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development to limit the concentrations of these constituents in any site runoff that is discharged into downstream facilities to acceptable levels.

The State Water Resources Control Board (SWRCB) is responsible for implementing the Clean Water Act and does so through issuing NPDES permits to cities and counties through regional water quality control boards. Federal regulations allow two permitting options for storm water discharges (individual permits and general permits). The SWRCB elected to adopt a statewide general permit (Water Quality Order No. 2003-0005-DWQ) for small MS4s covered under the CWA to efficiently regulate numerous storm water discharges under a single permit. Permittees must meet the requirements in Provision D of the General Permit which require the development and implementation of a Storm Water Management Plan (SWMP) with the goal of reducing the discharge of pollutants to the maximum extent practicable. The SWMP must include the following six minimum control measures:

- 1) Public Education and Outreach on Storm Water Impacts
- 2) Public Involvement/Participation
- 3) Illicit Discharge Detection and Elimination
- 4) Construction Site Storm Water Runoff Control
- 5) Post-Construction Storm Water Management in New Development
- 6) Redevelopment and Pollution Prevention/Good Housekeeping for Municipal Operations

The State has approved the City's SWMP and the City is now implementing the program outlined in the SWMP.

Given the absence of downstream storm drainage facilities to serve the proposed site development, one or more on-site temporary retention basins would be required as a condition of site development to intercept and store storm runoff generated by the project site. At a minimum, said on-site temporary retention basins would capture all "first flush" runoff generated by the project site and accompanying pollutants (to the extent that they are present). The sediment that accumulates in these on-site temporary retention basins shall be periodically monitored and shall be removed prior to the occurrence of any toxic concentrations of deleterious constituents. In addition, site construction and maintenance practices shall adhere to any and all applicable provisions and ordinances resulting from the City's implementation of their SWMP, to the extent to which they exist at the time of construction and/or maintenance activities.

At such time as downstream storm drainage facilities associated with the future Lammers Drainage System become operational, the continuing need or lack thereof for on-site temporary retention basins that serve the site may be readdressed.

Mitigation Measure

The following mitigation measure is proposed to reduce the impact of site runoff generation on storm water quality:

MM 4.6.2a

Construction. The City shall ensure that the development of the project site shall incorporate the construction of one or more on-site temporary retention basins to capture site runoff in conformance with City Design Standards as described in **MM 4.6.1**. In addition, site construction and maintenance practices shall adhere to any and all applicable provisions and ordinances resulting from the City's implementation of its SWMP, to the extent to which they exist at the time of construction and/or maintenance activities. The following list is intended as an outline summary and the City may impose additional requirements:

Non-Structural BMPs

- Minimizing Disturbance
- Preserving Natural Vegetation (where possible)
- Good Housekeeping, e.g., daily clean-up of construction site

Structural BMPs

Erosion Controls

- Mulch
- Grass
- Stockpile Covers

Sediment Controls

- Silt Fence
- Inlet Protection
- Check Dams
- Stabilized Construction Entrances
- Sediment Traps

Timing/Implementation: Prior to the initiation of grading or site clearing activities.

Enforcement/Monitoring: City of Tracy Development and Engineering Services Department.

MM 4.6.2b

Post-Construction. The Plans and Specifications of the proposed retention facilities should meet the standards of the City of Tracy Development and Engineering Services Department as an adequate engineering product. The City would review the design criteria and monitor for proper installation, if necessary. New development and significant redevelopment projects that begin after February of 2005 will be required to comply with numeric

4.6 HYDROLOGY AND WATER QUALITY

standards for post-construction stormwater BMPs in the re-issued permit. Treatment BMPs are to be constructed that incorporate, at a minimum, the required hydraulic sizing design criteria for volume and flow to treat stormwater runoff.

At least 85 to 90 percent of annual average stormwater runoff from the site would be treated per the standards in the 1003 California Stormwater Best Management Practice New Development and Redevelopment Handbook. Drainage from all paved surfaces, including streets, parking lots, driveways, and roofs should be routed either through swales, buffer strips, or sand filters or treated with a filtering system prior to discharge to the storm drain system. Landscaping should be designed to effect some treatment, along with the use of a Stormwater Management filter to permanently sequester hydrocarbons, if necessary. The specification of the StormFilter © by Stormwater Management, Inc. adequately meets the requirements of the Regional Water Quality Control Board (RWQCB) for a "box-in-ground" filtering system. A filtering system with similar specifications may be used based on the size of the project site, if landscape-based stormwater treatment measures cannot affect the required level of treatment. Roofs should be designed with down spouting into landscaped areas, bubbleups, or trenches. Driveways should be curbed into landscaping so runoff drains first into the landscaping. Permeable pavers and pavement should be utilized to construct the facilities, where appropriate.

Timing/Implementation: Prior to the initiation of grading or site clearing activities.

Enforcement/Monitoring: City of Tracy Development and Engineering Services Department.

Implementation of **MM 4.6.2a** and **MM 4.6.2b** would reduce **Impact 4.6.2** to a level that is **less than significant**.

Groundwater Quality and Resources

Impact 4.6.3 Runoff generated within the project site during storms would be collected and stored in on-site temporary retention basins. Stored runoff captured within these on-site temporary retention basins would drain via percolation, evaporation, and possibly restricted outflow into local downstream facilities. To the extent that captured runoff is drained via percolation, it is possible that some percolated water would reach the underlying aquifer (water table) beneath. Estimated depth to groundwater fluctuates between 90 and 125 feet, depending upon hydrologic conditions. To the extent that there are typical pollutants associated with urban runoff that are contained in the storm water that drains to the on-site temporary retention basins, there is little or no opportunity for these pollutants to percolate down to local groundwater, as these pollutants would be filtered by the underlying soils and accumulated near the ground surface. As such, the impact of the site development on groundwater quality is considered to be **less than significant**.

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The proposed project would require the use of non-potable water for irrigation purposes. The existing well on-site (non-potable) or potentially a new well (non-potable) may have to be drilled for irrigation. The project is located within the City's water service area boundary as described in the City's Urban Water Management Plan Service Area Boundary (March 2005). A water assessment completed in accordance with California Senate Bill (SB) 610¹, illustrates that the City's Urban Water Management Plan projected water use for parks accounts for the additional water demand of the project. The City's currently utilizes a combination of surface water and groundwater sources for water supply. The City's Groundwater Management Policy limits the groundwater extractions to 9,000 acre-feet per year ("AFA") although the current average extraction is 7,765 AFA (6 year average). The Groundwater Management Policy establishes a mitigation monitoring program which has shown no evidence of overdraft of groundwater under the City's Urban Water Management Plan. Furthermore, the delivery of treated surface water from the South County Surface Water Supply Program during the summer of 2005 would allow the City to reserve groundwater and emergency use and peak demand needs, thus the City's groundwater extractions would be reduced to quantities below the current average extraction. The City is also considering use of recycled treated wastewater (non-potable) or "purple pipes" for irrigation in the future, which would reduce and may eliminate the need for groundwater for irrigation purposes consistent with the City's adopted policy that recycled water determined to be available pursuant to section 13550 of the Water Code may be used for non-potable uses as outlined in Tracy Municipal Code Chapter 11.30 and as permitted by Title 22 of the California Code of Regulations. Therefore, the use of existing and potentially newly drilled well water for project irrigation purposes on groundwater resources is considered a **less than significant** impact.

Mitigation Measure

None required.

Exposure of Structures and Facilities to Flood Hazards and Potential Damage

Impact 4.6.4 During significant storm events, the northern portions of the project site would experience shallow, sheet flooding derived from a local offsite watershed. Buildings and other site facilities would be placed in these portions of the project site. The impact of the placement of buildings and other site facilities in an area having a flood hazard is considered to be **potentially significant**.

Shallow, sheet flow as derived from a 7.2 square mile local offsite watershed extending upstream to the southwest would enter the project site along the north ½ of the west property boundary. The magnitude of this shallow, sheet flow would be limited to the capacity of an overchute that crosses the Delta-Mendota Canal (420 cfs) about 1,500 feet upstream of the site. During major storms, excess runoff collected on the upstream side of the Delta-Mendota Canal would spill onto the contiguous agricultural parcel to the west of the project site and continue flowing in a

¹ SB 610 water assessment completed by Nick Pinhey is scheduled for adoption by City Council on July 19, 2005. Once adopted this document will become an exhibit of the YSF EIR.

4.6 HYDROLOGY AND WATER QUALITY

northeasterly direction. The contiguous property to the west of the project site is currently under agricultural use and would not generally be a source of offsite runoff.

Based on site topography provided via U.S.G.S. quad maps and field investigation, Cella Barr Associates estimated that approximately the north 1/3 of the project site would likely be inundated by shallow, sheet flow having an average depth of 0.5 feet during a 100-year, 24-hour storm. The zone of shallow, sheet flooding would be wider at the west property boundary (approximately the width of the north 1/2 of the west property boundary) and taper to a narrower zone of flooding at the east property boundary (approximately the width of the north 1/4 of the east property boundary). An approximate area of flooding was depicted on Exhibit C of the Cella Barr Associates' report, which is incorporated as **Figure 4.6-2** herein.

The offsite watershed does not pose a "nuisance" source of flooding that would frequently impact the project site. Flooding as shallow, sheet flow would only occur during major, relatively rare storm events under existing conditions for the following reasons:

- There is a relatively significant amount of storage available on the upstream side of the Delta-Mendota Canal, and storm water must pond to a depth of more than 3 feet before any flow would pass downstream across the existing overchute.
- The agricultural use for the contiguous property between the Tracy Youth Sports Facility site and the Delta-Mendota Canal would not contribute runoff to the project site except during major storms.

Placement of buildings and other site facilities within the portion of the project site that is subject to shallow, sheet flooding shall conform with the following provisions:

Provision 1. The site grades must not be raised along the northern portion of the west property boundary in the area subject to shallow, sheet flooding. It would be necessary to allow sheet flow to enter the site across this area during a major storm event.

Provision 2. The site design must provide for conveyance of 420 cfs across the northern portion of the property. Conveyance may occur across a combination of parking areas and drives, play fields, landscaped areas, excavated channels or swales, underground storm drains, and/or open space. A positive, continuous grade must be provided along major onsite flow paths to roughly the northeast corner of the site.

Provision 3. Buildings constructed within or adjacent to the existing flood hazard area or new flow paths created by site grading must have their finished floors elevated a minimum of 1 foot above the computed water surface elevations that would occur for the shallow, sheet flow peak rate of 420 cfs.

Provision 4. At least until downstream storm drainage facilities associated with the future Lammers Drainage System become operational, the flow paths for conveyance of shallow, sheet flow must drain to the site of an on-site temporary retention basin to be constructed at the northeast corner of the project site. A broad crested weir shall be installed along the east edge of the on-site temporary retention basin at the northeast corner of the project site to allow excess runoff from the offsite source to spill downstream in an unconcentrated manner, similar to existing conditions.

4.6 HYDROLOGY AND WATER QUALITY

Notwithstanding the above, according to Flood Insurance Rate Map (FIRM) Panels 0700 and 0705 published by the Federal Emergency Management Agency (FEMA) for San Joaquin County, California (Unincorporated Areas), the Tracy Youth Sports Facility site in its entirety is located in Zone C which represents "areas determined to be outside the 500-year floodplain". This designation indicates that the project site is either not prone to flooding or is considered to be of lesser concern by FEMA and has not been studied in detail.

Mitigation Measure

The following mitigation measure is proposed to reduce the impact of the placement of buildings and other site facilities in an area that is subjected to shallow, sheet flooding:

MM 4.6.4 YSAT shall be required to ensure that the development of the project site shall incorporate *Provisions 1 through 4* (above) into the design of any buildings or other site facilities that are to be placed within the area of the site that has been identified to experience a potential for shallow, sheet flooding as derived from an offsite watershed.

Timing/Implementation: Prior to the initiation of grading or site clearing activities.

Responsible Agency: City of Tracy Development and Engineering Services Department.

Implementation of **Impact 4.6.4** would reduce the impact to a level that is **less than significant**.

Conflicts with Applicable Local, State, and/or Federal Policies and Standards

Impact 4.6.5 The proposed Tracy Youth Sports Facility development does not conflict with applicable local, state, and/or federal policies and standards associated with hydrology and water quality. This impact is considered **less than significant**.

Proper development in conformance with these policies and standards and the implementation of mitigation measures **MM 4.6.1**, **MM, 4.6.2a** and **b**, and **MM 4.6.4** would limit impacts to levels that are considered to be **less than significant**.

Mitigation Measure

None required.

4.6 HYDROLOGY AND WATER QUALITY

REFERENCES

- California Stormwater Quality Association (CASQUA). 2003. New Development and Redevelopment Handbook.
- Cella Barr Associates. *City of Tracy, Storm Drainage Master Plan*, 1994.
- Cella Barr Associates. *Tracy Learning Center, Storm Drainage Analysis & Onsite Constraints Analysis*, December 1999.
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- State Water Resources Control Board (SWRCB). 2003. www.swrcb.gov. Storm Water Program [accessed December 22, 2004].

4.7 Geology and Soils

4.7 GEOLOGY AND SOILS

This section discusses the geology of the project site and general vicinity, and analyzes issues such as the potential exposure of people and property to geologic hazards, landform alteration, and erosion.

This section is based on information contained within Geologic and Seismic Hazards Investigation conducted by Twining Laboratories for the Tracy Learning Center, 1999, the General Plan General Plan EIR, literature prepared by the California Division of Mines and Geology, information from the U.S. Natural Resources Conservation Service, and mapping published by the U.S. Geologic Survey.

4.7.1. EXISTING SETTING

LOCAL GEOLOGY AND PROJECT SITE TOPOGRAPHY

San Joaquin County is located near the geographic center of California in the San Joaquin Valley (valley). The valley is bordered on the east by the Sierra Nevada Mountain Range consisting chiefly of crystalline rocks, and on the west by the Diablo Range tier of the Coast Range Mountains consisting of sedimentary and metamorphosed sedimentary rocks. The Sierra Nevada block has been tilted westward, caused by faulting and uplifting of the eastern edge. The western boundary of the Sierra Nevada block is overlain by sedimentary deposits of the valley.

The Coast Ranges, forming a barrier between the Great Valley and the Pacific Ocean, evolved as a result of folding, faulting, and accretion of diverse geologic terrains, and are composed chiefly of sedimentary and metamorphic rocks that are sharply deformed into complex structures. They are broken by numerous faults, the San Andreas Fault being the most notable structural feature.

Small intermittent streams enter the valley from the semi-arid mountains of the Diablo Range, but soon are lost on alluvial fans. Perennial rivers flow from the more humid and larger drainage areas of the Sierra Nevada Range with many of these having been dammed for irrigation. Large coalescing alluvial fans have developed along each side of the valley. The larger and more gently sloping fans on the valley's east side are built up principally by deposits from granitic rock sources, whereas the smaller and more steeply sloping fans on the west are comprised of sediment originating as sedimentary rocks of the Coast Range. As a result, the valley floor consists mainly of two kinds of alluvial materials that differ widely in provenance and their respective engineering properties.

The project site, west of Tracy, is located on the alluvial fans along the western edge of the valley approximately 8 miles (2 km) northeast of the Coastal Range foothills. Sediments in the Tracy region are comprised of alluvial sand and materials consisting primarily of erosion particles of sedimentary rocks from the Coast Ranges.

The topography of the project site is gently sloping from to the northeast with grades ranging from 0.6 percent to 1.5 percent. The elevation ranges from approximately 130 feet above mean sea level (MSL) in the northern most part of the site to 180 feet above MSL in the south.

4.7 GEOLOGY AND SOILS

The site contains an abandoned Federal Aviation Administration (FAA) antenna facility, one concrete structure in the central portion of the property and a ponding basin in the northeastern corner of the property. The Delta-Mendota Canal and Southern Pacific Railroad are located adjacent to the southern border of the site. The majority of the site is covered by annual grasslands. Two irrigation wells and associated lines are located in the southern corners of the property.

FAULTS AND SEISMICITY

The Sierra Nevada and Coast Ranges possess active and potentially active fault zones. Major active faults occur to the east, west, south, and north of the project site. The Sierra Nevada/Owens Valley Fault Zones bound the eastern edge of the Sierra Nevada block and comprise a complex of both active and potentially active fault segments. The San Andreas Fault Zone occurs in the Coast Range and contains large Quaternary fault segments each with a different tectonic behavior. Numerous potentially active faults also occur in the eastern and central Coast Range west and south of the site. Portions of the Great Valley, Ortigalita-Tesla, Calaveras, Greenville, Hayward, Concord-Green Valley, Monterey Bay-Tularcitos, Point Reyes, and Rinconada Faults are considered active and potentially active.

An “active fault” is defined, for the purpose of this evaluation, as a fault that has had surface displacement within Holocene time (about the last 11,000 years). The definitions of “potentially active” vary widely. A widely accepted definition of potentially active is a fault showing evidence of displacement older than 11,000 years and younger than 1.6 million years (Pleistocene). Faults showing evidence of displacement older than 1.6 million years are usually classified as “inactive”.

The following subsections briefly describe the major fault systems that are considered “active” or “potentially active”.

Foothills Fault System: The term “Foothills Fault System” has been used for the major fault zones in the western Sierra Nevada and is located approximately 46 miles (76 km) northeast of the site. The Melones and Bear Mountain faults zones are the most important components of this system south of the Consumnes River. Generally the faults of this system consist of vertical to steeply east-dipping zones of sheared rock with linear mapped traces. Many of the faults are delineated wholly or in part by lenses of sheared serpentine or schist.

Prior to the Oroville earthquake ($M=5.7$) of August 1, 1975, the Foothills Fault System was regarded as seismically inactive. This earthquake occurred within the northern extension of the Bear Mountain Fault zone and suggested the possibility of reservoir (Oroville Dam) induced seismicity. Microearthquake data and geodetic surveys show that the two main branches of the Foothills Fault System (Bear Mountain and Melones Fault Zones) display active movement, at least in the area between Oroville and Folsom.

The CDMG California Fault Parameter database lists the Foothill Fault System within approximately 75 miles (120 km) of the site. It is estimated that the closest segment lies approximately 46 miles (76 km) northeast of the site. An Upper Bounds Magnitude of 6.5 is assumed for analysis purposes for the Foothill Fault System, as indicated in the CDMG database. A slip rate of 0.05 millimeters per year (mm/yr) was used.

Western San Joaquin Valley: In the western portion of the San Joaquin Valley, a series of events referred to as the Coalinga Earthquake Sequence was initiated on May 2, 1983 with a 6.7 magnitude earthquake centered in Coalinga. In an event that is probably related, a 5.5 magnitude earthquake was generated near Avenal on August 15, 1985. The main shocks for

both earthquakes occurred in close proximity to late-Cenozoic crustal folds and have similar hypocenter depths and fault-plane solutions (California Department of Conservation, Division of Mines and Geology, Special Publications 66). The Great Valley Fault System (GVFS) is a topic of ongoing research, which primarily commenced with the Coalinga Earthquake of 1983, attributed to the zone. The GVFS, formerly termed the Coast Range-Sierra Nevada boundary zone and the Coast Range - Central Valley boundary zone, is believed to be a fundamental tectonic boundary between the Coast Range province and Sierran block. Fault plane solutions for the Coalinga Earthquake sequence suggest a northwest strike with either a steep northwest dip or shallow northwest dip (Eaton et al., 1983). Eaton (1983c) proposed that the main Coalinga earthquake as well as the 1985 North Kettleman Hills earthquake (Eaton, 1985b) occurred on a shallow westward dipping thrust fault and slip was induced on northwest and southwest dipping reverse faults in the plate overlying the thrust fault. Namson and Davis (1988) interpreted an approximately 125 mile (200 km) long zone of folds (anticlines and synclines) along the southwest margin of the San Joaquin Valley as an actively developing fold thrust belt. Namson and Davis (1988) attributed the seismically active Coalinga and Kettleman Hills North Dome anticlines to fault-bend folding above a thrust, which does not reach the surface (blind thrust).

The aforementioned fault plane solutions and tectonic interpretations of Namson and Davis are generally consistent with solutions for a number of earthquake events occurring along the GVFS boundary zone between the San Luis Reservoir and Willows, California (Wong et al. 1988). Wong et al. (1988) indicated that geologic evidence suggest that the boundary zone is not a single fault but a complex zone of faulting with the potential of generating large earthquakes (such as the Richter Magnitude 6.7 Coalinga earthquake) over most of its length. Wakabayashi and Smith (1994) postulated that the GVFS may comprise 18 to 25 segments from 12 to 57 kilometers in length, and that the characteristic earthquake for the average length segment may be a magnitude 6.3 to 6.4.

The CDMG California Fault Parameter database lists eight Great Valley Fault System segments within approximately 75 miles (120 km) of the site. It is estimated that the closest segment (Segment No. 7) lies approximately 4 miles (7 km) southwest of the site. An Upper Bounds Magnitudes of 6.4 to 6.8 is assumed for the individual segments, as indicated in the CDMG database. A slip rate of 1.5 millimeters per year (mm/yr) is used for all segments (Lienkaemper, 1996).

San Andreas Fault: The San Andreas Fault is associated with two of the largest earthquakes that have occurred in California during historic time: the 1857 Fort Tejon earthquake (magnitude 8.3) on the south-central portion of the fault and the 1906 San Francisco earthquake (magnitude 8.3) on the northern portion of the fault. The nearest segment of the San Andreas Fault is located approximately 44 miles (73 km) southwest of the site. Due in part to the length of the fault, approximately 625 miles (1,000 km), various portions of the San Andreas Fault can be characterized by distinctly different seismic behavior related to rupture location, length, and expected repeat time (e.g. Wallace, 1970; Allen, 1968; Sieh and Jahns, 1984).

The CDMG database lists six segments within 75 miles (120 km) of the site, with maximum moment magnitudes ranging from 6.5 to 7.9. Slip rates for these segments range from 14 to 34 mm/yr. These relatively high slip rates for the individual segments indicate the San Andreas Fault contributes more to the probabilistic ground motion estimate than closer, less active faults. Probabilistic ground motion estimates utilize CDMG fault/earthquake parameters (Blake, 1998).

Calaveras Fault: The Calaveras Fault is considered active over a distance of more than 80 miles (128 km) from Danville on the north to Hollister on the south. Tectonic creep also occurs episodically along the fault, mainly from Coyote Lake to Hollister. The nearest segment of the

4.7 GEOLOGY AND SOILS

Calaveras fault (Northern Segment) is located approximately 22 miles (36 km) west of the site. Seismic activity along the Calaveras Fault ($M=6.2$) in the vicinity of Morgan Hill has been felt in the central San Joaquin Valley as recently as April 1984. Horizontal accelerations (1.3g) were measured near the epicenter and ground shaking was experienced at least as far south as Fresno

The CDMG database lists 2 segments of the Calaveras fault within 75 miles (120 km) of the site, with maximum moment magnitudes ranging from 6.2 to 6.8 and slip rates ranging from 6.0 to 15.0 mm/yr.

Earthquakes can cause strong ground shaking that may damage property and infrastructure. The severity of ground shaking at any particular point is referred to as intensity and is a subjective measure of the effects of ground shaking on people, structures, and earth materials. The intensity of shaking generally decreases with distance away from the source of an earthquake. The level of intensity is commonly defined by comparison to the Modified Mercalli Scale that subjectively categorize the intensity on the basis of observed effects of seismic shaking on people and objects (see **Table 4.7-1**). Quantitative measurements of the level of ground motion during an earthquake are made by strong-motion seismographs that measure the acceleration of objects at the ground surface caused by seismic shaking. These measurements are made relative to, and are expressed as a fraction of, the acceleration of gravity.

TABLE 4.7-1
MODIFIED MERCALLI INTENSITY SCALE FOR EARTHQUAKES

| Richter Magnitude Scale | Modified Mercalli Scale | Effects of Intensity |
|-------------------------|-------------------------|--|
| 0.1-0.9 | I | Earthquake shaking not felt. |
| 1.0-2.9 | II | Shaking felt by those at rest. |
| 3.0-3.9 | III | Felt by most people indoors; some can estimate duration of shaking. |
| 4.0-4.5 | IV | Felt by most people indoors. Hanging objects rattle, wooden walls and frames creak. |
| 4.6-4.9 | V | Felt by everyone indoors; many estimate duration of shaking. Standing autos rock. Crockery clashes, dishes rattle, and glasses clink. Doors open, close & swing. |
| 5.0-5.5 | VI | Felt by all who estimate duration of shaking. Sleepers awaken, liquids spill, objects displaced, weak materials crack. |
| 5.6-6.4 | VII | People frightened and walls unsteady. Pictures & books thrown, dishes/glass are broken. Weak chimneys break. Plaster, loose bricks & parapets fall. |
| 6.5-6.9 | VIII | Difficult to stand, waves on ponds, cohesion-less soils slump. Stucco & masonry walls fall. Chimneys, stacks, towers and elevated tanks twist & fall. |
| 7.0-7.4 | IX | General fright as people are thrown down. Hard to drive, trees broken, damage to foundations and frames. Reservoirs damaged, underground pipelines broken. |
| 7.5-7.9 | X | General panic, ground cracks, masonry & frame buildings destroyed. Bridges destroyed, dams, dikes & embankments damaged. Railroads bent slightly. |
| 8.0-8.4 | XI | Large landslides, water thrown, general destruction of buildings, pipelines destroyed, railroads bent. |
| 8.5+ | XII | Total nearby damage, rock masses displaced. Lines of sight/level distorted. Objects thrown into air. |

Source: California Division of Mines and Geology

LOCAL SEISMIC ACTIVITY

The general area of the site has experienced recurring seismic activity. Based on historical earthquake catalogs published by the California Division of Mines and Geology, and supplemental data from Townley and Allen (1939) and the U.S. Geological Survey's earthquake database system, approximately 491 historical earthquakes with magnitude 4.0 or greater have been recorded from 1900 through 1998 within a 90 mile (150 km) radius of the site. Further information including tables, maps and source data is contained within the Technical Appendices.

The nearest event (Mag. = 4.4, Acc. = .038g) found during the search occurred in February of 1992 within approximately 5 miles (9 km) of the site. The largest magnitude earthquake identified the search occurred in April of 1906 along the San Andreas fault approximately 55 miles (88 km) west of the site. The maximum peak horizontal acceleration calculated for the subject site of 0.141g occurred during this earthquake.

In general, seismic activity in the TPA has been limited to experiencing low to moderate ground motion from earthquakes in the region. No measured earthquakes have had a magnitude greater than 3.9 on the Richter Scale with the Tracy Planning Area (City of Tracy, 1997). The Tracy Planning Area is located within Seismic Zone 3, and the maximum magnitude seismic event estimated for Tracy is 7.0 on the Richter Scale (City of Tracy, 1993).

SOILS

In general, the soils encountered in the test borings predominantly consisted of lean clays to the maximum depths explored, 41.5 feet below site grade. The lean clays were interbedded with strata of silty or clayey sands to the maximum depth explored.

The lean clays are stiff to hard as indicated by N-values ranging from 9 to 80 blows per foot. The natural moisture content of the soils ranged from 6 to 22 percent and the dry densities ranged from 89 to 101 pounds per cubic foot. The sands encountered during the investigation have grain size fractions passing the No. 200 sieve (silt and clay) ranging from 21 to 47 percent. The clays are moderately expansive as indicated by an expansion index test result of 62. **Table 4.7-2** summarizes the characteristics of these soils.

TABLE 4.7-2
SOIL CHARACTERISTICS WITHIN THE PROJECT SITE

| Soil Type | Erosion Hazard | Shrink/Swell Potential | Permeability | Strength |
|--------------------------------|----------------|------------------------|--------------------------|----------|
| Capay Clay (0-2% slopes) | Low | High | Slow (0.06-0.2 in/hr) | Low |
| Stomar Clay Loam (0-2% slopes) | Low | High | Slow (0.06-0.2 in/hr) | Low |

Source: U.S. Department of Agriculture, 1992

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The Soil Survey of San Joaquin County, prepared by the U.S. Department of Agriculture (USDA), Natural Resources Conservation Service (formerly Soil Conservation Service) identifies that limitations of these soils associated with urban development consist of their slow permeability, high shrink-swell potential, and low strength. Capay clay and Stomar clay loam are both identified by the USDA as prime farmland when irrigation is provided (USDA, 1992). Prime farmlands produce the highest yields with minimal expenditure of energy and economic resources, and farming it results in the least damage to the environment.

MINERAL RESOURCES

Primary mineral resources in San Joaquin County consist of sand and gravel (aggregates) and natural gas. Aggregate resources known to occur in the TPA are located south of the City along the Corral Hollow Creek alluvial fan, while natural gas resources are located in the northern portion of the City generally north of Eleventh Street.

4.7.2. REGULATORY FRAMEWORK

STATE

Alquist-Priolo Earthquake Faulting Zone Act

The Alquist-Priolo Earthquake Fault Zoning Act of 1972 (prior to January 1, 1994 called the Alquist-Priolo Special Studies Zones Act – CCR, Title 14, Section 3600) sets forth the policies and Criteria of the State Mining and Geology Board that governs the exercise of governments' responsibilities to prohibit the location of developments and structures for human occupancy across the trace of active faults. The policies and criteria are limited to potential hazards resulting from surface faulting or fault creep within Earthquake Fault Zones delineated on maps officially issued by the State Geologist. Working definitions include:

Fault – a fracture or zone of closely associated fractures along which rocks on one side have been displaced with respect to those on the other side;

Fault Zone – a zone of related faults, which commonly are braided and sub parallel, but may be branching and divergent. A fault zone has a significant width (with respect to the scale at which the fault is being considered, portrayed, or investigated), ranging from a few feet to several miles;

Sufficiently Active Fault – a fault that has evidence of Holocene surface displacement along one or more of its segments or branches (last 11,000 years); and

Well-Defined Fault – a fault whose trace is clearly detectable by a trained geologist as a physical feature at or just below the ground surface. The geologist should be able to locate the fault in the field with sufficient precision and confidence to indicate that the required site-specific investigations would meet with some success.

“Sufficiently Active” and “Well Defined” are the two criteria used by the State to determine if a fault should be zoned under the Alquist-Priolo Act.

CITY'S DESIGN STANDARDS

Section 8.0 of the City Standards provides grading design standards for development activities. The Design Standards require the preparation of a comprehensive soils report to identify soil constraints, groundwater elevations, and grading recommendations. The Design Standards also specify that all grading will be designed in accordance with the Chapter 70 of the latest Uniform Building Code (City of Tracy, 1988).

CITY GENERAL PLAN

City General Plan policies are currently in place with the intent of reducing the risk to life and property as a result of geologic and seismic hazards. Both plans call for the mitigation of potential hazards through the implementation of building requirements, emergency preparedness programs and public information.

4.7.3. IMPACTS AND MITIGATION MEASURES

STANDARDS OF SIGNIFICANCE

The following thresholds for measuring the project' environmental impacts are based upon the most recent CEQA Guidelines and the Initial Study prepared for the project. Impacts are considered to be significant if the following could result from implementation of the proposed project:

- 1) Destruction or modification of unique geologic features;
- 2) Exposure of people or property to geologic hazards including;
 - Groundshaking and ground rupture
 - Liquefaction
 - Subsidence
 - Soils with adverse engineering properties
- 3) Increased soil erosion; or,
- 4) Decreased accessibility to known mineral resources.

METHODOLOGY

The analysis of potential geologic impacts was prepared by Twining Laboratories, Inc. for the Tracy Learning Center EIR (1999) and was based upon literature review regarding the geology and seismicity of the project area, laboratory tests on selected physical and engineering properties of subsurface soils, the UMP Final EIR, and field review of the project site.

4.7 GEOLOGY AND SOILS

PROJECT IMPACTS AND MITIGATION MEASURES

Unique Geologic Features

As previously identified, the project site is relatively flat with no unusual features or attributes. Development of the project would result in grading and excavation activities. As identified in the Notice of Preparation (see **Appendix A**), Project construction would not alter the general land features and would not destroy any unique geologic features. This impact is considered **less than significant**.

Seismic Hazards

Ground Shaking/Ground Rupture

For any given earthquake, the rock in the immediate vicinity will respond with a certain maximum acceleration and with a predominant period that depends on the nature of the rock and on the source mechanism. Away from the focus of the earthquake, the shock waves begin to attenuate. The way in which the earthquake wave is altered depends to a great degree on source characteristics and to a lesser degree on the travel path.

Analyses indicate that groundshaking at the site is directly related to seismicity in the immediate area. The location and fault parameters (such as fault length, magnitude and rupture area) of faults capable of impacting the site were determined from published geologic papers (see bibliography), and the upper bounds magnitudes (100 year exposure period) were estimated using a characteristic fault model relationship (Youngs and Coppersmith, 1985).

There are no active faults within the project site or vicinity and the area has not been subject to large, damaging earthquakes during historic time. An upper bounds maximum peak horizontal acceleration of 0.73g is estimated for the site. The site is not located in a proposed Seismic Hazard Zone or an Aiqvist-Priolo Special Studies Zone. The potential for groundshaking and ground rupture associated with a known fault would have **no impact** for the development of the project.

Liquefaction

Liquefaction describes a phenomenon in which a saturated, cohesionless soil loses strength during an earthquake as a result of induced shearing strains, which usually results in a lateral and vertical movement of the soil mass, combined with loss of bearing. Research has shown that liquefaction potential of soil deposits induced by earthquake activity depends on soil types, void ratio, groundwater conditions, duration of shaking, and confining pressure over the potentially liquefiable soil mass. Fine, well-sorted, loose sand, shallow groundwater conditions, higher intensity earthquakes, and particularly long duration of groundshaking are the requisite conditions for liquefaction.

Studies of liquefaction potential during earthquakes address the liquefaction "susceptibility" and "opportunity" of a given site. Liquefaction susceptibility is a function of the mechanical properties of the underlying soils, particularly grain size distribution and relative density determined from standard penetration blow counts. Liquefaction opportunity expresses the probability of exceeding a critical level of shaking and is described in terms of a function which accounts for peak ground acceleration, or acceleration and duration. Accelerations of at least

0.10g and groundshaking durations of at least 30 seconds are generally required to initiate liquefaction.

The potential for the occurrence of an earthquake with the intensity and duration characteristics capable of promoting liquefaction "opportunity" is considered likely for the life of the proposed campus facility. However, the "susceptibility" factors, such as depth to groundwater and soil type, do not lend support to the prospect for ground failure by liquefaction. Accordingly, the potential for liquefaction would have **no impact** for development of the project.

Seismic Settlement

Impact 4.7.1 Development of the project may expose structures and people to hazards associated with seismic settlement. This is considered a **potentially significant** impact.

Seismic settlement can occur in both saturated and unsaturated granular soils. Seismic settlement occurs as saturated and unsaturated granular soils rearrange resulting in a volume reduction and is a function of the relative density of the soil and the magnitude of cyclic shear stresses caused by seismic ground motion. Test boring data indicates that silty sands susceptible to settlement are present in four of the five test borings drilled. The magnitude of seismic settlement was estimated using a spreadsheet program developed from the procedure entitled "An Update of The Simplified Liquefaction Evaluation Procedure", by I.M. Idriss, included as presentation notes for the Second Japan-Turkey Workshop, Istanbul Technical University, February 23-25, 1998.

A peak horizontal acceleration of 0.73g and an earthquake magnitude of 7.0 (conservative estimate for any segment on the Great Valley fault) were used for the analysis. Based on the procedure used, and using data from the five test borings drilled for this investigation, it is estimated that up to approximately 2.5 inches of settlement would occur as a result of the maximum earthquake event (magnitude 7.0) occurring on the Great Valley Fault located about 7 miles west of the site.

Based on the soil conditions encountered and the anticipated maximum site acceleration, seismically induced ground settlement is anticipated to be 2½ inches or less. This magnitude of settlement could impact some structures depending on the magnitude of differential settlement. Typically buildings with a large floor plan area are most susceptible to damage from differential seismic settlements although no buildings of this nature are anticipated as part of this project. However, as the Tracy area is susceptible to seismic settlement related damage due to the relatively high ground motion and interbedded sands layers which are typical of the area, this impact are considered **potentially significant**.

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Mitigation Measure

MM 4.7.1a In accordance with the California Building Code (Title 24, Part 2) Section 1804A.3 and A.5, liquefaction and seismic settlement potential shall be addressed in the design level geotechnical engineering investigations. The City's Building Division of the Development and Engineering Services Department shall ensure that all the pertinent sections of the California Building Code shall be adhered to in the construction of service buildings on site, prior to the issuance of a Building Permit.

Timing/Implementation: Prior to the initiation of grading or site clearing activities.

Enforcement/Monitoring: City of Tracy Development and Engineering Services Department.

Implementation of the above mitigation measure would mitigate seismic hazards consistent with the provisions of City policy. Implementation of the above mitigation measure would reduce seismic settlement hazards impacts to a **less than significant** level by addressing its potential through proper construction of service buildings.

Geologic Hazards

Landslides

Due to the gently sloping relief of the site, the potential hazard due to landslides is considered to be **less than significant**.

Seiches/Tsunamis

A seiche is a wave generated by the periodic oscillation of a body of water whose period is a function of the resonant characteristics of the containing basin as controlled by its physical dimensions. These periods generally range from a few minutes to an hour or more. The site is not near any large bodies of water, so seiches would have **no impact** at the project site. The nearest "body" of water is the Delta Mendota Canal immediately south of the project site. As discussed in Section 4.2, a seiche within the canal affecting the site is considered highly unlikely. Tsunamis are waves generated in oceans from seismic activity. Due to the inland location of the site, there is **no impact** hazard from tsunamis.

Geotechnical/Soil Hazards

Subsidence

Subsidence is the sinking of a large area of ground surface in which land material is displaced vertically downward, with little or none horizontal movement. Subsidence is generally caused by the removal of groundwater and oil or from the oxidation of drained peat deposits. The UMP EIR identified that subsidence problems within the Tracy Planning Area has not been documented. However, the UMP EIR did identify land areas in the vicinity of the Old River, Paradise Cut, and Tom Paine Slough as having potential for subsidence based on soil conditions and shallow groundwater levels (City of Tracy, 1993). Since the project site is outside this area and has shown no physical signs of subsidence, this impact is considered to have **no impact**.

Expansive Soils

Impact 4.7.2 Development of the project may subject new development to geologic hazards associated with expansive soils. This is considered a **significant** impact.

In general, the soils encountered during the field investigation consisted mostly of sandy lean clays and lean clays throughout the depths explored, 41.5 feet below site grade. In the upper 10 feet BSG, the clays are stiff as indicated by standard penetration resistance blow counts. Below 10 feet the clays are very stiff to hard. The clays were interbedded with 5 to 8 foot thick strata of silty sands, clayey sands, and sandy silts throughout the depth interval between 5 and 28 feet below site grade.

The near surface clays exhibit moderate expansion potential as indicated by an expansion index test result of 62. The primary geotechnical concern at the site is the moderate expansion potential of the lean clays. Over time the near surface clays will experience cyclic drying and wetting as the dry and wet seasons pass. The clay soils encountered at the site are anticipated to experience volumetric changes (shrinkswell) as the moisture content of the clay soils fluctuate. These shrink/swell cycles will impact foundations and lightly loaded slabs-on-grade. Expansive soils cause more damage to structures, particularly light buildings and pavements, than any other natural hazard, including earthquakes and floods (Jones and Holtz, 1973). Expansion potential may not manifest itself until months or years after construction.

From a geotechnical standpoint, the site is feasible for support of foundations and floor slabs. Based on the limited testing conducted for this investigation, it appears that the moderate expansion would be the principal concern with respect to geotechnical considerations. As the moisture content of the soils fluctuate, the clays shrink as moisture evaporates, and swells as moisture penetrates the subgrade. The surface deflection (either settlement or heave) causes damage to foundations and floor slabs, typically resulting in cracking, differential movement and distortion to level surfaces. Moderately expansive clays are typical of the Tracy region. The impact of the clays can be addressed by extending foundations below the zone where moisture fluctuations occur, typically 2 to 4 feet below finish grade, and supporting interior and exterior slabs-on-grade on 18 to 36 inches of non-expansive fill. Non-expansive fill could be imported sandy soils, or lime treated native clays. The actual depth of foundations and thickness of non-expansive soils should be determined by design level geotechnical investigations for the various structures planned.

The stiff clays will likely exhibit low to moderate compressibility under typical structural loads. For smaller lighter structures, foundations could likely be supported on undisturbed native soils.

Mitigation Measure

MM 4.7.2 Prior to the issuance of a building permit, the City shall employ the following mitigation measures:

- Expansive soils can be excavated and replaced with non-expansive materials. The required depth of excavation shall be specified by a registered civil engineer based on actual soil conditions;
- Expansive soils may be treated in place by mixing them with lime. Lime-treatment alters the chemical composition of the expansive clay minerals such that the soil becomes non-expansive; or,

4.7 GEOLOGY AND SOILS

- Implement alternative engineering practices for mitigation expansive soil conditions considered appropriate by the City of Tracy Development and Engineering Services Department.

Timing/Implementation: Prior to the initiation of grading or site clearing activities.

Enforcement/Monitoring: City of Tracy Development and Engineering Services Department.

Implementation of the above mitigation measure would mitigate expansive soil hazards to a **less than significant** level by engineering site soils in a manner to reduce the effects of shrink-swell.

REFERENCES

- County of San Joaquin. 1992. *General Plan 2010*. San Joaquin County, California.
- City of Tracy. 1988. *City of Tracy Design Standards*. Tracy, California. July 19, 1988.
- City of Tracy. 1993. *Final EIR for the City of Tracy Urban Management Plan/General Plan*. Tracy, California. July 19, 1993.
- City of Tracy. 1997. *South Schulte Specific Plan Draft EIR*. Tracy, California. March, 1997.
- USDA, 1992. U.S. Department of Agriculture. *Soil Survey of San Joaquin County, California*. 1992.
- Twining Laboratories, 1999. *Geologic and Seismic Hazards Investigation for the Tracy Learning Center*. Tracy, California. June, 1999.

4.8 Biological Resources

This section evaluates the biological resource impacts that may be associated with the development of the project and includes a discussion of the mitigation measures necessary to reduce these impacts to a less-than-significant level. Information contained in this section is based on a review of documents pertaining to the natural resources of the study area; examination of aerial photography, biological resources, and topographic maps; and field investigations. Foothill Associates prepared the Biological Assessment of the project.

4.8.1 EXISTING SETTING

The project site is bordered by the Delta Mendota Canal to the south, Schulte Road to the north, agricultural fields to the west, and industrial buildings to the east. The project site includes approximately 200 acres of predominantly cropland, with some areas of ruderal (weedy) vegetation along the roadways and antenna poles. Previously, the site was used as an antenna farm facility and the antenna poles still exist on site. The project site consists of previously plowed and disced cropland and an industrial building. The study area is shown in **Figure 4.8-1**.

4.8.2 PLANT COMMUNITIES

Discussed below are the plant communities occurring on the project site. Common wildlife and plant species observed, or expected to occur, in these areas and special-status species and sensitive plant habitats expected, or known to occur, in these areas are also addressed below. The habitat type occurring onsite is cropland.

CROPLAND

Frequently plowed and disced cropland is the predominant vegetation type on the project site. As a result of these farming activities, this area is sparsely vegetated. Plant species found in this habitat include grasses, such as ripgut brome (*Bromus diandrus*) and annual ryegrass (*Lolium multiflorum*), and weedy species, including yellow star thistle (*Centaurea solstitialis*) and rancher's fireweed (*Amsinckia menziesii*).

Plowed and disced cropland provides low cover for small mammals, reptiles, and amphibians and results in suitable foraging habitat for raptors and perching birds. Species observed in this habitat include Brewer's blackbird (*Euphagus cyanocephalus*), American crow (*Corvus brachyrhynchos*), northern harrier (*Circus cyaneus*), rough-legged hawk (*Buteo lagopus*), western meadow lark (*Sturnella neglecta*), California ground squirrel (*Spermophilus beecheyi*), valley pocket gopher (*Thomomys bottae*), and mourning dove (*Zenaida macroura*).

4.8.3 LISTED AND SPECIAL-STATUS SPECIES

The following discussion describes the plant and animal species that have been afforded special recognition by federal, state, or local resource agencies or organizations. Listed and special-status species are of relatively limited distribution and may require specialized habitat conditions. Listed and special-status species are defined as:

- Listed or proposed for listing under the state or federal Endangered Species Acts;
- Protected under other regulations (e.g. Migratory Bird Treaty Act (MBTA));
- California Department of Fish and Game (CDFG) Species of Special Concern;
- Listed as species of concern by CNPS, or;
- Otherwise, receive consideration during environmental review (CEQA).

4.8 BIOLOGICAL RESOURCES

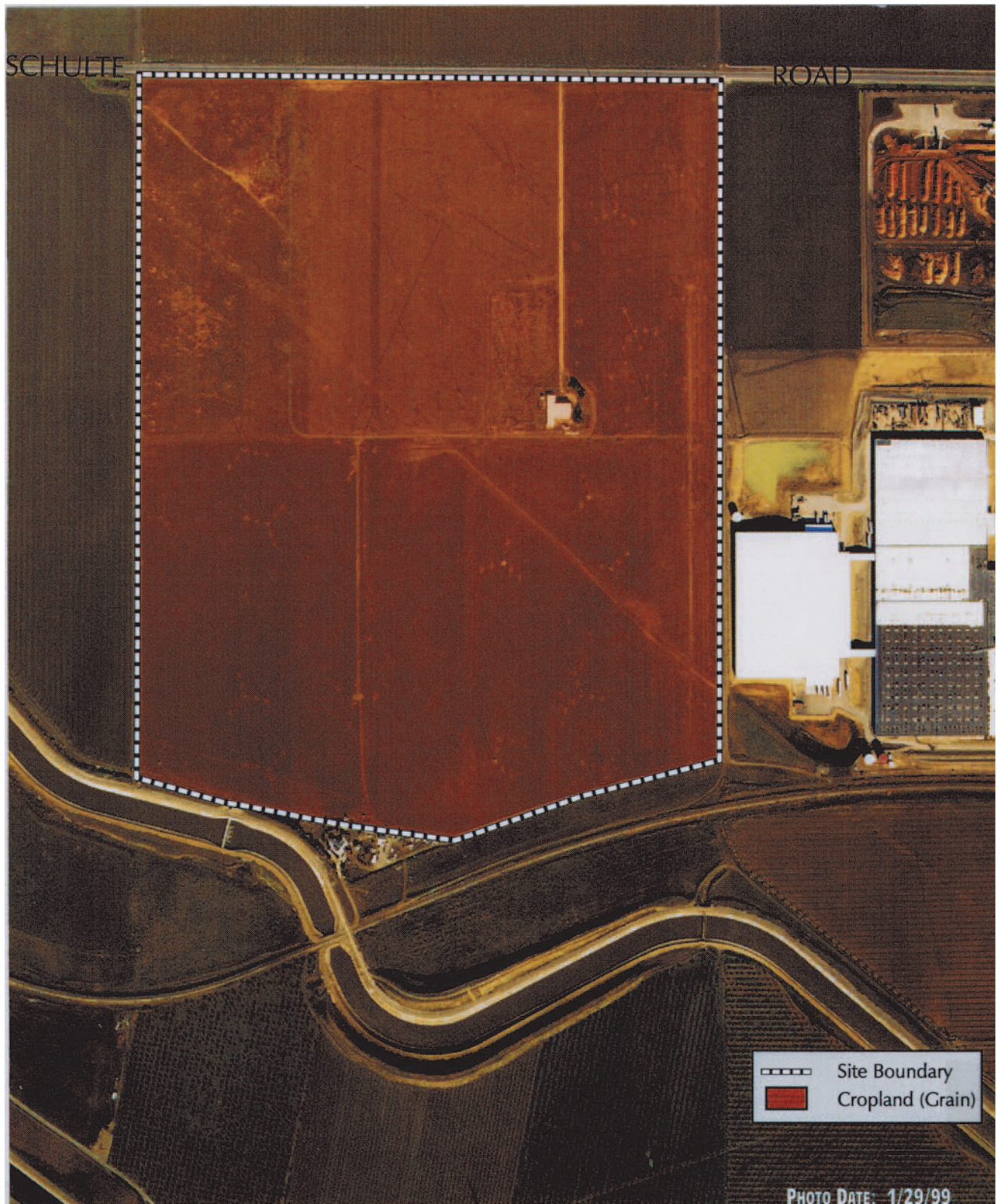
The listed and special-status species that are known to occur, or may potentially occur within the project site are discussed below and listed in the table below. These species were considered for this analysis based on field surveys, and review of USFWS special-status species lists, San Joaquin County Multi-Species Habitat Conservation and Open Space Plan, CNDDDB database and CNPS literature. The special-status species that are known to occur in the CNDDDB within a five-mile radius of the project site and are mapped in **Figure 4.8-2**.

LISTED AND SPECIAL-STATUS PLANTS

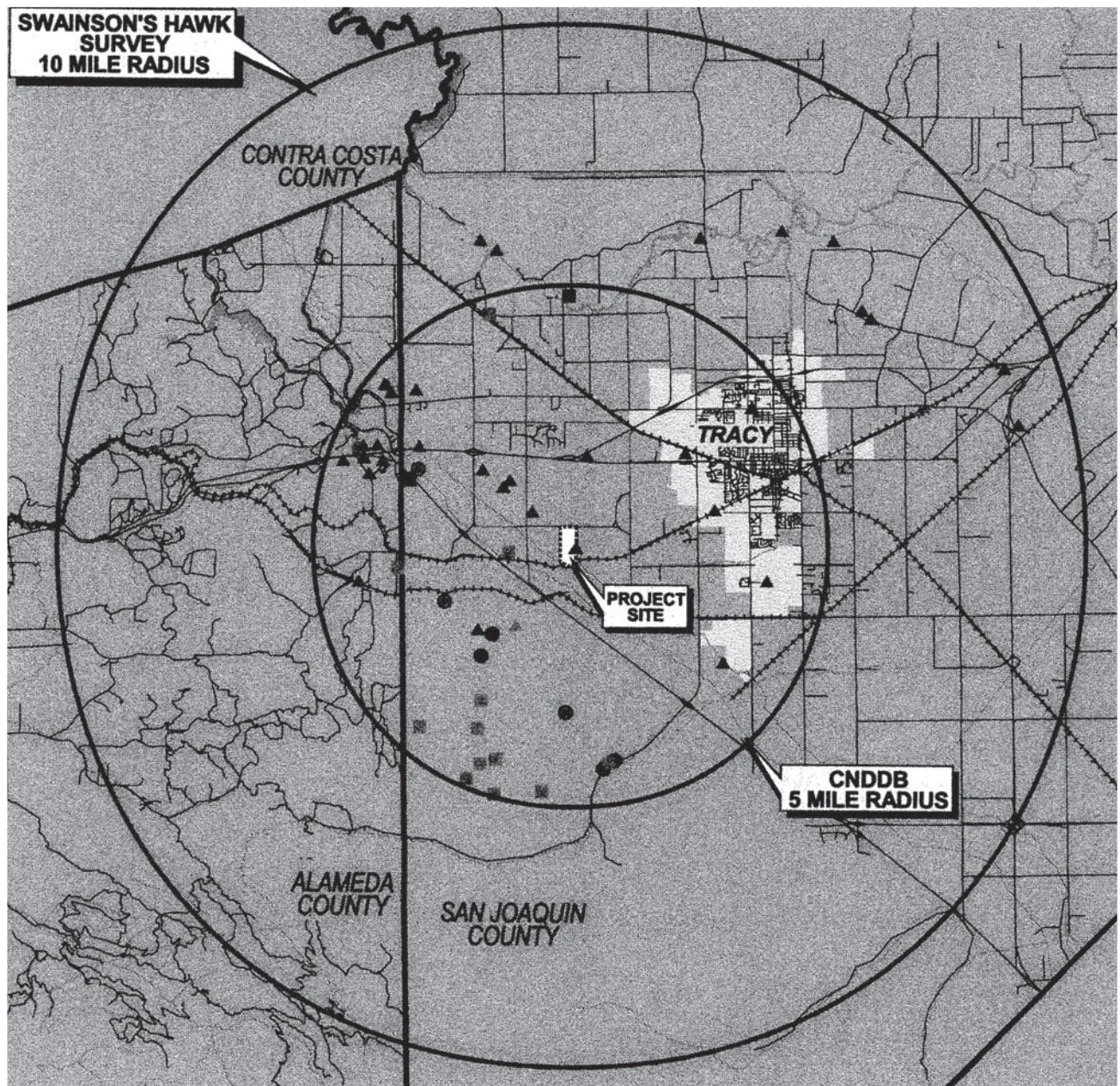
Four special-status plant species are listed in the CNDDDB as occurring within the vicinity of the project site. These species include big tarplant (*Blepharizonia plumosa* ssp. *plumosa*), caper-fruited tropidocarpum (*Tropidocarpum capparideum*), Ferris's milk-vetch (*Astragalus tener* var. *ferrisiae*), and Mason's lilaeopsis (*Lilaeopsis masonii*). Based on the habitats present on the project site and the habitat requirements of these plants, none of these species are expected to occur on the project site.

LISTED AND SPECIAL-STATUS ANIMALS

The following is a list of special-status wildlife species recorded in the CNDDDB as occurring within five miles of the project site: California red-legged frog (*Rana aurora draytonii*), burrowing owl (*Athene cunicularia*), California horned lark (*Eremophila alpestris actia*), tricolored blackbird (*Agelaius tricolor*), San Joaquin pocket mouse (*Perognathus inornatus inornatus*), California horned lizard (*Phrynosoma coronatum frontale*), Swainson's hawk (*Buteo swainsoni*), and San Joaquin whipsnake (*Masticophis flagellum ruddocki*). Of these species, habitat for burrowing owl and San Joaquin kit fox occur onsite. Various species of raptors, including Swainson's hawk, could periodically forage onsite; however, nesting habitat for these species is not present on the project site. A rough-legged hawk and a northern harrier were observed foraging during field reconnaissance; no nests were found.



Source: Foothill Associates, CNDDDB 1999



Source:

TABLE 4.8-1
LISTED AND SPECIAL STATUS SPECIES POTENTIALLY OCCURRING ON THE PROJECT SITE OR IN THE SITE VICINITY

| Species | Federal (USFWS) | State (CDFG) | CNPS 1 | Habitat | Potential for Occurrence |
|--|--------------------|-----------------|-----------|---|--|
| Plants | | | | | |
| Big tarplant <i>Blepharizonia plumosa</i> ssp. <i>plumosa</i> | – | – | 1B | Valley and foothill grasslands | No ; suitable habitat for this species is not present onsite. |
| Caper-fruited tropidocarpum <i>Tropidocarpum capparideum</i> | – | – | 1A | Valley and foothill grasslands on alkaline soils | No ; suitable habitat for this species is not present onsite. |
| Ferris's milk-vetch <i>Astragalus tener</i> var. <i>ferrisiae</i> | – | – | 1B | Meadows or valley and foothill grasslands on alkaline soils | No ; suitable habitat for this species is not present onsite. |
| Mason's lilaeopsis <i>Lilaeopsis masonii</i> | – | R | 1B | Marshes, swales, or riparian scrub | No ; suitable habitat for this species is not present onsite. |
| Round-Leaved Filaree <i>Erodium macrophyllum</i> | – | – | 2 | Cismontane woodland, valley and foothill grassland / clay | No ; suitable habitat for this species is not present onsite. |
| Amphibians/Reptiles | | | | | |
| California red-legged frog <i>Rana aurora draytonii</i> | T | CSC | – | Occurs in slow moving, densely vegetated permanent pools, streams, or rivers | No ; suitable habitat for this species is not present onsite. |
| California Tiger Salamander <i>Ambystoma californiense</i> | FE | – | – | Inhabits primarily annual grasslands and open woodlands of the foothills and valleys. Breeding sites are vernal ponds or stock ponds. | No ; suitable habitat for this species is not present onsite. |
| California horned lizard <i>Phrynosoma coronatum frontale</i> | – | CSC, FP | – | Open grasslands with sandy washes and brush | No ; suitable habitat for this species is not present within the project site. |
| San Joaquin whipsnake <i>Masticophis flagellum</i> ssp. <i>ruddocki</i> | FSC | CSC | – | Open dry grasslands and saltbrush scrub | Low ; habitat for this species would be restricted to the outer edges of the project site or adjacent land due to active farming practices. |
| Western Pond Turtle <i>Clemmys marmorata</i> | – | CSC | – | Aquatic turtle found in ponds, marshes, rivers, | No ; suitable habitat for this species is not present onsite. |

4.8 BIOLOGICAL RESOURCES

| Species | Federal (USFWS) | State (CDFG) | CNPS ¹ | Habitat | Potential for Occurrence |
|---|----------------------|--------------|-------------------|--|--|
| | | | | streams, and irrigation ditches that typically have a rocky or muddy bottom with emergent vegetation. | |
| Western Spadefoot Toad <i>Scaphiopus hammondi</i> | FSC | CSC | | Lowland species frequents washes and floodplains of rivers, alluvial fans, playas, and alkali flats. Also ranges into the foothills and mountains. | No; suitable habitat for this species is not present onsite. |
| Mammals | | | | | |
| San Joaquin pocket mouse <i>Perognathus inoratus</i> ssp. <i>inornatus</i> | FSC | – | – | Grasslands and blue oak savannas | Low; While this species was not observed during field reconnaissance, potential breeding habitat for this species occurs on canal banks and in the ruderal habitat onsite. However, active farming practices provide unsuitable nesting habitat for this species |
| San Joaquin kit fox <i>Vulpes macrotis mutica</i> | E | T | – | Occurs on unplowed agricultural land and grasslands | High; Although the cropland onsite is plowed, USFWS protocol designates all cropland as potential kit fox habitat. Thus, potential habitat for this species occurs in the ruderal and cropland habitats onsite. |
| Birds | | | | | |
| California horned lark <i>Eremophila alpestris actia</i> | MBTA | CSC | – | Occurs predominantly in open grasslands; can occur in disturbed areas | Low; Foraging habitat occurs on the site; however, active farming practices provide unsuitable nesting habitat for this species. |
| Burrowing owl <i>Athene cunicularia</i> | FSC (nesting) | CSC | – | Open low-growing grasslands and canal banks with suitable burrow sites | High; While this species was not observed during field reconnaissance, potential breeding habitat for this species occurs on adjacent lands and in the ruderal habitat onsite. One occurrence of a burrow site is recorded from the project site (CNDDDB occ. No. 201, 1992). |
| Swainson's hawk <i>Buteo swainsoni</i> | FSC, MBTA (nesting) | T | – | Nests in riparian areas and in stands of solitary trees | High; Suitable nesting habitat for this species is not present onsite, however, cropland and ruderal habitats are suitable foraging habitat for this species. |
| Tricolored blackbird <i>Agelaius tricolor</i> | FSC (nesting colony) | CSC | – | Freshwater marsh with stands of cattails, tules; nests colonially in blackberry thickets | No; no suitable nesting habitat for this species exists onsite; could forage on the project site. |
| Egrets and herons | MBTA | – | – | Marshlands and ponds | No; rookeries were not found onsite. Breeding habitat for these species does not |

| Species | Federal (USFWS) | State (CDFG) | CNPS ¹ | Habitat | Potential for Occurrence |
|--|-----------------|--------------|-------------------|--|--|
| | | | | | occur onsite; however, these species could forage along the Delta Mendota Canal, offsite. |
| Other Raptors (Birds of prey: hawks, owls, etc.) | MBTA (nesting) | -- | -- | Large trees and riparian woodlands for nesting | High; Suitable nesting habitat for this species is not present onsite, however, cropland and ruderal habitats are suitable foraging habitat for this species. |

E = Endangered T = Threatened R = Rare CSC = California Species of Special Concern MBTA = federal Migratory Bird Treaty Act FP = Fully Protected P = Protected

CNPS Categories:

1A = Plants presumed extinct in California 1B = Plants rare, threatened, or endangered in California and elsewhere 2 = Rare/Endangered in California; more common elsewhere

¹ CNPS is a private non-profit organization that works closely with CDFG throughout the state. CNPS-developed information serves as an important source of data for consideration by CDFG and USFWS in recommendations for listing state or federal threatened and endangered plant species.

Source: Foothill Associates and CDFG Special Animals 2003

Burrowing Owl

Burrowing owls are a California Species of Special Concern and are protected by the CDFG and the MBTA. Burrowing owls forage in open grasslands and shrublands and typically nest in old ground squirrel burrows. Although an active burrow was confirmed on the site in 1992, no evidence of burrowing owls were observed during the field reconnaissance on December 9, 2003. Based on the condition of the site (frequently discd), it is unlikely that burrowing owl would nest within the cropland. However, the presence of ground squirrel burrows onsite constitutes suitable nesting habitat for burrowing owl and, as a result, this species could occur on the project site.

San Joaquin Kit Fox

The San Joaquin kit fox forages in grasslands and agricultural habitats throughout the Central Valley. This species digs dens, which are commonly located in open, level areas on loosely textured soils. Kit fox dens are often located in areas of limited human activity (Zeiner et al, 1990b). The San Joaquin kit fox is federally endangered and threatened in California. Consequently, this species is protected by the U.S. Fish and Wildlife Service (USFWS) and the CDFG under the Federal Endangered Species Act (FESA) and the California Endangered Species Act (CESA), respectively. This species was not observed during field reconnaissance; however, several burrows were observed onsite that would be considered habitat for kit fox. The cropland habitat onsite constitute suitable foraging and denning habitat for this species and, as a result, this species could occur on the project site.

Swainson's Hawk

Swainson's hawks forage in open grasslands and agricultural fields and commonly nest in solitary trees and riparian areas in close proximity to foraging habitat. The foraging range for Swainson's hawk is ten miles from its nesting location (Zeiner et al, 1990a). This species is threatened in California and is protected by the CDFG and the MBTA. Additionally, Swainson's hawk foraging habitat is protected by the CDFG. The CNDDb lists a single Swainson's hawk nest as occurring within five miles of the project site. Although no nesting habitat for this species occur onsite, the cropland habitat on the project site is considered suitable foraging habitat for this species.

4.8 BIOLOGICAL RESOURCES

4.8.4 REGULATORY FRAMEWORK

The following describes the federal and state environmental laws and local policies, which are implemented during the CEQA review process.

LISTED SPECIES

The United States Congress passed the Federal Endangered Species Act (FESA) in 1973 to protect those species that are endangered or threatened with extinction. The State of California enacted a similar law, the California Endangered Species Act (CESA) in 1984.

The state and federal Endangered Species Acts are intended to operate in conjunction with the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA) to help protect the ecosystems upon which endangered and threatened species depend. The USFWS is responsible for implementation of the FESA, while the CDFG implements the CESA. During project review, each agency is given the opportunity to comment on the potential of the project to affect listed plants and animals.

SPECIAL-STATUS SPECIES

In addition to formal listing under the FESA and the CESA, species receive additional consideration during the CEQA process. Species that may be considered for review are included on a list of "Species of Special Concern," developed by the CDFG. It tracks species in California whose numbers, reproductive success, or habitat may be threatened.

The CNPS maintains a list of plant species native to California that have low numbers, limited distribution, or are otherwise threatened with extinction. This information is published in the *Inventory of Rare and Endangered Vascular Plants of California*. Potential impacts to populations of CNPS-listed plants receive consideration under CEQA review.

Raptors (birds of prey), migratory birds, and other avian species are protected by a number of state and federal laws. The federal MBTA prohibits the killing, possessing, or trading of migratory birds except in accordance with regulations prescribed by the Secretary of Interior. Section 3503.5 of the California Fish and Game Code states that it is "unlawful to take, possess, or destroy any birds in the order Falconiformes or Strigiformes or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto."

WATERS OF THE UNITED STATES

Under Section 404 of the Clean Water Act (CWA), the U. S. Army Corps of Engineers (Corps) regulates fill of Waters of the United States. Waters of the United States include navigable waters, tributaries to navigable waters, and isolated wetlands. Isolated wetlands include swamps, marshes, bogs, vernal pools, and similar areas. The Corps is responsible for issuing permits for any projects that propose to discharge any material into Waters of the United States. Section 401 of the CWA and a stipulation in the Corps permit require water quality certification (or waiver of certification) from the Regional Water Quality Control Board (RWQCB) for any project that will result in fill being placed in jurisdictional Waters of the U.S.

The California Fish and Game Code Sections 1601-1603 requires a Streambed Alteration Agreement from the CDFG for any project that would impact stream flows or the bed and banks of streams or lakes.

SAN JOAQUIN COUNTY MULTI-SPECIES HABITAT CONSERVATION AND OPEN SPACE PLAN

The San Joaquin County Multi-Species Habitat Conservation and Open Space Plan (SJMSCP) is administered by a Joint Powers Authority consisting of the members of the San Joaquin County Council of Governments (SJCOG). The 50-year plan addresses impacts to 97 special-status plant, fish and wildlife species found in 52 vegetative communities that occur in scattered localities throughout San Joaquin County. The SJMSCP compensates for conversions of open space for a wide variety of ground disturbing activity, including urban development.

According to the SJMSCP, "adoption and implementation of the SJMSCP by local planning jurisdictions provides adequate compensation and minimization measures for impacts to plants, fish and wildlife for SJMSCP Permitted Activities as necessary to implement conservation and Open Space policies of local general plans, resolution, ordinances and other regulations as they pertain to plants, fish and wildlife and as necessary to fulfill the obligations of local jurisdictions with respect to the analysis and mitigation of impacts to plants, fish and wildlife pursuant to the state and federal laws described (in the SJMSCP) and pursuant to the California Environmental Quality Act (CEQA), the National Environmental Policy Act (NEPA), the Planning and Zoning Law, the State Subdivision Map Act, the Porter-Cologne Act, and the Cortese-Knox Act as these laws relate to the Permittees' responsibilities for Covered Species with respect to SJMSCP Permitted Activities located within the boundaries of San Joaquin County." The SJMSCP dated November 15, 2000 and certified by the San Joaquin Council of Governments on December 7, 2000 was adopted by the City of Tracy on November 6, 2001. The project is located within an area covered by the SJMSCP.

4.8.5 SENSITIVE HABITATS

Sensitive habitats include those that are of special concern to resource agencies or those that are protected under CEQA, Section 1600 of the California Fish and Game Code, or Section 404 of the CWA. There are no sensitive habitats on the project site.

WATERS OF THE U.S.

Jurisdictional Waters of the U.S. include jurisdictional wetlands, creeks, ponds, and intermittent drainages. Wetlands are defined as "those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions" (Corps 1987). The majority of jurisdictional wetlands in the United States meet three wetland criteria: hydrophytic vegetation, hydric soils, and wetland hydrology. Jurisdictional Waters of the U.S. can also be defined by exhibiting a defined bed and bank and ordinary high water mark (OHWM). As discussed in Regulatory Framework, Jurisdictional Waters of the U.S. are subject to Section 404 of the CWA and are regulated by the Corps.

The drainage ditches located in the northeastern and southeastern corners of the project site appear to have been excavated, and are not natural watercourses. Additionally, vegetation observed in these ditches was predominantly ruderal. For these reasons, these ditches are not likely jurisdictional Waters of the U.S.

A "blue line" intermittent drainage is mapped on the USGS Midway Quadrangle in the northwestern edge of the project site. This area was surveyed during field reconnaissance; however, this drainage no longer exists in this portion of the site.

4.8 BIOLOGICAL RESOURCES

CITY GENERAL PLAN

The following goals and policies within the City's General Plan relate to biological resources and are relevant to this project:

Chapter Nine. Open Space Element

Goal OS 1: To Conserve Natural Resources through the Protection and Enhancement of Permanently Preserved Open Space.

Policy OS 1.2: Minimize the impacts of development on waterways, riparian corridors, and adjacent buffer areas.

Goal OS 3: Open Space lands for the future expansion of City facilities and amenities.

Policy OS 3.1: Multi-Use Open Space areas shall be established that provide for a variety of open space uses including: passive and active recreational activities in natural, semi-natural and agrarian settings.

4.8.7 IMPACTS AND MITIGATION MEASURES

STANDARDS OF SIGNIFICANCE

A biological resource impact is considered significant if implementation of the project would result in any of the following:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as an endangered, threatened, or rare species or their habitats (including, but not limited to, plants, fish, invertebrates, amphibians, reptiles, birds, and mammals).
- Have a substantial adverse effect on any natural communities identified as sensitive in local or regional plans, policies or regulations or by the CDFG and 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.
- 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. Interference would include disturbance of foraging and nesting habitat to raptors and migratory birds, natural communities that support endangered, threatened or rare species and wildlife movement zones, including but not limited to, non-fragmented stream environment zones, avian and mammalian routes, and known concentration areas of waterfowl within the Pacific Flyway;
- Conflict with local, state, or federal resource conservation plans, goals, or regulations that would result in a physical impact on the environment.

METHODOLOGY

Available information pertaining to the natural resources of the project site was reviewed. These documents include: *The San Joaquin County General Plan*, *The City of Tracy General Plan Environmental Impact Report*, (City of Tracy, 1993); the *San Joaquin County Multi-Species Habitat Conservation and Open Space Plan* (November 15, 2000), the California Natural Diversity Data Base (CNDDDB: Tracy and Midway quadrangles, December 2003); the California Native Plant Society (CNPS) *Inventory of Rare and Endangered Vascular Plants of California* (Skinner and Pavlik, 1994); and the *Jepson Manual: Higher Plants of California* (Hickman, 1993) and USFWS special status species lists for Midway and Tracy USGS 7.5-minute quadrangles December, 2003).

Foothill Associates' biologists surveyed the project site on December 9, 2003. Field investigations included general plant and wildlife surveys focusing on portions of the project site with the potential to support special-status species and sensitive habitats. Recent color aerial photography of the project site was also examined to identify biological resources and map vegetation types.

An evaluation of whether or not an impact on biological resources would be substantial must consider both the resource itself and how that resource fits into a regional or local context. Significant impacts would be those that would diminish, or result in the loss of, an important biological resource, or those that would obviously conflict with local, state, or federal resource conservation plans, goals, or regulations. Impacts are sometimes locally important, but not significant according to CEQA. The reason for this is that although the impacts would result in an adverse alteration of existing conditions, they would not substantially diminish, or result in the permanent loss of, a defined important resource on a population-wide or region-wide basis.

PROJECT IMPACTS AND MITIGATION MEASURES

Loss of Cropland Habitat

Impact 4.8.1 Construction of the project would remove cropland habitat. Because these habitats are common and regionally widespread, impacts to this area would be considered **less than significant**.

Development of the project site would remove approximately 200 acres of cropland. Because ruderal vegetation and cropland are regionally widespread, and the wildlife utilizing these areas is widespread, construction of the proposed project is not expected to result in a significant impact to the biological resources associated with these areas. For this reason, this impact would be considered **less than significant** and no mitigation would be required.

Mitigation Measure

None required.

Removal of Migratory Wildlife Habitat

Impact 4.8.2 Development of the project would remove habitat for regionally abundant resident and migratory wildlife currently utilizing the project site. This impact would be considered **less than significant** and no mitigation would be required.

4.8 BIOLOGICAL RESOURCES

The development of the project would remove habitat (approximately 200 acres) for common resident and migratory wildlife currently utilizing the project site. However, because these species are not specialized and common to this particular habitat and can move to similar habitats found elsewhere in the region, development of the project is not expected to impact these species. Additionally, these species are regionally abundant and are not considered sensitive by the resource agencies. Therefore, this impact would be considered **less than significant**.

Mitigation Measure

None required.

Removal of Foraging Habitat

Impact 4.8.3 Development of the project will remove foraging habitat (cropland) for Swainson's hawk. This species is threatened in California and its foraging habitat is protected by the CDFG. This impact would be considered **less than significant**.

The development of the project site would remove approximately 200 acres of Swainson's hawk foraging habitat (cropland). Sensitive biological resources would be impacted by continued growth within the county. The SJMSCP was created and adopted to address both the project and cumulative impacts to biological resources, including the burrowing owl and Swainson's hawk. The City's continued participation in the SJMSCP, and the continued collection and application of mitigation fees for the purpose of preserving agricultural lands as foraging territory would reduce the impacts to **a less than significant** level.

Mitigation Measure

None required.

Disturbance to Burrowing Owl Habitat

Impact 4.8.4 Development of the project may result in the disturbance of potentially active burrowing owl burrows. Burrowing owls are a California Species of Special Concern and are protected by the CDFG and the MBTA. Thus, this impact would be considered **potentially significant**.

Although not observed, burrowing owls may nest in burrows located onsite. Potential burrowing owl burrows were observed in the less disturbed areas of the site namely along Schulte Road. The removal or destruction of active raptor nests is considered a violation of the California Fish and Game Code Section 3503.5 and of the MBTA. For these reasons, this impact would be considered **potentially significant**.

Mitigation Measure

MM 4.8.4 A qualified biologist shall conduct a focused survey for burrowing owls within 30 days prior to the onset of construction activities (during the breeding season) to determine if active burrows exist onsite. If burrowing owls are found to occupy the project site, then the following measures shall be implemented:

- 1) During the non-breeding season (September 1 through January 31) burrowing owls occupying the project site should be evicted from the project site by passive relocation as described in the California Department of Fish and Game's Staff Report on Burrowing Owls (Oct., 1995).
- 2) During the breeding season (February 1 through August 31) occupied burrows shall not be disturbed and shall be provided with a 75 meter protective buffer until and unless the Technical Advisory Committee of San Joaquin County, with concurrence of the CDFG verifies through non-invasive means that either: 1) the birds have not begun egg laying, or 2) juveniles from the occupied burrows are foraging independently and are capable of independent survival. Once the fledglings are capable of independent survival, the burrow can be destroyed.

Timing/Implementation: Prior to the initiation of grading or site clearing activities.

Enforcement/Monitoring: The City of Tracy and a qualified biologist shall conduct surveys and relocate owls as required.

Implementation of the above mitigation measure would reduce impacts to burrowing owls to **less than significant**.

Disturbance to Active Kit Fox Den

Impact 4.8.5 Development of the project site may result in the disturbance of potentially active kit fox dens on the project site. Because this species is federally endangered and threatened in California, impacts to potential active kit fox dens on-site would be considered **potentially significant**.

The San Joaquin kit fox is threatened in California and is federally listed as endangered. It is not known whether active kit fox dens are on the project site. While the northern range of the San Joaquin kit fox extends to areas south of the Delta Mendota Canal, the project site is directly north of this boundary and this species could inhabit the cropland habitat onsite.

Mitigation Measure

MM 4.8.5 A qualified biologist should conduct focused surveys for active kit fox dens within 30 days prior to the onset of construction activities. When surveys identify potential dens (potential dens are defined as burrows at least four inches in diameter which open up within two feet), potential den entrances shall be dusted for three calendar days to register track of any San Joaquin kit fox present. If San Joaquin kit fox activity is identified, potential dens may be destroyed. If San Joaquin kit fox activity is identified, then dens shall be monitored to determine if occupation is by an adult fox only or is a natal den (natal dens usually have multiple openings). If the den is occupied by an adult only, the den may be destroyed when the adult fox has moved or is temporarily absent. If the den is a natal den, a buffer zone of 250 feet shall be maintained around the den until the biologist determines that the den has been vacated. Where San Joaquin kit fox are identified, the provision of the U.S. Fish and Wildlife Service's published *Standardized Recommendations for*

4.8 BIOLOGICAL RESOURCES

Protection of the San Joaquin Kit Fox Prior to or During Ground Disturbance shall apply. These standards include provisions for educating construction workers regarding the kit fox, keeping heavy equipment operating at safe speeds, checking construction pipes for kit fox occupation during construction and similar low or no-cost activities.

Timing/Implementation: Prior to the initiation of grading or site clearing activities.

Enforcement/Monitoring: The City of Tracy and qualified biologists shall conduct surveys, conduct educational seminars and monitor activities.

Implementation of the above measure reduces impacts to the San Joaquin kit fox to a **less than significant** level.

Disturbance to Kit Fox Habitat

Impact 4.8.6 Development of the project site could result in the removal of potential kit fox habitat. This impact would be **less than significant**.

The San Joaquin kit fox is threatened in California and is federally listed as endangered. Sensitive biological resources would be impacted by continued growth within the county. The SJMSCP was created and adopted to address both the project and cumulative impacts to biological resources, including the kit fox. The City's continued participation in the SJMSCP, and the continued collection and application of mitigation fees for the purpose of preserving open space lands for kit fox habitat would reduce the impacts to a **less than significant** level.

Mitigation Measure

None required.

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4.9 Cultural Resources

This section evaluates potential impacts to cultural resources that could result from implementation of the proposed project. The analysis is based on literature review conducted for prehistoric and historic resources within the vicinity of the project area, and a field survey of the project site. This section is based on the previous analysis completed in *The Cultural Resources Survey and Assessment of the Tracy Learning Center Property* prepared by Foothill Archaeological Services. The original report is included in the Tracy Learning Center EIR, 1999.

4.9.1. EXISTING SETTING

PHYSICAL SETTING

The project site had been used for agricultural purposes until about 1960, which corresponds to the establishment of the FAA facility on site. The site had supported row crops for many years, and as a result, the natural topography has been modified. Contour elevations range from 190 to 130 feet. The land slopes generally from southwest to northeast. The only evidence of the original topography are the remnants of a few shallow drainages that carry water seasonally from the southwest.

A few scattered trees around the margins of the agricultural areas are all that remain of the native vegetation. The only other vegetation of note are a few ornamental trees located around the concrete structure on-site.

PREHISTORY/ ETHNOGRAPHY

The San Joaquin Valley remains one of the least-known areas in California regarding prehistory. Other than the salvage of late-period Yokuts burial sites, large-scale excavations have been limited to Buena Vista Lake and a series of projects at San Luis, Los Banos and Little Panoche reservoirs.

The Northern Valley Yokuts occupied the project area at the time of European-American contact. These Penutian speakers made their home in the central portion of California. The native groups speaking Northern Yokuts dialects ranged from the Calaveras River on the north to the southern extent of the San Joaquin River to the south. Their territory also included lands from the crest of the Diablo Range on the west to the foothills of the Sierra Nevada on the east.

The Northern Yokuts are part of a larger population that occupied much of the San Joaquin Valley as well as the foothills on the east and west sides of the valley. There were over 50 different dialects of the Yokuts language, which were remarkably homogeneous from north to south over the 250-mile range inhabited by Yokuts-speaking peoples.

Unfortunately, very little is known of Yokuts societies. The lower or northern San Joaquin Valley is one of the least known ethnographic areas of California. The lack of information concerning the aboriginal inhabitants of this region is due to their rapid disappearance as the result of disease, missionization and the sudden overrunning of their lands by miners and settlers during the gold rush (Wallace, 1978).

The San Joaquin River formed the core territory of Northern Yokuts groups. Along its northern extremities, it formed a wide, tule-choked ribbon of fresh water with many sloughs and shallows, which formed a rich habitat for plants and animals, as well as the natives who exploited them. The northern Yokuts tribes were relative latecomers to this region, having expanded their territory in the northern San Joaquin Valley just a few centuries prior to the arrival of Europeans. Yokuts

4.9 CULTURAL RESOURCES

villages were situated on natural rises in close proximity to major streams. Several hundred people occupied these settlements annually.

Fishing was the most important subsistence activity among Northern Yokuts groups along with taking waterfowl and hunting (Wallace, 1978). Salmon were the most economically valuable catch. Tule elk and pronghorn antelope once populated the valley in great numbers. These animals provided the major game resource for Yokuts hunters. Deer, rabbits, hares, rodents and snakes were also eaten. Acorns were the principal non-animal staple.

The Tracy area was home to the Hoyumne triblet of Yokuts. They completely disappeared prior to 1850 when settlers began entering the area in significant numbers. Many northern Yokut territories were wiped out by a malaria epidemic. Any knowledge of their culture comes from examination of their archeological sites. The project site is an unlikely site for a Yokut settlement because of the tendency of establishments on rises above major streams. However, a minor drainage formerly emanating from the foothills may have been favorable for development.

HISTORY

In 1869, a railroad line was constructed through what is now Tracy. The roundhouse, shop, yards and a hotel were built in Lathrop, which became the center of railroad business and headquarters for the Central Pacific Railroad in the San Joaquin Valley. Due to the volume of business, the railroad found it necessary to build a coaling station at the foot of the Livermore hills, 14 miles west of Lathrop. The new station was called Ellis, which gave Tracy its initial growth. Ellis was established near a settlement called Wickland, founded in 1861 on Old River. This was a loading point for shipping coal. The town of Ellis grew quite rapidly. By November 1870, the town boasted 45-50 buildings including two hotels, a store, blacksmith shop, warehouse, saloon and livery stable. However, ten years later, Ellis was practically deserted (Tinkham, 1923).

During 1870, the Southern Pacific Railroad Company and the Central Pacific Railroad Company merged to become the Southern Pacific Company. In September, 1878, the new company built a branch railroad to San Francisco by way of Martinez and extended the road along the west side of Fresno making a junction approximately three miles east of Ellis. This new railroad junction resulted in the founding of Tracy on September 8, 1878. Railroad officials, seeing no reason for continuing the coal-loading station at Ellis, moved some of the families in Ellis to Lathrop. Others were moved to the new railroad station at Tracy. Residents of Ellis, soon realizing their town was doomed, decided that Tracy would become the leading center and moved their business offices and homes to the new railroad station.

Historical events near the project area were probably dictated more by activities in Corral Hollow than in Tracy or Ellis. Corral Hollow is California Historical Landmark No.755. An early road was mapped in the 1859 government land survey and named, "Stockton to Corral Hollow Road." A branch of this road is located south of the project.

Corral Hollow, probably the site of a prehistoric Indian village, was known as "El Arroyo de los Buenos Aires." The site was on an old Spanish trail, El Camino Viejo. Juan Bautista de Anza passed that way in April 1776. Spanish and Mexican vaqueros made customary use of the trail and then later, during the gold rush, the old trail was used as a road to the southern mines.

The Pacific Coal Mining Company was subsequently organized and this, in turn, became the Commercial Mine and the Eureka Mine (Hoover et. al., 1966). The Commercial Coal Mining Company was incorporated to develop the mine and, in 1894, ownership passed to the Treadwell brothers who had made a fortune in the Alaska gold fields. The Treadwells named the

coal property, "Tesla Mine" in honor of Nikola Tesla, the great inventor. They expended nearly a million dollars in improvements including acquisition of the Alameda and San Joaquin Railroad to transport coal to Stockton where they believed the product could be sold to power the railroad as well as steamboats. By 1896, the company began hauling coal to Stockton (Tinkham, 1923).

The 1906 earthquake and the introduction of California oil as the new fuel of industry brought the Treadwells' plan to a halt. Only the wreckage of abandoned dumps marks the site of the Tesla Mine and only a few ruins and exotic trees mark the sites of town life and industry in Corral Hollow.

RECORDS SEARCH RESULTS

A records search by the Central California Information Center of the California Historical Resources Information System failed to identify any cultural resources within the project area. Eight previous cultural resources surveys have been conducted in the vicinity of the project. Three cultural resources were identified within a one-mile radius of the project area. Very few prehistoric archeological sites have been recorded in the vicinity of Tracy. Several buildings, however, in Tracy have been placed on the National Register of Historic Places. No traditional cultural places or sacred sites were identified in consultation with the Native American Heritage Commission.

A review of archival records, Government Land Office Plats and early maps showed no historical structures, roads or features on the site. Historic roads, however, did pass to the north and south of the project.

4.9.2. REGULATORY FRAMEWORK

CEQA GUIDELINES

Under CEQA Guidelines, "A project with an effect that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment (Section 15064.5 [b]). Substantial adverse change is considered " . . . physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired (Section 15064.5 [b][2]).

Section 15064.5 of the CEQA guidelines state that, a "historical resource" includes: a resource listed in or eligible for the California Register of Historical Resources; or listed in a local register of historical resources; or identified in a historical resource survey and meeting requirements in section 5024.1(g) of the Public Resources Code; or any object, building, structure, site, area, place, record, or manuscript that a lead agency determines historically significant, provided the determination is supported by substantial evidence in light of the whole record; or a resource so determined by a lead agency as defined in Public Resources Code sections 5020.1(j) or 5024.1.

While alteration of the setting of an archaeological site that is eligible only for its information potential may not affect the site's significant characteristics, alteration of a property's location (e.g., removing or damaging all or part of the site) may have a significant adverse effect.

CEQA's Guidelines under Section 15126.4(b)(3) state, "Public agencies should, whenever feasible, seek to avoid damaging effects on any historical resource of an archaeological nature." The guidelines further state that preservation in place is the preferred manner of

4.9 CULTURAL RESOURCES

mitigating impacts, and that preservation ". . . may be accomplished by, but is not limited to, the following":

- 1) Planning construction to avoid archaeological sites;
- 2) Incorporation of sites within parks, greenspace, or other open space;
- 3) Covering the archaeological sites with a layer of chemically stable soil before building tennis courts, parking lots, or similar facilities on the site; or,
- 4) Deeding the site into a permanent conservation easement.

CEQA guidelines state, "when data recovery through excavation is the only feasible mitigation, a data recovery plan, which makes provision for adequately recovering the scientifically consequential information from and about the historical resource, shall be prepared and adopted prior to any excavation being undertaken" (CEQA Guidelines, Title 14, Section 15126.4[b][3][C]). However, "data recovery shall not be required for an historical resource if the lead agency determines that testing or studies already completed have adequately recovered the scientifically consequential information from and about the archaeological or historical resource" (CEQA Guidelines, Title 14, Section 15126.4[b][3][D]).

CITY GENERAL PLAN

City policies are contained within each respective General Plan. The common theme of these policies is the protection of architectural, historic, archaeological and paleontological resources. The City encourages the preservation of these resources, and requires identification and mitigation whenever these resources are present.

4.9.3. IMPACTS AND MITIGATION MEASURES

STANDARDS OF SIGNIFICANCE

Cultural resource impacts may be considered significant if implementation of the project would result in one or more of the following:

- 1) Cause a substantial adverse change in the significance of a historical or archaeological resource as defined in CEQA Guidelines Section 15064.5;
- 2) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature; or,
- 3) Disturb any human remains, including those interred outside of formal cemeteries.

CALIFORNIA REGISTER OF HISTORICAL RESOURCES

Standards of significance for historical resources are found in the implementing regulations for the California Register of Historical Resources (Public Resources Code, Section 4850 et seq.). The California Register is an authoritative listing and guide for state and local agencies and private groups and citizens in identifying historical resources. This listing and guide indicates which resources should be protected from substantial adverse change. The criteria used for determining the eligibility of a cultural resource for the California Register are similar to those

developed by the National Park Service for the National Register of Historic Places. However, criteria of eligibility for the California Register were reworded to better reflect California history.

Any building, site, structure, object or historic district meeting one or more of the following criteria may be eligible for listing in the California Register:

- 1) It is associated with events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the United States;
- 2) It is associated with the lives of persons important to local, California, or national history;
- 3) It embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of a master or possesses high artistic values; or
- 4) It has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California, or the nation.

Eligibility for the California Register also depends on the integrity, or the survival of characteristics of the resource that existed during its period of significance. Eligible historic resources must not only meet one of the above criteria, but also they must retain enough of their historic character or appearance to convey the reasons for their importance, or retain the potential to yield significant scientific or historical information or specific data.

Like the process of evaluating historical resources for National Register eligibility, California Register evaluations include the consideration of seven aspects of integrity: location, design, setting, materials, workmanship, feeling and association. The evaluation of integrity must be judged with reference to the particular criterion or criteria under which a resource may be eligible for the California Register. However, the implementing regulations specifically caution that alterations of a historic resource over time may themselves have historical, cultural or architectural significance.

Most often, historical resources eligible for the California Register will be 50 years old or older. However, the new implementing regulations stipulate "a resource less than fifty (50) years old may be considered for listing in the California Register if it can be demonstrated that sufficient time has passed to understand its historical importance."

METHODOLOGY

A field survey was conducted on April 20 and 21, 1999 by John W. Foster. The survey was conducted by walking transects 10-15 meters apart across open terrain. Perimeter irrigation ditches and furrows were also closely examined. All signs of archeological evidence were pursued. Porcelain, glass, nails, bricks, wire, rock alignments, roads and foundations were sought for signs of historic land use. One structure, a concrete building, is located on the site. An antenna field is also on the site. These improvements were constructed in the 1960s and according the State Office of Historic Preservation criteria are not considered historic resources.

4.9 CULTURAL RESOURCES

IMPACTS AND MITIGATION MEASURES

Potential Archaeological Resources

Impact 4.9.1 The potential exists for the discovery of buried deposits or features of Tracy's archaeological and/or historical past. Northern Valley Yokuts occupied the Tracy vicinity. Discovery of any villages, camps or artifacts of the Northern Yokuts would have the potential to add new information about this ancient culture. Such sites are exceedingly rare and would constitute a valuable heritage resource for San Joaquin County and the people of California. Disturbance of undiscovered archaeological and/or cultural resources is considered **potentially significant**.

Such discoveries, however, are addressed by state code, and regulatory measures are in place which address such finds. For this reason, the project itself will not have a "significant impact."

Mitigation Measure

MM 4.9.1a If any prehistoric or historic artifacts, or other indications of archaeological resources are found during grading and construction activities, an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards in prehistoric or historical archaeology, as appropriate, shall be consulted to evaluate the finds and recommend appropriate mitigation measures.

MM 4.9.1b Similarly, if human remains are discovered, all work must stop in the immediate vicinity of the find, and the County Coroner must be notified, according to Section 7050.5 of California's Health and Safety Code. If the remains are Native American, the coroner will notify the Native American Heritage Commission, which in turn will inform a most likely descendant. The descendant will then recommend to the landowner appropriate disposition of the remains and any grave goods.

Timing/Implementation: During construction activities.

Enforcement/Monitoring: City of Tracy Development and Engineering Services Department.

Potential Paleontological Resources

Impact 4.9.2 The potential exists for the discovery of buried deposits or features of paleontological resources. Disturbance of undiscovered paleontological resources is considered **potentially significant**.

Erosion and excavation can expose marine and terrestrial fossils, particularly at outcrops. The site is located on the alluvial fans along the western edge of the valley approximately 8 miles (2 km) northeast of the Coastal Range foothills. Sediments in the Tracy region are comprised of alluvial sand materials consisting primarily of erosion particles of sedimentary rocks from the Coast Ranges.

The topography of the project site is gently sloping from to the northeast with grades ranging from 0.6 percent to 1.5 percent. The elevation ranges from approximately 130 feet above mean sea level (MSL) in the northern most part of the site to 180 feet above MSL in the south.

MM 4.9.2

If any fossils are encountered, there shall be no further disturbance of the area surrounding this find until the materials have been evaluated by a qualified paleontologist, and appropriate treatment measures have been identified.

Timing/Implementation: *During construction activities.*

Enforcement/Monitoring: *City of Tracy Development and Engineering Services Department.*

4.9 CULTURAL RESOURCES

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4.10 Public Services and Utilities

4.10 PUBLIC SERVICES AND UTILITIES

This section of the Draft EIR includes an assessment of significance for identified public services and utilities and an evaluation of potential impacts to public services that could result from the implementation of the project. Public services include: water supply, wastewater, electrical, natural gas, telephone service, law enforcement, fire protection, solid waste service, parks and recreation, and other associated services.

4.10.1 WATER SUPPLY

This section discusses and analyzes existing water supply resources, storage and distribution capacities, and the project's impact to water resources. This analysis is based on the water assessment adopted by City Council on July 19, 2005, prepared in accordance with California Senate Bill 610 ("SB 610"). Water resources issues are also discussed in Section 4.6, Hydrology/Water Quality.

4.10.1.1 WATER SUPPLY OVERVIEW

The project area is located within the City's Westside Planning Area and has historically been served with agricultural water by the West Side Irrigation District (WSID). The proposed two-phased development plan by acreage is presented in **Table 4.10-1**.

TABLE 4.10-1
PROPOSED PROJECT PHASING

| Development Phase | Number Planned | Field Acreage |
|--------------------------------|----------------|---------------|
| Phase I | | |
| Football fields | 3 | 3.9 |
| Baseball/softball | 10 | 15.9 |
| Soccer | 13 | 12.7 |
| Phase II | | |
| Baseball/softball | 13 | 9.4 |
| Sports/football stadium | 1 | 1.3 |
| Football field | 1 | 1.3 |
| Soccer field | 2 | 3.3 |
| General park/recreational area | 1 | 50 |

PROJECT WATER DEMAND

As shown in **Table 4.10-2**, the total (potable and non-potable) water demand for the Project is approximately 387.3 acre-feet per year (AF/yr); however, with the use of non-potable supplies for landscape irrigation purposes, the potable water demand at buildout is reduced by 385.3 AF/yr to approximately two AF/yr.

4.10 PUBLIC SERVICES AND UTILITIES

TABLE 4.10-2
SUMMARY OF POTABLE AND NON-POTABLE WATER DEMANDS

| Development Phase | Potable Water Demand (AF/yr) | NON-POTABLE WATER DEMAND (AF/YR) | Total Water Demand by Phase (AF/YR) |
|---------------------------|------------------------------|----------------------------------|-------------------------------------|
| Phase I | 1.0 | 127.7 | 128.7 |
| Phase II | 1.0 | 257.6 | 258.6 |
| Total at Project Buildout | 2.0 | 385.3 | 387.3 |

Potable Supply

There is an existing City water line located within the Schulte Road right-of-way that can be used for potable water conveyance. The potable water supply source for the proposed Project will be a portion of the newly acquired WSID and BCID Bureau of Reclamation (Bureau) Central Valley Project (CVP) water supply contracts that have been assigned to the City. WSID and BCID have each entered into an agreement with the City to assign up to 5,000 AF/yr of their Bureau CVP water contracts to the City (for a total of up to 10,000 AF/yr). Appropriate environmental documents have been prepared and certified by the City, WSID and BCID, and the assignment of this contract to the City has been approved and signed by the Bureau. Up to 7,500 AF/yr of this water supply is currently available for City use.

Actual quantities of water delivered to the City from the WSID and BCID water assignment will depend on specific hydrologic conditions and annual Bureau water supply allocations. Because the Bureau water being assigned to the City is designated as an agricultural supply, it is subject to agricultural delivery allocations, and during critically dry periods a delivery of as low as 25 percent of entitlement could be expected (per the draft CVP M&I water shortage policy). Therefore, even during a critically dry period, the assigned WSID and BCID supply is anticipated to be able to provide 1,875 AF/yr (25 percent of 7,500 AF/yr) of reliable water supply to the City. It is assumed that potable water demand will be relatively low for this project. Therefore, the City has sufficient supply availability and reliability to meet demands of this Project, even during critically dry periods.

Non-Potable Supply

The City's future recycled water system will ultimately provided the Project's non-potable water supply. Therefore, the project will be required to provide a dual-piped distribution system (one system for potable water distribution and one "purple pipe" system for the future recycled water system). Non-potable water will be used for irrigation. The existing well on-site or potentially a new well may have to be drilled to supply the site with irrigation water.

Existing Water Demands For The Project Site

The project site currently contains several antenna poles, aboveground power lines, underground gas and oil transmission lines, a paved access and a single abandoned concrete building. None of these facilities are currently generating demand for water at the project site, and the site is not irrigated.

4.10.1.2 REGULATORY FRAMEWORK**STATE LAWS AND REGULATIONS PERTAINING TO THE USE OF RECYCLED WATER**

There are several California Water Code and California Government Code sections pertaining to the use of recycled water and non-potable water for irrigation of common areas, agricultural irrigation and industrial uses. All of the requirements in these sections are designed to meet the goals of preserving potable water and putting California's water resources to their highest and best use. Recycled water refers to wastewater treatment plant effluent that has received treatment that meets the state requirements for direct non-potable use (for example, irrigation of landscaping, industrial cooling purposes). The use of recycled water has been demonstrated to be an effective means for meeting the demands for new water caused by drought conditions or growth in California (Water Code section 13555.2). Per Government Code sections 65601 through 65604, any local public entity that produces recycled water and determines that it will provide recycled water within the boundaries of a local agency within ten years must notify the agency of this fact. Upon receiving the notice, the local agency that will utilize the recycled water must adopt and enforce a recycled water ordinance within 180 days of receiving notice.

CITY GENERAL PLAN

City policies discourage the use of groundwater, and require sufficient and reliable surface supplies for new development. City and County policies are similar with regard to assurance of supply, long-term reliability, treatment and quality standards and water conservation.

The City's General Plan identifies specific policies regarding safety and management of water supplies. The following goals and policies within the City's General Plan relate to public services and utilities and are relevant to the project:

Goal PF 1: Efficient Management of Public Resources and Facilities to ensure that a High Level of Service is Maintained Throughout the Community.

Policy PF 1.1: Optimize use of planning area resources for efficient siting of public facilities.

Policy PF 1.2: Design major facilities such as water and wastewater treatment plants for phased expansions concurrent with growth.

Policy PF 1.3: Encourage design of infrastructure to serve dual purposes.

Policy PF 1.4: Ensure that adequate water supply can be provided within the City's service area, concurrent with service area expansion and population growth.

Policy PF 1.9: Use reclaimed water to reduce non-potable water demands wherever practical and feasible.

Policy 1.10: Create market opportunities for reclaimed water.

Policy 2.3: Maximize practical, feasible opportunities for land application of treated wastewater in the future.

4.10 PUBLIC SERVICES AND UTILITIES

City Of Tracy Water Master Plan

Following the adoption of the General Plan, the City prepared the Water Master Plan to address future water demands and provide a detailed evaluation of additional infrastructure facilities required to service City build out. The Water Master Plan assumes that at ultimate build out of the General Plan, water demands would be met entirely by surface water supplies and groundwater would be used for emergency supplies only. Master Plan water system facilities have been designed to meet estimated maximum peak hour water demands of the municipal service area at ultimate build out.

4.10.1.3 IMPACTS AND MITIGATION MEASURES

STANDARDS OF SIGNIFICANCE

The following thresholds for measuring the project's environmental impacts are based upon the Initial Study prepared for the project and the City's checklist format. For the purposes of this EIR, impacts are considered to be significant if the following could result from implementation of the proposed project:

- 1) A substantial increase in demand for an adequate domestic water supply and water distribution facilities over the existing conditions; or,
- 2) A substantial depletion of groundwater resources, which would limit this resource for other potential uses.

METHODOLOGY

The analysis of water is based upon previously prepared environmental documents for projects in the area (*Final Master Environmental Impact Report for the Urban Area General Plan*, SCH. No. 92052017), and the *Urban Water Management Plan* (updated in 2002 by Erler & Kalinowski). The reports used the following modeling criteria in analyzing the potential impacts of the project to the City's existing water system infrastructure:

- Design criteria as presented in the City's June 1994 Water Master Plan, in particular:
- The water treatment plant was sized to meet maximum day demands;
- Pumping facilities are sized to meet either maximum day, peak hour, or maximum day plus fire flow demand conditions;
- Transmission mains were sized to provide required peak hour flows, at a minimum pressure of 40 pounds per square inch (psi);
- Storage facilities were sized to include both operational and fire storage;
- Consistent with the City's planning criteria, the City's approved Infill/ISP/RSP/I-205, Plan C, South MacArthur, Presidio and NEI project areas were assumed to be completely built out. In addition, identified impacts to the City's water system associated with build out of these projects have been mitigated through construction of previously recommended water facilities;

- Per direction from the City, it has also been assumed that seven of the nine existing City wells will be operational at their actual 1997 pumping capacities;
- New pipelines will be hydraulically modeled with a roughness coefficient (C-Factor) of 120;

It has been assumed that the non-potable water supply for the project would be provided by on-site wells. In the future, a recycled water system, "purple-pipes", would provide the Project's non-potable water supply consistent with the City's adopted policy that recycled water determined to be available pursuant to section 13550 of the Water Code may be used for non-potable uses as outlined in Tracy Municipal Code Chapter 11.30 and as permitted by Title 22 of the California Code of Regulations.

PROJECT IMPACTS AND MITIGATION MEASURES

Water Supply

Impact 4.10.1 The proposed project will contribute to an increase in demand for an adequate domestic water supply and water distribution facilities over the existing conditions. This is considered a **less than significant** impact to the existing systems.

The project is located within the City's water service area boundary as described in the City's Urban Water Management Plan Service Area Boundary (March 2005). A water assessment completed in accordance with Water Code sections 10910 and 10912 illustrates that the City's Urban Water Management Plan (March 2005) projected water use for parks accounts for the additional water demand of the project. The water assessment concludes that the City's identified water supply for the project is sufficient based on the following:

- a) The Urban Water Management Plan project water use for the City 2004/2005 is accurate compared to the actual water use;
- b) The Urban Water Management Plan projected use by sector accounts for the project's estimated water use;
- c) The ultimate source for non-potable water for irrigation will be recycled water;
- d) The Tracy Municipal Code Title 11, Chapter 11.28 Water Management, provides the institutional controls to reduce or curtail the delivery of potable water to the proposed project during emergencies including, but not limited to, multiple dry years.

As such, the project's impact on water supply is considered **less than significant**.

Mitigation Measures

None required.

4.10 PUBLIC SERVICES AND UTILITIES

Water Treatment, Distribution, Pump and Storage Facilities

Impact 4.10.2 Development of the project may require expansion of existing water treatment and distribution systems. This is considered a **potentially significant** impact to existing systems.

Mitigation Measures

MM 4.10.2 Prior to approval of the project, the City shall demonstrate that water treatment and distribution facilities are constructed or available to meet project water demands. The project sponsor will contribute to the project's fair-share funding of water treatment and distribution facilities and improvements associated with providing service to the project site in accordance with the Water Master Plan and City Design Standards.

Timing/Implementation: Prior to the approval of the project.

Enforcement/Monitoring: City of Tracy Development and Engineering Services Director.

The impact identified is mitigated by mitigation measure **MM 4.10.2**, which is consistent with the provisions of General Plan EIR Mitigation Measures. Implementation of the above mitigation measures will reduce water treatment and distribution facility impacts to a **less than significant** level by requiring verification of WTP and conveyance capacity prior to phased approvals.

4.10.2 WASTEWATER TREATMENT

This section of the EIR addresses the existing and proposed wastewater treatment services that will accommodate the proposed project.

4.10.2.1 EXISTING SETTING

The project site currently contains several antenna poles, aboveground power lines, underground PG&E gas and Chevron oil lines, a paved roadway and a single abandoned building. No public wastewater services are currently needed or extended to the site.

4.10.2.2 REGULATORY FRAMEWORK

CITY GENERAL PLAN

The City's General Plan contains goals, policies and actions addressing utility corridors and new utility services. Policies focus on location of facilities, coordination with service providers, undergrounding of utilities and public safety.

Goal PF 1: Efficient Management of Public Resources and Facilities to ensure that a High Level of Service is Maintained Throughout the Community.

Policy PF 1.7: Provide adequate wastewater collection and treatment capacity for planned development in Tracy.

Policy PF 1.8: Provide flood protection for wastewater treatment facilities located within the 100-year flood plain.

CITY'S DESIGN STANDARDS

Section 4.0 of the City's Design Standards set forth requirements regarding the design and operation of wastewater distribution facilities. These requirements include estimates of average sewer flows based on land use and associated densities; standards for pipe design and pump systems, and other associated facilities.

4.10.2.3 IMPACTS AND MITIGATION MEASURES

STANDARDS OF SIGNIFICANCE

The following thresholds for measuring the project's environmental impacts are based upon the 1999 CEQA Guidelines and the Initial Study prepared for the project. Impacts to wastewater treatment are considered to be significant if implementation of the project will result in any of the following:

- 1) Require substantial expansion or alteration of the City's wastewater collection facilities beyond the ability to provide capacity; or,
- 2) Result in a substantial increase in wastewater flows over current conditions and treatment capacity.

METHODOLOGY

The analysis of potential utility system impacts is based upon review of the proposed facilities for the project site.

PROJECT IMPACTS AND MITIGATION MEASURES

A combination of restroom and concession facilities will be located at strategic locations throughout the project site. The project intends to use an onsite septic or alternative waste disposal system. Portable restrooms will be utilized on an interim basis until a permanent septic system is installed for the project site. Initially wastewater will be handled with a combination of a septic system and chemical treatment of temporary bathroom facilities. All retention and treatment of wastewater will remain onsite and will be dealt with through chemical treatment. There is no intent or proposal to connect the new facilities to the City's sewer system; therefore this is a **less than significant** impact on wastewater treatment.

4.10.3 ELECTRICAL, NATURAL GAS, AND TELEPHONE SERVICE

This section of the EIR addresses the existing electricity, natural gas, and telephone services and evaluates the ability of these service providers to accommodate development resulting from the project.

4.10 PUBLIC SERVICES AND UTILITIES

4.10.3.1 EXISTING SETTING

ELECTRICAL AND NATURAL GAS FACILITIES

Currently, Pacific Gas and Electric (PG&E) provides electrical and natural gas facilities. Major facilities in the project area include aboveground electrical transmission lines in Schulte Road and an underground PG&E gas transmission line with aboveground gas paddles located onsite. In addition to the transmission lines along Schulte Road, smaller power poles are located throughout the site.

TELEPHONE SERVICE

Pacific Bell currently provides telephone facilities and services to the City. Telephone infrastructure facilities are located in the vicinity of the project site and could be extended to accommodate the project.

4.10.3.2 REGULATORY FRAMEWORK

CITY GENERAL PLAN

The City's General Plan contains goals, policies and actions addressing utility corridors and new utility services. Policies focus on location of facilities, coordination with service providers, undergrounding of utilities and public safety.

4.10.3.3 IMPACTS AND MITIGATION MEASURES

STANDARDS OF SIGNIFICANCE

Project impacts are considered significant if the project results in the following:

- 1) Substantial increases in demand necessitating new or extended services in excess of service provider's ability to provide service.

METHODOLOGY

The analysis of potential utility system impacts is based upon review of facilities in the project area.

PROJECT IMPACTS AND MITIGATION MEASURES

Utility Services

Impact 4.10.3 Development of the project would result in an increase in demand necessitating the expansion of utility services. This is considered to be a **potentially significant** impact.

Electric, natural gas and telephone service would be provided at the time of request for service. Electric and natural gas service is currently provided by PG&E. Telephone service in the vicinity of the project site is currently provided by Pacific Bell. Electric and natural gas distribution lines as well as telephone infrastructure would need to be extended and improved to PG&E and Pacific

Bell standards and specifications. The provision of electrical, natural gas and telephone services to the project site is available. However, expansion and upgrading of existing distribution systems would be required as part of project development.

Mitigation Measure

MM 4.10.3a The project sponsors shall coordinate with PG&E and Pacific Bell regarding the proper extension of electrical, natural gas and telephone services to the project site. This shall include the development of detailed plans for utility placement and the project's participation in energy conservation programs provided by PG&E. Utility placement shall not conflict with other planned infrastructure improvements such as water distribution systems and project site drainage facilities. Evidence of this coordination with PG&E and Pacific Bell shall be provided to the City's Department of Development and Engineering Services.

MM 4.10.3b The on-site facilities shall be designed according to the California Code of Regulations, Title 24, "Energy Standards for Nonresidential Buildings", or be designed to not exceed the energy consumption requirements of those standards.

Timing/Implementation: Prior to completion of final improvement plans.

Enforcement/Monitoring: City's Development and Engineering Services Department.

Implementing the above mitigation measures that are consistent with the provisions of established development codes mitigates the impact identified. Implementation of the above mitigation measures will reduce potential utility impacts to a **less than significant** level by ensuring that utilities are properly located and coordinated between providers.

4.10.4 POLICE PROTECTION

This section of the EIR evaluates the impacts on law enforcement services as a result of the proposed project. The existing law enforcement services provided by the San Joaquin County Sheriff's Department are discussed and the demand for increased services and accessibility are evaluated.

4.10.4.1 EXISTING SETTING

SAN JOAQUIN COUNTY SHERIFF'S DEPARTMENT

The San Joaquin County Sheriff's Department currently patrols the area in the vicinity of the project site. The Sheriff's Department, with a dispatch facility located at 7000 Canlis Boulevard in French Camp, divides the County into nine service areas, or "beats". The City of Tracy is located within Beat #8. Each 24-hour period is divided into 5 shifts with 1-2 officers per shift. One sergeant supervises each shift and a lieutenant is present during a normal eight-hour business day.

The beat is further divided into report districts based on patterns of development and population density. This section of Schulte Road is located in Reporting District 142, which encompasses a geographical area bordered by I-205 on the north, the County Line on the west and Corral Hollow

4.10 PUBLIC SERVICES AND UTILITIES

Road on the south and east. There were a total of 148 calls for service in this reporting district for the seven-month period from May 1, 1999 to December 1, 1999, and only one documented incident report for the year in the immediate vicinity of Schulte Road where the project is located.

The Sheriff's Department is divided into two sections - Custody and Operations. Custody is responsible for transportation of criminals to and from incarceration facilities. Operations conducts patrol officers and their dispatch, detectives and investigation, evidence collection, and officer training. Operations personnel are those with whom the public is most likely to come into contact.

The area surrounding the project site is characterized by expanses of undeveloped open space or rural agricultural land, which impacts response times, depending upon priority. Response times for the highest priority service calls range between 3-11 minutes. Lower priority service call responses can be as much as 45 minutes and the lowest can range from 2-3 hours to 1 day.

4.10.4.3 IMPACTS AND MITIGATION MEASURES

STANDARDS OF SIGNIFICANCE

Project impacts are considered significant if the project results in the following:

- 1) Increased demand for additional personnel, equipment or facilities that impairs the ability to maintain acceptable service levels.

METHODOLOGY

The analyses of police protection impacts are based upon discussions with the Tracy Police Department and County Sheriff's Department.

PROJECT IMPACTS AND MITIGATION MEASURES

Law Enforcement and Police Services

Impact 4.10.4 Implementation of the project would increase the demand for police protection services and facilities. This is considered to be a **potentially significant** service impact.

The proposed project site will include approximately 150 acres of field sports facilities and 50 acres of general park/recreational area. These uses would result in an increased demand for law enforcement from the County Sheriff's Department.

Mitigation Measures

MM 4.10.4a The project sponsor will coordinate directly with the San Joaquin County Sheriff's Department and/or the Tracy Police Department to prepare a police services plan for proposed project. The plan will determine service requirements for all project land uses and ratios for public/private patrolling which are acceptable to the Sheriff's and/or the Tracy Police Departments performance standards for response times. Prior to site plan approvals for each phase of the project the City may be required to provide fair-share contribution to any applicable County public service fees in place at that time.

MM 4.10.4b The County Sheriff's Department shall be given the opportunity to review site specific proposals and make recommendations to improve public safety and emergency access.

Timing/Implementation: Prior to finalization of final site design.

Enforcement/Monitoring: City of Tracy Parks and Community Services Department

Impact upon police services can be mitigated to a **less than significant** level by the above measures, which require the project sponsors to coordinate with the affected law enforcement agencies to review site plans and meet established performance standards.

4.10.5 FIRE PROTECTION

This section of the EIR evaluates the impacts on fire protection services as a result of the proposed project. The existing fire protection services provided by the City of Tracy Fire Department are discussed and the demand for increased services and accessibility are evaluated.

4.10.5.1 EXISTING SETTING

The Tracy Fire Department currently conducts operations out of seven fire stations. Station 91 is located at 1701 W. Eleventh Street, Station 92 is located at 22484 S. Seventh Street in Banta (east of Tracy), Station 93 is located at 1551 Durham Ferry Road, Station 94 (which is the station nearest the YSF) is located at 16502 W. Schulte Road and is also the temporary station of Engine 98 assigned to the Mountain House community, Station 96 is located at 301 W. Grant Line Road, and Station 97 is located at 595 W. Central Avenue. A fire station is currently under construction to house Engine 98 in the Mountain House community at 911 Mascot.

It should be noted that the Tracy Fire Department is a consolidated department providing fire protection for the City of Tracy and the unincorporated areas surrounding the City.

The closest fire station to the project site is the Station Number 94. This station is located west of the project site at the corner of Hansen Road and Schulte Road. Two fire hydrants are also located along Schulte Road. One is located at the northwestern corner of the site and the other is located near the middle of the site's frontage of Schulte Road.

The Fire Department's current staff is 74 full time personnel with 30 reserve firefighters. The Fire Department is service oriented and responds to all fire, first-aid and rescue incidents, as well as citizen service calls. Fire protection services are currently supplemented by assistance from the Tracy Defense Depot through a Mutual-Aid agreement with the City.

The General Plan EIR notes that the City currently has a light to moderate fire hazard, due to existing land use and development patterns. Fire problems are generally confined to single and multifamily dwellings along with older, unprotected commercial and industrial buildings located primarily in the downtown area. Vacant land, brush, and grass fires account for more than 20 percent of total fire activity.

The Tracy Fire Department's performance objectives include the following: 1) respond to 95 percent of all calls for emergency assistance within 5 minutes of dispatch; 2) provide a minimum of 11 firefighters for initial attack of structural fires within 10 minutes of dispatch; 3) provide a

4.10 PUBLIC SERVICES AND UTILITIES

minimum of 20 firefighters for sustained attack to structural fires within 20 minutes of dispatch; and, 4) maintain fire losses at a level not to exceed the average annual losses for the preceding five year period. The Tracy Fire Department is currently a Class Three fire department in terms of the Insurance Service Organization (ISO) rating system, which ranks fire protection and sets insurance rates on a scale from 1 to 10.

All construction plans and development proposals are evaluated to determine fire protection needs. The Fire Marshall works closely with other City departments to ensure appropriate design and construction standards; including adequate fire protection water flows and fire resistive building materials, are met within new development projects.

4.10.5.2 REGULATORY FRAMEWORK

CITY GENERAL PLAN

The General Plan contains goals, policies and actions intended to provide fire protection to ensure the public's health and safety. Specific actions address early project review for new development, elimination of fire hazards, public information and effective emergency response.

4.10.5.3 IMPACTS AND MITIGATION MEASURES

STANDARDS OF SIGNIFICANCE

Project impacts are considered significant if the project results in the following:

- 1) Demand for additional fire protection staff, equipment or fire stations in excess of the ability of service providers to maintain an acceptable level of service.

METHODOLOGY

The analysis of fire protection impacts are based upon discussions with the Tracy Fire Department, review of the project area, the Presidio Planned Unit Development EIR, and the Tracy Gateway EIR.

PROJECT IMPACTS AND MITIGATION MEASURES

Fire Protection Services

Impact 4.10.5 Development of the project would result in an increase in demand for fire protection services. This is considered a **potentially significant** impact.

The project itself would not impact the existing ability of the Department to respond, as the station at Schulte and Hansen Roads would respond to calls, which is within 1/4 mile of the project site.

Mitigation Measures

MM 4.10.5 The Tracy Fire Departments shall be provided the opportunity to review development plans for the project site to ensure that the following items are addressed:

- Project site accesses and internal roadways shall be adequately designed to ensure adequate access for emergency vehicles. Any gates shall be designed to allow access for emergency vehicles.
- Buildings shall be designed in accordance with Tracy Fire Department and Uniform Fire Code standards.
- Fire hydrants spacing and location shall be consistent with Tracy Fire Department standards.
- Acceptable response time can be ensured.

Timing/Implementation: *Prior to start of construction activities.*

Enforcement/Monitoring: *City's Development and Engineering Services Department.*

The impact identified is mitigated by implementing the above measure and measures MM 4.10.3, MM 4.10.6a and MM 4.10.6b that are consistent with the provisions of City General Plan policy. Implementation of the above mitigation measures will reduce potential fire protection impacts to a **less than significant** level by allowing early review of site development plans, confirming service responsibilities and requiring adequate fire suppression and storage consistent with existing regulations.

4.10.6 SOLID WASTE

This section of the EIR addresses solid waste generation and disposal capacity as it relates to the proposed project. Existing solid waste disposal facilities are discussed and the impacts to those facilities and available capacity are addressed. This analysis is based on review of the Presidio Planned Unit Development EIR, and the Tracy Gateway EIR, City of Tracy General Plan, and the General Plan EIR.

4.10.6.1 EXISTING SETTING

Tracy Delta Disposal Service, a private firm, provides collection of solid waste for the City. Tracy Delta Disposal Service also operates the Tracy Materials Recovery Facility (MRF) under contract with the City of Tracy. Household hazardous waste collection is accomplished through collection events that are held every 1 or 2 months at various locations within the County. County residents may dispose of household hazardous wastes at no cost at these collection events.

The City currently directs its solid waste to either the North County Landfill located east of Lodi or the Foothill Landfill located eight miles east of Linden. Waste generated by the project would be directed to the Foothill Landfill. The Foothill Landfill has a current capacity of approximately 45 million tons, which is anticipated to provide 40-60 years of service. The landfill currently receives approximately 500 tons of solid waste per day.

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4.10.6.2 REGULATORY FRAMEWORK

VOLUME 40 OF THE CODE OF FEDERAL REGULATIONS, PART 258 (RESOURCE CONSERVATION AND RECOVERY ACT, RCRA, SUBTITLE D)

Volume 40 of the Code of Federal Regulations, Part 258 (Resource Conservation and Recovery Act, RCRA, Subtitle D) contains regulations for municipal solid waste landfills and requires states to implement their own permitting programs incorporating the federal landfill criteria. The federal regulations address the location, operation, design, groundwater monitoring, and closure of landfills. In 1998, the City of Tracy diverted 39 percent of all solid waste from entering the landfill. Federal Requirements for disposal of biosolids are set forth in Volume 40, Code of Federal Regulations (CFR) Part 503.

CALIFORNIA INTEGRATED WASTE MANAGEMENT ACT

To minimize the amount of solid waste that must be disposed of by transformation and land disposal, the State Legislature passed the California Integrated Waste Management Act of 1989 (AB 939), effective January 1990. According to AB 939, all cities and counties are required to divert 25 percent of all solid waste from landfill facilities by January 1, 1995 and 50 percent by January 1, 2000. Solid waste plans are required to explain how each city's AB 939 plan will be integrated with the San Joaquin County plan. They must promote (in order of priority); source reduction, recycling and composting, and environmentally safe transformation and land disposal. Currently, San Joaquin County's solid waste diversion rate is at approximately 35 percent (Johnson, 1999) and the City's is approximately 40 percent.

SENATE BILL 1066

Senate Bill 1066 authorizes the Board to grant one or more single or multiyear time extensions from the diversion requirements if the city, county, or regional agency satisfies certain conditions. However, no multiyear extension may exceed three years and, in total, extensions may not exceed five years. Under no circumstances may extensions be granted for any period after January 1, 2006. Similarly, under existing law, the Board can approve an alternative diversion requirement (i.e., different from the 50% diversion mandate) for cities and counties under certain conditions. Senate Bill 1066 states, however, that no alternative diversion requirement may be granted for more than three years and, if another alternative requirement is granted, that their combined effect may not exceed five years. As with extensions, no such alternative requirements may be granted for any period after January 1, 2006. The City of Tracy has filed for an extension of the AB 939 requirement pursuant to SB 1066. Additionally, the City has also submitted plans for an alternative diversion requirement.

CITY GENERAL PLAN

The City of Tracy General Plan does not identify specific policies regarding solid waste disposal. While this EIR analyzes the project's consistency with the City of Tracy General Plan pursuant to CEQA Section 15125(d), the Tracy City Council would ultimately make the determination of the project's consistency with this General Plan. Environmental impacts associated with inconsistency with General Plan policies are addressed under the impact discussions of this EIR.

4.10.6.3 IMPACTS AND MITIGATION MEASURES

STANDARDS OF SIGNIFICANCE

Project impacts are considered significant if the project results in the following:

- 1) Create a demand for solid waste services and generate solid waste in an amount greater than the ability of local landfill facilities to accommodate such waste.

METHODOLOGY

The analysis of solid waste service impacts are based upon consideration of the estimated amount of solid waste anticipated to be generated by the project and consultations with the California Environmental Protection Agency, Department of Toxic Substances Control (DTSC).

PROJECT IMPACTS AND MITIGATION MEASURES

For purposes of this EIR, the project would be considered to have significant impact if the project were to be served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs or be served by a landfill that would be unable to comply with federal, state, and local statutes and regulations related to solid waste. The project is not expected to result in the need for expansion of the existing, or construction of a new, landfill or transfer facility to accommodate solid waste generated by the project or to result in increased demand for solid waste collection and disposal. The amount of waste to be generated by the project will be less than the daily intake capacity of 1,000 tons of the existing Tracy Materials Recovery and Transfer Station. The landfill has ample capacity to accept solid waste from the project, including additional construction debris. The project is not expected to exceed solid waste disposal regulations and would have **no impact** on solid waste disposal.

4.10.7 PARKS AND RECREATION

This section of the EIR identifies demands upon existing local park and recreation facilities. This analysis is based on existing park facility inventories, City of Tracy General Plan, and the General Plan EIR.

4.10.7.1 EXISTING SETTING

The Tracy Parks and Community Services Department provides for the majority of the parks, buildings, programs, and maintenance in the City of Tracy. Landscape and Lighting Districts provide maintenance of mini-parks, and neighborhood parks.

Tracy's park dedication ordinance requires new development to provide a minimum of 4.0 acres of parks per 1,000 residents. This is based on the various park classifications (neighborhood, community, regional) and national standards. Considering that the project site is in an area of predominately agricultural and industrial uses, there are no parks in the immediate vicinity of the site.

County parks in the vicinity of Tracy include Mossdale Boat Ramp and Oak Grove Regional Park. State Parks in the vicinity include Durham Ferry, Bethany Reservoir, and Caswell State Park. Parks near the project site consist of Plasencia Athletic Fields located along Eleventh Street, just west of Corral Hollow Road.

4.10 PUBLIC SERVICES AND UTILITIES

4.10.7.2 REGULATORY FRAMEWORK

CITY OF TRACY PARKS AND PARKWAYS DESIGN MANUAL

The City's Parks and Parkways Design Manual acts as its master plan for park facilities. The Parks and Parkway Design Manual provides design guidelines, standards, details, and specifications for park development and acts as a park planning guide for the General Plan.

CITY AND COUNTY GENERAL PLANS

City policies addressing parks ensure that new development is responsible for providing sufficient neighborhood, community and regional parks, provide guidelines for parking siting, and encourage mutual cooperation between the City and County regarding service levels. County park policies focus primarily on the provision of regional parks in a larger, countywide context, but also provide guidelines for local park facilities and service areas.

4.10.7.3 IMPACTS AND MITIGATION MEASURES

STANDARDS OF SIGNIFICANCE

Project impacts are considered significant if a project results in the following:

- 1) The project will create demands for new or expanded parks and recreation facilities and as proposed, will not comply with the City's standard of 4 acres of parkland per 1,000 persons.
- 2) The project will increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.

METHODOLOGY

The analysis of park and recreation impacts is based upon review of the proposed project and the provisions of the General Plan, which contains more stringent requirements than the County. For purposes of this EIR, the project would be considered to have significant impact on parks if it would generate additional visits to existing park facilities beyond their acceptable service level and/or necessitate the provision of additional park facilities in order to maintain acceptable levels of access.

PROJECT IMPACTS AND MITIGATION MEASURES

The proposed TYSF project does not include any land uses that would generate demand for park facilities. Therefore, there will be **no impact** upon parks as a result of implementing the project. The TYSF project is a recreational sports facility; it is expected to reduce impacts to parks in San Joaquin County and the City of Tracy.

REFERENCES

- West Yost & Associates, 1999. *Presidio Water System Analysis Technical Memorandum*. Prepared for the City of Tracy. Tracy, California. January 1999.
- SSJID, 1988. South San Joaquin Irrigation District (SSJID). *South County Surface Water Supply Project Notice of Preparation*. Manteca, California. February 3, 1998.
- CH2M Hill, 1999. *Wastewater System Analysis for Presidio, Draft Technical Memorandum*. Prepared for the City of Tracy. April 7, 1999.

4.11 Agricultural Resources

This section describes the agricultural resources in the area and the policies pertaining to these resources. Sources utilized in this section to assess impacts of the project include the City's General Plan, the California Department of Conservation Farmland Conversion Reports, the California Department of Conservation Important Farmlands Map, and the Soil Survey of San Joaquin County, California (1965).

4.11.1 SETTING

FARMLAND CLASSIFICATIONS

The two systems used by the United States Department of Agriculture (USDA) and Natural Resource Conservation Service (NRCS) to determine a soil's agricultural productivity include the Soil Capability Classification and the Storie Index Rating System. The "prime" soil classifications of both systems indicate the absence of soil limitations, which if present, would require the application of management techniques (e.g., drainage, leveling, special fertilizing practices) to enhance production.

Soil Capability Classification

The Soil Capability Classification System takes into consideration soil limitations, the risk of damage when the soils are used, and the way in which soils respond to treatment. Capability classes range from Class I soils, which have few limitations for agriculture, to Class VIII soils, which are unsuitable for agriculture. Generally, as the ratings of the capability classification system increase, the yields and profits are more difficult to obtain. A general description of soil classification, as defined by the NRCS, is provided in **Table 4.11-1**.

TABLE 4.11-1
SOIL CAPABILITY CLASSIFICATION¹

| Class | Definition |
|-------|--|
| I | Soils have few limitations that restrict their use. |
| II | Soils have moderate limitations that reduce the choice of plants, or that require special conservation practices. |
| III | Soils have severe limitations that reduce the choice of plants, require conservation practices, or both. |
| IV | Soils have very severe limitations that reduce the choice of plants, require very careful management, or both. |
| V | Soils are not likely to erode but have other limitations; impractical to remove that limits their use largely to pasture or range, woodland, or wildlife habitat. |
| VI | Soils have severe limitations that make them generally unsuited to cultivation and limit their use largely to pasture, or range, woodland, or wildlife habitat. |
| VII | Soils have very severe limitations that make them unsuited to cultivation and that restrict their use largely to pasture or range, woodland, or wildlife habitat. |
| VIII | Soils and landforms have limitation that preclude their use for commercial plant production and restrict their use to recreation, wildlife habitat, or water supply, or to aesthetic purposes. |

Source: USDA Soil Conservation Service, Soil Survey of Sacramento County, April 1993.

¹ The San Joaquin County Soil Survey utilizes the same Soil Capability Classification; however, the information in this chart was not provided in this document, therefore, details from the Sacramento County Soil Survey were utilized.

4.11 AGRICULTURAL RESOURCES

Storie Index Rating System

The Storie Index Rating system ranks soil characteristics according to their suitability for agriculture from Grade 1 soils (80 to 100 rating), which have few or no limitations for agricultural production to Grade 6 soils (less than 10), which are not suitable for agriculture. Under this system, soils deemed less than prime can function as prime soils when limitations such as poor drainage, slopes, or soil nutrient deficiencies are partially or entirely removed. The six grades, ranges in index rating, and definition of the grades, as defined by the NRCS, are provided below in **Table 4.11-2**.

TABLE 4.11-2
STORIE INDEX RATING SYSTEM²

| Grade | INDEX RATING | Definition |
|---------------------|----------------|--|
| 1 – Excellent | 80 through 100 | Soils are well suited to intensive use for growing irrigated crops that are climatically suited to the region. |
| 2 – Good | 60 through 79 | Soils are good agricultural soils, although they may not be so desirable as Grade 1 because of moderately coarse, coarse, or gravelly surface soil texture; somewhat less permeable subsoil; lower plant available water holding capacity, fair fertility; less well drained conditions, or slight to moderate flood hazards, all acting separately or in combination. |
| 3 – Fair | 40 through 59 | Soils are only fairly well suited to general agricultural use and are limited in their use because of moderate slopes; moderate soil depths; less permeable subsoil; fine, moderately fine or gravelly surface soil textures; poor drainage; moderate flood hazards; or fair to poor fertility levels, all acting alone or in combination. |
| 4 – Poor | 20 through 39 | Soils are poorly suited. They are severely limited in their agricultural potential because of shallow soil depths; less permeable subsoil; steeper slope; or more clayey or gravelly surface soil textures than Grade 3 soils, as well as poor drainage; greater flood hazards; hummocky micro-relief; salinity; or fair to poor fertility levels, all acting alone or in combination. |
| 5 – Very Poor | 10 through 19 | Soils are very poorly suited for agriculture, are seldom cultivated and are more commonly used for range, pasture, or woodland. |
| 6 – Nonagricultural | Less than 10 | Soils are not suited for agriculture at all due to very severe to extreme physical limitations, or because of urbanization. |

Source: USDA Soil Conservation Service, Soil Survey of Sacramento County, April 1993

Farmland Mapping and Monitoring Program

The Farmland Mapping and Monitoring Program (FMMP) was established in 1982 to continue the Important Farmland mapping efforts begun in 1975 by the U.S. Department of Agriculture, Soil Conservation Service (USDA-SCS). The intent of the USDA-SCS was to produce agricultural resource maps based on soil quality and land use across the nation. As part of the nationwide agricultural land use mapping effort, the USDA-SCS developed a series of definitions known as Land Inventory and Monitoring (LIM) criteria. The LIM criteria classified the land's suitability for agricultural production; suitability included both the physical and chemical characteristics of

² The San Joaquin County Soil Survey utilizes the same Storie Index Rating; however, the detailed information in the chart was not provided in this document, therefore, details from the Sacramento County Soil Survey are utilized.

soils and the actual land use. Important Farmland Maps are derived from the USDA-SCS soil survey maps using the LIM criteria.

Since 1980, the State of California has assisted the USDA-SCS with completing its mapping in the state. The FMMP was created in the State Department of Conservation (DOC) to continue the mapping activity with a greater level of detail. The DOC applied a greater level of detail by modifying the LIM criteria for use in California. The LIM criteria in California utilize the SCS and Storie Index Rating systems, but also consider physical conditions such as a dependable water supply for agricultural production, soil temperature range, depth of the ground water table, flooding potential, rock fragment content, and rooting depth.

Important Farmland Maps for California are compiled using the modified LIM criteria, as described above, and current land use information. The minimum mapping unit is 10 acres unless otherwise specified. Units of land smaller than 10 acres are incorporated into the surrounding classification. The Important Farmland Maps identify five agriculture-related categories: prime farmland, farmland of statewide importance, unique farmland, farmland of local importance, and grazing land. Each is summarized below, based on *A Guide to the Farmland Mapping and Monitoring Program* (1994), prepared by the Department of Conservation.

According to the Environmental Impact Report prepared for the General Plan (General Plan EIR), the project site is not designated as Prime Farmland as it has only farmed dry crops since 1962. According to the DOC, the IFI does not classify land as Prime Farmland if it has not been irrigated. The designation for this type of land is considered Farmland of Local Importance as it has not been irrigated since the 1960s (**Figure 4.11-1**).

Prime Farmland

Prime farmland is considered land with the best combination of physical and chemical features able to sustain the long-term production of agricultural crops. This land has the soil quality, growing season, and moisture supply needed to produce sustained high yields. The land must have been producing irrigated crops at some time during the two update cycles (a cycle is equivalent to 2 years) prior to the mapping date of 1998 (or since 1994).

Farmland of Statewide Importance

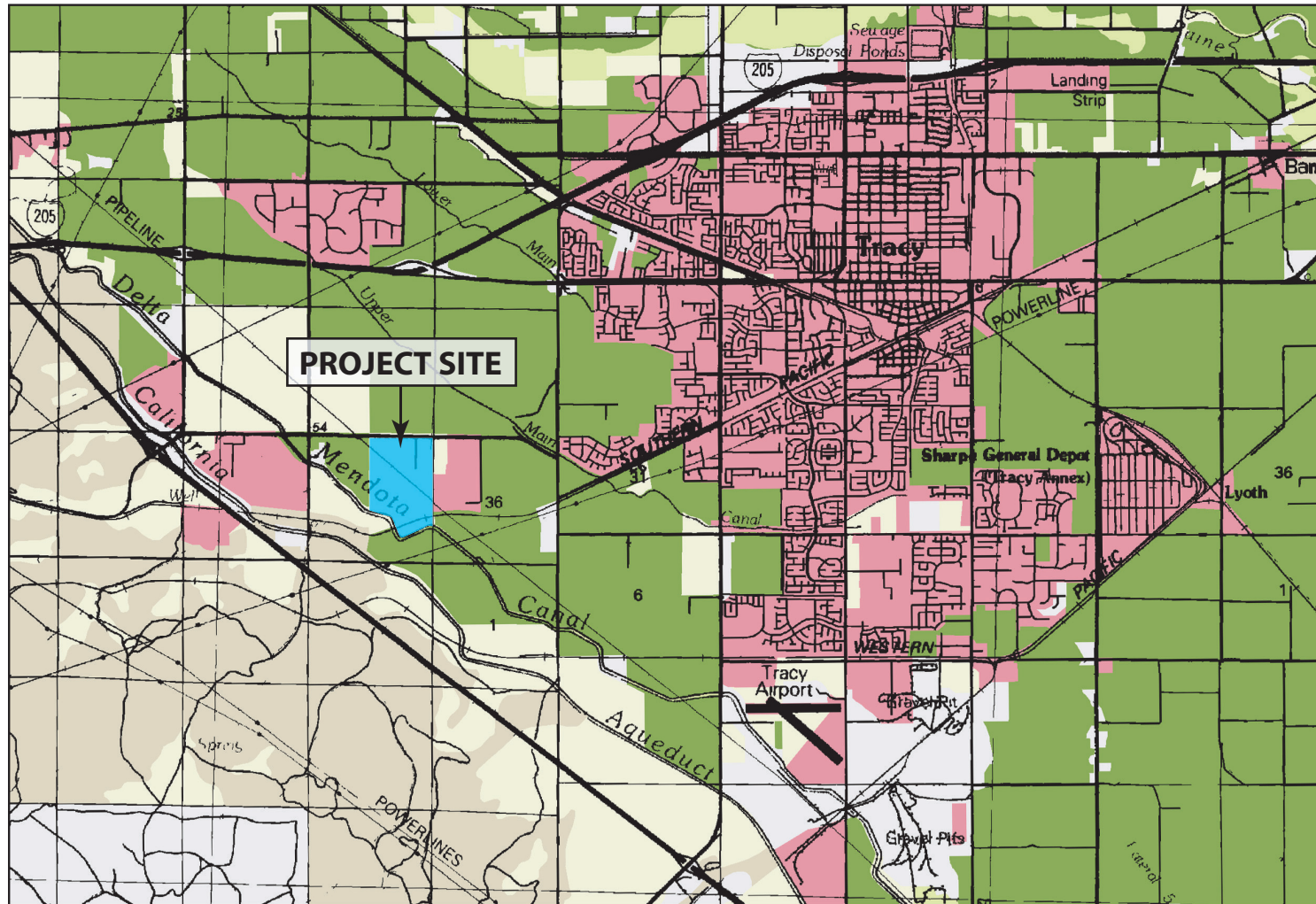
Farmland of statewide importance is considered land similar to prime farmland, but with minor shortcomings, such as greater slopes or with less ability to hold and store moisture. The land must have been used for the production of irrigated crops at some time during the two update cycles prior to the mapping date (or since 1994).

Unique Farmland

Unique farmland is land of lesser quality soils used for the production of the State's leading agricultural crops. This land is usually irrigated, but may include non-irrigated orchards or vineyards, as found in some climatic zones in California. The land must have been cultivated at some time during the two update cycles prior to the mapping date (or since 1994).

4.11 AGRICULTURAL RESOURCES

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STATE OF CALIFORNIA
Arnold Schwarzenegger, Governor

THE RESOURCES AGENCY
Michael Chrisman, Secretary

DEPARTMENT OF CONSERVATION
Bridget Luther Thompson, Director

DEPARTMENT OF CONSERVATION

DIVISION OF LAND RESOURCE PROTECTION

FARMLAND MAPPING AND MONITORING PROGRAM

- Prime Farmland
- Farmland of Statewide Importance
- Unique Farmland
- Farmland of Local Importance
- Grazing Land
- Urban and Built-Up Land
- Other Land



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Map data, categories and statistics are
available on the World Wide Web at:
www.consrv.ca.gov/dlrp/fmmp or contact
the Farmland Mapping and Monitoring Program,
801 K Street, MS 18-01, Sacramento, CA 95814.
Phone (916) 324-0859; e-mail: fmmp@consrv.ca.gov

This map is an enlargement of a 1:100,000-scale
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Source: Department of Conservation, 2005

FIGURE 4.11-1
IMPORTANT FARMLAND MAP

Farmland of Local Importance

Farmland of local importance is land of importance to the local agricultural economy, as determined by each County's Board of Supervisors and a local advisory committee. Farmland of local importance in Amador County includes "land that is in agricultural production and that is providing an economic return equal to that from the prime soil types" (DOC, 2001).

Grazing Land

Grazing land is considered land on which the existing vegetation, whether grown naturally or through management, is suited to the grazing of livestock. The minimum mapping unit for this category is 40 acres.

Urban and Built-Up Land

Urban and built-up land is considered land occupied with structures with a building density of at least one unit to one-half acre. Uses may include, but are not limited to, residential, industrial, commercial, construction, institutional, public administration purposes, railroad yards, cemeteries, airports, golf courses, sanitary landfills, sewage treatment plants, water control structures, and other development purposes. Highways, railroads, and other transportation facilities are mapped as part of this unit, if they are part of a surrounding urban area.

Other Land

Other land is considered land that is not included in any other mapping categories. The following uses are generally included: rural development, brush, timber, government land, strip mines, borrow pits, and a variety of other rural land uses.

CONTRIBUTION OF AGRICULTURE TO THE SAN JOAQUIN COUNTY ECONOMY

Agriculture is one of San Joaquin County's Major Industries. Approximately 4,000 farms are located in the County, occupying over 800,000 acres, with an average farm size of 209 acres. Gross agricultural production in San Joaquin County in 2002 was \$1,343,808,000. ([http://cesanjoaquin.ucdavis.edu/Agricultureand Natural Resources/](http://cesanjoaquin.ucdavis.edu/AgricultureandNaturalResources/), accessed 10/31/03).

San Joaquin County is one of the most agriculturally rich regions in California and is the number one producer, statewide, of asparagus. Twenty-four thousand acres of county farmland is dedicated to production of this crop. In recent years, the leading crop in the county has been wine grapes. Wineries and vineyards have sprung up from Tracy to Lodi. The region is fast becoming known as one of California's leading premium wine districts. Because of its agricultural heritage, the county offers vast areas of open space and easy access to nature.

The project site is surrounded by mixed agricultural and industrial uses. The parcels west and north of the site consist of active agricultural properties. A single rural residence on a two-acre parcel is located south of the site near the Delta Mendota canal. Beyond the canal is the westernmost extent of the South Schulte Specific Plan area, which forms a thin "finger" of land designated for future residential land uses.

The existing County General Plan designation of the site is General Agriculture and the property is zoned AG - 40. This designation applies to areas suitable for agriculture outside areas planned for urban development where the soils are capable of producing a wide variety of crops and/or supporting grazing; parcel sizes are generally large enough to support commercial agricultural

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activities; and there exists a commitment to commercial agriculture in the form of Williamson Act contracts and/or capital investments. Under this designation, recreational facilities are an allowable use.

The City of Tracy has designated this parcel as Park in within the Planning Area of their Land Use map (see Figure 4.1-2a). The parcel is surrounded by land designated by the City as Industrial and Urban Reserve.

As described in Section 4.7 Geology and Soils, the soils encountered in the test borings predominantly consisted of lean clays to the maximum depths explored, 41.5 feet below site grade. The lean clays were interbedded with strata of silty or clayey sands to the maximum depth explored.

SAN JOAQUIN COUNTY FARMLAND CONVERSION

One of the basic underlying premises of agricultural conversion says that the proximity of agricultural land to urban uses increases the value of the agricultural land either directly through formal purchase offers, or indirectly through recent sales in the vicinity, and through the extension of utilities and other urban infrastructure into productive agricultural areas. The County Assessor's Office provides evidence to this premise by assessing property values higher when adjacent to the urban fringe (U.S. Census Bureau, 1990). The rate of both farmland loss and urbanization in San Joaquin County accelerated since 2000, according to the new map released by the DOC. Urban land increased by more than 6,200 acres between 2000 to 2002, with agricultural land declining by a similar amount. Sixty percent of the newly developed land was prime farmland.

According to the 1997 Census of Agriculture (the date when the previous Census of Agriculture was completed) prepared by the USDA, San Joaquin County had 4,387 farms totaling 830,189 acres with an average farm size of 189 acres. The total amount of cropland harvested was 570,558 acres. In 2002, the date of the most recent Census of Agriculture, San Joaquin County had 4,026 farms totaling 812,629 acres, with an average farm size of 202 acres. The total amount of cropland harvested was 3,509 acres and a total of 90.7 percent of land in farms.

PROJECT SITE CHARACTERISTICS

The project site is currently unused land in the process of acquisition by the City of Tracy from the federal government. Properties adjoining the site are used for heavy industrial purposes with the Southern Pacific Railroad line to the south.

The Soil Survey of San Joaquin County, prepared by the U.S. Department of Agriculture (USDA), Natural Resources Conservation Service (formerly Soil Conservation Service) identifies that limitations of these soils associated with urban development consist of their slow permeability, high shrink-swell potential, and low strength. The project site consists of Capay clay and Stomar clay loam (**Figure 4.11-2**), which are both, identified by the USDA as prime farmland when irrigation is provided (USDA, 1992) (**Figure 4.11-3**). Prime farmlands produce the highest yields with minimal expenditure of energy and economic resources, and farming it results in the least damage to the environment. **Figure 4.11-1** shows the distribution of farmland types within San Joaquin County. According the County Important Farmland Map, the project site is designated as Farmland of Local Importance.

T:\Tracy Youth Sports\Revised Figures_Sep12005\Figure 4.11-2.coi, September 2005

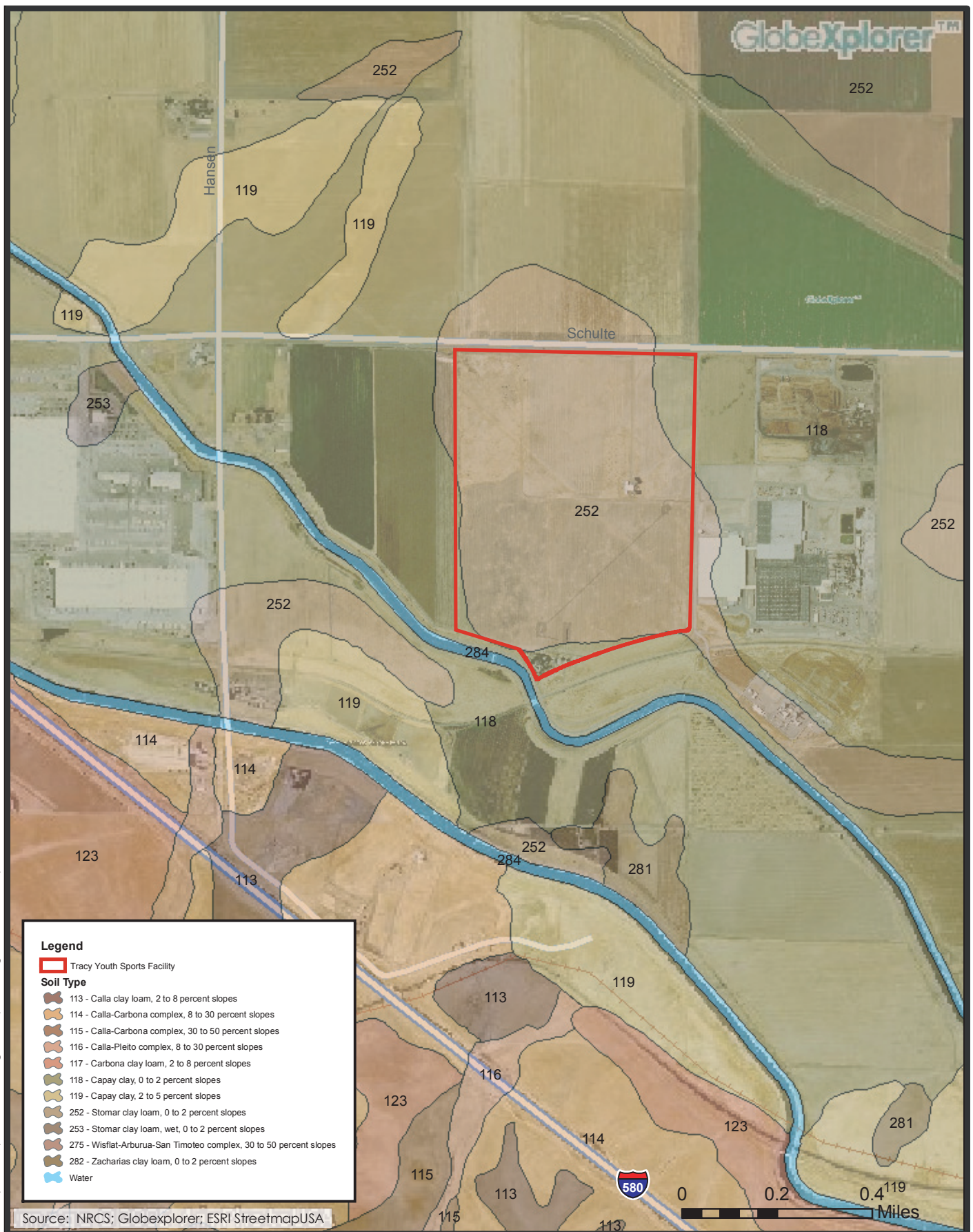


FIGURE 4.11-2
SOILS MAP

T:\Tracy Youth Sports\Revised Figures_Sep12005\Figure 4.11-3.ai, September 2005



FIGURE 4.11-3
PRIME FARMLAND

The soil capability classification, Storie Index rating and grade, and designation as a Prime Farmland or Farmland of Statewide Importance is presented for each of these soils in **Table 4.11-3**.

TABLE 4.11-3
ON-SITE SOIL CAPABILITY CLASSIFICATION AND STORIE INDEX RATING

| Soil Map Symbol and Name | Soil Capability Classification | Storie Index Rating | Storie Index Grade | Prime or Statewide Importance Farmlands |
|--------------------------|--------------------------------|---------------------|--------------------|---|
| Capay clay | 1 | 80-100 | 1 – Excellent | No |
| Stomar clay loam | 1 | 80-100 | 1 – Excellent | No |

¹Irrigated/Nonirrigated Source: *Storie Index, U.S. Department of Agriculture, Natural Resources Conservation Service, 2001; Land Capability Classification, ibid.; Soil Candidate Listing for Prime Farmland and Farmland of Statewide Importance, California Department of Conservation, 1993.*

As shown, project site soils include Class I soil capability classifications of both soils and have a Storie Index Grade of Excellent when irrigated. None of the soil types are classified as Farmlands of Statewide Importance or classified as Prime Farmland.

Important Farmland Map

The project site does not contain any acres of Prime Farmland or Farmland of Statewide Importance as designated on the important Farmland Map for San Joaquin County.³

Williamson Act Contracts

The project site is not subject to a Williamson Act contract. Properties adjacent to the project site are not subject to active Williamson Act contracts as they are currently used for heavy industrial purposes.

4.11.2 REGULATORY FRAMEWORK

CITY GENERAL PLAN

Agricultural preservation and conversion issues are addressed in the Conversation Element of the City's General Plan. While this Draft EIR analyzes the project's consistency with the City's General Plan pursuant to CEQA Section 15125(d), the determination of the project's consistency with this General Plan rests with the City Council.

The following City General Plan goals and policies related to agriculture are relevant to the proposed project:

Chapter Eight: Conservation

Goal CO 5: Preservation of agricultural lands and protection of economic viability of agricultural operations.

³ Conversation with Jan Carey, Department of Conservation, September 6, 2005.

4.11 AGRICULTURAL RESOURCES

Policy CO 5.1: The City shall support the County's effort to preserve agricultural land.

Policy CO 5.2: Prohibit scattered nonagricultural uses.

Agricultural Mitigation Fee Ordinance

The Tracy City Council adopted ordinance 1079 on June 7, 2005. This ordinance acknowledged the loss of farmland as a significant, unavoidable environmental consequence of many projects reviewed by the City under the requirements of CEQA. The ordinance established a mitigation fee program to provide a source of funding to acquire farmland, farmland conservation easements or farmland deed restrictions, to mitigate some of the environmental consequences of development on farmland.

4.11.3 IMPACTS AND MITIGATION MEASURES

STANDARDS OF SIGNIFICANCE

Standards of significance were based on existing laws and regulations affecting agricultural resources and impacts generally considered to be significant (Appendix G, CEQA Guidelines).

Only those thresholds of significance that are applicable to the proposed project are presented below. Impacts on agricultural resources were considered significant if implementation of the project would result in any of the following:

- 1) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (farmland) to as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use;
- 2) Conflict with existing zoning for agricultural use, or a Williamson Act contract;
- 3) Involve other changes in the existing environment which, due to their location or nature could result in conversion of Farmland to non-agricultural use;
- 4) Pose substantial land use incompatibilities with adjacent property currently in, or suitable for, agricultural production.

METHODOLOGY

Evaluation of potential agricultural impacts of the proposed project was based on review of the City's General Plan, and field review of the project and surrounding area. The agricultural analysis is based on information gathered from the City's Land Use Element of the General Plan, the California Department of Conservation Farmland Conversion Reports, 1994 to 1996, 1996 to 1998, and 1998 to 2000 (2002), the California Department of Conservation Important Farmlands Map, and the Soil Survey of San Joaquin County, California (1965).

PROJECT IMPACTS AND MITIGATION MEASURES

Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland)

Impact 4.11.1 The project site is not considered Prime Farmland, Unique Farmland, or Farmland of Statewide Importance since it has only been used to farm dry crops since the early 1960s. This is a **less than significant** Impact.

Farmland of Local Importance is all agricultural farmable land within San Joaquin County not meeting the definitions of "Prime Farmland," "Farmland of Statewide Importance," and "Unique Farmland." Farmland of Local Importance is land of importance to the local economy, as defined by the County's local advisory committee and adopted by its Board of Supervisors (**Figure 4.11-1**). Authority to adopt or to recommend changes to the category of Farmland of Local Importance rests with the Board of Supervisors in each county. This includes land that is or has been used for irrigated pasture, dryland farming, confined livestock or dairy facilities, aquaculture, poultry facilities, and dry grazing. It also includes soils previously designated by soil characteristics as "Prime Farmland," "Farmland of Statewide Importance," and "Unique Farmland" that has since become idle. The project site does not come under the criteria for the thresholds of significance for CEQA as it is not Prime Farmland, Unique Farmland or Farmland of Statewide Importance, therefore, this impact is considered **less than significant**.

Mitigation Measures

None required.

Conflict with existing zoning for agricultural use, or a Williamson Act contract

Impact 4.11.2 The project site is not under a Williamson Act agricultural contract. The existing County General Plan designation of the site is General Agriculture and the property is zoned AG - 40. Under this designation, recreational facilities are an allowable use. This is a **less than significant** impact.

Mitigation Measure

None required.

Conversion of Agricultural Land

Impact 4.11.3 The project would convert approximately 200 acres of previously productive farmland to non-agricultural uses. Although not farmed since the 1960's except for dryland crops, the site is surrounded by lands with prime farmland characteristics and may also contain prime soil characteristics. Use of the site for more intensive urban uses would result in a **less than significant** impact

As identified in Impact 4.11.1, the conversion of the project site from formerly dry-farmed agricultural uses to urban uses would not reduce the amount of Important Farmland (Prime Farmland and Farmland of Statewide Importance) in San Joaquin County. As noted in the setting discussion above, project site soils are considered excellent for agricultural use (see Table 4.11-3) when irrigated; however, this site has not been used as irrigated farmland since prior to 1960. In addition, the site was formerly used as an antenna and radio transmission facility operated by the FAA until 1981. Conversion of the project site would not substantially reduce the overall agricultural production of the County. This conversion would also occur in an area where

4.11 AGRICULTURAL RESOURCES

intensive agricultural operations are limited as a result of industrial land uses and the proximity to developed areas (i.e., City of Tracy).

Mitigation Measure

None required.

Impairment to Productivity/Land Use Compatibility

Impact 4.11.4 The project would urban land uses adjacent to primarily agricultural uses, which may impair agricultural production and result in land use compatibility conflicts. This would result in a **potentially significant** impact.

Mitigation Measure

MM 4.11.4 The applicant has proposed a 50-foot buffer for the proposed project site to physically separate the facility from the agricultural and industrial uses that may pose compatibility problems for land applications of herbicides and pesticides. For materials applied via aerial spraying the following measures are included:

- The Youth Sports Alliance will contact the identified adjacent landowners and distribute the yearly schedule to ensure that no person will be on the field when an adjacent field is sprayed with any type of pesticide.
- If games or park reservations are to be performed that are not on the pre-notification schedule, notice shall be given by phone calls to the affected parties.
- The Youth Sports Alliance shall distribute additional notice of scheduled games added during the year that are known in advance.

Timing/Implementation: Prior to finalization of site design and project construction. Prior to the current year's scheduled games and activities and prior to any games/activities added during the current season.

Enforcement/Monitoring: City of Tracy Parks and Community Services Department.

Implementation of the above mitigation measures would reduce land use compatibility impacts to a **less than significant** level by requiring physical separation between new project land uses and existing industrial and agricultural uses, as well as notification for spraying of pesticides.

REFERENCES

- California Department of Conservation. 2005. Farmland Mapping and Monitoring Program. Personal communication with Jan Carey. September 2, 2005.
- California Department of Conservation. 2001. *Farmland of Local Importance Definitions*.
- California Department of Conservation. 1994. *A Guide to the Farmland Mapping and Monitoring Program*.
- United States Department of Agriculture. 1992. *Soil Survey Report of San Joaquin Valley, California*. Soil Conservation Service. Washington: United States Government Printing Office.
- California Agricultural Statistics Service. 1998. *California Counties by Total Value Production*.
- U.S. Census Bureau. 1990. Census Data.
- U.S. Department of Agriculture, National Agricultural Statistics Service. 2004. *2002 Census of Agriculture: California State and County Data, Volume 1, Geographic Area Series, Part 5*. June.

*4.12 Aesthetics/Visual Resources/Light
and Glare*

This section of the EIR describes the physical changes created by the project that can affect the visual nature and character of the project site, as well as the surrounding areas.

4.12.1 EXISTING SETTING

The City of Tracy is located in the San Joaquin Valley. As a result, the project site and surrounding areas are predominantly flat. The flat topography of the valley floor provides a horizontal panorama providing vistas of the valley. The Diablo Range forms a distinctive visual backdrop in views to the south and west. To the east, the Altamont pass provides a visual screen from the urban growth of Livermore.

Currently distributed throughout the project site are approximately 40 wooden antenna poles, which range in height from approximately 60 to 140 feet. Guy wires anchor the poles, and six of the poles are adjoined by metal junction boxes at their bases. The site also contains approximately 50 smaller power transmission poles, a paved and graveled driveway, and an abandoned Federal Aviation Administration (FAA) building. Adjacent to the FAA building is a water well and a turbine pump, three pine trees, apiary (bee keeping) hives, and abandoned farm equipment. Prior to use by the FAA as an "antenna farm", the site was used for agricultural purposes.

A single rural residence on a two-acre parcel is located south of the site near the Delta Mendota canal. Beyond the canal is the westernmost extent of the South Schulte Specific Plan area, which forms a thin "finger" of land designated for future residential land uses.

The Owens Illinois, Inc. (Owens-Brockway) glass plant and the Tracy Biomass facility are industrial facilities and the closest non-agricultural uses east of the site. The Tracy Biomass Plant is a multi-story incinerator that operates 24 hours per day, seven days a week, processing discarded wood and vegetation into energy. Owens Brockway manufactures and recycles glass products, and has expanded its distribution facility to the parcel immediately adjacent to the project site. A remaining agricultural parcel, approximately 40 acres in size, is located immediately to the east and provides separation between the project site and Tracy Biomass. A Southern Pacific rail line right of way runs along the southern edge of the site.

Adjacent to the site at the southwest corner of Hansen Road and Schulte Road is the Tracy Rural Fire Protection District Station Number 93, and a California Dept. of Forestry Fire Station.

Approximately ½ mile west of the site is the Summit Distribution Center, which serves as a facility for Safeway and Costco trucking and food distribution. The Tracy Peaker Plant project, a 169 MW natural gas-fired, simple-cycle electric generating facility, is also located southwest of the site.

There are no designated scenic vistas or scenic corridors in the project vicinity.

In the vicinity of the project site, the Tracy Gateway project is planned for construction along Lammers Road. Tracy Gateway will include an approximately 538-acre business park development including 5.8 million square feet of Class A office space in mid- and high-rise buildings surrounding a nine-hole golf course, 400,000 square feet of retail space, and a hotel with a total of 200 rooms.

4.12.2 REGULATORY FRAMEWORK

CITY GENERAL PLAN

The General Plan does not contain any specific policies regarding visual resources, aesthetics or glare. However, several of the goals, policies and implementation measures indirectly address minimizing the impacts of light and glare associated with future development. Additionally, the General Plan EIR recognizes that Goals 4 and 5 of the Conservation Element provide for the restriction of urban development to maintain open space and agricultural areas, which would assist in the preservation of visual quality.

4.12.3 IMPACTS AND MITIGATION MEASURES

STANDARDS OF SIGNIFICANCE

Implementation of the project would result in significant aesthetic impacts if the project would result in any of the following:

- 1) Obstruction of a scenic view from public viewing areas.
- 2) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway or local scenic corridor.
- 3) Substantially degrade the existing visual character or quality of the site and its surroundings.
- 4) Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area.

METHODOLOGY

The analysis of visual impacts is based on site visits, as well as a review of planning and environmental documents for projects constructed or planned for construction in the project site vicinity.

IMPACTS AND MITIGATION MEASURES

View Obstruction Impacts

Impact 4.12.1 The project would result in a change in the project site from surplus style, predominately unused land to a sports facility. This could impact distant views of the Diablo Range and the Altamont pass. This impact is considered **less than significant**.

The proposed project would introduce playing fields and one-story service buildings to the project site. These structures would change the visual setting of the project site and affect views for surrounding uses. The low site line of these components is anticipated to have minimal visual impact.

It also noted that the project area is currently shifting from rural/agricultural to more urban uses as evidenced by the planned development of the Tracy Gateway and the multiple industrial

uses in the vicinity of the project site. As such, the proposed project represents an expansion of urban uses into an area that is in the process of urbanizing.

Mitigation Measures

None Required.

Impacts to Scenic Resources

Impact 4.12.2 The project would not impact any existing scenic resources, as none are located on the project site or in the vicinity. Therefore, this impact is considered **less than significant**.

As described above, the proposed project site is relatively flat with a dispersion of antennae poles and a one-story outbuilding. The existing soil on the site is occasionally disced. No geologic features or other unique resources are located on the project site or in the vicinity. As a result, development of the site will not result in the loss of scenic resources.

Mitigation Measures

None required.

Visual Character Impacts

Impact 4.12.3 The project would change the visual character of the project site. This impact is considered **less than significant**.

The proposed project would make substantial changes to the project site. These changes would include the construction of four football fields and fifteen soccer fields on the southern side of the site. Also in the southern area of the site, the one-sport/football stadium will be located. In addition twenty-three baseball/softball fields are planned within five pie-shaped clusters, consisting of three to five ball fields each, with two separate ball fields adjacent to the northern site boundary. Each baseball and softball field will have permanent backstops. Also integrated into the site are eight storm water detention basins, 50 acres of general park/ recreation area, a corporation yard, restrooms, concession stands, field and vehicular lighting, signs, storage buildings, parking and associated landscaping. Motorist, pedestrian and bicyclist views along Schulte Road would be impacted by development of the project site. However, the introduction of the sports facility is not out of character with new development on the western edge of the City. The Tracy Gateway project proposed northeast of the proposed project site on Lammers Road would create approximately six million square feet of office facilities, a nine-hole golf course (with related clubhouse, maintenance facility, and lighted driving range), and roadway improvements. Additional commercial space will include retail space, a hotel, and second-floor office space. The Tracy Gateway project would include building heights up to 15 stories.

For these reasons, the proposed project is consistent with the developing character of the area, and impacts to the visual character of the area from the proposed project are **less than significant**.

4.12 AESTHETICS/VISUAL RESOURCES/LIGHT AND GLARE

Mitigation Measure

None required.

Light and Glare Impacts

Impact 4.12.4 The project would introduce new sources of light and glare to the project site. This impact is considered **potentially significant**.

The visual characteristics of the project include the introduction of lighting and glare/reflection from each sport field with lighting and the possible reflection of those lights on to the adjacent service building's glass and metal surfaces. Field lighting is assumed at the end of five years on four soccer fields, one football stadium, and two ninety-foot baseball diamonds. Additional field lighting is assumed at the end of ten years on eight soccer fields, one football stadium, one football field, and seven baseball/softball fields.

Mitigation Measure

MM 4.12.4 A building permit shall be required prior to the installation of the project's lighting. The building permit plans shall demonstrate that site lighting and exterior building light fixtures ~~that~~ are designed to reduce the effects of light pollution and glare off of glass and metal surfaces. The site lighting shall be of a type that casts light downward onto the fields and shall also have control boxes that allow operation of the lighting only when teams need the field to be illuminated.

Timing/Implementation: Prior to issuance of an electrical permit for each field lighting system.

Enforcement/Monitoring: City of Tracy Department of Development & Engineering Services

The above mitigation measure would reduce light and glare impacts to a **less than significant** level.

REFERENCES

City of Tracy. *General Plan: An Urban Management Plan*. July 1993.

City of Tracy. *Final Environmental Impact Report for the City of Tracy Urban Management Plan/General Plan*. July 1993.

San Joaquin County. *General Plan 2010*. July 1992. Amended September 2000.

5.0 CUMULATIVE IMPACTS SUMMARY

This section summarizes the cumulative impacts associated with the proposed project that are identified in environmental issue areas in Section 4.0. Cumulative impacts are the result of combining the potential effects of the project with other planned developments, as well as foreseeable development projects. The following discussion considers the cumulative impacts of the relevant environmental issue areas.

5.1 INTRODUCTION

The California Environmental Quality Act (CEQA) requires that an Environmental Impact Report (EIR) contain an assessment of the cumulative impacts that could be associated with the proposed project. According to CEQA Guidelines Section 15130(a), "an EIR shall discuss cumulative impacts of a project when the project's incremental effect is cumulatively considerable." "Cumulatively considerable" means that the incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects (as defined by Section 15130). As defined in CEQA Guidelines Section 15355, a cumulative impact consists of an impact that is created as a result of the combination of the project evaluated in the EIR together with other projects causing related impacts. A cumulative impact occurs from:

...the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time.

In addition, Section 15130(b) identifies that the following three elements are necessary for an adequate cumulative analysis:

- 1) Either:
 - (A) A list of past, present, and probable future projects producing related or cumulative impacts, including, if necessary, those projects outside the control of the agency; or,
 - (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 area wide conditions contributing to the cumulative impact. Any such planning document shall be referenced and made available to the public at a location specified by the lead agency.
- 2) A summary of the expected environmental effects to be produced by those projects with specific reference to additional information stating where that information is available; and
- 3) A reasonable analysis of the cumulative impacts of the relevant projects. An EIR shall examine reasonable, feasible options for mitigating or avoiding the project's contribution to any significant cumulative effects.

Where a lead agency is examining a project with an incremental effect that is not "cumulatively considerable," a lead agency need not consider that effect significant, but shall briefly describe its basis for concluding that the incremental effect is not cumulatively considerable.

5.0 CUMULATIVE IMPACTS SUMMARY

The proposed project represents an action that is subject to CEQA compliance. It must evaluate both the project-specific and cumulative environmental impacts. Based on discussions with the City of Tracy and San Joaquin County, there are reasonably foreseeable projects when viewed in connection with the proposed project that could result in related cumulative impacts.

5.2 CUMULATIVE SETTING

CEQA Guidelines only requires the use of one method of cumulative analysis, either the list approach or summary of projects approach. For the purposes of the cumulative impact analysis for this EIR a combination of both methods was used.

DEVELOPMENT ANTICIPATED UNDER CUMULATIVE CONDITIONS

The city-wide, long term development assumption for the Tracy Youth Sports Facility includes the buildout of Tracy's three approved specific plans: Residential Specific Plan (RSP), Industrial Specific Plan, and I-205 Specific Plan (I-205 SP). It also includes the buildout of all infill parcels within the 1990 city limits. In addition, it assumes the buildout of the seven planned unit development areas known as "Plan C," as well as buildout of Tracy's "Next Phase of Development," including the first phases of Tracy Hills and South Schulte Specific Plans, Northeast Industrial, and the following development projects: Castro, Elissagaray and Lourence Ranch (South MacArthur), Kagehiro, Saddlebrook, Moitoso II, Soucek, Presidio and Filios. Cumulative development also includes buildout of the Patterson Pass Business Park. Traffic, water, wastewater and other areas of analysis within the EIR assume and incorporate this potential development.

Beyond the development levels assumed for the Tracy Planning Area (TPA), the analysis assumes partial buildout of the planned new community of Mountain House located in San Joaquin County to the north and west of Tracy. Market-constrained forecasts by the San Joaquin Council of Governments (SJCOC) have projected virtual buildout of Mountain House residential units (population of 43,600) and 40% buildout of non-residential uses (employment of 8,700). Assuming development will occur at a uniform rate over the 20-year time frame to 2020, the analysis assumes 50% and 20% buildout, respectively, of the residential and non-residential components of Mountain House development.

The Cumulative setting for the Tracy Youth Sports Facility Project is provided in **Table 5.0-1**.

**TABLE 5.0-1
TRACY YOUTH SPORTS FACILITY PROJECT CUMULATIVE SETTING**

| Project Name | Development Type | Acres/Units and Land Use | Location | Conversion From |
|----------------------|-------------------------------|---|--|--------------------------------------|
| I-205 Specific Plan | Regional Mall and Residential | 700 acres: 1,040 Residential units; 186 ac. Commercial; 131 ac. Industrial | North of the project site, along I-205 corridor in Tracy | Agriculture |
| Northeast Industrial | Light Industrial | 805 acres: Phase I = 274 ac. Light Industrial; Phase II = 231 ac. Light Industrial, 19 ac. Commercial; Phase III = 300 ac. Light Industrial | Northeast side of Tracy | Agriculture |
| Tracy Hills | Community | 6,172 acres: 5,499 Residential units; 3,565 ac. Open Space; 372 ac. Light Industrial; 97 ac. Office; 76 ac. Commercial; 31 ac. Neighborhood Shopping; 91 ac. Schools; 309 ac. Parks | West of the project site at the base of Altamont Pass | Agriculture |
| South Schulte | Residential | 1,850 acres: 1,557 Residential units | Outside the southwest corner of the Tracy City Limit | Agriculture and scattered residences |
| Tracy Gateway | Business Park | 538 acres | Across Lammers Road, east of the project site | Agriculture |
| Mountain House | Community | 4,784 acres: 16,000 Residential units; Parks, Schools, Neighborhood Shopping; Mixed-Use Office and Commercial; Industrial | Northwest of the project site, north of I-205 | Agriculture and scattered residences |

5.0 CUMULATIVE IMPACTS SUMMARY

5.3 CUMULATIVE IMPACT ANALYSIS

Identified below is a compilation of the cumulative impacts that would result from implementation of the project and future development in its vicinity. As described above, cumulative impacts are two or more effects that, when combined, are considerable or compound other environmental effects. Each cumulative impact is determined to have one of the following levels of significance: less than significant, significant, or significant and unavoidable. The specific cumulative impacts for each environmental issue area are identified in Section 4.0.

LAND USE

The cumulative setting for the proposed project includes the Tracy Gateway, I-205 Specific Plan Area, Northeast Industrial, Tracy Hills, Phase I of South Schulte, and the Mountain House Community. The majority of these projects would be developed on currently undeveloped lands, and would include residential development, planned business development, and industrial uses. Within the Tracy Planning Area (TPA), the City of Tracy Urban Management Plan (General Plan) defines six Community Areas, each with its own Urban Center, around which growth can be focused and community character, image, and sense of place can develop. The project site is located within the Patterson Pass Community Area, which is intended to be a predominantly residential area. While the project would further contribute to changes to the City's designated community areas, there are no other current proposals for changes to the Patterson Pass Community Area. As such, no cumulative environmental impacts are anticipated. Detachment from the Community Area is more appropriately discussed under Growth Inducing Effects, which discusses the potential for further conversions and land use changes upon surrounding properties.

Cumulative Increase in Density

Impact 4.1.5 This project in combination with other reasonably foreseeable projects would increase the density of development in the area. This cumulative impact is considered **less than significant**.

Development of proposed and approved projects in the Tracy area would result in urbanization of the area by increasing the density of residential, commercial, office, resort, recreational, and public facility uses in the region. The proposed TYSF is intended to meet the needs of the growing community for additional park, recreation and youth sports fields, as such it will urbanize a rural area, but not necessarily contribute to increased population density. This urbanization would conversely result in a decrease in the amount of open space areas and a change to the rural character of the area. However, the Tracy General Plan anticipates development and urbanization of the area, and therefore this impact is considered **less than significant**.

Mitigation Measure

None required.

HUMAN HEALTH/RISK OF UPSET

Future development within the project vicinity includes the Tracy Gateway, I-205 Specific Plan Area, Northeast Industrial, Tracy Hills, Phase I of South Schulte, and the Mountain House

Community. These projects include residential, commercial, office and industrial land use proposals. The cumulative setting for human health and risk of upset would represent hazardous activities within the project vicinity. Under buildout conditions, impacts would include the generation, transportation, storage, and disposal of hazardous materials within the project vicinity.

Cumulative Hazards and Risks

Impact 4.2.9 This project, in combination with other reasonably foreseeable projects, would increase the density of development in the area, thus increasing the chance for hazardous materials release and other threats related to human health and safety. However, this is considered to be a **less than significant** impact under cumulative conditions.

Development of proposed and approved projects in the project vicinity would result in urbanization of the area by increasing the density of residential, commercial, office, recreational, and public facility uses. Urbanization increases human health and safety-related impacts through the increased generation, transport, storage and disposal of hazardous materials. Human Health/Risk of Upset impacts are site-specific and are generally not affected by cumulative development in the region. However, the project will comply with all federal, state, and local regulations regarding hazardous materials and all other applicable policies, in addition to implementation of **MM 4.2.1** through **MM 4.2-4** (See Section 4.2, Health Hazards/Risk of Upset); therefore, no additional mitigation is required.

Mitigation Measure

None required.

TRAFFIC AND CIRCULATION

Project impacts under baseline and cumulative conditions are identified in Section 4.3, Traffic and Circulation, are a result of the project added to planned regional growth. The Cumulative scenario includes build-out of other “reasonably foreseeable” development projects in the City of Tracy, including the entire I-205 Specific Plan Area, Tracy Gateway, Tracy Hills, South Schulte, and Northeast Industrial. Build-out of the Mountain House community in San Joaquin County is also assumed. Beyond the Tracy Planning Area and the Mountain House community, the Cumulative scenario development assumptions are consistent with the SJCOG 2025 land use forecasts.

The future cumulative roadway network includes certain roadway improvements, consistent with the City's Roadway Master Plan. Improvements affecting the study area include the following:

- Lammers Road extension/realignment from Eleventh Street north, with new interchange at I-205
- I-205 widening to three lanes in each direction through Tracy
- Six-lane Schulte Road extension from Mountain House Parkway to Corral Hollow Road
- Lammers Road upgrade to six-lane expressway standards from Eleventh Street south
- Eleventh Street upgrade to an expressway from I-205 to Corral Hollow Road

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- Corral Hollow Road widening to four lanes south of Schulte Road
- Valpico Road widening to four lanes from Lammers Road to Corral Hollow Road

Cumulative future conditions were evaluated with and without the proposed development in order to determine the need for and timing of any necessary mitigation measures specifically related to the proposed project. The cumulative traffic volumes (Year 2025) were obtained from the City of Tracy model provided by Fehr and Peers Inc. on August 27, 2004.

Future (Year 2025) Traffic Scenario

Impact 4.3.7 Under this scenario, five of the thirteen study intersections are expected to operate acceptably during the p.m. peak hour. The eight that will not include the intersections of Mountain House Parkway/I-205 Westbound Ramps, Mountain House Parkway/I-205 Eastbound Ramps, Mountain House Parkway/I-580 Westbound Ramps, Mountain House Parkway/I-580 Eastbound Ramps, Lammers Road/Schulte Road, Lammers Road/11th Street, Corral Hollow Road/11th Street, and Corral Hollow Road/Schulte Road, which are expected to operate at LOS F, LOS F, LOS F, LOS F, LOS F, and LOS F, LOS D, and LOS D, respectively (see **Table 4.3-11**). The project's contribution to these unacceptable levels of service is a **cumulative significant impact** of the project.

Improvements to mitigate unacceptable LOS conditions at all of these intersections are identified in **Table 4.3-15**. It is important to note that the LOS E or worse conditions and the need for signalization occur with or without the addition of project traffic.

Mitigation Measures

MM 4.3.7 Phase II of the project shall not be implemented until such time that a Capital Improvement Program (CIP) or similar program is in place for affected intersections within the City's jurisdiction.

Timing/Implementation: Prior to Building Permit Issuance.

Enforcement/Monitoring: City of Tracy Department of Development and Engineering Services.

Implementation of **MM 4.3.7** would avoid project impacts to affected intersections under the jurisdiction of the City of Tracy associated with implementation of Phase II of the project. **Table 4.3.16** below depicts which intersections in the study are under the jurisdiction of the City of Tracy and which are under the jurisdiction of the San Joaquin County.

The roadway improvements identified in **Table 4.3-15** would mitigate the existing unacceptable LOS conditions at all future unacceptable LOS levels under this scenario. However, some mitigation measures under this scenario would require coordination with the County to implement since not all of the affected intersections are under control of the City (see **Table 4.3-16**).

As discussed in Section 4.3, Traffic and Circulation, CEQA Guidelines Section 15040 acknowledges the discretionary power of public agencies in that an

agency does not have unlimited authority to impose mitigation measures (or alternatives) that would reduce environmental impacts to a less than significant level. The County currently has no improvement plans for any of the affected study sections within the jurisdiction of San Joaquin County. Furthermore, there is no existing traffic impact mitigation fee program in place to collect funds to support future improvements for the affected intersections. Therefore, since **MM 4.3.7** would only avoid impacts to intersections under the jurisdiction of the City of Tracy, this impact will remain **significant and unavoidable**.

Cumulative Fair Share Analysis Future (Year 2025 Plus Project Traffic Scenario)

Impact 4.3.8 Under this scenario, the same study intersections as those of Year 2025 scenario are expected to continue to operate at unacceptable service levels. The project's contribution to these unacceptable levels of service is a **cumulative significant impact** of the project.

Mitigation Measures

MM 4.3.8 Phase II of the project shall not be implemented until such time that a Capital Improvement Program (CIP) or similar program is in place for affected intersections within the City's jurisdiction.

Timing/Implementation: Prior to Building Permit Issuance.

Enforcement/Monitoring: City of Tracy Department of Development and Engineering Services.

Implementation of **MM 4.3.8** would avoid project impacts to affected intersections under the jurisdiction of the City of Tracy associated with implementation of Phase II of the project. **Table 4.3-16** in the preceding chapter depicts which intersections in the study are under the jurisdiction of the City of Tracy and which are under the jurisdiction of the San Joaquin County.

The roadway improvements identified in **Table 4.3-15** would mitigate the existing unacceptable LOS conditions at all future unacceptable LOS levels under this scenario. However, some mitigation measures under this scenario would require coordination with the County to implement since not all of the affected intersections are under control of the City (see **Table 4.3-16**).

The County currently has no improvement plans for any of the affected study sections within the jurisdiction of San Joaquin County. Subsequently, there is no existing traffic impact mitigation fee program in place to collect funds to support future improvements for the affected intersections. Therefore, since **MM 4.3.8** would only avoid impacts to intersections under the jurisdiction of the City of Tracy, this impact will remain **significant and unavoidable**.

NOISE

Section 4.4, Noise, provides an analysis of future noise conditions based upon cumulative development and traffic. Future development within the project vicinity includes the Tracy

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Gateway, I-205 Specific Plan Area, Northeast Industrial, Tracy Hills, Phase I of South Schulte, and the Mountain House Community. These projects include residential, commercial, office and industrial land use proposals. The cumulative setting for noise would represent activities within the project vicinity. Under buildout conditions, impacts would include the generation of additional noise and noise receptors within the project vicinity.

Cumulative Traffic Noise

Impact 4.4.8 Cumulative plus project traffic is expected to result in traffic noise level increases over cumulative no-project baseline levels of 0 to 8 dB Ldn (Table 6) on the roadways in the immediate project vicinity. Therefore, this impact would be considered **less than significant**.

TABLE 5.0-2
PREDICTED 2025 TRAFFIC NOISE LEVELS (LDN @ 100 FEET FROM ROADWAY CENTERLINES)
TRACY YOUTH SPORTS PROJECT VICINITY ROADWAYS - CITY OF TRACY, CALIFORNIA

| Roadway | Segment | Year 2025 Conditions | | | |
|---------------------|--------------------------|----------------------|--------------|----------|------------------------------------|
| | | Without Project | With Project | Increase | Distance to 65 dB Ldn with Project |
| Schulte Road | Patterson Pass to Hansen | 65 | 66 | 1 | 122 |
| | East of Hansen | 59 | 63 | 4 | 78 |
| | West of Lammers | 57 | 65 | 8 | 96 |
| Patterson Pass Road | North of Schulte | 71 | 71 | 0 | 243 |
| Hansen Road | North of Schulte | 62 | 63 | 1 | 73 |
| Lammers Road | North of Schulte | 71 | 72 | 1 | 285 |
| | South of Schulte | 72 | 72 | 0 | 293 |

Notes: FHWA Model input data are provided in Appendix B.

Source: FHWA-RD-77-108 with inputs from transportation consultant and Bollard & Brennan, Inc.

Distances to 65 dB Ldn traffic noise contours are measured in feet from the centerlines of the roadways.

Pursuant to Significance Criteria N-b, a substantial increase in traffic noise levels is typically defined as 5 dB. Although the predicted project-related traffic noise level increases on segments of Schulte Road would exceed criterion N-b (due mainly to the construction of the new Schulte Road to the north), the agricultural land uses located along that roadway segment are insensitive to noise, so this impact is considered to be **less than significant** based on significance criteria N-b.

Mitigation Measure

None required.

Cumulative Plus Project Traffic Noise

Impact 4.4.9 Cumulative plus project traffic noise levels may exceed the 75 dB Ldn exterior noise level standard at proposed outdoor recreation areas in the Tracy Youth Sports Complex Development which are located within 96 feet of the centerline of Schulte Road. Therefore, this impact would be considered **potentially significant**.

Existing plus project traffic noise levels are predicted to exceed 65 dB Ldn within 96 feet of the centerline of Schulte Road under year 2025 plus project conditions. The degree by which Schulte Road traffic noise levels will exceed the San Joaquin County exterior noise level standards for outdoor recreation areas will depend on the proximity of those areas to that roadway. Therefore, this impact is considered significant and subject to mitigation according to significance criteria N-a.

Mitigation Measure

MM 4.4.9 Outdoor recreation fields should be located beyond the 65 dB Ldn contour for Schulte Road.

Timing/Implementation: Include as a requirement in plans.

Enforcement/Monitoring: City of Tracy Parks and Community Services Department.

This impact would be **less than significant** with implementation of **MM 4.4.9**.

AIR QUALITY

Section 4.5, Air Quality, identifies potentially significant impacts to air quality that could result from implementation of the project. The climate and geography of the San Joaquin Valley Air Basin severely limits the dilution and transportation of any air pollutants that are released to the atmosphere. At current levels of development and activity the air basin exceeds the state/federal ambient standards for particulates and ozone. Cumulative growth in population, vehicle use and industrial activity presents a major obstacle for efforts to improve regional air quality and attain the ambient air quality standards.

Cumulative Regional Air Quality Impacts

Impact 4.5.6 This project in combination with other reasonably foreseeable projects would increase regional air emissions well beyond the SJVAPCD significance threshold. This cumulative impact is considered **potentially cumulative significant**.

The project is part of a pattern of rapid urbanization occurring in Tracy and western San Joaquin County. Several major developments are proposed or under construction in the project vicinity. Over the buildout period of the proposed project substantial foreseeable future development will be occurring in the project area.

Mitigation Measure

MM 4.5.6 Require the following design features be implemented:

- Use energy efficient design including automated control system for heating/air conditioning and energy efficiency, utilize lighting controls and energy-efficient lighting in buildings and use light colored roof materials to reflect heat.
- Plant deciduous trees on the south and westerly facing sides of buildings.

5.0 CUMULATIVE IMPACTS SUMMARY

- Provide low nitrogen oxide (NO_x) emitting and/or high efficiency water heaters.
- Appropriate easements should be reserved to provide for future improvements such as bus turnouts, loading areas, and shelters.
- Purchase low-emission, alternatively fueled or electrical-driven maintenance vehicles and equipment.
- Promote pedestrian, bicycle and transit modes of travel through informational programs and provision of amenities such as transit shelters, secure bicycle parking, and attractive pedestrian pathways.

Timing/Implementation: *Include as a requirement in plans.*

Enforcement/Monitoring: *City of Tracy Parks and Community Services Department.*

While the above measure would reduce project impacts, the project would have a **significant and unavoidable** after implementation of mitigation.

HYDROLOGY AND WATER QUALITY

Within Section 4.6, the surface hydrology, groundwater, and water quality characteristics of the project area were discussed and analyzed. The effects of altering drainage patterns and impacts to and groundwater resources were also analyzed. The TYSF Site Sub-basin lies within a larger watershed known as the Lammers Watershed. As delineated in the City's SDMP, the Lammers Watershed consists of a large area of mostly undeveloped properties within the western portion of the City's General Plan area. The SDMP depicts a future network of drainage facilities, consisting of open channels, detention basins, and underground storm drains that are referred to as the Lammers Drainage System and that will serve future development. At this time, the only component of the planned system that is constructed is a storm water detention basin located adjacent to and west of the Safeway Distribution Center on the south side of Schulte Road about 3 miles southwest of the project site.

However, as a part of the environmental review process that was completed relevant to Supplement No. 1 to the Storm Drainage Master Plan (Reference 2), it has become apparent to the City of Tracy that the Lammers Drainage System as presented in the SDMP will need to be re-evaluated and revised. The main element of future revisions to the SDMP relevant to the Lammers Drainage System will be the placement of a greater emphasis upon storm water detention and retention to facilitate an updated goal of limiting future outflow discharges from the overall Lammers Watershed to very low rates (about 20 to 30 cfs). These restricted rates of storm runoff will be delivered to Old River to the north via a storm drainage outfall system whose alignment and components will be determined at a later date.

The City of Tracy water entitlements provide maximum supply of 39,000 AFY and average yield of 31,000 AFY. Water usage during 2004 totaled 18,363 acre-feet and 2005 water use is projected at 17,700 acre-feet in the UWMP. Irrigation for parks and open space was projected to be 1,200 acre-feet for 2005 in the UWMP and the 2004 actual water use for parks and open space was 700 acre-feet (metered water used). The total yield for Tracy's water supplies under average conditions is 31,300 AFY, which is equivalent to the year 2020 water demand projection in the UWMP. The projected water demand for the irrigation of parks and open space is 1,500 AFY for 2010 **(See SB 610 in Appendix D).**

The project proposes to utilize one or two water wells to supply non-potable water for irrigation purposes. The TYSF will be required to provide a dual-piped distribution system (one system for potable water distribution and one "purple pipe" system for the future recycled water system). The City is considering use of the proposed "purple pipe" system to be constructed by the Tracy Gateway project to offset potential effects to groundwater overdraft. The use of "purple pipes" for irrigation would therefore result in the project to not contribute to cumulative depletion of groundwater resources. An existing City water line will be used to provide potable water.

Storm Water Runoff Generation and Surface Water Drainage Patterns

Impact 4.6.6 Development within the Lammers Watershed will increase storm water runoff generation and alter surface water drainage patterns. This is considered a **less than significant** impact.

A system of drainage facilities will be constructed that will serve to provide extensive storm water detention and metered conveyance to downstream outfall facilities, with a maximum attenuated discharge rate of about 20 to 30 cfs. Until such time as these detention and conveyance facilities are constructed and operational, new development will be required to construct and utilize temporary retention facilities in conformance with San Joaquin County Standards. The extensive use of detention facilities and temporary retention facilities and ultimate metered discharge rate of about 20 to 30 cfs for the entire Lammers Watershed will limit the cumulative impacts of storm water runoff generation and alterations to surface water drainage patterns to levels that are considered to be **less than significant**.

Mitigation Measure

None required.

Cumulative Surface Water Quality

Impact 4.6.7 Development within the Lammers Watershed will introduce pollutants generally associated with construction activities and land development into storm water runoff. This is considered a **less than significant** impact.

A system of drainage facilities will be constructed that will serve to provide extensive stormwater detention and metered conveyance to downstream outfall facilities, with a maximum attenuated discharge rate of about 20 to 30 cfs. Until such time as these detention and conveyance facilities are constructed and operational, new development will be required to construct and utilize temporary retention facilities in conformance with San Joaquin County Standards. The extensive use of detention facilities and temporary retention facilities and ultimate metered discharge rate of about 20 to 30 cfs for the entire Lammers Watershed will constitute structural BMPs that will allow for significant settling of pollutants prior to downstream discharge. In addition, construction activities shall conform to the statewide General Permit, and the City will be implementing the program outlined in their recently adopted Storm Water Management Plan. The composite of all of these measures will limit the cumulative impacts to surface water quality associated with development within the Lammers Watershed to levels that are considered to be **less than significant**.

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Mitigation Measure

None required.

Cumulative Groundwater Quality

Impact 4.6.8 Storm water generated within new development areas in the Lammers Watershed will be intercepted and stored within detention and retention basins. This is considered a **less than significant** impact.

To the extent that there are typical pollutants associated with urban runoff that are contained in the storm water that drains to these basins, there is little or no opportunity for these pollutants to percolate down to local groundwater, as these pollutants will be filtered by the underlying soils and accumulated near the ground surface. The sediment that accumulates in these basins shall be periodically monitored and shall be removed prior to the occurrence of any toxic concentrations of deleterious constituents in conformance with the City's recently adopted Storm Water Management Plan. Based on the above, the cumulative impact to groundwater quality associated with development within the Lammers Watershed is considered to be **less than significant**.

Mitigation Measure

None required.

Cumulative Exposure of Structures and Facilities to Flood Hazards and Potential Damage

Impact 4.6.9 Storm water generated within new development areas in the Lammers Watershed will be collected in detention and retention basins and conveyed in storm drainage facilities that will retain adequate capacity to accepted regulated discharges from the basins. This is considered a **less than significant** impact.

In the upper portions of the Lammers Watershed where the potential for flooding exists due to storm runoff generated from offsite sub-basins, the construction of flood control facilities will be a pre-condition requirement for new development, where applicable, to prevent exposure of structures and facilities to flood hazards. Given these requirements, the cumulative impact of exposing structure and facilities to flood hazards and potential damage is considered to be **less than significant**.

Mitigation Measure

None required.

GEOLOGY AND SOILS

Due to the localized nature of geotechnical and seismic information, potential impacts are site-specific and are generally not affected by, or do not affect, other developments in the region. The Tracy area is considered to have low to moderate seismic activity due to its location between the Sierra Nevada and Coast Ranges and its distance from any active or potentially

active fault systems. Additionally, few faults were created under the Central Valley due to its soil composition and sedimentary deposits. The proposed project site is not located within an Alquist-Priolo Fault Rupture Zone. Under cumulative conditions, impacts associated with geology and soils are based on site-specific conditions of the subsurface materials that underlay a particular project site.

Cumulative Geological and Soil Impacts

Impact 4.7.3 Development of the proposed project in addition to other proposed and approved projects in the Tracy area would result in urbanization of the area by increasing the density of residential, commercial, office, recreational and public facility uses in the region. This is considered a **less than significant** impact under cumulative conditions.

The project would be one component of future development within the greater Tracy area. The geotechnical investigation performed for the project site recommended site-specific preparation and construction procedures to reduce any potential geology and soil related impacts. Impacts relative to geology and soils are mitigated on a project-by-project basis and would therefore not result in cumulative geology or soil-related impacts.

Mitigation Measure

None required.

BIOLOGICAL RESOURCES

Cumulative development would contribute to the ongoing loss of open space in the region, increase human intrusion and activity levels in proximity to habitat areas, and would remove potential habitat for federally and state listed and other special-status species. Development of rural regions results in the loss, degradation, and fragmentation of functional wildlife habitat. Additionally, road construction, site grading, infrastructure installation, and construction of recreational uses will result in the direct loss of wildlife habitat.

The cumulative setting for the proposed project includes several projects in the vicinity of the City of Tracy and anticipated to develop within the reasonably foreseeable future. These projects include the Tracy Gateway, I-205 Specific Plan Area, Northeast Industrial, Tracy Hills, Phase I of South Schulte, and the Mountain House Community. These projects would include residential development, planned business development, and commercial and industrial uses. These projects, in addition to existing development within the City of Tracy, describe the cumulative setting for the project.

Cumulative Impacts to Biological Resources

Impact 4.8.7 Conversion of existing open lands to housing and urban uses or infrastructure uses results in an overall loss of suitable habitat for special status species, general wildlife, and habitats. This is considered a **less than significant** impact.

Through initiation and implementation of the San Joaquin County Multi-Species Habitat Conservation, the Open Space Plan and **MM 4.8.4** and **MM 4.8.5** as described in Section 4.8, Biological Resources, the cumulative loss of land for the special status species in the region associated with development

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has been anticipated. Although the analysis focuses on the special status species identified in the document, the habitat acquired and set aside as part of the plan also provides habitat for general wildlife species in the region. Therefore, cumulative impacts to biological resources as a result of the proposed project would be **less than significant**.

Mitigation Measure

None required.

CULTURAL AND PALEONTOLOGICAL RESOURCES

According to the *Final Environmental Impact Report for the City of Tracy Urban Management Plan/General Plan* (1993), portions of the Tracy Planning Area can be considered to have a moderate to high sensitivity for the presence of prehistoric or historic sites. However, in its discussion of cumulative impacts to cultural resources, the document recognizes that cultural resources and potential impacts are site-specific and are difficult to assess on a cumulative basis.

The EIR also recognizes that the potential for increased growth pressures in Tracy to result in the destruction or alteration of State Historic Landmarks, sites listed in the National Register of Historic Places, or other historic resources recognized by the City of Tracy.

Cumulative Impacts to Cultural Resources

Impact 4.9.3 The proposed project in addition to other development projects within the greater Tracy area could potentially disturb previously unknown cultural resources. This impact is considered **less than significant**.

The project would be one component of anticipated development within the greater Tracy area. The cultural and historical resources investigations performed for the project were site-specific and revealed no significant impacts relative to cultural and historical resources. However, there is the potential for continued development in the vicinity of the City of Tracy to potentially impact previously unknown buried cultural resources through the development of additional off-site infrastructure improvements. The cultural and paleontological resources investigation performed for the project site recommended site-specific preparation and construction procedures to reduce any potential impacts. Impacts relative to cultural and paleontological resources are mitigated on a project-by-project basis and would therefore not result in cumulative impacts.

Mitigation Measure

None required.

PUBLIC SERVICES AND UTILITIES

Section 4.10 of the EIR identifies potential effects to public services and utilities due to the proposed project. The following discussion analyzes the cumulative effects of the project in relation to other approved projects.

Cumulative Water Supply and Treatment

The City proposes to utilize a dual-piped distribution system (one system for potable water distribution and one "purple pipe" system for the future recycled water system) for the proposed TYSF project. Currently there is a water well on the project site that may be used for non-potable irrigation water. A second water well may be drilled in the event that the "purple pipe" system connection is with Tracy Gateway project is delayed. Potable water use will be minimal and provided by an existing City water line.

Impact 4.10.6 The delivery and use of the proposed potable and non-potable water supplies to serve the Proposed Project, in combination with other urban and non-urban uses in the City of Tracy served by regional supplies would not result in any significant cumulative water supply impacts. Therefore, this is a **less than significant** impact.

As previously stated, no new entitlements would be needed to serve the proposed project potable and non-potable water needs. Therefore, the proposed project would not incrementally contribute to increased demand for local and regional water supplies, and there would be no cumulative effect on water supplies that could result in adverse environmental effects.

Mitigation Measures

None required.

ELECTRICAL SERVICE

The proposed project is located in the western area just outside of the Tracy city limits. The cumulative setting for electricity is the City of Tracy. Planned buildout in the City as well as future projects would cumulatively increase the demand for electrical service.

Cumulative Impacts to Electrical Service

Impact 4.10.7 The proposed project, in combination with other reasonably foreseeable development, would cumulatively increase the demand for electrical service in the City of Tracy. Adequate infrastructure has been planned to accommodate the uses identified in the proposed project. Therefore, cumulative impacts are considered **less than significant**.

PG&E will construct additional facilities to accommodate cumulative growth as needed. Relocation of existing facilities may also be required. Additional facilities and infrastructure relocations would be determined on a project-by-project basis. PG&E does not anticipate any capacity problems in serving cumulative development in this area.

Mitigation Measures

None required.

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NATURAL GAS SERVICE

The proposed project is located in the western area of the City of Tracy, but not within the City limits. The cumulative setting for natural gas is the City of Tracy. Planned buildout in the City as well as future projects would cumulatively increase the demand for natural gas service.

Cumulative Impacts to Natural Gas Service

Impact 4.10.8 The proposed project, in combination with other reasonably foreseeable development, would cumulatively increase the demand for natural gas service in the project area. Infrastructure has been planned to accommodate the uses identified in the City of Tracy. Therefore, cumulative impacts are considered **less than significant**.

PG&E will construct additional facilities to accommodate cumulative growth as needed. Relocation of existing facilities may also be required. Additional facilities and infrastructure relocations would be determined on a project-by-project basis. PG&E does not anticipate any capacity problems in serving cumulative development in this area.

Mitigation Measure

None required.

TELEPHONE SERVICE

The proposed project is located in the western area of the City of Tracy. The cumulative setting for telephone service is the City of Tracy. Planned buildout in the City as well as future projects would cumulatively increase the demand for telephone service.

Cumulative Impacts to Telephone Service

Impact 4.10.9 The proposed project, in combination with other reasonably foreseeable development, would cumulatively increase the demand for telephone service in the project vicinity. Adequate infrastructure has been planned to accommodate the uses identified in the City of Tracy. Therefore, cumulative impacts are considered **less than significant**.

SBC will construct additional facilities to accommodate cumulative growth as needed. Relocation of existing facilities may also be required. Additional facilities and infrastructure relocations would be determined on a project-by-project basis. SBC does not anticipate any capacity problems in serving cumulative development in this area.

Mitigation Measures

None required.

Cumulative Police Services

Impact 4.10.10 The proposed project, in combination with other reasonably foreseeable development, would increase the need for police protection services. Future developments have identified potential impacts to the Department and have

proposed mitigation measures to lessen potential impacts. Therefore, the proposed project's addition to cumulative impacts to police protection is considered **less than significant**.

Implementation of **MM 4.10.4a** and **MM 4.10.4b** in Section 4.10, Public Services and Utilities would provide for the provision of police protection personnel and patrols on the proposed project that would cause the cumulative impacts to be **less than significant**.

Mitigation Measure

None required.

Cumulative Fire Protection Services

Impact 4.10.11 The proposed project, in combination with other reasonably foreseeable development, would increase the need for fire protection services. Future developments have identified potential impacts to the Department and have proposed mitigation measures to lessen potential impacts. Therefore, cumulative impacts to fire protection are considered **less than significant**.

Implementation of **MM 4.10.5** in Section 4.10, Public Services and Utilities would provide for the provision of fire protection personnel and patrols on the proposed project that would cause the cumulative impacts to be **less than significant**.

Mitigation Measure

None Required.

Cumulative Parks and Recreation

Impact 4.10.12 Development of the proposed TYSF in combination with other development planned in the City of Tracy would result in additional demands for parks and recreational facilities. This impact is considered **less than significant**.

Development of proposed and approved projects in the Tracy area would result in urbanization of the area by increasing the density of residential, commercial, office, resort, recreational, and public facility uses in the region. The proposed project is designed to provide additional park, recreation and youth sports field services to the Westside community of Tracy and the surrounding unincorporated County area. The proposed project's addition to cumulative impacts would be **less than significant**.

Mitigation Measure

None Required.

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Cumulative Solid Waste

Impact 4.10.13 This project in combination with other reasonably foreseeable projects would increase the demand for solid waste generation, service, and disposal in the area. Therefore, this cumulative impact is considered **less than significant**.

The buildout of the proposed project in conjunction with other development in the City of Tracy, there will be an increased demand for solid waste generation, collection and disposal services. However, it is anticipated that the landfill has the capacity for an additional 44 years of service, which extends beyond the cumulative analysis. Additionally, these projects would be required to comply with AB 939. Because the landfill has adequate capacity to handle buildout of the Tracy Planning Area the proposed project's contribution to cumulative impacts on solid waste service and disposal is considered to be **less than significant**.

Mitigation Measures

None required.

AGRICULTURAL RESOURCES

Cumulative Agricultural Conversion/Conflicts

Impact 4.11.5 The project would convert approximately 200 acres of grazing land to urban and recreational uses. This loss would contribute to the cumulative loss of farmland in the region and could contribute to cumulative conflicts with agricultural uses. This would be a **less than significant** impact.

The project would contribute to the on-going conversion of farmland in San Joaquin County to urbanized uses by converting approximately 200 acres of grazing land to residential and recreational uses. The site is not considered Prime Farmland, Unique Farmland or Farmland of Statewide Importance. The County's Important Farmland Map designates the site as Farmland of Local Importance.

As noted in the setting discussion above, project site soils are considered excellent for agricultural use (see Table 4.11-3) when irrigated; however, this site has not been used as irrigated farmland since prior to 1960. In addition, the site was formerly used as an antenna and radio transmission facility operated by the FAA until 1981. Conversion of the project site would result in the approximate loss of 0.02 percent of total amount of estimated farmland in the County (812,629 acres in 2002) and would not substantially reduce the overall agricultural production of the County. Based on recent historical uses, and the City's current and planned land use designations and the fact that the site is located in an area where intensive agricultural operations are limited as a result of soil conditions and the proximity to developed areas (i.e., City of Tracy), it is unlikely that the site would ever be returned to agricultural use regardless of the proposed project's implementation. Given that the project site has not been used for agricultural activities since the 1950's, does not consist of Prime Farmland, Unique Farmland or Farmland of Statewide Importance and, would not result in the conversion of grazing land in close

proximity to urban uses, the project's contribution to the loss of agricultural resources is considered **less than significant** under cumulative conditions.

Mitigation Measures

None required.

VISUAL RESOURCES/LIGHT AND GLARE

Section 4.12, Aesthetics/Visual Resources/Light and Glare of the EIR identifies impacts relative to the visual character of the project site. The areas proposed for development under the cumulative scenario are generally flat and are currently adjacent to industrial uses. The greater Tracy area was historically agricultural in character, and is transitioning into a variety of development types. While cumulative development is not anticipated to disrupt any existing scenic views or vistas, it will continue to alter the agricultural or rural character of the area. Development anticipated under the cumulative scenario will also increase light sources. The project's contribution to these effects; however, does not trigger any specific significance thresholds, and is a minor contribution when viewed in the context of citywide development.

Cumulative View Obstruction Impacts

Impact 4.12.5 Development of areas in the vicinity of the western Tracy City Limit would contribute to obstruction of short-range views of agricultural lands and long-range views of the Diablo Range. This impact is a **less than significant impact** under cumulative conditions.

The proposed project, in combination with other proposed and approved development, would construct buildings on land that is currently in agricultural use or vacant, and would therefore interrupt existing views of short-range views of agricultural lands and long-range views of the Diablo Range to the west of the project site. However, this development is anticipated by the Tracy General Plan and addressed in the General Plan EIR, and therefore cumulative impacts would be **less than significant**.

Mitigation Measure

None required.

Cumulative Impacts to Scenic Resources

Impact 4.12.6 Development of areas in the vicinity of the western Tracy City Limit would not create cumulative impacts to scenic resources. This impact is a **less than significant impact** under cumulative conditions.

No scenic resources in the project vicinity are recognized. Although scenic resources do exist south of the project site, in the southern portion of the Tracy Planning Area, this project would not contribute to cumulative impacts on those resources. Cumulative impacts are considered **less than significant**.

5.0 CUMULATIVE IMPACTS SUMMARY

Mitigation Measure

None required.

Cumulative Visual Impacts

Impact 4.12.7 Development of areas in the vicinity of the western Tracy City Limit would change the visual character of the area from agriculture to urban uses. This impact is a **less than significant impact** under cumulative conditions.

The proposed project is one of several projects approved for the cumulative area. The project, in combination with other proposed and approved development, would change the visual setting of the area from agricultural fields to urban uses including homes, commercial and office uses, schools, etc. However, this development is anticipated by the Tracy General Plan and addressed in the General Plan EIR, and therefore cumulative impacts would be **less than significant**.

Mitigation Measure

None required.

Cumulative Light and Glare Impacts

Impact 4.12.8 Development of areas in the vicinity of the western Tracy City Limit would increase the amount of artificial light and reflective surfaces in the project area. This impact is considered **less than significant** under cumulative conditions.

Development in the cumulative area including the proposed project would result in the introduction of artificial light to the site and increased nighttime light levels through out the plan area. Additional light sources within the area would include streetlights, structural lights within buildings, ball field lighting and an increase in automobile headlights due to increased automobile traffic. Lighting for night games at the project site would contribute the most significant increase in light and glare. It is anticipated that night lighting would only be required during the winter months when darkness falls at earlier times.

The development of other projects in the vicinity, including the Tracy Gateway Project across Lammers Road from the project site, would introduce light and glare to the cumulative area. However, this development is anticipated by the Tracy General Plan and addressed in the General Plan EIR, and therefore cumulative impacts would be **less than significant**.

Mitigation Measure

None required.

6.0 PROJECT ALTERNATIVES

6.1 INTRODUCTION

GENERAL CEQA REQUIREMENTS

The purpose of the alternatives analysis in an Environmental Impact Report (EIR) is to describe a range of reasonable alternatives to the project that could feasibly attain most of the basic objectives of the project, and to evaluate the comparative merits of the alternatives (CEQA Guidelines, Section 15126.6[a]).

Additionally, Section 15126.6(a,b) of the CEQA Guidelines requires consideration of alternatives that could reduce or eliminate any significant adverse environmental effects of the proposed project, including alternatives that may be more costly or could otherwise impede the project's objectives. The range of alternatives considered must include those that offer substantial environmental advantages over the proposed project and may be feasibly accomplished in a successful manner considering economic, environmental, social, technological, and legal factors.

6.2 PROJECT ALTERNATIVES

The following project alternatives to the proposed project are analyzed below:

- No Project Alternative
- Chrisman Road Alternative
- Environmentally Superior Alternative

These alternatives were chosen based on their ability to minimize anticipated environmental effects of the proposed project. For each of these alternatives, a general description and a qualitative analysis are provided. Each alternative is compared to the proposed project relative to individual environmental issue areas (e.g. land use, human health/risk of upset, etc.). A determination is made as to whether the alternative would result in impacts that are better than, worse than, or similar to the proposed project. The results of the comparison are summarized in tabular form at the end of the discussion. This section also identifies an "environmentally superior" alternative based on a comparison of the Proposed Project, No Project and Chrisman Road alternatives.

ALTERNATIVES ANALYSIS

No Project Alternative

CEQA Guidelines Section 15126.6(e) requires that a "no-project" alternative be evaluated in an EIR. This alternative considers the environmental effects of not approving the proposed project and the future development of the entire project site consistent with the Industrial designation under the City's adopted Urban Management Plan/General Plan (UMP), pursuant to CEQA Guidelines Section 15126.6(e). Using allowable land uses and zoning, the No Project Alternative could result in the development of educational, other recreational, heavy industrial, light industrial, fabrication/assembly, warehousing, or professional offices and support uses on the site. This alternative would not include development of youth field sports uses at the site and is assumed to develop consistent with the Patterson Pass Community Area.

6.0 ALTERNATIVES TO THE PROJECT

Comparative Analysis – No Project Alternative

Environmental Impacts

Land Use

Land use compatibility would be generally better under this alternative. Industrial uses would be consistent with adjacent users to the east, and are insensitive to ongoing agricultural practices. Agricultural conversion issues would be the same. However, this alternative would not achieve broader General Plan goals related to the development of needed youth athletic field sites (for City and the surrounding unincorporated area), and would remove the potential for desired adequate sports facility development.

Health Hazards/Risk of Upset

Public health impacts associated with potential exposure to pesticides, soil contamination, asbestos, and other hazardous materials would be less impacting with the No Project Alternative, considering that most health and safety issues identified within the EIR focus on the youth sports facilities. With industrial uses only, the alternative would be less sensitive and less impacting. It should be noted, however, that the impacts associated with the project can be mitigated to a less than significant level.

Traffic and Circulation

The No Project Alternative would result in heavy industrial, light industrial, fabrication/assembly, warehousing, or professional offices. Compared to the project, these uses generate substantially more traffic trips. Industrial, warehousing, and office land uses would result in more daytime trips Monday through Friday a.m./p.m. peak trips than the proposed project. Traffic and parking impacts would be more intensive with the No Project alternative.

Noise

Construction noise impacts associated with the development of the project site under the No Project Alternative would be similar to the proposed project. As previously described, the No Project Alternative would result in development of heavy industrial, light industrial, fabrication/assembly, warehousing, or professional offices. This alternative would avoid noise conflicts with existing residents associated with the operation of the athletic fields, but may result in industrial noise conflict with those residents. Impacts would be considered similar for the purposes of this analysis, although ultimate noise impacts would be dependent upon the ultimate industrial user.

Air Quality

Construction air quality impacts associated with the development of the project site under the No Project Alternative would be similar to the proposed project. With fewer traffic trips, however, the No Project alternative would result in fewer vehicle emissions. Stationary sources from industrial uses may be increased, depending upon the type of user at the site.

Surface Hydrology, Groundwater and Water Quality

Development of the project site under the No Project Alternative would result in similar (or more) impervious surface coverage to the proposed project. Project significant impacts associated with groundwater and surface water quality issues would be similar for the No Project Alternative, although greater need for potable water may result from development for professional offices or other similar use. The site would require similar drainage improvements to address existing flows.

Geology and Soils

Geologic and soil impacts associated with seismic hazards, expansive soils, and soil erosion for the No Project Alternative would be similar to impacts associated with the project, considering that site development of any kind would encounter the same issues and constraints.

Biological Resources

Biological resource impacts associated with Swainson's hawk, burrowing owl, San Joaquin kit fox, and common habitats would be similar to impacts associated with the project, since development would occur under either scenario.

Historic and Cultural Resources

Cultural resource impacts associated with undiscovered historic and prehistoric resources would be similar to impacts associated with the project, as development would occur under either scenario.

Public Services and Utilities

The No Project Alternative would probably result in fewer demands over what is anticipated for the project for water supply, wastewater conveyance and treatment, electrical, natural gas and telephone service, fire protection and law enforcement services. This is difficult to predict however, as some industry uses substantial water and wastewater capacity (wet industries), and others utilize large amounts of power. The No Project alternative would not supply the additional youth athletic sports fields, or benefit from on-site community facilities such as the general park and recreational facilities.

Agricultural Resources

Agricultural conversion issues would be the same if the site were developed for other than a youth sports facility. If the No Project Alternative resulted in no future development, there would be no impact to agricultural resources.

Visual Resources/Light and Glare

The No Project Alternatives would not include development of the proposed parks and athletic fields, but could result in an increase of vehicles (and fewer headlights) and generally would bring more ambient light to the areas. The project site is currently designated as an industrial land use that could result in more ambient light sources due to vehicle headlights, parking lot and building lighting.

6.0 ALTERNATIVES TO THE PROJECT

Overall Impacts

If the No Project Alternative were selected, a youth sports facility would not be constructed in or around the City. This would result in fewer impacts to land use, human health/risks of upset, geology and soils, infrastructure, biological resources, public services and utilities, agricultural resources and visual resources.

The youth population within the City would continue to use the existing available facilities. All these facilities are operating over capacity. Additionally, the No Project Alternative would conflict with the goal of the City to provide adequate sports facilities for the current and future needs of all Tracy youth athletics. YSAT has identified the lack of facilities for youth sports now and in the future to the City Council and Park Commission. This condition would be exacerbated if a new facility were not constructed.

Chrisman Road Alternative

This alternative proposes a development scenario in which the proposed project is constructed on an approximately 112 acre City-owned site currently zoned for agricultural uses, located north of Eleventh Street on Chrisman Road (**Figure 6.0-1**). The project would be located generally northeast of the City core. This alternative would include a similar development scenario, but would be reduced in scale due to the smaller overall size of the property available for development. This alternative would include a fewer number of playing fields and would not include a passive recreation area. This alternative is intended to reduce the onsite impact of increased nighttime illumination and light spillover to adjoining residential uses, as well as reduce risk of upset impacts and adjacent land use impacts. About three acres of this property is used for the City's water reservoir and the remainder of the site is presently under agricultural use and is leased for farming. The property **Figures 6.0-2 to 6.0-5** show the Chrisman property and surrounding land uses. The purpose of this alternative is to gain environmental benefits from locating the proposal closer to existing City infrastructure and service systems on land already owned by the City within the City limits.

Environmental Impacts

Land Use

Land use impacts associated with the loss of Prime Farmland would be greater than the proposed project, considering that this alternative site is actively farmed. However, the project would be integrated into an existing area planned for development. In the long term, the TYSF/industrial interface would be similar in terms of land use. Compatibility with adjacent uses would be similar in terms of the agricultural interface, but would separate the project from a neighboring residential parcel, thus avoiding conflicts. This area is located within the City's limits and is owned by the City, eliminating the need for an acquisition process from the GSA. The Chrisman property is sited adjacent to existing railroad tracks, which could pose a land use conflict, whereas only a small section of the Schulte Road site is near railroad tracks.

In general, the range of land use impacts would present different issues, but would remain similar in terms of number of issues and degree of impact. The Chrisman Road property would have less conflict from industrial and residential uses, but greater impact from proximity to the railroad tracks.

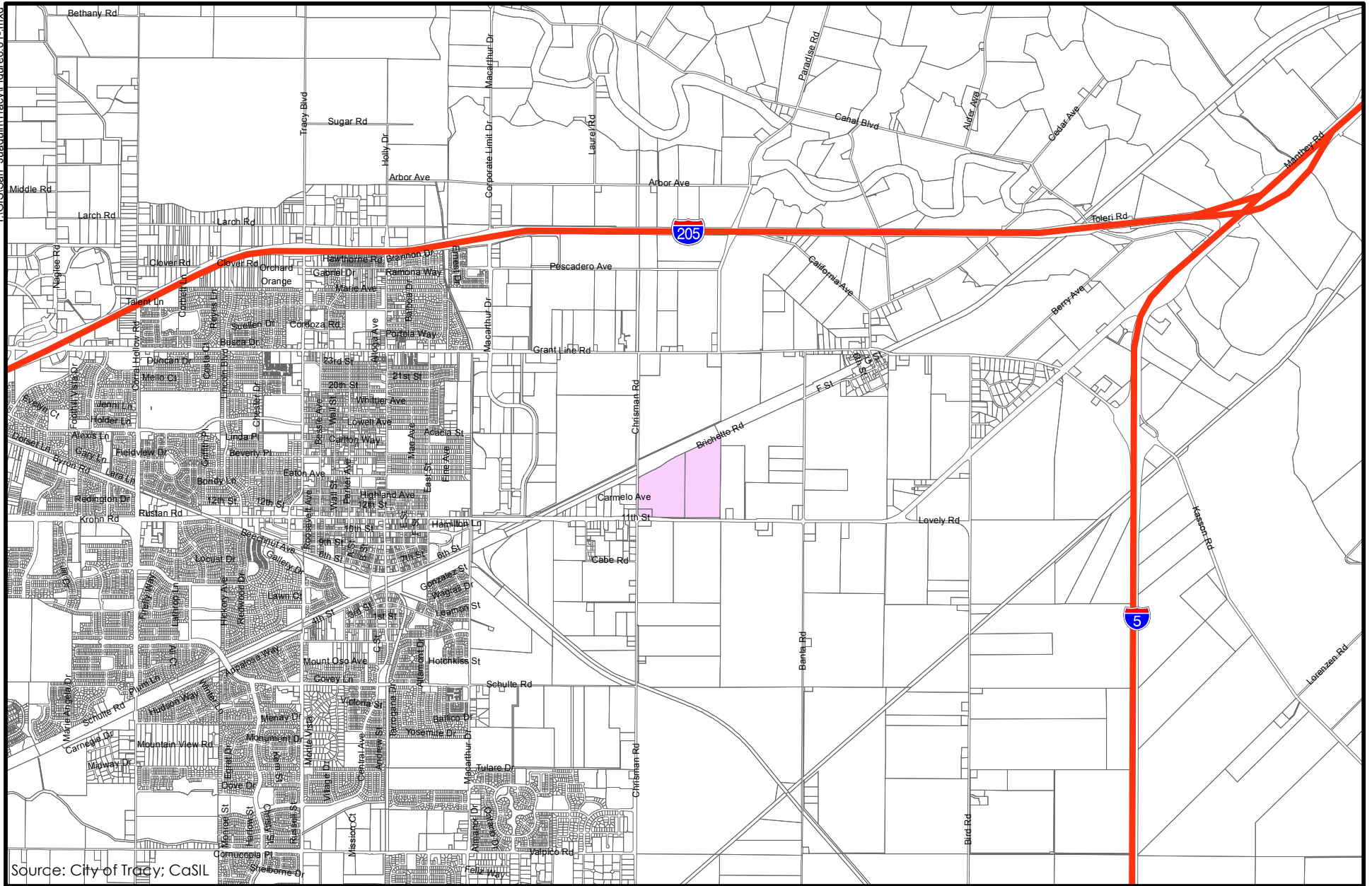




Photo 1: View Looking South on Chrisman Road towards Eleventh Street



Photo 2: View Looking South on Chrisman Road Towards Eleventh Street



Photo 3: Chrisman Road Property Looking Southeast Towards Eleventh Street



Photo 4: View of Reservoir Tank Looking North Towards Brichetto Road



Photo 5: NE Corner of Chrisman Property Looking Towards Railroad on Brichetto Road



Photo 6: West Side of Chrisman Rd. Looking Towards Eleventh St. Showing Industrial Sites



Photo 7: West Side of Chrisman Road Looking Towards Railroad on Brichetto Road

Health Hazards/Risk of Upset

Public health and safety impacts associated with potential exposure to soil contamination, asbestos, and other hazardous materials would be generally less intensive than the proposed project. The Chrisman Road Alternative would be developed on land that is currently farmed (dryland crops), limiting the potential exposure to asbestos or other residual substances that may have been used in the antennae field.

The Chrisman Road Alternative is further away from existing heavy industrial users and does not contain underground pipelines. It should be noted, however, that the impacts identified at the Schulte Road site can be mitigated to a less than significant level.

PG&E overhead transmission lines bisect the property and could create a hazard and would limit the location of buildings because of restrictions of permanent structures with the overhead easement maintained by PG&E.

Traffic and Circulation

As previously described, the Chrisman Road Alternative would include a similar development located directly across a railroad that runs along Brichetto Road and a block from Eleventh Street. The Chrisman Road Alternative would result in moderately less traffic volumes due to the smaller development, but would place those volumes in a different area of the City's road network. Located closer to the City core, Eleventh Street, and Grant Line Road, impacts to the east side of the City and downtown would be greater. However, in a setting closer to higher density urban uses, opportunities for transit may be enhanced. Therefore, the Chrisman property would contribute to less traffic and circulation impacts than the proposed project.

Noise

Construction noise impacts associated with the development of the project site under the Chrisman Road Alternative would be similar to the proposed project. A greater portion of the project perimeter would be exposed to noise from the adjacent railroad than with the Schulte Road site. Less traffic may be generated with a smaller project; therefore traffic noise impacts would be similar to or less than those currently anticipated under the proposed project. However, potential noise impacts to the adjacent residential parcel would be removed with the Chrisman Road Alternative. Therefore, the Chrisman property would have similar or less noise impacts than the proposed project.

Air Quality

Construction air quality impacts associated with the development of the project site under the Chrisman Road Alternative would be similar to the proposed project. As previously described, the Chrisman Road Alternative would include a similar, but possibly smaller, development located across from light industrial and railroad tracks. This additional traffic would result in similar air pollutant emissions.

Surface Hydrology, Groundwater and Water Quality

Development of the project site under the Chrisman Road Alternative would be similar to impacts associated with the project. Relocation of the recreational and youth field sports uses is not anticipated to result in additional significant drainage, groundwater or water quality impacts, although the drainage concept and ultimate stormwater system design would be specific to the

6.0 ALTERNATIVES TO THE PROJECT

new site. Development of the project site under the Chrisman Road Alternative would result in similar drainage and surface water quality impacts as the proposed project in terms of impervious surfaces; however, the project would not be located in the same watershed and would not have to account for exiting sheet flows entering the proposed site. This alternative would impact drainage facilities located within the Northeast Industrial area and the drainage plans proposed for this area of the City.

Geology and Soils

Geologic and soil impacts associated with seismic hazards, expansive soils, and soil erosion for the Chrisman Road Alternative would be similar to impacts associated with the project.

Biological Resources

Biological resource impacts associated with this alternative are considered similar, while potential kit fox habitat would not be present.

Historic and Cultural Resources

Cultural resource impacts associated with undiscovered historic and prehistoric resources would be similar to impacts associated with the project.

Public Services and Utilities

The Chrisman Road Alternative would place the project closer to the existing City core, therefore, placing the project closer to existing service lines and minimizing the extension of services. The City of Tracy would not be the likely water purveyor, but water would be required from a new source, similar to the proposed project. Sewer collection would not be within the Hansen line, allowing that line to accommodate other users. However, existing lines on the east side would therefore be impacted. Performance standards and response times for emergency services may be better, and the project would be closer to the City's wastewater treatment plant. New facilities would be required, but the linear distances for new infrastructure would not be as great as currently proposed.

Agricultural Resources

Both alternatives would require the conversion of agricultural lands. The Chrisman Road Alternative would result in greater impact as the City currently leases the site for farming, whereas the Schulte Road property is farmed for dryland crops under federal jurisdiction.

Visual Resources/Light and Glare

Light and glare impacts associated with the existing residential parcel would not occur with the Chrisman Alternative. However, project light and glare impacts associated with the athletic fields would affect other nearby land uses in a similar manner. Located nearer the City core, adjacent to a railroad and light industrial uses, additional nighttime lighting would not have as great an impact.

Overall Impacts

The Chrisman Road Alternative would result in a youth sports facility on a 109 acres parcel that would be bordered by Eleventh Street, Chrisman Road, Brichetto Road, industrial uses, and railroad tracks.

As indicated by the Alternative Analysis, the Chrisman Road Alternative avoids or reduces significant adverse project impacts in most areas and would be considered the environmentally superior alternative. The Chrisman Road Alternative would result in reduced traffic, decreases in anticipated noise and air quality impacts, reduced demand for public services and utilities, and would avoid light and glare impacts associated with athletic field lighting facilities. While this alternative may be feasible, it may not result in the necessary "critical mass" for a successful, and would not have the same opportunity to share facilities between land uses. The project would result in higher per capita infrastructure costs, and would not fully utilize the 200-acre site to its potential.

Of the remaining alternatives, the Chrisman Road Alternative would also meet the project objectives and would provide some benefits over the project by providing distance between existing residential (only single existing residential adjacent to site) and industrial uses. However, this alternative would result in a loss of productive agricultural land.

6.3 CONCLUSIONS AND ENVIRONMENTALLY SUPERIOR ALTERNATIVE

PROJECT OBJECTIVES

As outlined within the Project Description, the primary objectives of the project are to:

- Provide youth field athletic facilities for the City and surrounding communities' growing populations.
- Develop an unused 200 acres of property owned by the federal General Services Administration.
- Provide facilities that are flexible, sustainable, and relevant.

The Chrisman Road Alternative would provide some environmental benefits associated with city services. However, this location would not be as compatible with surrounding land uses over the long term, and would severely impact existing roadway systems in the northeast area of the City. The alternative would meet more the project objectives compared to the other alternatives.

The Chrisman Road Alternative is essentially also a reduced scale alternative as the site has fewer acres available overall for project construction. As such it avoids or reduces significant adverse project impacts in most areas and would be considered the environmentally superior alternative. This alternative would result in reduced traffic, decreases in anticipated noise and air quality impacts, reduced demand for public services and utilities, and would reduce light and glare impacts associated with athletic field lighting facilities. While this alternative may be feasible, it may not result in the necessary facilities to meet the needs identified by YSAT for the City current and future youth population.

As shown in **Table 6.0-1**, the Chrisman Road Alternative would result in worse impacts in up to three issue areas (land use, public services and utilities, and agriculture) as compared to the proposed project. The No Project Alternative would result in up to ten fewer (better) or

6.0 ALTERNATIVES TO THE PROJECT

potentially better impacts (land use, human health/risk of upset, noise, hydrology and water quality, geology and soils, biological resources, cultural resources, public services, agricultural resources, and visual resources/light and glare) and one worse impact (air quality) than the proposed project.

**TABLE 6.0-1
COMPARISON OF PROJECT ALTERNATIVES TO THE PROPOSED PROJECT**

| Environmental Categories | No Project Alternative | CHRISMAN ALTERNATIVE |
|--|------------------------|----------------------|
| Land Use | B | S/W |
| Human Health/Risk of Upset | B | B |
| Traffic and Circulation | S | B/S* |
| Noise | B/W | B/S* |
| Air Quality | S/W* | S |
| Hydrology and Water Quality | B | S |
| Geology and Soils | S | S |
| Biological Resources | B | S |
| Cultural and Paleontological Resources | S | S |
| Public Services and Utilities | B/S/W* | B/S/W* |
| Agriculture | B | B/W |
| Visual/Light and Glare | S | B |

Notes: B = Better, S = Same, W = Worse

* Depending on the specific use, service, or unknown site conditions.

CEQA Guidelines explain that alternatives and their mitigation measures must be feasible considering economic, environmental, social, technological, and legal factors in order to be considered. Based on this analysis, the Environmentally Superior Alternative would be the No Project Alternative. However, not building a new youth sports facility would not meet YSAT and City objectives to add a new sports and recreation facility to accommodate the growing population. Therefore, this Alternative is infeasible, as identified in Chapter 3, and the project as proposed is the best alternative.

7.0 LONG-TERM IMPLICATIONS OF THE PROJECT

7.0 LONG-TERM IMPLICATIONS OF THE PROJECT

This section discusses the additional topics statutorily required by CEQA. The topics discussed include significant irreversible environmental changes/irretrievable commitment of resources, significant and unavoidable environmental impacts, and growth-inducing impacts.

7.1 SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES/IRRETRIEVABLE COMMITMENT OF RESOURCES

LEGAL CONSIDERATIONS

CEQA Section 15126.2(c) and Public Resources Code Sections 21100(b)(2) and 21100.1(a), requires that the EIR include a discussion of significant irreversible environmental changes which would be involved in the proposed action should it be implemented. Irreversible environmental effects are described as:

- The project would involve a large commitment of nonrenewable resources;
- The primary and secondary impacts of a project would generally commit future generations to similar uses (e.g., a highway provides access to previously remote area);
- The project involves uses in which irreversible damage could result from any potential environmental accidents associated with the project; or,
- The phasing of the proposed consumption of resources is not justified (e.g., the project involves the wasteful use of energy).

Determining whether the proposed project would result in significant irreversible effects requires a determination of whether key resources would be degraded or destroyed such that there would be little possibility of restoring them. Irretrievable commitments of resources should be evaluated to assure that such current consumption is justified.

ANALYSIS

Implementation of the project will result in an increased intensity of development with the conversion of agricultural land to sports fields, recreational and park uses. A variety of resources, including land, energy, water, construction materials, and human resources will be irretrievably committed for the project's initial construction and its continued maintenance.

An increase in the intensity of land use on the site will result in an increase in regional energy consumption. Fossil fuels are the principal source of energy and the project will increase consumption of available supplies, including natural gas and gasoline. These energy resource demands relate to initial project construction, lighting, heating, and cooling of buildings, and the transport of people and goods.

Construction of the project will require the commitment of a variety of other non-renewable or slowly renewable natural resources such as lumber and other forest products, sand and gravel, asphalt, petrochemicals, and metals. Increased long-term commitment of social services and public maintenance facilities would also be required, establishing an increased demand for such services throughout the life of the project.

Development will permanently alter the site's existing visual character. Grading, utility extensions, drainage improvements, road construction, and the construction of sports fields, will permanently alter the project site's existing characteristics to a more urbanized setting.

7.0 LONG-TERM IMPLICATIONS OF THE PROJECT

Although it is likely that various initial components of the project may gradually be replaced by more productive urban activities as redevelopment of the land occurs, future generations will generally be committed to similar urban uses of the site.

7.2 SIGNIFICANT AND UNAVOIDABLE ENVIRONMENTAL EFFECTS

CEQA Guidelines Section 15126.2(b) requires an EIR to discuss unavoidable significant environmental effects, including those that can be mitigated but not reduced to a level of insignificance. In addition, Section 15093(a) of the CEQA Guidelines allows the decision-making agency to determine if the benefits of a proposed project outweigh the unavoidable adverse environmental impacts of implementing the project. The City can approve a project with unavoidable adverse impacts if it prepares a "Statement of Overriding Considerations" setting forth the specific reasons for making such a judgment. A list of project unavoidable adverse impacts identified in this EIR is provided below.

TRAFFIC AND CIRCULATION

Existing Plus Proposed Project Traffic Scenario

Impact 4.3.1 Under Existing plus Phase I project Conditions, the project would contribute traffic to the intersection of Mountain House Parkway/I-580 Eastbound Ramps, which is already operating at an unacceptable level. Additionally, under Existing plus Phase I plus Phase II project conditions, the project's contribution to existing area traffic would result in unacceptable LOS levels at Hansen Road/Schulte Road and Lammers Road/Schulte Road and would continue to contribute traffic to the intersection of Mountain House Parkway/I-580 Eastbound Ramps. The project's additional contribution to these unacceptable levels of service is a **significant impact** of the project.

The roadway improvements recommended in the Impact Analysis subsection of the Existing Plus Proposed Project Traffic scenario would mitigate the existing unacceptable LOS conditions at Mountain House Parkway/I-580 Eastbound Ramps and all future unacceptable LOS levels under this scenario. However, the affected study intersections are within the jurisdiction of San Joaquin County and the County currently has no improvement plans for any of the affected study sections. Subsequently, there is no existing traffic impact mitigation fee program in place to collect funds to support future improvements for the affected intersections. Until a traffic impact mitigation fee program or improvement plans are implemented for the affected intersections, this impact will remain **significant and unavoidable**.

Year 2010 Plus Proposed Project Traffic Scenario

Impact 4.3.2 Under Year 2010 Base plus Phase I plus Phase II project conditions, the project would contribute traffic to four intersections that are projected to be operating at unacceptable or failure levels at that time. The project's additional contribution to these unacceptable levels of service is a **significant impact** of the project.

As part of the conditions of approval for a separate previously approved project under the County's jurisdiction, the Mountain House Development, an interchange improvement project is currently under design, which will improve the level of service at the Mountain House Parkway/I-205 Eastbound and Westbound Ramps to acceptable conditions. In addition, the roadway improvements recommended in the analysis section of the Year 2010 Base plus Phase I plus

Phase II scenario (above) would mitigate the projected unacceptable LOS conditions at Mountain House Parkway/I-580 Eastbound Ramps, Hansen Road/Schulte Road, and Lammers Road/Schulte Road under this scenario. However, the affected study intersections are within the jurisdiction of San Joaquin County and the County currently has no improvement plans for any of the affected study sections. Subsequently, there is no existing traffic impact mitigation fee program in place to collect funds to support future improvements for the affected intersections. Until a traffic impact mitigation fee program or improvement plans are implemented for the affected intersections, this impact will remain **significant and unavoidable**.

AIR QUALITY

Cumulative Regional Air Quality Impacts

Impact 4.5.6 This project in combination with other reasonably foreseeable projects would increase regional air emissions well beyond the SJVAPCD significance threshold. This cumulative impact is considered **potentially cumulative significant**.

Implementation of the **MM 4.5.1** would minimize long-term air quality impacts generally consistent with the General Plan EIR mitigation measures M 37.1, M 37.3, M 37.4, M 37.5, M 37.6, M 37.7, and M 39.2. The General Plan, General Plan EIR, and this EIR contain adequate measures that may mitigate Project specific impacts to less than significant levels. However, results of the year 2020 regional and area source operations modeling, emissions will result in exceedence of maximum ROG, NO_x, and CO thresholds; therefore, impacts are considered to remain **significant and unavoidable**.

7.3 GROWTH-INDUCING IMPACTS

LEGAL CONSIDERATIONS

As required by CEQA Guidelines Section 15126.2(d), an EIR must include a discussion of the ways in which a proposed project could directly or indirectly foster economic development or population growth, and how that growth would, in turn, affect the surrounding environment. Growth can be induced in a number of ways, including the elimination of obstacles to growth, or through the stimulation of economic activity within the region.

Direct growth-inducing impacts result when the development associated with a project directly induces population growth or the construction of additional developments within the same geographic area. These impacts may impose burdens on a community or encourage new local development, thereby triggering subsequent growth-related impacts. The analysis of potential growth-inducing impacts includes a determination of whether a project would remove physical obstacles to population growth. This often occurs with the extension of infrastructure facilities that can provide services to new development. Indirect growth-inducing impacts result from projects that serve as catalysts for future unrelated development in an area. Development of public institutions, such as colleges, and the introduction of employment opportunities within an area are examples of projects that may result in indirect growth-inducing impacts.

Under CEQA, induced growth is not considered necessarily detrimental or beneficial. Induced growth is considered a significant impact only if it directly or indirectly affects the ability of agencies to provide needed public services, or if it can be demonstrated that the potential growth, in some other way, could significantly affect the environment.

7.0 LONG-TERM IMPLICATIONS OF THE PROJECT

ANALYSIS

By virtue of expanding public services and facilities in the project area, growth pressures may be experienced within the Patterson Pass Community Area and adjoining County agricultural lands. Existing City policies call for the planning of Community Areas in a comprehensive manner, and currently represent a barrier to haphazard growth within major areas planned for development in and around the City. The project has been proposed in response to the growing need for additional park, recreation and youth field sports due to expansion of residential areas in and around the Westside of Tracy. The project would not in itself contribute to growth, since it is proposed in response to the population growth that the City and adjacent unincorporated County area has experienced over the last 15 years. No plans exist to annex the project site to the City or request detachment of the site from the Community Plan Area; however the project could create additional growth pressures to surrounding properties wishing to take advantage of new facilities or new infrastructure service lines. The result may be an accelerated pace of growth, with additional requests for conversion of County agricultural lands.

8.0 REPORT PREPARERS

8.1 PREPARERS OF THE ENVIRONMENTAL IMPACT REPORT

CITY OF TRACY

Director of Development and
Engineering Services
Associate Planner

Brian Millar
John Palmer

PACIFIC MUNICIPAL CONSULTANTS

Project Director
Project Manager
Deputy Project Manager
Environmental Planner
Assistant Planner
Assistant Planner

Christina Ratcliffe
Margaret Cavanaugh-Lynch
Janet Meth, AICP
Brett Bollinger
Rebecca Atkinson
Richard Hirsch

BOLLARD & BRENNAN ACOUSTICAL CONSULTING

Principal

Paul Bollard

DON BALLANTI – AIR QUALITY CONSULTANT

Principal

Don Ballanti

FOOTHILL ASSOCIATES

Senior Biologist
Resource Specialist

Brian Mayerle
Rosie H. Black

FOOTHILL ARCHAEOLOGICAL

Principal

John Foster

APPENDIX A: NOTICE OF PREPARATION

**NOTICE OF PREPARATION
OF AN
ENVIRONMENTAL IMPACT REPORT**

DATE: February 27, 2004

TO: Responsible Agencies, Organizations and Interested Parties

LEAD AGENCY: City of Tracy
Contact: John Palmer
520 Tracy Boulevard
Tracy, CA 95376

(209) 831-4401
john.palmer@ci.tracy.ca.us

SUBJECT: Tracy Youth Sports Facility Environmental Impact Report

In discharging its duties under Section 15021 of the California Environmental Quality Act (CEQA) Guidelines, the City of Tracy (as Lead Agency) intends to prepare an Environmental Impact Report, consistent with Article 9 and Sections 15161 and 15168 of the CEQA Guidelines, for the Sports Complex. In accordance with Section 15082 of the CEQA Guidelines, the City of Tracy has prepared this Notice of Preparation to provide Responsible Agencies and other interested parties with sufficient information describing the proposal and its potential environmental effects.

The determination to prepare an Environmental Impact Report was made by the City of Tracy. As specified by the CEQA Guidelines, the Notice of Preparation will be circulated for a 30-day review period. The City of Tracy welcomes public input during this review. In the event that no response or request for additional time is received by any Responsible Agency by the end of the review period, the Lead Agency may presume that the Responsible Agency has no response.

Comments may be submitted in writing during the review period and addressed to:

John Palmer, Associate Planner
520 Tracy Boulevard
Tracy, CA 95376

The comment period closes on Monday, March 29, 2004.

Project Description

The project site is 198 acres. The site is in unincorporated San Joaquin County, within one mile of the City of Tracy's city limits and within the City's Sphere of Influence. The City has no current plans to annex the site to the City. The site is adjacent to and accessible by Schulte Road, ½ mile east of Hansen Road and one mile west of Lammers Road. Regional access to the site is provided via I-205, I-5, and I-580. Please see Figure 1.

Ball Fields

The proposed site plan includes a 32-acre area on the western side of the site, on which football and soccer fields are planned. Baseball and softball fields are planned within seven pie-shaped clusters, consisting of four to five ball fields each, in addition to five separate ball fields adjacent to the southern site boundary. Each baseball and softball field will have permanent backstops. The plan calls for a total of:

- ❑ 5 baseball diamonds (with 90-foot basepaths)
- ❑ 27 baseball diamonds (with 60-foot basepaths)
- ❑ 5 softball diamonds
- ❑ 3 football fields
- ❑ 15 soccer fields

Please see Figure 2.

In addition to the proposed ball fields, the proposed site plan includes various associated program elements:

Buildings and Temporary Structures

The site plan provides the opportunity for the incorporation of both permanent and portable buildings, as site development progresses. Concession and storage facilities will be contained on either concrete pads with mobile trailers, or "Tuff Shed"-type transitory structures. The location of these temporary structures is still to be determined, although structures are recommended for the center of the northernmost pie-shaped baseball field cluster, as well as along the eastern boundary of the soccer and football playfield area. Permanent buildings are recommended for certain structures, such as those used for bathroom facilities. The existing concrete FAA building and surrounding area will be retained and used as a corporation yard for maintenance.

Parking

Parking areas will be located throughout the project site, providing access to each of the ball fields and accommodating 2,166 spaces. This number of parking spaces allots for 1,200 spaces for baseball facilities, 188 for softball, 105 for football, 525 for soccer, and 148 for general recreation.

Playgrounds and Picnic areas

A minimum of four playground and picnic areas will be incorporated throughout the site, and are optimized for accessibility to the various groups of ball fields. Four sets of basketball courts are to be located just south of the soccer/football playfield area.

Security

Security fencing will surround the site perimeter. The site design provides the potential for gated parking lots to regulate access to various site locations. Safety lighting will be located throughout the project site.

Ballfield Lighting

All ball fields will have lighting for night play. The installation of lighting equipment will be completed during later development phases.

Project Phasing

The project construction will be divided into three phases, as demonstrated in Figure 2. The purpose of phasing is to provide lower up-front costs for facility use, in addition to providing the opportunity to adjust project programming and funding mechanisms during project development. Phase I will consist of securing the infrastructure and utility needs to the site, as well as the construction of play fields planned for the center region of the project site, to meet ball field needs for current and five-year projections. Phase II will continue development of the center portion of the site, and Phase III will complete site construction in a U-shape along the western and then southern site border. Phases II and III will address program needs for five- to ten-year program need projections.

Necessary Entitlements

The San Joaquin County General Plan designates the project site as Agricultural, and it is zoned AG-40 (General Agriculture, 40-acre minimum lot size). The City of Tracy's Urban Management Plan (UMP) designates the project site as Industrial, and located within the Patterson Pass Community Area, one of six areas planned for development. Recreational uses for Outdoor Sports Clubs are permitted subject to site approval in this zone.

Environmental Topics to be Addressed in the EIR

Based on a preliminary review, the City anticipates evaluating the following topics in the EIR:

Aesthetics

The potential visual impacts resulting from the project on adjacent lands and surrounding areas, including views from Schulte Road, Hanson Road as well as from Highways 580 and Interstate 5, will be analyzed. Emphasis will be placed on the increased light and glare created by the build-out of the project. Mitigation measures for these impacts will be identified as appropriate.

Agriculture Resources

The EIR will analyze the impact of converting approximately 198 acres of idle farmland to non-agricultural use. Further, the proposed project will be reviewed due to its proximity to adjacent agricultural uses and subsequent potential of compatibility problems due to the possible generation of periods of dust and noise, as well as the possible application of pesticides or herbicides through aerial spraying or other means.

Air Quality

Based on an air quality impact assessment prepared by a qualified expert, this analysis will address the project's effects upon local and regional air quality. This analysis will include impacts created by vehicles traveling to and from the site as well as temporary impacts associated with construction activities that could create dust affecting residential areas to the south. The potential for project emissions to exceed the thresholds of the Air District for regional significance will also be evaluated through computer modeling. Mitigation measures for air quality impacts will be identified as appropriate.

Biological Resources

The site has been allowed to revert to grassland. It will be surveyed to identify the project area's potential to support rare, threatened, endangered, or otherwise unique species, including potential impact on the foraging habitat the San Joaquin Kit Fox, Swainson's Hawk and Burrowing Owl, with mitigation measures identified as appropriate.

Geology and Soils

Based on a report prepared by a qualified geotechnical engineer, the EIR will evaluate potential impacts and hazards to the project due to on-site geologic and soils conditions. This discussion will focus on the potential for liquefaction, response to ground shaking, erosion potential, and the presence of expansive or compressible soils, with mitigation measures identified as appropriate.

Hazards and Hazardous Materials: The presence of on-site and area hazards will be researched and analyzed, including the presence of the three underground pipelines that traverse the site, the possible exposure to hazardous materials such as asbestos from the existing concrete building currently located on the project site, a former underground storage tank, former transformers previously existing on the site and the historical use of pesticides on the site.

Hydrology and Water Quality

Based on a report prepared by a qualified hydrologist, the potential hydrology and drainage impacts associated with the project will be addressed. The discussion of water quality will address potential impacts resulting from the project both during construction and during project operation. Specific mitigation measures to control erosion during construction will be identified, as will measures planned to be incorporated into project design to control urban non-point source pollution.

The discussion of surface hydrology will describe existing on-site drainage conditions and evaluate the potential impacts of proposed onsite retention and detention facilities, increased impervious surfaces and resulting increases in peak runoff from the project on downstream storm drainage facilities. The existing conditions section will describe the drainage areas and current stormwater runoff and flooding potential on the site and surrounding area. The storm drainage system planned for the project will be described and evaluated in terms of its ability to mitigate potential on-site and off-site drainage and flooding impacts.

Noise

Based on a report prepared by a qualified acoustical engineer, the EIR will evaluate the potential impacts of the project. The anticipated project-related activities at the sports facility that would generate permanent noise would include human voices, public address systems and vehicles along roadways. Based on the recommendations of the noise report, the EIR will identify noise mitigation measures as appropriate.

Public Services

The EIR discussion on public services will cover the issues of fire and police protection as well as solid waste disposal. The City and County fire and police departments will be contacted regarding the project's potential effects on service levels, and whether additional personnel and equipment may be required to serve the project. Any provisions proposed in the project for recycling and waste reduction will be noted.

Recreation

The EIR will recognize that the project is adding a large sports facility to land that is currently under-utilized as idle farmland. All of the physical impacts of the project will be discussed and mitigations identified as appropriate.

Transportation/Traffic

Based on the traffic report to be prepared by a qualified transportation engineer, this section will discuss the potential level of service impacts resulting from traffic generated by the project on the surrounding roadway network. This section will evaluate operational aspects such as: project access, internal vehicular circulation, parking, pedestrian and bicycle access. The level of service mitigations and operational recommendations identified in the traffic report will be incorporated into the EIR.

Utilities and Service Systems

The project demand for utilities and services will be evaluated in terms of existing capacities and ability of providers to serve the project. The project will require a water supply, electric power, natural gas, and telephone service.

CEQA-Mandated Discussions

In addition to the above environmental topic discussions, the EIR will include the following discussions required by CEQA: cumulative impacts, effects found not to be significant, project alternatives, significant unavoidable impacts, significant irreversible changes, and growth-inducing impacts.

Environmental Initial Study

1. **Project Title:** Tracy Youth Sports Facility
2. **Lead Agency Name and Address:**
City of Tracy Development and Engineering Services Department
520 Tracy Boulevard
Tracy, CA 95376
3. **Contact Person and Phone Number:** John Palmer, Associate Planner (209) 831-4401
4. **Project Location:** The site address is 15178 W. Schulte Road (APN 209-230-03) and is located in unincorporated San Joaquin County, within one mile of the City of Tracy's city limits and within the City's Sphere of Influence. The site is adjacent to and accessible by Schulte Road, ½ mile east of Hansen Road and one mile west of Lammers Road. Regional access to the site is provided via I-205, I-5, and I-580. Please see Attachment A.
5. **Project Sponsor's Name and Address:** City of Tracy Parks and Community Service Department
6. **General Plan Designation(s):** County General Plan: A-40 General Agricultural/Urban Reserve, 40 acre minimum lot size; City of Tracy Urban Management Plan: Industrial, site is located within the Patterson Pass Community area.
7. **Zoning:** AG-40 General Agriculture
8. **Description of the Project:** The proposed Tracy Youth Sports Facility is a 198 acre youth park and recreational facility to be developed by the City of Tracy and the Youth Sports Alliance of Tracy. The proposed site plan includes three football fields, four basketball courts, and fifteen soccer fields. In addition, twenty-seven baseball and five softball fields are planned within seven pie-shaped clusters, consisting of four to five ball fields each, in addition to five separate ball fields adjacent to the southern site boundary. Each baseball and softball field will have permanent backstops. Also integrated into the site are eight storm water detention basins, one open turf area, a corporation yard, restrooms, concession stands, field and vehicular lighting, signs, storage buildings and associated landscaping. Parking areas will be located throughout the project site, providing access to each of the ball fields individually and accommodating 2,166 total spaces. This number of parking spaces allots 1,200 spaces for baseball facilities, 188 for softball, 105 for football, 525 for soccer and 148 spaces for general recreation.

- 9. Surrounding Land Uses and Setting:** Adjacent land uses include agricultural land to the north and west, and a single residential parcel to the south. Also located to the south is the Southern Pacific Railroad line and the Delta Mendota canal. To the east is an agricultural parcel, as well as the Owens Illinois, Inc. (Owens Brockway) Glass Plant. Adjacent to the site at the southwest corner of Hansen Road and Schulte Road is the Tracy Rural Fire Protection District Station Number 93, and a California Dept. of Forestry Fire Station under construction.

The Tracy Biomass Plant, an 18.5 megawatt (MW) wood-fired energy plant, is located ¼ mile east of the site. Approximately ½ mile west of the site is the Summit Distribution Center, which serves as a facility for Safeway and Costco trucking and food distribution. The Tracy Peaker Plant project, a 169 MW natural gas-fired, simple-cycle electric generating facility, is located southwest of the site.

- 10. Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement):**

General Services Administration (current owner)
San Joaquin County Government

State Agencies (via Clearinghouse) including:
Regional Water Quality Review Board
Department of Fish and Game
Parks and Recreation Department

Federal Agencies:
Army Corp of Engineers
Department of Fish and Wildlife

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

- | | | |
|--|---|--|
| <input checked="" type="checkbox"/> Aesthetics | <input checked="" type="checkbox"/> Hazards & Hazardous Materials | <input checked="" type="checkbox"/> Public Services |
| <input checked="" type="checkbox"/> Agricultural Resources | <input checked="" type="checkbox"/> Hydrology/Water Quality | <input checked="" type="checkbox"/> Recreation |
| <input checked="" type="checkbox"/> Air Quality | <input type="checkbox"/> Land Use and Planning | <input checked="" type="checkbox"/> Transportation/Traffic |
| <input checked="" type="checkbox"/> Biological Resources | <input type="checkbox"/> Mineral Resources | <input checked="" type="checkbox"/> Utilities & Service Systems |
| <input type="checkbox"/> Cultural Resources | <input checked="" type="checkbox"/> Noise | <input checked="" type="checkbox"/> Mandatory Findings of Significance |
| <input checked="" type="checkbox"/> Geology and Soils | <input type="checkbox"/> Population and Housing | |

DETERMINATION

(To be completed by the Lead Agency)

On the basis on this initial evaluation:

- ☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- ☐ I find that although the proposed project could have significant effect on the environment, there will not be a significant effect in this case because the mitigation measures described on an attached sheet have been added to the project. A NEGATIVE DECLARATION will be prepared.
- ☒ I find that the proposed project MAY have a significant effect on the environment, and an **ENVIRONMENTAL IMPACT REPORT** is required.
- ☐ I find that the proposed project MAY have a significant effect(s) on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets, if the effect is a "potentially significant impact" or "potentially significant unless mitigated." An ENVIRONMENTAL IMPACT REPORT is required, but must analyze only the effect that remains to be addressed.
- ☐ I find that, although the proposed project could have a significant effect on the environment, there will NOT be a significant effect in this case because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature

Date

John Palmer, Associate Planner

Printed Name

For

PURPOSE OF THIS INITIAL STUDY

This Initial Study has been prepared consistent with CEQA Guidelines Section 15063, to determine if the Tracy Youth Sports Facility, as proposed, may have a significant effect upon the environment. Based upon the findings contained within this report, the Initial Study will be used in support of the preparation of an Environmental Impact Report.

EVALUATION OF ENVIRONMENTAL IMPACTS

1. A brief explanation is required for all answers except “No Impact” answers that are adequately supported by the information sources cited. A “No Impact” answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g. the project falls outside a fault rupture zone). A “No Impact” answer should be explained where it is based on project-specific factors as well as general standards.
2. All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect, and construction as well as operational impacts.
3. A “Less than Significant Impact” applies when the proposed project would not result in a substantial and adverse change in the environment. This category also applies when the impact has been previously addressed and it has been determined that there are no new impacts created by the project. This impact level does not require mitigation measures.
4. “Potentially Significant Impact” is appropriate if there is substantial evidence that an effect is significant. If there are one or more “Potentially Significant Impact” entries when the determination is made, an EIR is required.
5. “Potentially Significant Unless Mitigation Incorporated” applies where the incorporation of mitigation measures has reduced an effect from “Potentially Significant Impact” to a “Less than Significant Impact”. The initial study must describe the mitigation measures and briefly explain how they reduce the effect to a less than significant level.
6. “Reviewed Under Previous Document” applies where the impact has been evaluated and discussed in a previous document. This category could be checked if an impact is either “Potentially Significant” or “Less than Significant”. Discussion will include reference to the previous documents.
7. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration.

8. Preparers are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g. general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated. A source list should be attached and other sources used or individual contacts should be cited in the discussion.
9. Impacts that were originally classified as potentially significant on previous documents may now be indicated as less than significant. These particular impacts will be marked as "Less than Significant Impact" if the Project does not create any new impacts for the project area than those previously evaluated.

| | Potentially Significant Impact | Potentially Significant Unless Mitigation Incorporated | Less Than Significant Impact | No Impact | Reviewed Under Previous Document |
|--|--------------------------------------|--|-------------------------------------|-------------------------------------|---|
| I. AESTHETICS. Would the project: | | | | | |
| a) Have a substantial adverse effect on a scenic vista? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| c) Substantially degrade the existing visual character or quality of the site and its surroundings? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| d) Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Discussion:

- a) Although the project would introduce new visual elements, including lighting and signs, as well as paved and unpaved surfaces that would alter views of the proposed site, there are no dedicated scenic vistas or significant visual vantage points from or toward the project site. The impact is considered **less than significant**.
- b) No scenic resources exist on the project site. **No impact** is expected.
- c) The proposed site is currently occupied by a concrete structure, a series of power distribution poles, metal electrical junction boxes and a water well turbine pump. The introduction of a sports facility will not substantially degrade the existing visual character of the site. **No impact** is expected.
- d) Ball fields, parking areas, and restrooms will be equipped with artificial lighting which may result in a **potentially significant impact** to motorists traveling along Schulte and Hansen Roads as a result of light and glare.

| | Potentially Significant Impact | Potentially Significant Unless Mitigation Incorporated | Less Than Significant Impact | No Impact | Reviewed Under Previous Document |
|---|--------------------------------------|--|------------------------------------|--------------------------|---|
| II. AGRICULTURE RESOURCES. In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997), prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project: | | | | | |
| a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b) Conflict with existing zoning for agricultural use, or a Williamson Act contract? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| c) Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland to non-agricultural use? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Discussion:

- a) The project would convert approximately 198 acres of idle farmland to non-agricultural use. Although not farmed since the 1960's except for dryland crops, the site is surrounded by lands with prime farmland characteristics and may also contain prime soil characteristics. Use of the site for more intensive urban uses is therefore considered a **potentially significant impact**.
- b) The project site is not under a Williamson Act agricultural contract. However, the site is zoned AG-40 and the proposed project is sited immediately adjacent to agricultural uses that may pose compatibility problems due to the possible generation of periods of dust and noise, as well as the possible application of pesticides or herbicides through aerial spraying or other means. Therefore, the project would result in a **potentially significant impact**.
- c) The current UMP designation is I – Industrial. There are currently no active Farmland uses on the site. However the development of the project as a sports facility would result in the loss of the land as useable farmland for the foreseeable future. This would result in a **potentially significant impact**.

| | | | | |
|--------------------------------------|--|------------------------------------|--------------|---|
| Potentially Significant Impact | Potentially Significant Unless Mitigation Incorporated | Less Than Significant Impact | No Impact | Reviewed Under Previous Document |
|--------------------------------------|--|------------------------------------|--------------|---|

III. AIR QUALITY. Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:

- | | | | | | |
|---|-------------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| a) Conflict with or obstruct implementation of the applicable air quality plan? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| d) Expose sensitive receptors to substantial pollutant concentrations? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| e) Create objectionable odors affecting a substantial number of people? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Discussion:

- a) The project will include actions during its construction and operational phases, (grading, vehicular traffic) that has the potential for contributing to the City & County's status of a non-attainment zone for Ozone and PM-10, which could conflict with or obstruct implementation of the San Joaquin Valley Air Pollution Control District plan. The impact is considered **potentially significant**.
- b) The project has the potential for violating ROG (reactive organic compounds) and NOx (nitrogen oxides) Emission Threshold levels for mobile source pollutants. Primary factors contributing to reduced air quality in and around Tracy are: a sink effect, climatic subsidence, temperature inversions and low wind speeds; automobile and truck travel; and increases in mobile and stationary pollutants generated by local urban growth. This impact is considered **potentially significant**.
- c) The proposed sports facility will consist of a series of relatively flat fields of varying sizes. Grading equipment would be used to construct entrances, driveways, parking, ball fields, and other amenities. Construction activities will generate an increase in particulate matter, which has the potential of impacting residential areas in the surrounding area. Further the project would generate high volumes of traffic to and from park that could exceed the significance threshold for air pollutants established by the San Joaquin Valley Air Pollution Control District. This impact is **potentially significant**.

- d) Air quality impacts at sensitive receptors could be impacted by high concentrations of CO (Carbon Monoxide) as a result of increased automobile traffic along adjacent streets and highways. This impact is considered **potentially significant**.
- e) Construction equipment would also generate petroleum-based fuel odors and typical motor vehicle pollutants, in addition to particulate matter, carbon monoxide and ozone precursors (e.g., nitrogen oxide and sulfur dioxide). The effect on air quality from during construction could be **potentially significant**.

| Potentially Significant Impact | Potentially Significant Unless Mitigation Incorporated | Less Than Significant Impact | No Impact | Reviewed Under Previous Document |
|--------------------------------|--|------------------------------|-----------|----------------------------------|
|--------------------------------|--|------------------------------|-----------|----------------------------------|

IV. BIOLOGICAL RESOURCES. Would the project:

- | | | | | | |
|---|-------------------------------------|--------------------------|--------------------------|-------------------------------------|--------------------------|
| a) 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 California Department of Fish and Game or U.S. Fish and Wildlife Service? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| c) 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 wetlands, etc.), through direct removal, filling, hydrological interruption or other means? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| d) 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? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

INITIAL STUDY CHECKLIST

| | Potentially Significant Impact | Potentially Significant Unless Mitigation Incorporated | Less Than Significant Impact | No Impact | Reviewed Under Previous Document |
|---|--------------------------------------|--|------------------------------------|--------------------------|---|
| f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional or state habitat conservation plan? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Discussion:

- a) Three species of animals have been identified as having foraging habitats occurring within the vicinity of the project site. The proposed Sports Facility development would contribute to the ongoing loss of open space in the region resulting in a decline of biological resources and species diversity. These species include the San Joaquin Kit Fox, Swainson's Hawk, and the Burrowing Owl of which the Kit Fox is a State and Federally recognized threatened species. This is a **potentially significant impact**.
- b) The project site does not contain a riparian habitat, or other sensitive natural community as identified in local or regional plans, policies or regulations, or by the State or Federal agencies. Therefore, **No impact** is anticipated.
- c) The project site does not contain water bodies and federally protected wetlands have not been identified on the site. Therefore, **No impact** is anticipated.
- d) Development of the proposed project will remove potential foraging habitat for Swainson's hawk, Burrowing Owl, and San Joaquin Kit Fox. The Swainson's Hawk and San Joaquin Kit Fox are threatened in California with their foraging habitat protected by the California Department of Fish and Game (CDFG). The Kit Fox is also Federally listed as an endangered species; the Burrowing Owl has the potential of being found at the site. These are **potentially significant impacts**.
- e) There is little potential for conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance for this proposed site. **No impact** is anticipated.
- f) There could be a conflict with provisions of State and Federal conservation programs to protect the Swainson's hawk, Burrowing Owl, San Joaquin Kit Fox and/or their habitat, if this project is implemented. This is a **potentially significant impact**.

| | | | | |
|--------------------------------------|--|------------------------------------|--------------|---|
| Potentially Significant Impact | Potentially Significant Unless Mitigation Incorporated | Less Than Significant Impact | No Impact | Reviewed Under Previous Document |
|--------------------------------------|--|------------------------------------|--------------|---|

V. CULTURAL RESOURCES. Would the project:

- | | | | | | |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|--------------------------|
| a) Cause a substantial adverse change in the significance of a historical resource as defined in " 15064.5? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to " 15064.5? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| c) Directly or indirectly destroy a unique paleontological resource or site or unique geological feature? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| d) Disturb any human remains, including those interred outside of formal cemeteries? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

Discussion:

- a – d) There are no known historical structures, roads, or features on the project site. There are no known archaeological or historic resources anticipated on the project site. The project site is an unlikely site for native American settlements or paleontological remains. No traditional cultural places or sacred sites were identified according to consultation with Native American Heritage Commission. **No impacts** are anticipated from this project.

| | Potentially Significant Impact | Potentially Significant Unless Mitigation Incorporated | Less Than Significant Impact | No Impact | Reviewed Under Previous Document |
|--|--------------------------------------|--|-------------------------------------|-------------------------------------|---|
| VI. GEOLOGY AND SOILS. Would the project: | | | | | |
| a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury or death, involving: | | | | | |
| i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42. | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| ii) Strong seismic ground shaking? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| iii) Seismic-related ground failure, including liquefaction? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| iv) Landslides? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b) Result in substantial soil erosion or the loss of topsoil? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Discussion:

- a.i.) The project site is located on an alluvial fan along the edge of the San Joaquin Valley approximately 8 miles long, which consist primarily of eroded sedimentary rock and approximately 46 mile southeast of the Foothills Fault System the closest major fault line. This impact is **less than significant**.
- ii.) Some moderate ground shaking could affect the proposed project site, however as the structures are proposed to be small, one story restrooms, concession stands and storage facilities, all to be

- constructed in compliance with the Uniform Building Code. Damage due to ground shaking would be very minimal. This impact is **less than significant**.
- iii.) The prospect for ground failure by liquefaction based on depth of groundwater, and soil are **less than significant**.
- iv.) The potential for landslides is unlikely due to the fairly flat nature of the site. **No impact** is anticipated.
- b) Conversion of 198 acres of idle agricultural lands to a sports facility development could have the potential for altering the existing drainage pattern of the site and cause sever soil erosion during both the construction and operating phases of the project as a result of impervious surfaces. This is a **potentially significant impact**.
- c) Due to the relative flatness of the site and the soil type present, the potential for hazards due to landslides lateral spreading, and subsidence is considered **less than significant**.
- d) The project site could be subject to geologic hazards associated with expansive clay soils. This is a **potentially significant impact**.
- e) The project intends to use septic systems or alternative waste disposal systems; therefore, **this is a potentially significant impact**.

| Potentially Significant Impact | Potentially Significant Unless Mitigation Incorporated | Less Than Significant Impact | No Impact | Reviewed Under Previous Document |
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VII. HAZARDS AND HAZARDOUS MATERIALS. Would the project:

- | | | | | | |
|--|-------------------------------------|--------------------------|--------------------------|-------------------------------------|--------------------------|
| a) Create a significant hazard to the public or the environment through the routine transport, use or disposal of hazardous materials? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances or waste within one-quarter mile of an existing or proposed school? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code § 65962.5 and, as a result, would it create a significant hazard to the public or the environment? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

INITIAL STUDY CHECKLIST

| | Potentially Significant Impact | Potentially Significant Unless Mitigation Incorporated | Less Than Significant Impact | No Impact | Reviewed Under Previous Document |
|---|--------------------------------------|--|------------------------------------|-------------------------------------|---|
| e) For a project located within an airport land use plan area or, where such a plan has not been adopted, within two miles of a public airport or a public use airport, would the project result in a safety hazard for people residing or working in the project area? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| g) Impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

Discussion:

- a) The project will result in **no impact** involving the use, transport or emission of any hazardous materials.
- b) Two PG&E pipelines traverse the site from the southeast to northwest, bisecting the site in a diagonal manner. The pipelines are 16-inch and 36-inch diameter high-pressure natural gas pipelines. The site also contains an 18-inch pipeline containing crude oil, owned by the Chevron Corporation. If these pipelines were disturbed during construction activities, or in the unlikely event of other accidental rupture, there is a risk of explosion and fire from these lines. Development of the site in this vicinity may expose people to risk of upset conditions. This is a **potentially significant impact**.

In addition, the potential exists for possible exposure to hazardous materials such as asbestos, from the existing concrete building currently located on the project site, a former underground storage tank, and transformers previously existing on the site. This is a **potentially significant impact**.

Also, the project will be developed on a site previously utilized for agricultural production therefore potentially exposing people or property to a potential risk associated with soil contamination from pesticides and/or herbicides. This is a **potentially significant impact**.

In addition, the project is adjacent to existing industrial plants that store and utilize hazardous materials, which, in the unlikely event of a catastrophic release, could potentially result in hazardous conditions on the project site. This is a **potentially significant impact**.

- c) The project will not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances or waste. **No impact** is expected.

- d) Review of federal, state and local government agency records of the site and properties within a one-mile radius of the site was done regarding potential impacts. Information regarding the site was obtained from aerial photographs and interviews with the Federal Aviation Administration and the current owner of the residential parcel to the south of the project site. The site is not listed on any hazardous materials site list and the database search found no records in regards to the Underground Storage Tank on the site and its removal in 1984. **No impact** is expected.
- e, f) The nearest airport, the Tracy Municipal Airport, is located approximately 2.5 miles southeast of the site. The airport is used as a general aviation facility. The project site is not located within the Area of Influence, as indicated in the County's Airport Land Use Plan. There are no other private airstrips in the project vicinity. Therefore, **no impact** is anticipated from exposure to hazards from airports and airstrips.
- g) The project will not interfere with the implementation of, or physically interfere with an adopted emergency response plan or emergency evacuation plan. Circulation access points will be designed and constructed to meet the minimum requirements of all emergency, fire and police specifications. Therefore, **no impact** is expected.
- h) With regard to wildland fire hazards, the project area is not designated as a wildland fire hazard area and the Tracy Urban Management Plan designates the project area as Industrial, and the area has a low potential for wildfires. Therefore, **no impact** is expected.

| | Potentially Significant Impact | Potentially Significant Unless Mitigation Incorporated | Less Than Significant Impact | No Impact | Reviewed Under Previous Document |
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| VIII. HYDROLOGY AND WATER QUALITY. Would the project: | | | | | |
| a) Violate any water quality standards or waste discharge requirements? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on- or off-site? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| f) Otherwise substantially degrade water quality? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| h) Place within a 100-year flood hazard area structures that would impede or redirect flood flows? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of a failure of a levee or dam? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| j) Inundation by seiche, tsunami or mudflow? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

Discussion:

- a) Water quality standards are provided by the City of Tracy Storm Drainage Master Plan, City of Tracy Design Standards, City of Tracy and San Joaquin County General Plans, the Groundwater Management Plan for the Northern Agencies in the Delta-Mendota Canal Service Area and by the Central Valley Regional Water Quality Control Board, which issues permits for activities that could cause impacts to surface waters and groundwater. There is potential for the project to contribute non-point source pollution from driveways and streets that could enter the storm water system and negatively impact water quality. Such discharge may violate the standards of the Federal Clean Water Act if not mitigated properly. This is a **potentially significant impact**.
- b) Studies have been performed indicating that the City's groundwater production has averaged between 4,000 and 5,000-acre feet/year over the past several years. This amount does not support additional increases in the direct usage of groundwater as a sustainable water supply option. Therefore, City policy limits the use of additional groundwater for emergency purposes only. This is a **potentially significant impact**.
- c) Although the project site's topography is consistent and gently sloping, grading activities would be required for infrastructure and roadway placement. Development of the project would involve grading activities that would disturb project site soils that could result in increased soil erosion. This is a **potentially significant impact**.
- d) There is an existing large watershed area to the southwest of the project site. During major storms, excess runoff collected along the upstream side of the Delta Mendota Canal may spill onto the contiguous agricultural parcel to the west of the project site and continue flowing in a northeasterly direction. The majority of this excess runoff will enter near the midpoint of the west property boundary. An average 100-year sheet flow depth of 0.5 feet was estimated across the site for a flow rate of 420 cfs. New structures in the project area will be subject to flooding during a 100-year flood event. Flooding is expected to occur only during major, relatively rare storm events because there is a relatively significant amount of existing storage available on the upstream side of the Canal and because the agricultural usage of the property that is contiguous to the project will not contribute runoff to the site except during major storm events. This is a **potentially significant impact**.
- e) Implementation of the project would result in the conversion of idle agricultural lands to urban recreational uses with parking areas and would thus result in increases in the amount of surface area impervious to water percolation. Such uses include hardtop sports courts such as basketball courts, parking, roofing, and walkways. These surfaces will increase the volume of stormwater runoff on- and off-site. This is a **potentially significant impact**.
- f) The project may result in the degradation of surface and groundwater quality from construction and operation of the project. Grading and other construction related activities will disturb the soil, which could increase soil erosion rates. In addition, refueling and the parking of construction equipment and other vehicles onsite during construction may result in spills of oil, grease or other pollutants. Development of urban land uses would also result in a substantial alteration in existing site conditions and the introduction of urban pollution sources. Urban runoff typically consists of oils, grease, fuel, antifreeze; byproducts of combustion, fertilizers, and other commonly found pollutants. These pollutants accumulate during the dry season and are released into storm water runoff at high concentration levels during the first storm event of the season. This is a **potentially significant impact**.

- g) The project consists of a recreational sports facility and no housing is proposed as part of this project. **No impact** will result.
- h) Development of the project will result in the alteration of existing drainage patterns. Stormwater drainage improvements will be required to be constructed in order to mitigate the impacts to the drainage pattern and existing flood flows. This is a **potentially significant impact**.
- i) The site is located in federally mapped Flood Zone C, which is denoted as an area of minimal flooding. Flooding is expected to occur only during major, relatively rare storm events because there is a relatively significant amount of existing storage available on the upstream side of the Canal and because the agricultural usage of the property that is contiguous to the project will not contribute runoff to the site except during major storm events. The northern half of the site, however, has been identified as subject to 100-year flood event sheet flows of approximately five inches in depth. New structures in this area of the project site may be subject to flooding during a 100-year flood event. There are two dams, the Camanche and Farmington dams, located on the west side of the Sierra Nevada Mountains in the eastern portion of San Joaquin County. The maps indicate that catastrophic dam failure of these dams would not inundate the site. This is therefore a **less than significant impact**.
- j) The site is not near any large bodies of water, so tsunamis, tidal waves and seiches are not considered a potential hazard at the project site. Due to the inland location of the site, there are **no impacts** from tsunamis or tidal waves.

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| Potentially Significant Impact | Potentially Significant Unless Mitigation Incorporated | Less Than Significant Impact | No Impact | Reviewed Under Previous Document |
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IX. LAND USE AND PLANNING. Would the project:

- | | | | | | |
|--|--------------------------|--------------------------|-------------------------------------|-------------------------------------|--------------------------|
| a) Physically divide an established community? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b) Conflict with any applicable land use plan, policy or regulation of an agency with jurisdiction over the project (including, but not limited to, the general plan, specific plan, local coastal program or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| c) Conflict with any applicable habitat conservation plan or natural community conservation plan? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

Discussion:

- a) The project site is located at the western edge of the City of Tracy within San Joaquin County. Unincorporated county lands form the project site, which is adjacent to and accessed by Schulte Road. The land uses proposed are recreational sports facilities. This land use is proposed to be constructed in an area absent of any established residential community. **No impact** is anticipated.

- b) The Tracy Urban Management Plan (UMP) currently designates the site as Industrial. According to the UMP, community facilities, such as recreational uses, may be appropriate in an industrial area upon a determination of land use compatibility. The project site designation will be required to be amended to reflect UMP designations providing the appropriate underlying land use designations for recreational facilities. This is a **less than significant impact**.

The existing County General Plan designation of the site is Agriculture-Urban Reserve, and the property is zoned for Agriculture. The function of this designation is to address areas expected to become urban, but most likely beyond the timeframe of the General Plan. Examples of Urban Reserve include areas within a City's planned urban expansion, and areas currently undeveloped or devoted to agriculture, but that are also within the logical path of urban development. Under this designation, recreational facilities are an allowable use. This is a **less than significant impact**.

- c) The San Joaquin County Council of Governments has completed a habitat conservation plan for the site. **No impact** is anticipated.

| Potentially Significant Impact | Potentially Significant Unless Mitigation Incorporated | Less Than Significant Impact | No Impact | Reviewed Under Previous Document |
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X. MINERAL RESOURCES. Would the project:

- | | | | | | |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|--------------------------|
| a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

Discussion:

- a) The State Mining and Geology Board identifies sand and gravel resources using Mineral Resource Zone classifications and has identified a number of regionally significant sand and gravel aggregate areas in San Joaquin County. In particular, sand and gravel deposits in the Tracy area represent an important mineral resource. However, there are no significant sand or gravel deposits on the project site and, therefore, the State Mining and Geology Board classifies the site as MRZ-1. Although there are several natural gas fields in San Joaquin County, there are no known natural gas deposits on the project site. **No impact** is anticipated.
- b) The project site is not classified as a locally important mineral resource recovery site in any local or regional plans. **No impact** is anticipated.

| | Potentially Significant Impact | Potentially Significant Unless Mitigation Incorporated | Less Than Significant Impact | No Impact | Reviewed Under Previous Document |
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| XI. NOISE. Would the project result in: | | | | | |
| a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance or of applicable standards of other agencies? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b) Exposure of persons to or generation of excessive ground borne vibration or ground borne noise levels? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| e) For a project located within an airport land use plan area or, where such a plan has not been adopted, within two miles of a public airport or a public use airport, would the project expose people residing or working in the project area to excessive noise levels? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

Discussion:

- The project could result in an increase in noise levels that exceed the City of Tracy Noise Element standards. Off-site locations in the project vicinity would experience increased noise caused by traffic, and daily activities, such as public address systems, crowd noise, etc. generated at the project site. This is a **potentially significant impact**.
- Ground borne vibration will result only temporarily from construction-related activities. This impact is anticipated to be **less than significant**.
- Construction of the proposed project could result in an increase in permanent noise levels in the vicinity. Permanent noise increases associated with the project would result from site preparation such as grading and excavation, construction of roadways, driveways and structures, off-site improvements, human voices, public address systems, mechanical equipment, and vehicles along roadways. Motorized vehicles would not be allowed on the actual playing fields, with the exception of lawn maintenance equipment. The nearest sensitive receptors to the project area are primarily

within the existing residential subdivision located at 11th Street and Lammers road. However, there are other residences in the vicinity that may be affected. Any sensitive receptors in the area with an uninterrupted line of site, including residences, schools and parks would be exposed to increased noise levels. This is a **potentially significant impact**.

- d) Construction activities would intermittently generate noise levels above existing ambient levels in the project vicinity. Activities involved in construction would generate maximum short-term impacts exceeding 70 dBA at 25 feet. Such noises may be audible from Schulte Road. Construction noise levels at and near locations on the project site would fluctuate depending on the particular type, number, and duration of use of various pieces and types of construction equipment. Noise would also be generated during the construction phase by increased truck traffic on area roadways. A potentially significant project-generated noise source would be truck traffic associated with transport of heavy materials and equipment to and from construction sites. The effect of construction noise would depend upon how much noise would be generated by construction, the distance between construction activities and the nearest noise-sensitive receptor, and the existing noise levels at those uses. This is a **potentially significant impact**.
- e, f) The closest airport facility is the Tracy Municipal Airport that is approximately 2.5 miles away from the project site. The site is not within the Area of Influence of the airport or within any airport land use planning area. There are no other airports or private airstrips in the vicinity of the project. **No impact** is anticipated.

| Potentially Significant Impact | Potentially Significant Unless Mitigation Incorporated | Less Than Significant Impact | No Impact | Reviewed Under Previous Document |
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XII. POPULATION AND HOUSING. Would the project:

- | | | | | | |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|--------------------------|
| a) Induce substantial population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

Discussion:

- a) The proposed project is for recreational facilities only and will not add any residential units or create a significant number of jobs that would induce new housing or growth. **No impact** is anticipated.
- b, c) The project site does not contain any housing and is currently used as a radio antenna transmission facility. The project proposed to construct only recreational facilities in the City of Tracy. No housing or people will be displaced by the proposed project. **No impact** is anticipated.

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| Potentially Significant Impact | Potentially Significant Unless Mitigation Incorporated | Less Than Significant Impact | No Impact | Reviewed Under Previous Document |
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XIII. PUBLIC SERVICES. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the following public services:

- | | | | | | |
|-----------------------------|-------------------------------------|--------------------------|-------------------------------------|-------------------------------------|--------------------------|
| a) Fire protection? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b) Police protection? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| c) Schools? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| d) Parks? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| e) Other public facilities? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Discussion:

- a) Development of the project would result in an increase in demand for fire protection services. However, the increase would be minimal as the majority of proposed facilities on-site will not be buildings made from combustible materials. The project itself would not impact the existing ability of the Department to respond, as calls would be responded to by the existing station at the intersection of Schulte and Hansen Roads, which is within ¼ mile of the project site. This is a **less than significant impact**.
- b) Implementation of the project would increase demand for police protection and services. Safety lighting will be located throughout the project site as well. However, recreational uses, especially during nighttime activities, would require additional law enforcement from the County Sheriff's Department. The amount of additional services needed will depend on whether the project will employ private security. This would be determined based on arrangements between the project and the County Sheriff's Department. This is a **potentially significant impact**.

- c) The proposed project is within the jurisdiction of the Tracy Unified School District. No schools are proposed as part of the project. The project is the construction of a sports and recreation facility and does not include the construction of any housing. **No impact** is anticipated.
- d) The proposed project is a sports recreational facility and would not result in a need for additional park space. The addition of this facility will reduce the impacts to parks and recreation facilities in the County as well as the City of Tracy. **No impact** is anticipated.
- e) Development of the project could result in an increase in demand necessitating the expansion of utility services such as natural gas, electric and telephone services. Such services would be provided at the time of request for service. Electric and natural gas services would be provided by PG&E. telephone service in the area is provided by Pacific Bell. Electric and natural gas distribution lines as well as telephone infrastructure would need to be extended and improved to PG&E and Pacific Bell standards and specifications. The provision of electrical, natural gas and telephone services to the project site is available; however, expansion and upgrading of existing systems would be required. This is a **less than significant impact**.

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| Potentially Significant Impact | Potentially Significant Unless Mitigation Incorporated | Less Than Significant Impact | No Impact | Reviewed Under Previous Document |
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XIV. RECREATION.

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|--|-------------------------------------|--------------------------|--------------------------|-------------------------------------|--------------------------|
| a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b) Does the project include recreational facilities, or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Discussion:

- a) The proposed project is a recreational sports facility and would reduce the usage of other existing neighborhood and regional parks and school fields and facilities. The project will result in a decelerated rate of deterioration of other parks and school fields and facilities in the City of Tracy, as some usage will be transferred to the project. **No impact** is anticipated.
- b) The proposed project is a recreational facility on a site that was previously used for radio transmission poles and facilities and idle farmland. The site lies in an area of the City of Tracy Sphere of Influence. The project will result in the conversion of 198 acres of land that has been planned for development in accordance with the City of Tracy's Urban Management Plan. Possible impacts of

the project have been identified in earlier sections of the Initial Study, they include but are not limited to possible impacts on:

- Aesthetics (light and glare)
- Air Quality (particulates during construction and vehicular during operational phases)
- Biological Resources (foraging habitat loss of certain species)
- Soils (erosion)
- Hazards (heightened exposures to dangers, during construction and operational phases)
- Water Quality (non-point source pollution)
- Noise (grading during construction, traffic, public address systems, crowds during operational phases)

This is a **potentially significant impact**.

| | Potentially Significant Impact | Potentially Significant Unless Mitigation Incorporated | Less Than Significant Impact | No Impact | Reviewed Under Previous Document |
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| XV. TRANSPORTATION/TRAFFIC. Would the project: | | | | | |
| a) Cause an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume-to-capacity ratio on roads, or congestion at intersections)? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| e) Result in inadequate emergency access? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| f) Result in inadequate parking capacity? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| g) Conflict with adopted policies, plans or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

Discussion:

- a) The project may result in an increase in vehicle traffic over the existing levels on some local roadway segments, including W. Schulte Road, Lammers Road and 11th Street, Linne Road and on Corral

Hollow Road, located southwest of the study area. The project may also result in some increased vehicle trips on Interstate 205 and Interstate 580. This is a **potentially significant impact**.

- b) The project may result in increased vehicle trips on Interstate 205 and Interstate 580. Some segments of both freeways are already operating at LOS F conditions during peak hours, including eastbound I-580 and eastbound I-205 between Lammers Road and Chrisman Road, in the PM peak hour. Project traffic may exacerbate these conditions. Therefore, this is a **potentially significant impact**.
- c) The project will not result in a change in air traffic patterns. **No impact** is anticipated.
- d,e) Schulte Road is a straight road course in the section adjacent to the project site, visibility is unrestricted. The site will be accessible from two entrances along Schulte Road. Both site access entries will be designed as two-lane roads, to provide for turning lanes at project buildout. Site access points also provide room for turn-arounds without having to enter the main ball field area. The site road design incorporates no cul-de-sacs that would not inhibit emergency vehicle access and turn-around. Driveway lengths and road designs will provide space for several automobiles to be stopped at an intersection without interference with other traffic flow patterns. Traffic-calming measures will be implemented to reduce the risk from increased traffic hazards. Separations between roadways and parking areas are made for efficient access, as well as to minimize pedestrian conflicts. **No impact** is expected.
- f) Parking areas will be located throughout the project site, providing access to each of the ball fields individually and accommodating 2,166 total spaces. This number of parking spaces allots 1,200 spaces for baseball facilities, 188 for softball, 105 for football, 525 for soccer and 148 spaces for general recreation. **No impact** is expected.
- g) The proposed project will not conflict with any adopted policies, plans or programs supporting alternative transportation. **No impact** is anticipated.

| | | | | |
|--------------------------------------|--|------------------------------------|--------------|---|
| Potentially Significant Impact | Potentially Significant Unless Mitigation Incorporated | Less Than Significant Impact | No Impact | Reviewed Under Previous Document |
|--------------------------------------|--|------------------------------------|--------------|---|

XVI. UTILITIES AND SERVICE SYSTEMS. Would the project:

- | | | | | | |
|--|-------------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

INITIAL STUDY CHECKLIST

| | Potentially Significant Impact | Potentially Significant Unless Mitigation Incorporated | Less Than Significant Impact | No Impact | Reviewed Under Previous Document |
|---|--------------------------------------|--|-------------------------------------|--------------------------|---|
| d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| e) Result in a determination by the wastewater treatment provider that serves or may serve the project that it has adequate capacity to serve the project's projected demand, in addition to the provider's existing commitments? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| g) Comply with federal, state and local statutes and regulations related to solid waste? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Discussion:

- a) The proposed project would result in an increase in wastewater generation as a result of on-site facilities, restrooms and irrigation. The project site is undeveloped and is not connected to the City sewer. Initially, wastewater will be handled with a combination of septic systems and chemical treatment of temporary bathroom facilities. The build-out plan for wastewater management has not been identified. This is a **potentially significant impact**.
- b) The previous project plan included the construction of an on-site water reclamation and treatment facility; however, no such facility is proposed as part of this project. The long-term sewer infrastructure and wastewater treatment needs will need to be identified. This is a **potentially significant impact**.
- c) The project will result in an increase in impervious surfaces, which could increase the rate and amount of stormwater runoff. There are no natural streams or drainage courses located on the project site, but there is a network of irrigation ditches and pipes that serve the site. There are currently no public storm drain facilities adjacent to the project site and the watershed lacks a permanent outfall. Existing drainage from the project site is collected in perimeter drainage ditches and is carried to the Sugar Cut Outfall on the northeast side of Tracy. The City requires that new development projects eventually utilize a City owned and maintained storm drainage outfall that would discharge to Old River to the north at the Wickland outfall. The outfall alignment has not been specifically defined at this time but would generally consist of a combination storm drain and open ditch system that would ultimately deliver a controlled rate of discharge. The outfall would serve the project site watershed and the overall Tracy West area, which includes numerous surrounding properties. Generally, the City intends to limit the maximum discharge rate for this outfall to about 30 cfs during a 100-year storm to significantly limit new discharges into Old River. The City will require that the controlled rate of discharge be achieved through stormwater detention storage at new development projects in the Westside area. This is a **potentially significant impact**.

- d) The project may require potable and non-potable water in excess of the City's ability to provide. The project would require the construction of potable and non-potable water facilities. Two supply sources have been identified to provide potable and non-potable water for the project. These sources are the West Side Irrigation District supply and a "water exchange program". Potable water demands would be met through the exchange of untreated surface water obtained through a will-service letter from the WSID to the City of Tracy. This water, from WSID's Upper Main Canal, would be delivered to a storage pond in the western portion of the project site and then pumped from the pond into the non-potable distribution system. Non-potable water demand for irrigation would likely be met through the use of untreated surface water supplies provided by WSID according to the terms of a will-service letter provided by WSID to the City of Tracy that is specific to the project. This is a **potentially significant impact**.
- e) The proposed project would result in an increase in wastewater generation as a result of on-site facilities, restrooms and irrigation. The project site is undeveloped and is not connected to the City sewer system. Major wastewater conveyance facilities in the project area consist of the Hansen Road Sanitary Sewer Collection System, which generally extends from Schulte Road to the City's Wastewater Treatment Plant north of Interstate 205, the Corral Hollow Trunk Sewer and the C Street sewer lift station. In the vicinity of the project site, the Hansen sewer line flows to the northeast in a 36-inch line that runs underneath the West Side Irrigation District Upper Main Canal in the northwest corner of the project site. Initially, wastewater will be handled with a combination of septic systems and chemical treatment of temporary bathroom facilities. This is a **potentially significant impact**.
- f, g) The project is not expected to result in the need for expansion of the existing, or construction of a new, landfill or transfer facility to accommodate solid waste generated by the project or to result in increased demand for solid waste collection and disposal. The amount of waste to be generated by the project will be less than the daily intake capacity of 1,000 tons of the existing Tracy Materials Recovery and Transfer Station. The landfill has ample capacity to accept solid waste from the project, including additional construction debris. The project is not expected to exceed solid waste disposal regulations. This is a **less than significant impact**.

| Potentially Significant Impact | Potentially Significant Unless Mitigation Incorporated | Less Than Significant Impact | No Impact | Reviewed Under Previous Document |
|--------------------------------------|--|------------------------------------|--------------|---|
|--------------------------------------|--|------------------------------------|--------------|---|

XVII. MANDATORY FINDINGS OF SIGNIFICANCE

- a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of rare or endangered plants or animals, or eliminate important examples of the major periods of California history or prehistory?



INITIAL STUDY CHECKLIST

| | Potentially Significant Impact | Potentially Significant Unless Mitigation Incorporated | Less Than Significant Impact | No Impact | Reviewed Under Previous Document |
|--|--------------------------------------|--|------------------------------------|--------------------------|---|
| b) Does the project have impacts that are individually limited, but cumulatively considerable? "Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects. | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| c) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Discussion:

- a) Based upon the findings of this environmental initial study, the proposed project **could significantly degrade or diminish** the quality of the environment and important habitat areas resulting in a potentially significant impact. **An Environmental Impact Report will be prepared to conduct further analysis.**
- b) There are **potentially significant** cumulative effects with other projects in the vicinity which have been identified and discussed throughout the initial study. **An Environmental Impact Report will be prepared to conduct further analysis.**
- c) The presence of identified hazardous substances within the project area is **potentially significant**. **An Environmental Impact Report will be prepared to conduct further analysis.**

REFERENCES

City of Tracy. 1993. *City of Tracy Urban Management Plan/General Plan*. Tracy, California. July 19, 1993.

City of Tracy. 1993. *Final EIR for the City of Tracy Urban Management Plan/General Plan*. Tracy, California. July 19, 1993.

City of Tracy, 1997. *City of Tracy Municipal Code*. Tracy, California. June, 1997.

County of San Joaquin. 1992. *General Plan 2010*, Volumes I, II and III. San Joaquin County, California, July 29, 1992.

NOTICE OF PUBLIC SCOPE MEETING

DEVELOPMENT AND ENGINEERING SERVICES DEPARTMENT
"PUBLIC MEETING"
SCOPING MEETING FOR TRACY YOUTH SPORTS FACILITY
ENVIRONMENTAL IMPACT REPORT

A Public Meeting will be held by the City of Tracy on Tuesday, September 23, 2003, at 6:00 p.m., or as soon after as possible, in the Community Room A at the Tracy Community Center, 300 East Tenth Street, Tracy, to consider the following:

Scope, focus, and content of the Environmental Impact Report for the proposed Tracy Youth Sports Facility to be located at 15178 W. Schulte Road, Assessor's Parcel Number 209-230-03, a site formally known as the "Antenna Farm".

As stated in California Environmental Quality Act (CEQA) Guidelines Section 15083(a), the scoping meeting is held to help identify the range of actions, alternatives, mitigation measures, and significant effects to be analyzed in depth in the EIR and in eliminating from detailed study issues found not to be important.

All interested persons are invited to be present and to submit statements orally or in writing before or during the meeting.

Information concerning this matter may be obtained by contacting John Palmer, Associate Planner, at the Development and Engineering Services Department, City Hall Annex, 520 Tracy Blvd., Tracy, CA 95376, (209) 831-4600.

*NOTICE OF PREPARATION AND
COMMENT LETTERS*



Arnold
Schwarzenegger
Governor

STATE OF CALIFORNIA
Governor's Office of Planning and Research
State Clearinghouse and Planning Unit



Jan Boel
Acting Deputy
Director

Notice of Preparation

February 27, 2004

To: Reviewing Agencies

Re: Tracy Youth Sports Facility
SCH# 2004022139

Attached for your review and comment is the Notice of Preparation (NOP) for the Tracy Youth Sports Facility draft Environmental Impact Report (EIR).

Responsible agencies must transmit their comments on the scope and content of the NOP, focusing on specific information related to their own statutory responsibility, within 30 days of receipt of the NOP from the Lead Agency. This is a courtesy notice provided by the State Clearinghouse with a reminder for you to comment in a timely manner. We encourage other agencies to also respond to this notice and express their concerns early in the environmental review process.

Please direct your comments to:

John Palmer
City of Tracy
520 Tracy Boulevard
Tracy, CA 95376

RECEIVED

MAR 03 2004

CITY OF TRACY

with a copy to the State Clearinghouse in the Office of Planning and Research. Please refer to the SCH number noted above in all correspondence concerning this project.

If you have any questions about the environmental document review process, please call the State Clearinghouse at (916) 445-0613.

Sincerely,

Scott Morgan
Associate Planner, State Clearinghouse

Attachments
cc: Lead Agency

Document Details Report

State Clearinghouse Data Base

SCH# 2004022139
Project Title Tracy Youth Sports Facility
Lead Agency Tracy, City of

Type NOP Notice of Preparation

Description The project site is 198 acres. The proposed site plan includes a 32-acre area on the western side of the site, on which football and soccer fields are planned. Baseball and softball fields are planned within seven pie-shaped clusters, consisting of four to five ball fields each, in addition to five separate ball fields adjacent to the southern site boundary. The site plan provides the opportunity for the incorporation of both permanent and portable buildings, as site development progresses. Parking areas will be located throughout the project site, providing access to each of the ball fields and accommodating 2,166 spaces. A minimum of four playground and picnic areas will be incorporated throughout the site. The project construction will be divided into three phases.

Lead Agency Contact

Name John Palmer
Agency City of Tracy
Phone 209-831.4401
email
Address 520 Tracy Boulevard
City Tracy **State** CA **Zip** 95376
Fax

Project Location

County San Joaquin
City Tracy
Region
Cross Streets Hansen / Lammers
Parcel No. 209-230-03
Township **Range** **Section** **Base**

Proximity to:

Highways I-205
Airports
Railways Southern Pacific
Waterways Delta Mendota
Schools Tracy Unified Schools
Land Use AG-40; AG-40

Project Issues Aesthetic/Visual; Agricultural Land; Air Quality; Archaeologic-Historic; Cumulative Effects; Drainage/Absorption; Flood Plain/Flooding; Forest Land/Fire Hazard; Geologic/Seismic; Landuse; Minerals; Noise; Public Services; Recreation/Parks; Septic System; Sewer Capacity; Social; Soil Erosion/Compaction/Grading; Solid Waste; Toxic/Hazardous; Traffic/Circulation; Water Quality; Water Supply; Wildlife

Reviewing Agencies Resources Agency; Department of Parks and Recreation; Department of Conservation; Department of Water Resources; Department of Fish and Game, Region 2; Native American Heritage Commission; California Highway Patrol; Department of Toxic Substances Control; Regional Water Quality Control Bd., Region 5 (Sacramento); Caltrans, District 10

Date Received 02/27/2004 **Start of Review** 02/27/2004 **End of Review** 03/29/2004

Note: Blanks in data fields result from insufficient information provided by lead agency.

Sau Jazmin

SCH# 20040221.39

Dept. of Fish & Game 2
Banky, Curfiss
Region 2

- North American Healthcare**

San Jacinto

- Development
Cathy Creswell
Housing Policy Division**

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- California Highway Patrol**

उद्देश

- Air Resources Board**
 **Airport Projects**
Jim Lerner

Dept. of Transportation

- Dept. of Transportation 1**
Mike Eagar
District 1

Independent Commissions, Boards

- ☐ Delta Protection Commission
Debby Eddy

**Governor's Office of Planning
& Research
State Clearinghouse**

San Jacinto

- ### Case Studies - Planning

한글서체

Regional Water Quality Control Board (RWQCB)

- ENVIRONMENTAL DOCUMENT
COORDINATOR**
San Francisco Bay Region (21)

उद्देश

- Air Resources Board**
 **Airport Projects**
Jim Lerner

Dept. of Transportation

- Dept. of Transportation 1**
Mike Eagar
District 1

Independent Commissions, Boards

- ☐ Delta Protection Commission
Debby Eddy

**Governor's Office of Planning
& Research
State Clearinghouse**

San Jacinto

- ### Case Studies - Planning

한글서체

Regional Water Quality Control Board (RWQCB)

- ENVIRONMENTAL DOCUMENT
COORDINATOR**
San Francisco Bay Region (21)

03-03-2004 03:09pm From:CITY OF TRACY

12098314110

T-538 P.002/003 F-985

STATE OF CALIFORNIA — BUSINESS, TRANSPORTATION AND HOUSING AGENCY

ARNOLD SCHWARZENEGGER Governor

DEPARTMENT OF TRANSPORTATION

P.O. BOX 2048 (1976 E. CHARTER WAY)
STOCKTON, CA 95201
TTY: California Relay Service (800) 735-2929
PHONE (209) 941-1921
FAX (209) 948-7194



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March 3, 2004

**10-SJ-I-5/580-PM Various
Notice of Preparation
Tracy Youth Sports Facility
SCH#2004022139**

Mr. John Palmer
City of Tracy
520 Tracy Boulevard
Tracy, CA 95376

Dear Mr. Palmer:

Thank you for the opportunity to review the Notice of Preparation (NOP) for the Tracy Youth Sports Facility draft Environmental Impact Report (EIR). The proposed project is located at 15178 W. Schulte Road (APN 209-230-03) and is in an unincorporated San Joaquin County area, within one mile of the City of Tracy's city limits in the City's Sphere of Influence.

We look forward to reviewing the Draft Environmental Initial Report (DEIR). The Initial Study shows potentially significant impacts to Interstates I-5, 205 and 580 facilities. Please include the following comments for the project:

Please provide a Traffic Impact Study (TIS) in accordance with the Caltrans "Guide for the Preparation of Traffic Impact Study," December 2002 edition.

If you have any questions or would like to discuss these comments in more detail, please contact Lynn O'Connor at (209) 948-7575 (e-mail: lynn_o'connor@dot.ca.gov) or me at (209) 941-1921. We look forward in continuing to work with you in a cooperative manner.

Sincerely,

**TOM DUMAS, Chief
Office of Intermodal Planning**

Mr. John Palmer
March 3, 2004
Page 2

c: Scott Morgan
State Clearinghouse
P.O. Box 3044
Sacramento, CA 95812-3044

Cym

TRAQC – Tracy Region Alliance for a Quality Community

PO Box 1299

Tracy, CA 95378

email: traqc@reachme.netwww.traqc.com

Delivered via US Mail and by hand on 3/24/04

March 24, 2004

John Palmer, Associate Planner
City of Tracy, DES
520 Tracy Boulevard
Tracy, CA 95376

RECEIVED
MAR 25 2004
CITY OF TRACY

**RE: Comments on Notice of Preparation for Tracy Youth Sports Park/Antenna Farm
EIR**

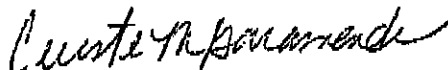
Dear Mr. Palmer:

Enclosed are comments from the local citizen group, Tracy Region Alliance for a Quality Community (TRAQC), regarding the NOP for the Tracy Youth Sports Park /Antenna Farm EIR issued February 27, 2004.

The proposed location of the Tracy Youth Sports Park at the Antenna Farm presents numerous significant impacts on the health and safety of our children that would use the site in addition to other surrounding impacts, including but not limited to cumulative air quality impacts and public health and safety impacts from hazards on and adjacent to the site (e.g., high pressure gas lines, biomass and glass plants). It is essential that the EIR thoroughly address these significant cumulative impacts that cannot be mitigated at all or will require additional funds by the City of Tracy to mitigate, relative to the superior alternative of the existing city park land at 11th and Chrisman.

Please let me know if you have any questions or need any additional information.

Sincerely,



Celeste M. Garamendi

Air Quality

Project Impacts

The project will generate both mobile source and area source criteria pollutants and will increase total criteria air pollutants in the region. The SJVUAPCD has recently requested reclassification to extreme and new indirect source rules and mitigation measures should be considered in the EIR.

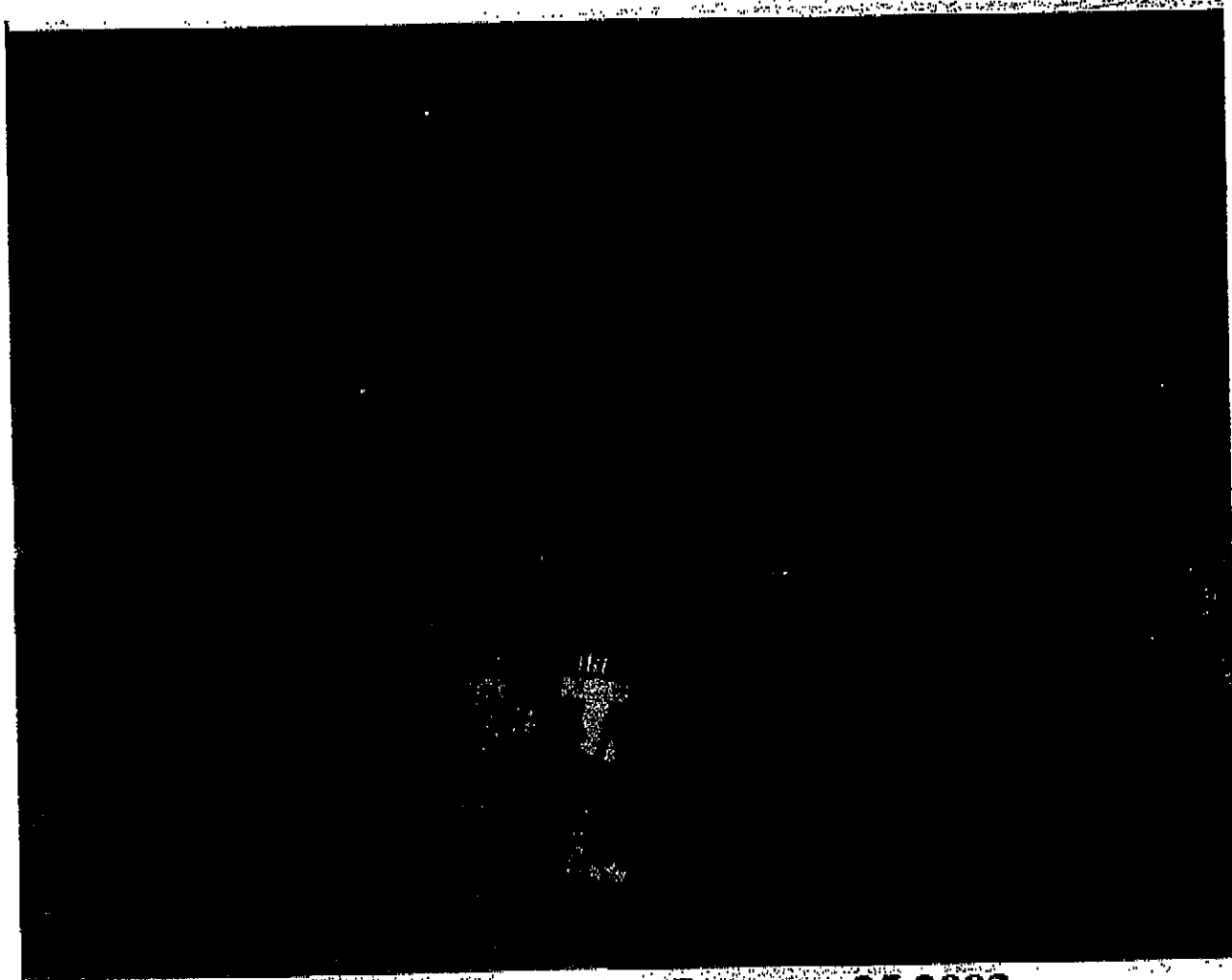
The projects development and operation will also increase emissions of PM-10 in the project area a problem which has lead to unhealthy standards for PM-10 at the nearest monitoring station for approximately 60 days a year in each of the last several years. The EIR should address transportation and construction measures to mitigate local impacts from the projects operation and construction.

Cumulative Air Quality Impacts

The EIR should address the air quality impacts related to the projects location between industrial uses to the east, Owens Brockway, Tracy Biomass Plant, and the Tracy Peaker Plant and two proposed business parks the Tracy Gateway Project and the Cordes Ranch Project and the existing Patterson Pass Business Park. The Tracy Youth Sports Facility will be surrounded by industrial uses. Large amounts of Residential development are also projected to be occurring near the project area with the development of the Tracy Hills and South Schulte Planning areas. Appendix A to this submittal contains the latest isopleths generated for these developments by the California Energy Commission and modeling files can be made available upon request. The Isopleths in Appendix A reveal that the project area is the location of some of the highest concentrations of PM-10 from new development in the Tracy area and the health impacts associated with young children (sensitive receptors) exercising at this site must be carefully evaluated in the EIR. Children are more sensitive to air pollution. Children breathe faster especially when exercising and are more susceptible to damage to their developing organs and immune systems. Studies specifically involving children below age 14 suggest small reductions in lung function, exacerbation of asthma, and increased medical or hospital visits associated with PM10 or PM in general (U.S. EPA, 1998). For example, among studies conducted using U.S. data, short-term exposure to PM10 has been associated with asthma exacerbation in Los Angeles (Ostro et al., 1995), cough among non-asthmatic children (Schwartz et al., 1994), and lung function (Hoek et al., 1998). In addition, several studies have reported effects on children resulting from chronic exposure to PM. Monitoring in San Joaquin County has shown an average of about 60 days per year of unhealthy PM-10 levels for the last several years. Examination of the high background PM-10 levels in combination with the new development projects should be a priority in the air quality analysis in the EIR.

Public Health and Safety

The project is located near the Owens Illinois Glass Plant. The Glass Plant experienced an explosion and large fire on January 25, 2003 just a year ago. This facility has demonstrated that it is one of the most dangerous industrial facilities in Tracy making it a poor neighbor for a youth sports park. The EIR should address the impacts to the safety of young children near a heavy industrial use that has existed for many years. The Glass Plant stores large amounts of ammonia, and other toxic and flammable substances on site. The Glass Plant is reportedly considering expansion of its operations if this is true the EIR should provide a revised Health Risk Assessment to reflect increased emissions. The safety risk of additional storage and transportation of hazardous materials should be evaluated.



Owens Illinois Glass Plant Fire January 25,2003

The Tracy Biomass Plant has been the site of two of the largest fires in Tracy's History. In 1990 the storage pile caught fire and burned for three days. In 1996 the storage pile ignited again requiring seventeen Fire Districts to respond to extinguish the blaze. Many hazardous materials are stored onsite including large amounts of ammonia and sulfuric acid and the plants record for accidents show that risk of accidental release should be considered very high. The EIR should not dismiss the possibility of an accident at this as facility low. The storage pile is also a large source of PM-10 and the offensive odors of fermenting wood chips will cause odor complaints. The EIR should discuss in detail the risk of locating children near this facility.



Mary McGurley and Enrique Gutierrez/Tracy Press

Firefighters — representing 17 fire districts — work the hard-to-extinguish blaze southwest of Tracy Monday morning at the Tracy Biomass Plant. The fire, which started on top of a pile of burning wood chips, was contained after only two hours had passed since the initial alarm, firefighters say the fire will burn for a day or more. A similar fire at the same plant in 1990 burned for three days. That fire was attributed to spontaneous combustion, with high temperatures and breezy conditions cited as

The newly constructed Tracy Peaker Plant is next to the project site. The Tracy Peaker access road for hazardous materials transportation runs between the Peaker Plant and the project site. The Peaker Plant stores 9,000 gallons of Ammonia, thousands of gallons of flammable materials and several thousand gallons of Hazardous chemicals onsite.

The current health risk assessment for these industrial facilities does not include a Combined Cumulative Health Risk Assessment. Considering the proposal to locate children next to the heavy industrial area a Combined Health Risk assessment should be included in the EIR. Studies by the BAAQMD have shown that when high emitting industrial facilities are grouped together Cumulative Health Risks can occur. To date no Combined Health Risk Assessment has been performed for these Industrial sites and the Glass plant and Biomass Plant are both listed as Intermediate Risks. Conversation with the SJVUAPCD representative Leland Villalovoz reveal that the Biomass HRA Score is 4.429 and the Glass Plant HRA Score is 8.9 in their latest evaluations not yet published.

The project site is also crossed by two PGE Natural Gas Pipelines and an oil pipeline owned by Chevron. This fact alone caused the Tracy Planning Commission to reject this site for the Tracy Learning Center due to the unacceptable risk of upset to the gas pipelines and the associated catastrophic casualties that would occur to the students. It is unclear why this site could be considered for a Youth Sports Park after Tracy's Planning body has rejected it as an inappropriate area to locate children and the current City council did not reverse or challenge that decision. The EIR should address this policy

inconsistency considering the proposed use of this property as a playground for Tracy's most valuable asset.

The project site has the potential for asbestos contamination from the existing building on site. PCB contamination may exist from the former onsite electrical transformers. An underground storage tank may be responsible for subsurface contamination. The use of pesticides on the property and adjacent agricultural lands should be investigated. Potential onsite contamination should be the subject of soil and water sampling not speculation in the EIR. Cost estimates for removal of any contaminated soil and remediation of subsurface contamination of soil and water should be included in the EIR.

The Delta Mendota Canal is located to the south of the project site, carrying up to 10,000 cfs and storing approximately 4 acre feet of water for every 100 feet of linear canal distance. During a seismic event the canal has the potential to flood the project site due to canal failure. The Delta Mendota Canal is aging and the potential for canal failure increases over time and the likelihood of a large magnitude earthquake increases with time. The EIR should address this potential hazard in terms of the likelihood of occurrence and most importantly in relation to the magnitude of the catastrophe that could occur with thousands of youths at the site in close proximity to the canal.

Existing Land Uses

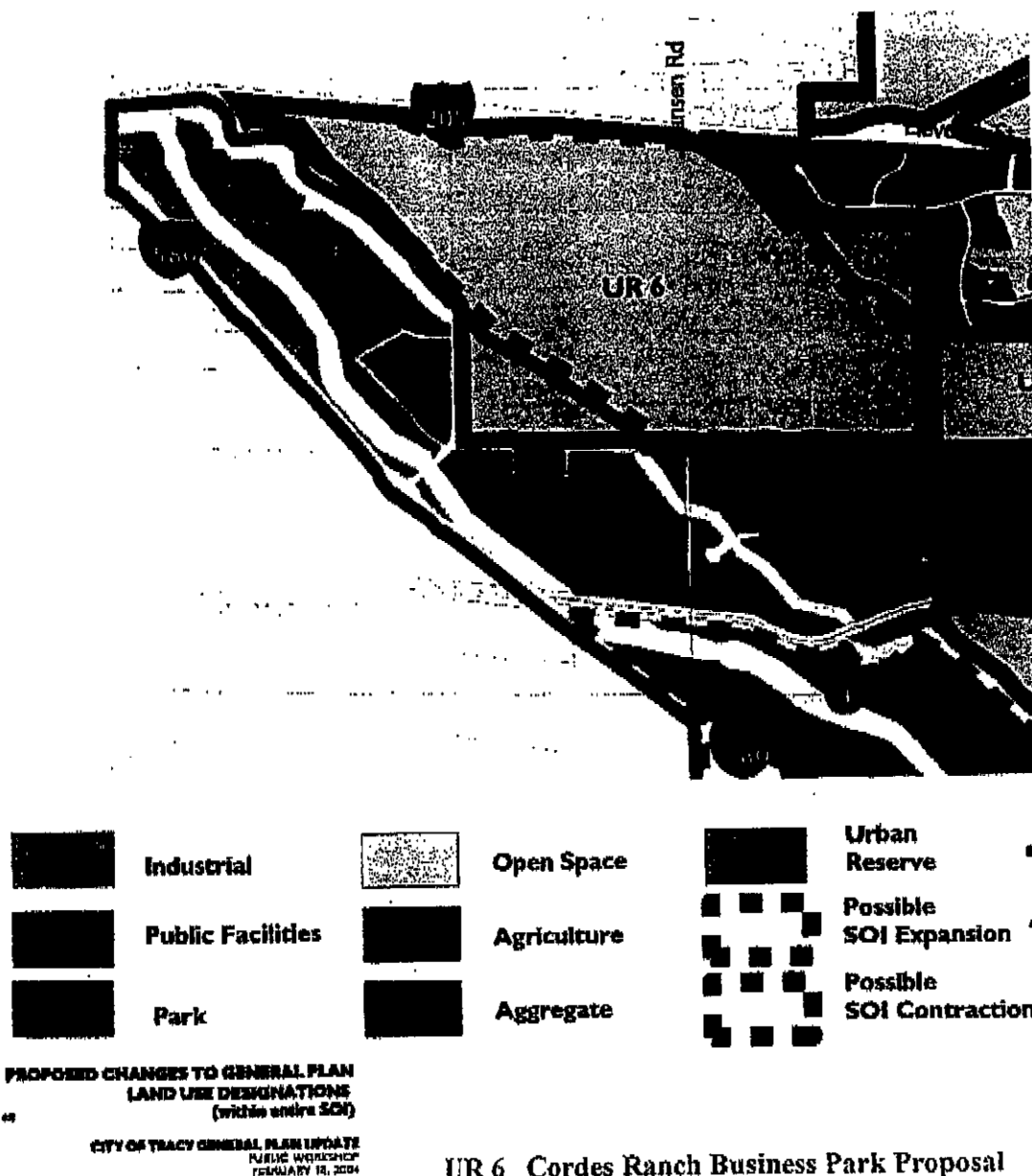
The proposed sports park is incompatible with existing land uses. The project site is bounded to the west by high intensity industrial uses which are incompatible with a youth sports facility. High levels of emissions and transportation and storage of hazardous materials in conjunction with the current industrial facilities safety records need to be discussed in the EIR. The Tracy Biomass plants waste storage piles present a health hazard, fire hazard, and odor problem. Fly ash Emissions from the Glass Plant Bag House pose an extreme health risk to children, asthmatics and people with respiratory problems. The Patterson pass Business Park and the Safeway distribution center are South of the proposed project. High volumes of diesel truck traffic from these facilities could pose air quality and safety issues to users of the sports facility.

Other existing uses adjacent to the park are agricultural. Farming operations such as disking, burning, and agricultural spraying are incompatible with a youth sports park. The EIR should discuss the City of Tracy's right to farm ordinance and current County development of the County's Right to Farm Ordinance. Conversion of Agricultural land should be the subject of a farmland mitigation agreement and agricultural easements should be considered. The recent development of the Tracy Peaker Plant contributed \$86,000 to the American Farmland Trust for the conversion of 34 acres from agricultural use. A comparable formula should be applied to the proposed project for preserving farmland in San Joaquin County. Dairy operations within the general vicinity of the project could generate additional odor complaints from parents and youth utilizing the sport complex.

The existence of two high pressure natural gas lines removes a large portion of the 200 acre parcel from development. Original visions of a 150 acre Sports Park have been limited by the necessary 600 foot plus safety easements around the gas pipelines.

Proposed Land Uses

Proposed land uses in the current Tracy General plan update near the sports park are entirely industrial. The Patterson Pass Industrial Park the Gateway Project and the proposed Cordes Ranch Business Park (Urban Reserve 6) are now being considered as the surrounding uses. The EIR should address the planning and infrastructure impacts of the Sport Park with the other planned industrial uses. Previously discussed industrial impacts should be addressed for the proposed land uses in the General Plan Update.



Biological Resources

As proposed the project will in conjunction with other current and future development projects contribute to the loss of open space in the region resulting in a decline of biological resources and diversity. San Joaquin Kit Fox, Burrowing Owls and the Swainson Hawk are species of concern that occur in the vicinity of the project site. Participation in the SJMHCP should be required in the EIR as this area is a migrating corridor for the kit fox and the nighttime lighting and added human activity will degrade the project site as habitat for this special status species. The large increase in vehicular activity will discourage wildlife from entering the project site and lead to incidental take of special status species through collisions with automobiles. The recently constructed Tracy Peaker Plant participated in the SJMHCP at a cost of \$1,690 an acre for 38 acres for a total of \$58,474.

Traffic and Transportation

The project will bring a huge increase to traffic in the project vicinity. Lammers and Schulte road will require improvements to safely accommodate the large increase in vehicle trips. The primarily rural character of these two roads will change with the large volumes of traffic the project will generate. The large volumes of traffic have the potential to interfere with current and planned industrial uses. Large amounts of air pollutants will be emitted in an area which already has elevated pollution levels. No Public Transit currently serves the project site and will need to be developed.

Public Services

The proposed Youth Sport Facilities will increase the need for Police and Fire Services. The area is currently served by the County Sheriffs Department and the Tracy Rural Fire Department. The location of the project is outside the current city limits and service area and an increase in manpower and facilities will be necessary to serve the project. While taxes such as sales and property taxes normally assist in compensating the increased staffing requirements associated with urban development the Youth Sports Park would generate little revenue compared with the demand for services. The EIR should discuss how these services will be financed and the extraordinary burden of supplying police and fire protection to thousands of youth in a hazardous industrial area.

Alternatives

The project has a clearly superior alternative to the Antenna Farm Site. The City purchased a parcel at 11th and Chrisman about 15 years ago. The Chrisman site eliminates many of the projects impacts because it is not located adjacent to heavy industrial uses with poor safety records. Traffic and circulation impacts would be lessened at this site since 11th street is already widened and could be further improved in the planned Measure K improvements of these roadways. Impacts to current residents on Lammers and Schulte Road would not occur. PGE does not have two major gas pipelines running through the Chrisman site so the property could be fully utilized. The Chrisman site could now provide a larger youth sports facility than the proposed project site. The city already owns the site so transfer of the property and multi-jurisdictional approval would be lessened. Infrastructure costs would be much less for the Chrisman site. The Chrisman site is not located in the critical Tracy Triangle for Kit Fox Habitat. The EIR should compare the Chrisman site and other logical locations to the proposed project.

Appendix A

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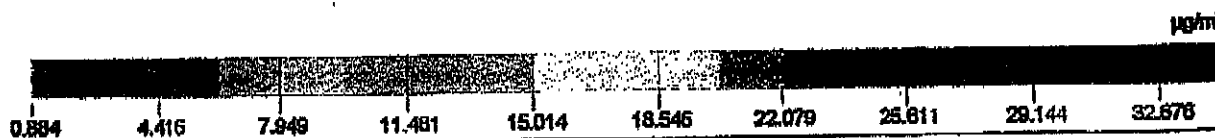
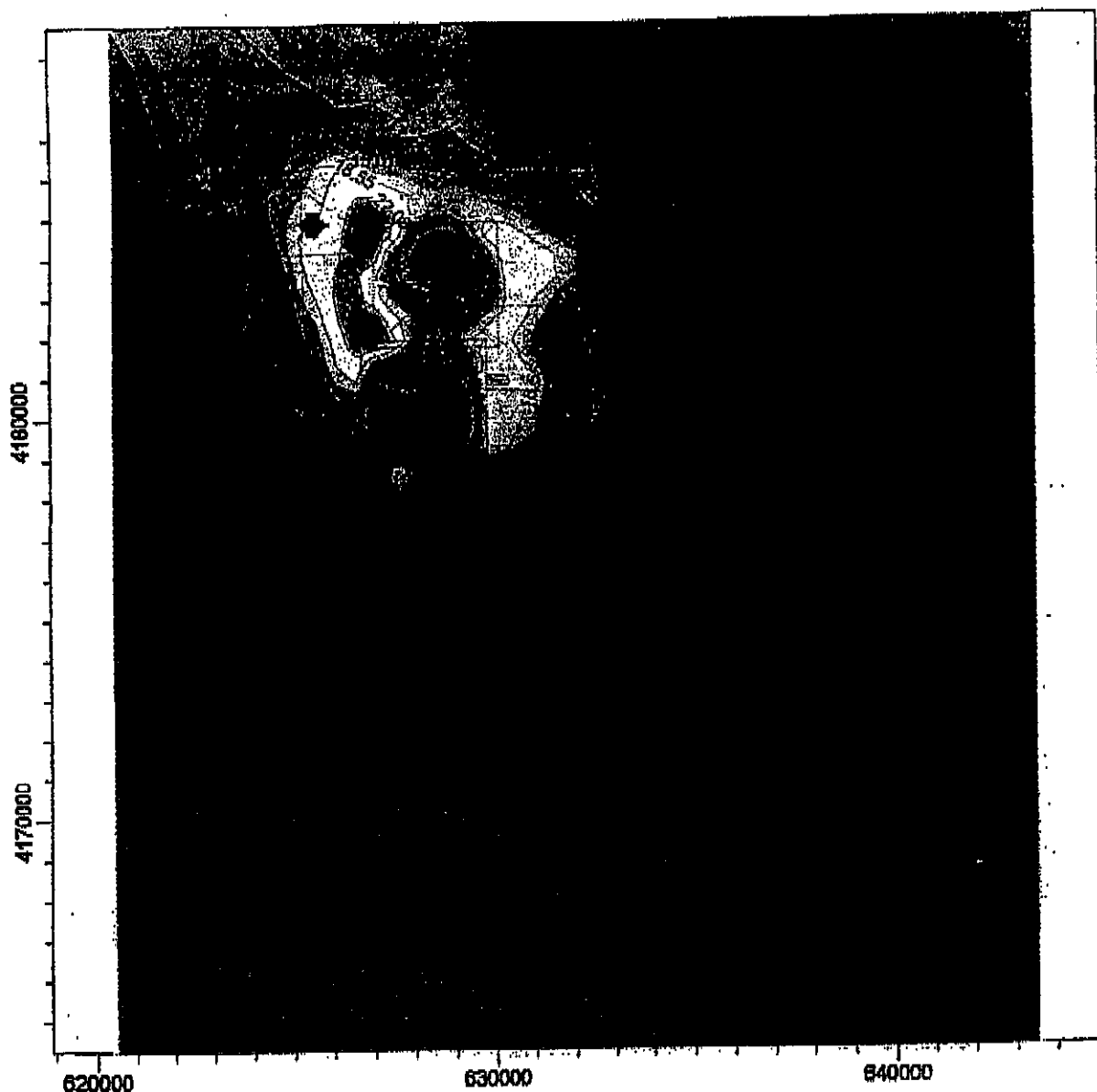
- Figure 1 24 Hour PM-10 Construction Impacts**
Tracy Hills, South Schulte, Tracy Peaker, Mountain House, EAEC, Tesla
- Figure 2 24 Hour PM-10 Operation Impacts**
Tracy Hills, South Schulte, Tracy Peaker, Mountain House, EAEC, Tesla
- Figure 3 24 Hour PM-10 Impacts Gateway Project**
- Figure 4 24 hour PM-10 Impacts Owens Illinois**
- Figure 5 24 hour PM-10 Impacts Tracy Biomass Plant**
- Table 1 Owens Illinois 1989 HRA Emission Summary**
- Table 2 Tracy Biomass Plant 1997 HRA Emissions Summary**


AIR QUALITY Figure 1

PROJECT TITLE

EAEC - Criteria Pollutants - PM10 24-HOUR

PLOT FILE OF HIGH 1ST HIGH 24-HR VALUES FOR SOURCE GROUP: ALL



| | | | | |
|--|-------------------|----------|--------------------|---|
| MODELING OPTIONS: CONC, RURAL, ELEV, DFAULT | | | COMPANY NAME | |
| OUTPUT TYPE CONC | RECEPTORS 3456 | COMMENTS | MODELER | SCALE 0  5 km |
| MAX 32.67628 | UNITS µg/m³ | | DATE 10/10/2002 | PROJECT NO. |

POST View - Lakes Environmental Software

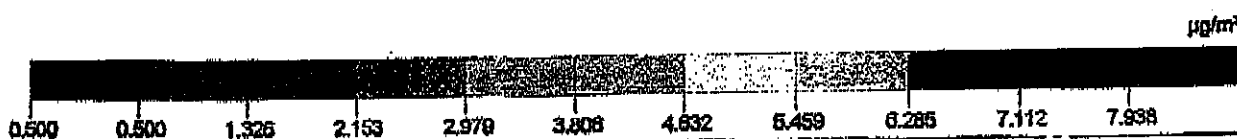
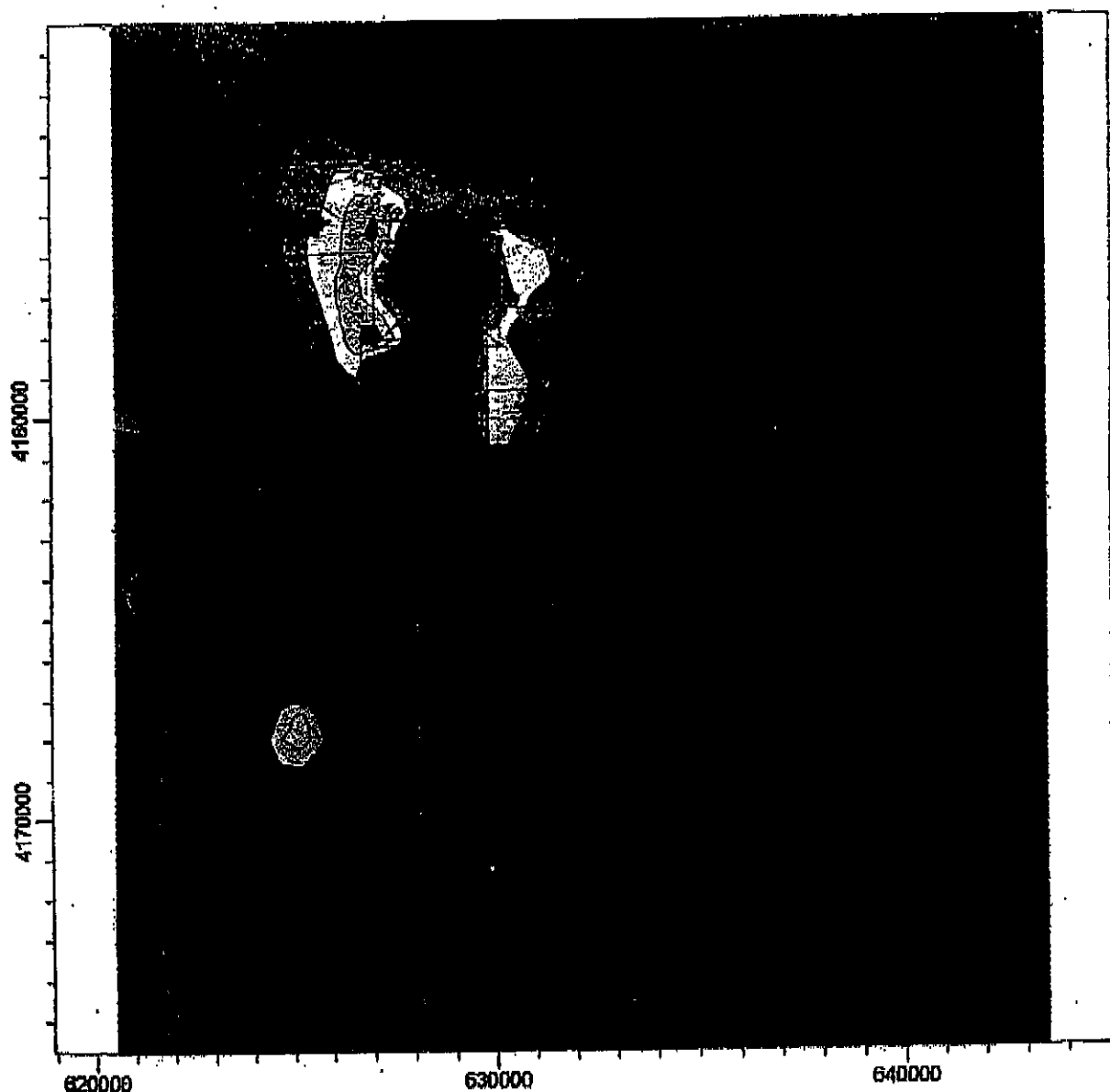
C:\UNZIPPED\TESCUM_ST_JBBCT TO TNG\EAEC\TSCUM1S24H1GALL.PLT


PROJECT TITLE:

AIR QUALITY Figure 2

EAEC - Criteria Pollutants - PM10 24-HOUR

PLOT FILE OF HIGH 1ST HIGH 24-HR VALUES FOR SOURCE GROUP: ALL



| | | | | |
|--|--------------------|-----------|---------------------|--|
| MODELING OPTIONS: CONC, RURAL, ELEV, DFAULT | | | COMPANY NAME: | |
| OUTPUT TYPE: CONC | RECEPTORS: 3455 | COMMENTS: | MODELER: | SCALE: 0  5 km |
| MAX: 7.93806 | UNITS: µg/m³ | | DATE: 10/10/2002 | PROJECT NO.: |

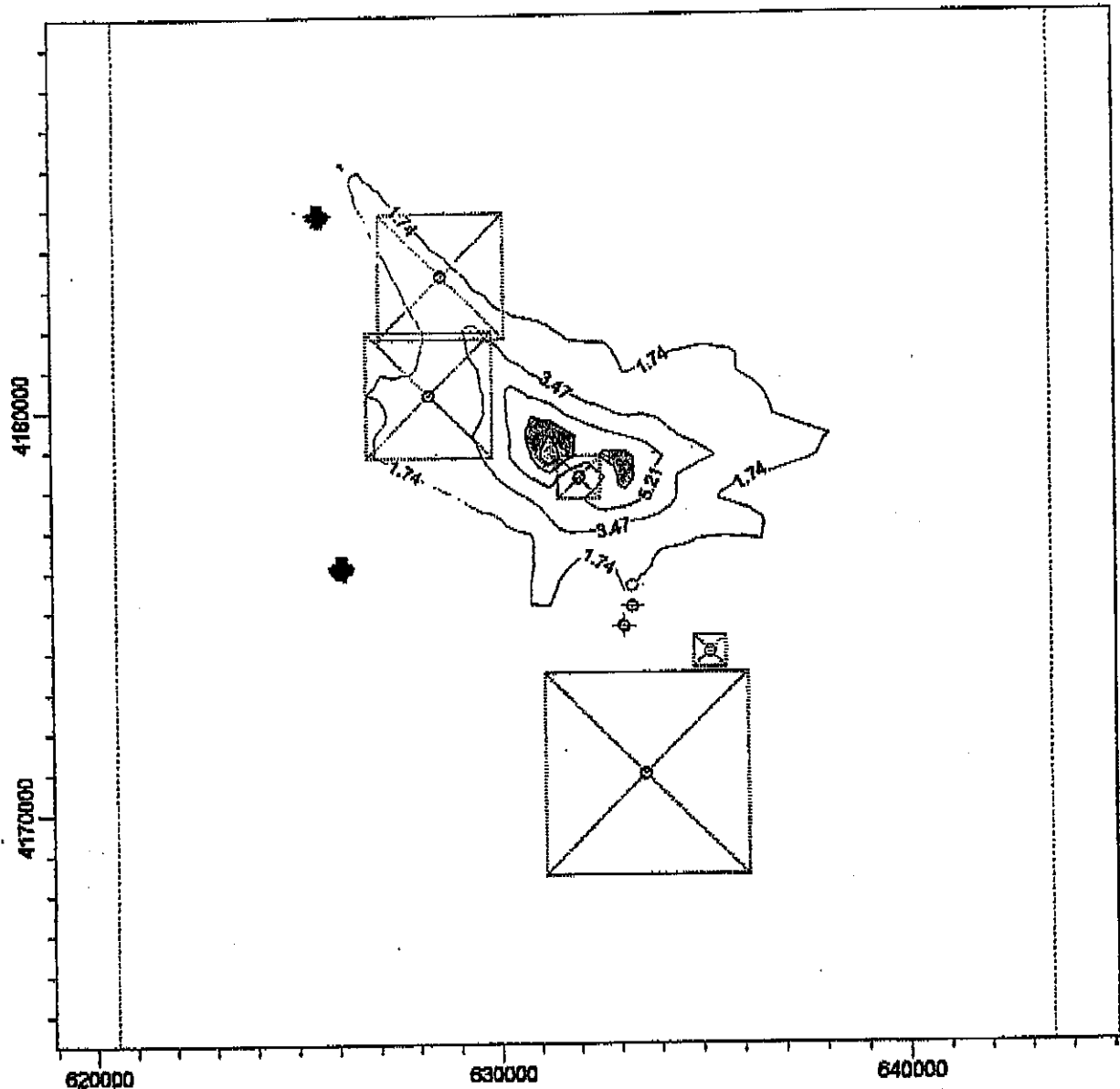
POST View - Lakes Environmental Software

C:\UNZIPPED\TESCUM_ST_PROJECT\TIN301EAEC\CUM21524H1GALL.PLT

Figure 3

PROJECT TITLE:

Cumulative Impact Analysis - 24-Hour PM₁₀
Gateway Business Park Operation



| | | | | |
|---|----------------------------|------------------|-----------------------------|---------------------------|
| | | | <p>µg/m³</p> | |
| <p>0.002 1.738 3.473 5.209 6.945 8.681 10.417 12.153 13.889 15.624</p> | | | | |
| <p>MODELING OPTIONS: CONC, RURAL, ELEV, DFAULT</p> | | | <p>COMPANY NAME:</p> | |
| <p>OUTPUT TYPE: CONC</p> | <p>RECEPTORS: 3456</p> | <p>COMMENTS:</p> | <p>MODELER:</p> | <p>SCALE: 0 5 km</p> |
| <p>MAX: 15.62422</p> | <p>UNIT: µg/m³</p> | | <p>DATE: 10/16/2002</p> | <p>PROJECT NO.:</p> |

Figure 4

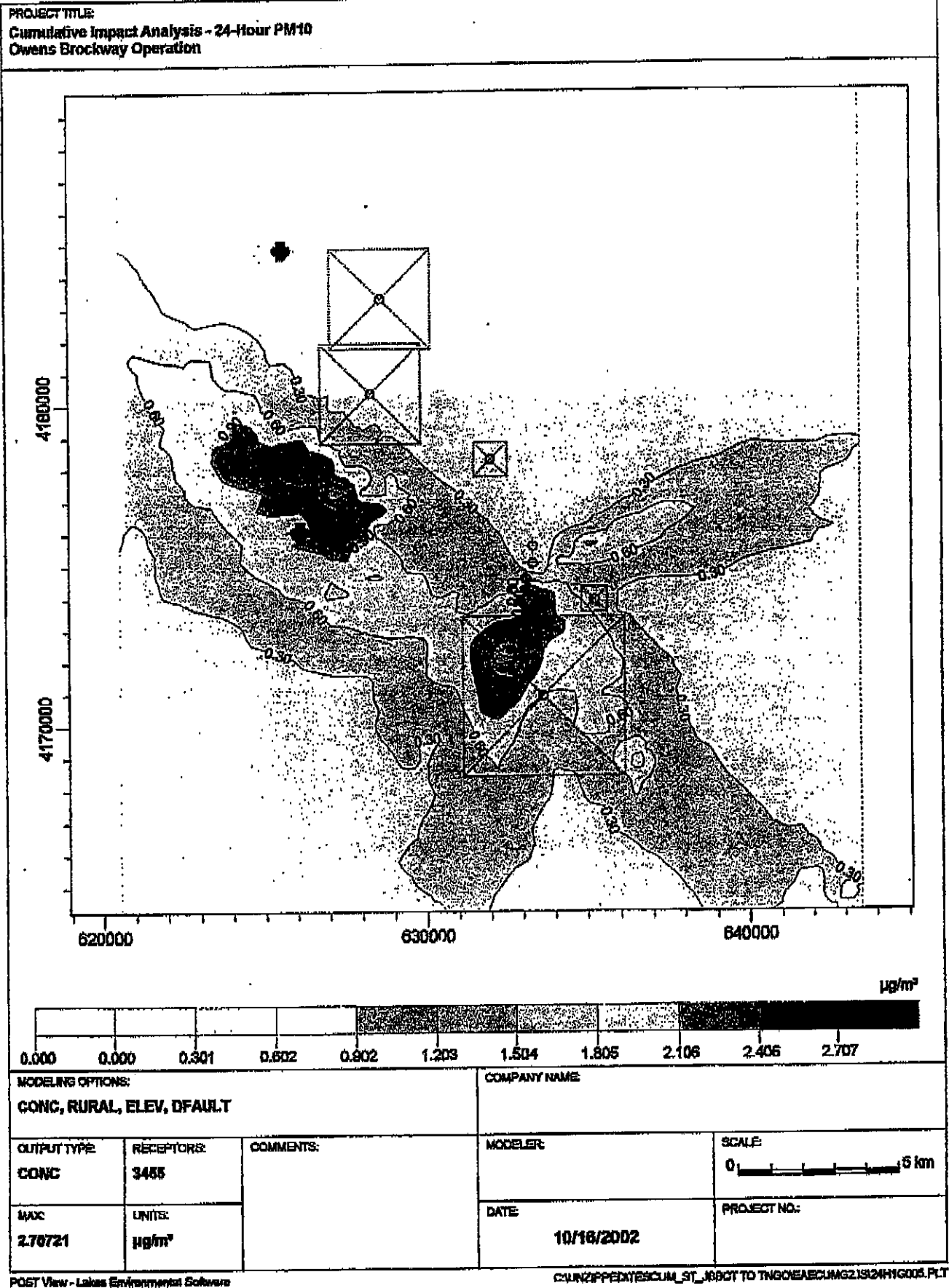


Figure 5

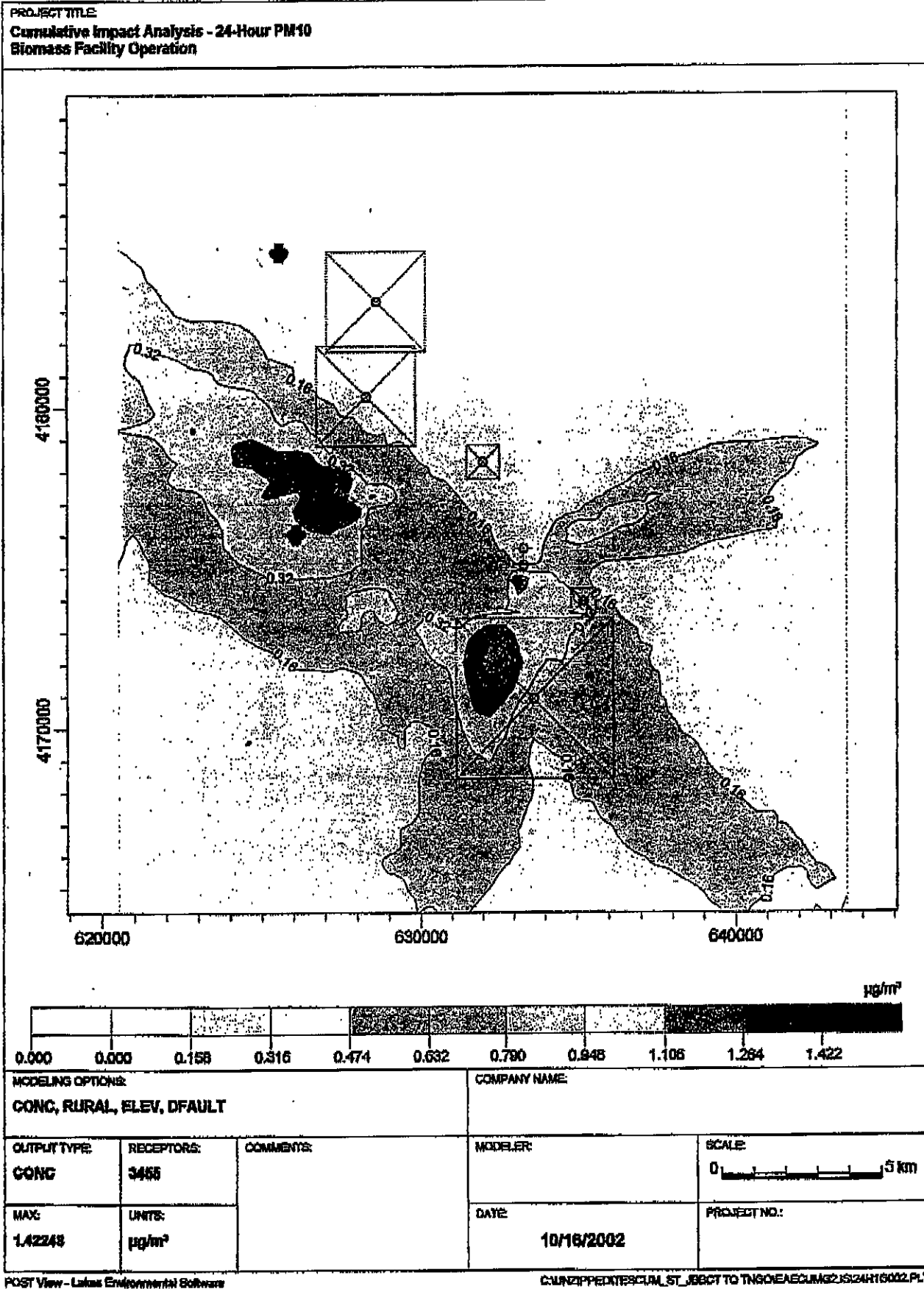


TABLE 1

RP01: AS 2500 RISK PRIORITIZATION ANALYSIS FOR SAN JOAQUIN COUNTY APCD

FACILITY: Owens-Brockway Glass Container

LOCATION: 14700 W. Schulte Rd., Tracy

RP FACTOR: .005 (AMB APPROACH: 1000. METERS)

COMPLIANCE ADJUSTMENT: 1.0

POLLUTANTS WITH ESTABLISHED AS 2500 TOXICITY DATA

| POLLUTANT | NUMBER | ANNUAL EMISSIONS (lb/yr) | UNIT RISK (mg/kg-d) | CARCINOGEN SCORE | ANNUAL EMISSIONS (lb/yr) | CHRONIC AEL (ug/m3) | CHRONIC WORKING SCORE | ACUTE EMISSIONS (lb/yr) | ACUTE AEL (ug/m3) | ACUTE WORKING SCORE | NONCARC SCORE |
|--------------------|--------|--------------------------|---------------------|------------------|--------------------------|---------------------|-----------------------|-------------------------|-------------------|---------------------|---------------|
| Amonia | 8 | 12640.00 | .00E+00 | .00 | 1.44292 | 200.0 | .00 | 1.905 | 2100.0 | .00 | .00 |
| Arsenic | 9* | 22.60 | .31E-02 | .50 | .00262 | .0 | .00 | .003 | .0 | .00 | .00 |
| Benzene | 12 | 4.89 | .31E-04 | .00 | .00555 | 71.0 | .00 | 1.878 | .0 | .00 | .00 |
| Benzene | 12 | 200.03 | .31E-04 | .05 | .00283 | 71.0 | .00 | .004 | .0 | .00 | .00 |
| Codolum-food | 12* | 40.84 | .17E-01 | 2.50 | .00466 | 3.5 | .00 | .005 | .0 | .00 | .00 |
| Chromilun (thick.) | 30* | .50 | .15E+00 | .45 | .00007 | .1 | .00 | .000 | .0 | .00 | .00 |
| Formaldehyde | 50 | 470.96 | .11E-04 | .03 | .03776 | 3.6 | .01 | .056 | .0 | .00 | .00 |
| Hydrochloric acid | 63 | 53526.70 | .00E+00 | .00 | 6.11015 | 7.0 | .19 | 6.398 | 370.0 | .01 | .39 |
| Lead | 68* | 633.97 | .00E-05 | .02 | .04916 | 1.5 | .01 | .052 | .0 | .00 | .01 |
| Manganese | 69 | 3.83 | .00E+00 | .00 | .00044 | 1.0 | .00 | .000 | .0 | .00 | .00 |
| Methyl chloroform | 72* | 27804.00 | .00E+00 | .00 | 3.09406 | 320.0 | .00 | 3.360 | .0 | .00 | .00 |
| Methylene chloride | 74 | 1659.60 | .10E-05 | .01 | .05946 | 3000.0 | .00 | .059 | .0 | .00 | .00 |
| Nickel | 87 | 17.86 | .24E-03 | .02 | .00204 | .2 | .00 | .004 | .0 | .00 | .00 |
| Selenium | 105 | 1230.45 | .14E-03 | .06 | .13018 | 3.5 | .02 | .032 | .0 | .00 | .02 |
| Xylene | 110 | 758.62 | .00E+00 | .00 | .01011 | 200.0 | .00 | .001 | 1500.0 | .00 | .00 |

TOTAL CARCINOGENIC SCORE = 4.45
 TOTAL NONCARCINOGENIC SCORE = .45
 TOTAL FACILITY TOXICS SCORE = 4.45

TOTAL CARCINOGENIC EMISSIONS = 4062.24 LB/YR
 TOTAL OF DEPLETER EMISSIONS = 27104.00 LB/YR
 TOTAL APPENDIX A-1 EMISSIONS = 97692.16 LB/YR
 TOTAL RD TOX INFO EMISSIONS = .00 LB/YR

* = MULTI-PATHWAY POLLUTANT: SCORE MULTIPLIED BY A FACTOR OF 1.
 # = STRATOSPHERIC OZONE DEPLETING COMPOUND

FACILITY RISK ASSESSMENT PRIORITY = 1.0
 TS >= 10.0: HIGH
 TS < 10.0: INTERMEDIATE
 TS < 1.0: LOW

Table 2 Edited by SJVUAPCD Leland Vililovoz

PRIORITIZATION FOR

Tracy Operators
INVENTORY YEAR 1997
County (39) Facility (21253)

| TOTALS FOR DEVICE (008) | 7.21E-04 | 1.81E-02 | 1.51E-03 |
|-------------------------------|----------|----------|----------|
| CARCINOGENIC RISK | 1.88E-01 | 3.71E+00 | 3.61E+00 |
| CHRONIC NON-CARCINOGENIC RISK | 0.9000 | 0.84000 | 0.6200 |
| ACUTE NON-CARCINOGENIC RISK | | | |

TOTAL PRIORITIZATION SCORE FOR Tracy Operators

(Risk also Net Gen Entry Sheet Highlighted)

HEALTH
(Risk w/ Smoke) +
Weight Adj
New FAC OPER. → 442952 107818

1800-274-6262

**SAN JOAQUIN COUNTY
COMMUNITY DEVELOPMENT DEPARTMENT**

1810 E. HAZELTON AVE., STOCKTON, CA 95205-0832
PHONE: 209/468-3121 FAX: 209/468-3163

March 25, 2004

John Palmer, Associate Planner
520 Tracy Boulevard
Tracy, California 95376

Dear Mr. Palmer:

Re: Tracy Youth Sports Facility EIR NOP (APN: 209-230-03; 15178 W. Schulte Road, Tracy)

Thank you for the opportunity to comment on this item. The Community Development Department has reviewed this item and offers the following comments:

Page 3 "Necessary Entitlements" and Initial Study Page 1, Nos. 6 and 7 "General Plan Designation" and "Zoning"

The County General Plan designation for this site is A/G (General Industrial). The zone is AG-40 (General Agriculture, 40-acre minimum lot size). The Youth Sports Facility falls under the use type: Recreation-Park (San Joaquin County Development Title), which may be conditionally permitted in the AG-40 zone with an approved Use Permit.

Please include the Community Development Department on the EIR mailing list. Feel free to call me at 468-3144 if you have any questions.

Sincerely,

A handwritten signature in cursive script, appearing to read "Chandler Martin".

Chandler Martin
Principal Planner

RECEIVED
MAR 29 2004
CITY OF TRACY

STATE OF CALIFORNIA - THE RESOURCES AGENCY

ARNOLD SCHWARZENEGGER, Governor

DEPARTMENT OF WATER RESOURCES1416 NINTH STREET, P.O. BOX 942836
SACRAMENTO, CA 942360001
(916) 653-5791

April 14, 2004

RECEIVED**APR 15 2004****CITY OF TRACY**

Mr. John Palmer, Associate Planner
City of Tracy
520 Tracy Boulevard
Tracy, California 95376

Notice of Preparation (NOP) for the Tracy Youth Sports Facility, City of Tracy, Delta
Field Division, San Joaquin County, SCH 2004022139

Dear Mr. Palmer:

Thank you for the opportunity to review and comment on the Notice of Preparation for the Tracy Youth Sports Facility. The plan for the proposed 198-acre site includes construction of 3 football, 15 soccer, 32 baseball, and 5 softball fields along with picnic, playground, and parking areas. The project site is located adjacent to Schulte Road, one-half mile east of Hansen Road and one mile west of Lammers Road in the City of Tracy in San Joaquin County.

Upon review of the area where the proposed construction is to occur, the additional traffic volumes could impact DWR-owned bridges over the California Aqueduct of the State Water Project at Hansen and Lammers Roads. Therefore, we request more detailed documents for this project when they become available. Please submit documents to:

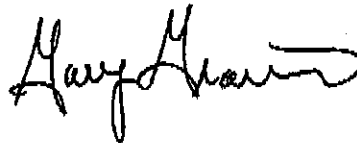
Department of Water Resources
1416 9th Street
Sacramento, California 95814
Attention: Elena Behnam, Room 649-2

In addition, please provide the Department of Water Resources with a copy of the EIR when it becomes available for public review. If you have any questions, please

Mr. John Palmer, Associate Planner
April 14, 2004
Page 2

contact Elena Behnam, Chief of Maintenance Engineering Section, at (916) 653-0344 or
Maria Chin at (916) 653-8029.

Sincerely,



Gary Gravier, Chief
Water and Plant Engineering Office
Division of Operations and Maintenance

cc: State Clearinghouse
Office of Planning and Research
1400 Tenth Street, Room 121
Sacramento, California 95814

STATE OF CALIFORNIA—BUSINESS, TRANSPORTATION AND HOUSING AGENCY

ARNOLD SCHWARZENTEGGER, Governor

DEPARTMENT OF TRANSPORTATION

P.O. BOX 2048 STOCKTON, CA 95201
(1976 E. CHARTER WAY/1976 E. DR. MARTIN
LUTHER KING JR. BLVD. 95205)
TTY: California Relay Service (800) 735-2929
PHONE (209) 941-1921
FAX (209) 948-7194



RECEIVED

MAY 05 2004

CITY OF TRACY

Flux your power!
Be energy efficient!

April 26, 2004

10-SJ-I-5/580-PM Various
Tracy Youth Sports Facility
Pacific Municipal Consultants (PMC)

Ms. Margaret Kavanaugh-Lynch
Pacific Municipal Consultants
1440 Broadway, Suite 1008
Oakland, CA 94612

Dear Ms. Kavanaugh-Lynch:

Thank you for the opportunity to review the Environmental Initial Study for the Tracy Youth Sports Facility located in unincorporated San Joaquin County, within one mile of the City of Tracy.

Please provide copies of the Draft Environmental Impact Report (DEIR) and a Traffic Impact Study (TIS) in accordance with the Caltrans "Guide for the Preparation of Traffic Impact Studies" December 2002 edition, to determine impacts and mitigations to I-5/580.

We look forward to continuing to work with you in a cooperative manner. If you have questions or would like to discuss these comments in more detail, please contact Lynn O'Connor at (209) 948-7575 (e-mail: lynn_o'connor@dot.ca.gov) or me at (209) 941-1921.

Sincerely,

TOM DUMAS, Chief
Office of Intermodal Planning

Cc: City of Tracy
Attn: John Palmer
520 Tracy Blvd.
Tracy, CA 95376

APPENDIX B:
PG&E GAS PIPELINE SAFETY PLAN

**Pacific Gas and Electric Company's
California Gas Transmission's
Pipeline Safety Plan
for
Tracy Sports Complex**

March 2, 2005



Description of the Pipeline and Corridor

PG&E gas transmission Line 401 and Line 002 are two of three pipelines occupying a common utility corridor. The other pipeline is a Chevron liquid pipeline.

This segment of Line 401 is a 36-inch diameter natural gas pipeline. It was installed in 1993 and was originally coated with fusion bonded epoxy coating (FBE). It was hydrotested to a minimum test pressure of 1302 psig for 8 hours.

PG&E's Line 002 is a 26-inch diameter natural gas pipeline. It was installed in 1972 and was originally coated with tape coating. It was hydrotested to a minimum test pressure of 1486 psig for 8 hours.

Detailed Scope of the Safety Plan

To ensure the continued integrity of the gas transmission lines running through the proposed Tracy Sports Complex, PG&E is proposing the following integrity assessments, additional measures during construction and increased maintenance:

Integrity Assessments

- A high-resolution in-line inspection (smart pig) will be performed on 110 miles of Line 401 and on 26 miles of Line 002 as a primary means of initially verifying the integrity of the pipeline segments in the sports park and the neighboring segments. Additionally, a caliper tool inspection will be performed to detect any geometric abnormalities.
- In conjunction with the in-line inspections, close interval surveys of the cathodic protection systems will be performed on both pipeline segments in the identified Tracy Sports Complex parcel. This will ensure that the existing cathodic protection systems are adequately protecting against external corrosion.
- On-going re-assessments of the pipelines' integrity will occur at intervals not to exceed seven years.

Additional measures to ensure protection during construction of the Tracy Sports Park

- Public Safety Education will be conducted with the City of Tracy and all contractors working at the specified parcel deemed the Tracy Sports Complex. The education will clarify the special requirements for excavation within or crossing of the PG&E gas transmission easement.
- PG&E will install temporary protective fencing with warning signs around the easement to clearly delineate the area of concern.
- PG&E personnel will "Stand-by" whenever construction occurs within the pipeline easement. This will insure against 3rd party damage when construction activities are near the pipelines.
- PG&E personnel will visit the site daily to check on the progress of the construction and ensure the contractors are working safely near the pipeline easement.

Additional maintenance measures throughout the life of the pipelines

- Perform monthly leak surveys of both pipelines to verify integrity of the pipeline
- Perform Bi-monthly patrols of the pipelines. These patrols will focus on detecting any construction that may be taking place, or evidence of construction since the last patrol.
- Perform Bi-monthly verification of the cathodic protection levels at the monitoring locations. The increased verification interval will allow prompt remediation in the event protection falls below desired criterion.
- Quarterly reporting to California Public Utilities Commission (CPUC) to verify additional measures have been taken.

Schedule

| Planned Action | Date |
|--|---|
| Develop Safety Plan in conjunction with the City of Tracy and the CPUC | Approved March 2004 |
| Smart pig L-401 | July 2005 |
| Close Interval Survey L-401 | October 2005 |
| Public Safety Education | Prior to start of Sports Complex construction |
| Smart pig L-002 | 2006 |
| Close Interval Survey L-002 | 2006 |
| Install temporary fencing | Prior to start of construction |
| Stand-by | Whenever construction occurs within easement |
| Daily site visits | Throughout construction of Sports Complex |
| Monthly leak surveys | July 2005 |
| Bi-monthly patrols | July 2005 |
| Bi-monthly cathodic protection verification | July 2005 |
| Quarterly reporting to CPUC | October 2005 |

Conclusion

PG&E has worked with the City of Tracy and regulatory officials to develop a safety plan for the pipelines running through the proposed Tracy Sports Complex. The additional integrity assessments, safety measures and maintenance frequencies will ensure a higher level of public safety at the proposed Tracy Sports Complex than required by existing pipeline safety regulations. On December 16, 2004 the Public Utilities Commission accepted this plan in Resolution SU-58.

Figure 1

APPENDIX C: FINAL TRAFFIC IMPACT STUDY

FINAL

**Tracy Youth Sports Facility
Traffic Impact Study**

In the City of Tracy

September 1, 2005

FINAL

**Tracy Youth Sports Facility
Traffic Impact Study**

In the City of Tracy

September 1, 2005

**Prepared by:
TJKM Transportation Consultants
5960 Inglewood Drive, Suite 100
Pleasanton CA 94588-8535
Tel: 925.463.0611
Fax: 925.463.3690**

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INTRODUCTION AND SUMMARY

Introduction

This report presents the results of TJKM's traffic impact study for the proposed Tracy Youth Sports Facility to be located on the south of Schulte Road, approximately half a mile east of Hansen Road and one mile west of Lammers Road in the City of Tracy. The proposed project site is approximately 200 acres, which includes 150 acres of field sports facilities and 50 acres of general park/recreational area. The project site and its vicinity are shown in Figure 1. The project site access and circulation plan is shown on Figure 2.

The purpose of this traffic study is to evaluate the potential traffic impacts resulting from the development of the proposed project, identify short-term and long-term roadway and circulation needs, determine potential mitigation measures and identify any critical traffic issues that should be addressed in the on-going planning process. The project tasks included collection, reduction and review of traffic data, field review, input of traffic data into the traffic analysis software, evaluation of intersection controls and development of intersection improvements and control recommendation.

Based on discussions with the City Staff, it was determined that the study would focus only on evaluating conditions during the weekday p.m. peak hour at thirteen study intersections (ten existing and three future) that may potentially be impacted by the proposed project. Since the weekday p.m. peak hour would be considered as the worst-case scenario, required mitigations and appropriate recommendations would be based on the analysis of this scenario.

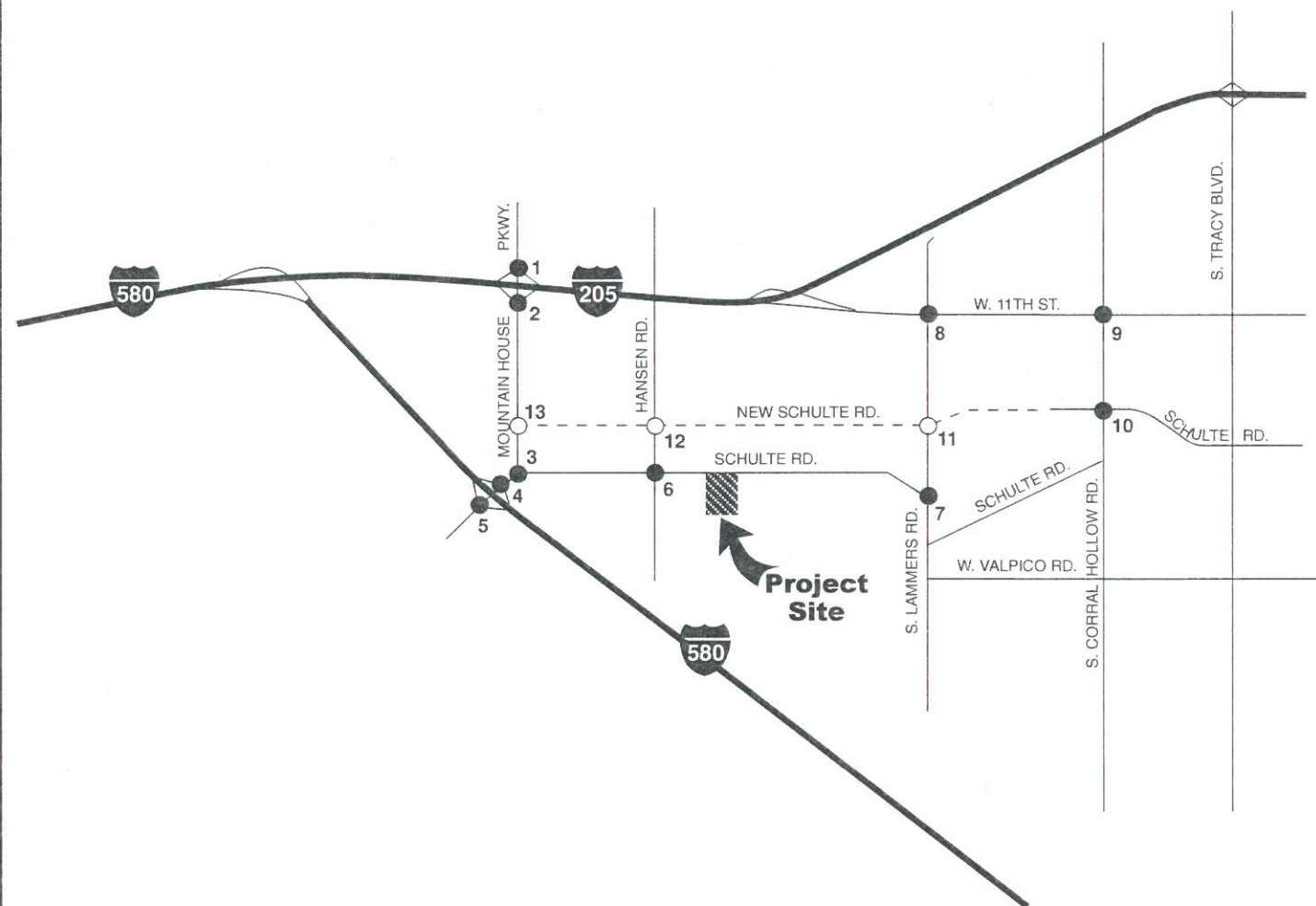
The study intersections in the project vicinity are as follows:

1. Mountain House Parkway/ I-205 Westbound Ramps (One-way Stop)
2. Mountain House Parkway/ I-205 Eastbound Ramps (One-way Stop)
3. Mountain House Parkway/Schulte Road (Signal)
4. Mountain House Parkway/ I-580 Westbound Ramps (One-way Stop)
5. Mountain House Parkway/ I-580 Eastbound Ramps (One-way Stop)
6. Hansen Road/Schulte Road (Four-way Stop)
7. Lammers Road/Schulte Road (Three-way Stop)
8. Lammers Road/11th Street (Signal)
9. Corral Hollow Road/11th Street (Signal)
10. Corral Hollow Road/Schulte Road (Signal)
11. Lammers Road/New Schulte Road (Future Signal)
12. Hansen Road/New Schulte Road (Future Four-way Stop)
13. Mountain House Parkway/New Schulte Road (Future Signal)

Cumulative future conditions were evaluated with and without the proposed development in order to determine the need for and timing of any necessary mitigation measures specifically related to the proposed project. The cumulative traffic volumes (Year 2025) were obtained from the City of Tracy model provided by Fehr and Peers Inc. on August 27, 2004.

- *Existing Conditions* – This scenario evaluates existing (2004) traffic volumes and roadway conditions based on traffic counts and field surveys
- *Existing plus Proposed Phase I Project* – This scenario adds traffic generated by Phase I project to existing traffic

- *Existing plus Proposed Phase I plus Phase II Project* – This scenario adds traffic generated by full project (Phase I + Phase II) to existing traffic
- *Year 2010 Near-Term Conditions* – This scenario considers the near-term (Year 2010) traffic interpolating between the existing traffic and the Year 2025 traffic obtained from the City of Tracy model
- *Year 2010 Near-Term plus Phase I Project Conditions* – This scenario adds traffic generated by Phase I project to near-term (Year 2010) traffic
- *Year 2010 Near-Term plus Phase I plus Phase II Project Conditions* – This scenario adds traffic generated by full project (Phase I + Phase II) to near-term (Year 2010) traffic
- *Year 2025 Cumulative Conditions* – This scenario considers the 20+ year future base year traffic based on the City's model
- *Year 2025 Cumulative plus Project Conditions* – This scenario adds traffic generated by the full project to the future (Year 2025) volumes



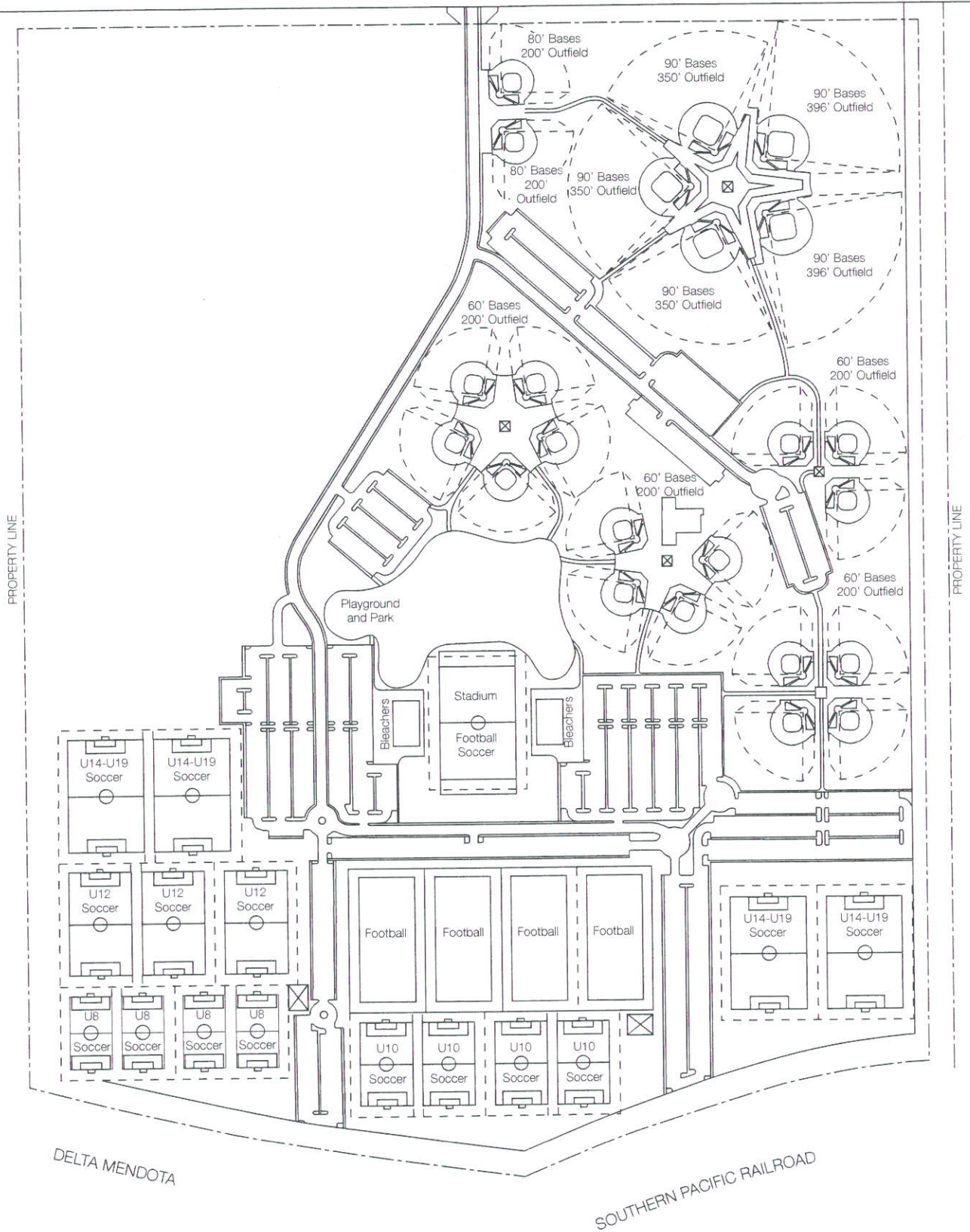
| LEGEND | |
|--------|---------------------|
| ● | Study Intersection |
| ○ | Future Intersection |
| - - | Future Roadway |



City of Tracy
Tracy Youth Sports Complex
Vicinity Map

Figure
1





North

Not to Scale

City of Tracy
Tracy Youth Sports Complex
Proposed Site Plan

Figure

2



Summary

Existing Traffic Condition

Currently, all ten study intersections operate at acceptable level of service (LOS) during the p.m. peak hour, except for the intersection of Mountain House Parkway/I-580 Eastbound Ramps, which operates at LOS E.

Existing plus Project (Phase I) Traffic Conditions:

All study intersections are expected to operate acceptably during the p.m. peak hour, except for the intersection of Mountain House Parkway/I-580 Eastbound Ramps, which is expected to continue to operate at LOS E and currently meets rural peak hour signal warrants. Signalizing this intersection will improve the LOS to B during the p.m. peak hour for Existing and Existing plus phase I Conditions. It is important to note that the LOS E or worse conditions and the need for signalization occur with or without the addition of project traffic. Alternatively, since no improvements are currently proposed at the interchange of Mountain House Parkway /I-580, and future development is in the beginning planning stages with developments such as Cordes Ranch and others, signalizing the intersection of Mountain House Parkway/I-580 Eastbound Ramps could potentially become a throw away improvement when more development occurs and widening of the interchange and possibly the addition of Loop Ramps are needed. Therefore, an alternative mitigation to signalization would be to make Mountain House Parkway/I-580 Eastbound Ramps an all-way stop controlled intersection, which would improve its operation to LOS B.

Near-Term (Year 2010) Traffic Conditions with and without Phase I of the Project:

Under this scenario, all study intersections operate acceptably during the p.m. peak hour, except for the intersections of Mountain House Parkway/I-580 Eastbound Ramps, Mountain House Parkway/I-205 Eastbound Ramps, Mountain House Parkway/I-205 Westbound Ramps and Lammers Road/Schulte Road. It is important to note that all the above-mentioned intersections will operate at unacceptable levels of service with or without the addition of project traffic. Additionally, as part of the Mountain House Development conditions of approval, an interchange improvement project is currently under design, which will improve the level of service at the I-205/ Mountain House Parkway Eastbound and Westbound Ramps to acceptable conditions.

Cumulative (Year 2025) Traffic Conditions with and without the Project (Phase I plus Phase II):

Year 2025 traffic conditions were based on traffic projections from the City of Tracy travel demand-forecasting model. It was assumed that the new Schulte Road extension would be fully built by Year 2025 and as a result three more intersections (Mountain House Parkway/New Schulte Road, Hansen Road/New Schulte Road, and Lammers Road/New Schulte Road) were studied as part of this scenario. Under this scenario, all thirteen study intersections are expected to operate acceptably during the p.m. peak hour, except for the intersections of Mountain House Parkway/I-205 Westbound Ramps, Mountain House Parkway/I-205 Eastbound Ramps, Mountain House Parkway/I-580 Westbound Ramps, Mountain House Parkway/I-580 Eastbound Ramps, Lammers Road/Schulte Road, Lammers Road/11th Street, Corral Hollow Road/11th Street, and Corral Hollow Road/Schulte Road, which are expected to operate at LOS F, LOS F, LOS F, LOS F, LOS F, and LOS F, LOS D, and LOS D, respectively. With the addition of project traffic, the study intersections, which operate

unacceptably under Year 2025 scenario, are expected to continue to operate at unacceptable service levels with the addition of project traffic. It is important to note that the LOS E or worse conditions and the need for signalization occur with or without the addition of project traffic.

In conclusion, two conditions exist relative to the potential need for mitigation required by the Tracy Sports facility:

1. Improvements to the interchange at I-205/Mountain House Parkway will be constructed prior to completion of Phase I of the Tracy Sport Facility Project. Therefore, no additional mitigation will be required by the Tracy Sports Facility Development to achieve acceptable levels of service at the interchange in existing or near term conditions.
2. All other intersections that require mitigation require this mitigation due to conditions that either currently exist or which will exist in the future whether or not the Tracy Sports Facility Development is constructed. The six intersections in this category are Mountain House Parkway/ I-580 Eastbound Ramps, Mountain House Parkway/ I-580 Westbound Ramps, Lammers Road/Schulte Road, Lammers Road/11th Street, Corral Hollow Road/11th Street and Corral Hollow Road/Schulte Road.

EXISTING CONDITIONS

Roadway Network

The project site and surrounding study area are illustrated in Figure 1 and the important roadways serving the project site are discussed below.

Interstate 205 is an east west freeway located just south of the project site and on the northern side of the City of Tracy. It provides access to Tracy and to the greater San Francisco Bay Area and Silicon Valley job centers to the west.

Corral Hollow Road is a major north-south arterial that connects to Grant Line Road to the north and 11th street in the south. Both Grant Line Road and 11th Street provide access to I-205 freeway. In the vicinity of the project area, Corral Hollow Road is a four-lane road with landscape median. The area is generally a residential community.

Mountain House Parkway is a north-south two to four lane arterial, which has interchanges at I-205 and I-580. The roadway is fronted mainly by commercial and industrial land uses.

Lammers Road is a two-lane roadway that runs north and south. The roadway is fronted mainly by industrial land use on the east side and residential land use on the west side.

Schulte Road is a discontinuous east-west roadway and the project site is located just south of Schulte Road, west of Lammers Road. From Chrisman Road to Corral Hollow Road, Schulte Road is four lanes wide with primarily residential land uses fronting it. From Lammers Road to Patterson Pass Road, Schulte Road is primarily two lanes wide with agricultural uses fronting it.

Old Schulte Road is a two-lane east-west road currently providing a connection between the eastern and western portion of Schulte Road. Fronting land uses on Old Schulte Road are primarily agriculture.

Tracy Boulevard is a four-lane arterial from I-205 to Linne Road. It has been widened on the west side from Valico Road to Linne Road. It is located to the west of the project site.

Segment counts were conducted on Schulte Road west of Lammers Road between 3/17/2004 (Wednesday) and 3/21/2004 (Sunday). On a typical weekday, the average daily traffic on Schulte Road west of Lammers Road was estimated to be 11,990 vehicles per day (vpd). The average daily traffic on Schulte Road west of Lammers Road was estimated to be 4,140 vehicles per day (vpd). Thus, segment counts show that the traffic volumes are generally higher on the weekday compared to the weekend. The trip generation for the proposed Youth Sports Park would most likely be peaking during the morning and early afternoon of a Saturday or during the evening of a typical weekday. Therefore, the worst-case scenario is expected to be the weekday p.m. peak hour when the streets are expected to be relatively busy with the peak trip generation from the proposed Youth Sports Park in use. Based on the rationale explained above, the intersection analysis was completed only for the weekday p.m. peak hour traffic conditions.

Level of Service Analysis Methodology

The level of service measurement is a qualitative description of traffic operating conditions including expected traffic conflicts and delay. Levels of service describe these conditions in terms of such factors as speed, travel time, delays, and freedom to maneuver, traffic interruptions, comfort, convenience and safety. Levels of service are given letter designations ranging from A to F. Level of Service (LOS) A indicates free-flow conditions with little or no delay and LOS F indicates congested conditions with excessive delays and long backups. Various methodologies are used to determine levels of service at specific roadway facilities, including signalized and unsignalized intersections, rural two-lane and multi-lane highways, urban arterials and freeways.

Unsignalized study intersections were evaluated using the appropriate methodologies for One-, Two- and All-Way STOP-controlled intersections contained in the *2000 Highway Capacity Manual*.¹ These methodologies report peak hour operating conditions as the control delay (length of time a vehicle waits to pass through the intersection from the end of a queue) for all vehicles entering the intersection. The control delay is also reported for only those critical movements subject to delay (stopping and yielding movements).

Signalized intersections were evaluated using the corresponding methodology contained in the *2000 Highway Capacity Manual*. This methodology reports peak hour operating conditions as the control delay for all vehicles entering the intersection.

Appendix A contains detailed descriptions of all the level of service methodologies.

Significant Impact Criteria

The City of Tracy 2010 General Plan specifies minimum acceptable level of service standards. For City roadways and intersections, the minimum standard is LOS C. However, within the City of Tracy sphere of influence, the City has adopted LOS D as the standard for roadways and intersections within ¼-mile of a freeway.

Based on the above criteria, the minimum acceptable LOS standard for the intersections was assumed to be LOS C for the intersections of Hansen Road/Schulte Road, Lammers Road/Schulte Road, Corral Hollow Road/11th Street, Corral Hollow Road/Schulte Road and LOS D for the intersections of Mountain House Parkway/I-205 Eastbound Ramps, Mountain House Parkway/I-205 Westbound Ramps, Mountain House Parkway/I-580 Eastbound Ramps, I-580 Westbound Ramps, Mountain House Parkway/Schulte Road, and Lammers Road/11th Street. A project that causes a roadway facility to fall below these thresholds is considered to significantly impact the facility. Mitigation measures must be identified for any impacted facility.

Intersection Level of Service Analysis

The existing p.m. peak hour traffic volume counts were conducted at the ten study intersections by TJKM during January and February of 2004. Figure 3 illustrates the existing intersection lane configurations/geometry for ten study intersections and the assumed lane configurations/geometry for the three future study intersections. Figure 4 shows the current p.m. peak hour turning movement volumes at the ten study intersections.

Under the existing conditions, all the ten study intersections are expected to operate at acceptable levels of service or better except for the intersection of Mountain House Parkway/I-580 Eastbound Ramps, which operates at LOS E during the p.m. peak hour. Signalizing the intersection is expected to improve the service level to LOS B during the p.m. peak hour under existing conditions.

¹ *Highway Capacity Manual*, Transportation Research Board, 1994.

Table I summarizes the results of the intersection level of service analysis for existing conditions. Detailed calculations are contained in Appendix B.

TABLE I: INTERSECTION LEVELS OF SERVICE - EXISTING CONDITIONS

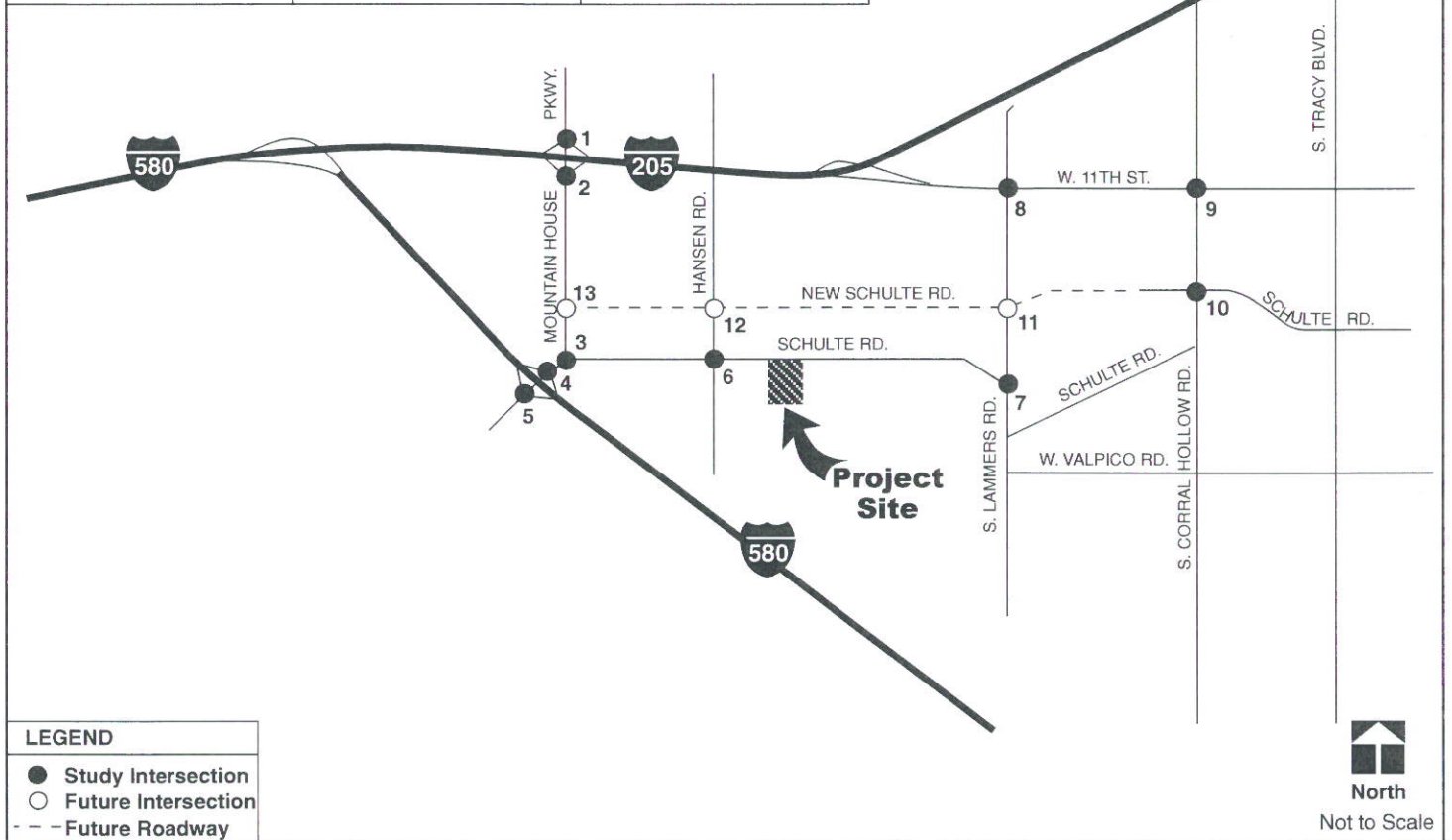
| <i>Intersection</i> | <i>Control</i> | <i>P.M. Peak Hour</i> | |
|---|----------------|-----------------------|------------|
| | | <i>Delay</i> | <i>LOS</i> |
| 1. Mountain House Pkwy. /I-205 WB Ramps | One-Way STOP | 4.1 (16.1) | A (C) |
| 2. Mountain House Pkwy. /I-205 EB Ramps | One-Way STOP | 6.1 (16.1) | A (C) |
| 3. Mountain House Pkwy. /Schulte Rd. | Signal | 24.8 | C |
| 4. Mountain House Pkwy. /I-580 WB Ramps | One-Way Stop | 1.1 (14.8) | A (B) |
| 5. Mountain House Pkwy. /I-580 EB Ramps | One-Way Stop | 13.7 (46.3) | B (E) |
| -- With Mitigation | Signal | 16.3 | B |
| 6. Hansen Rd. / Schulte Rd. | Four-Way Stop | 14.0 | B |
| 7. Lammers Rd. / Schulte Rd. | Three-Way Stop | 11.7 | B |
| 8. Lammers Rd. / 11 th St. | Signal | 16.9 | B |
| 9. Corral Hollow Rd. / 11 th St. | Signal | 32.5 | C |
| 10. Corral Hollow Rd. / Schulte Rd. | Signal | 29.9 | C |

Notes: LOS = Level of Service

X.X (X.X) = Overall intersection delay (minor approach delay) in seconds per vehicle

Delay = Average stopped delay at signalized intersections and average delay for all movements at Stop- controlled intersections. Values in parenthesis indicated average delay for the critical movement at One- and Two-Way STOP-controlled intersections

| Intersection #1 I-205 WB Ramps/Mountain House | Intersection #2 I-205 EB Ramps/Mountain House | Intersection #3 Mountain House/Schulte | Intersection #4 I-580 WB Ramps/Mountain House | Intersection #5 I-580 EB Ramps/Mountain House |
|--|--|--|--|--|
| | | | | |
| Intersection #6 Hansen/Schulte | Intersection #7 Lammers/Schulte | Intersection #8 Lammers/Eleventh | Intersection #9 Corral Hollow/Eleventh | Intersection #10 Corral Hollow/Schulte |
| | | | | |
| Intersection #11 Lammers/New Schulte | Intersection #12 Hansen/New Schulte | Intersection #13 Mountain House/New Schulte | | |
| | | | | |

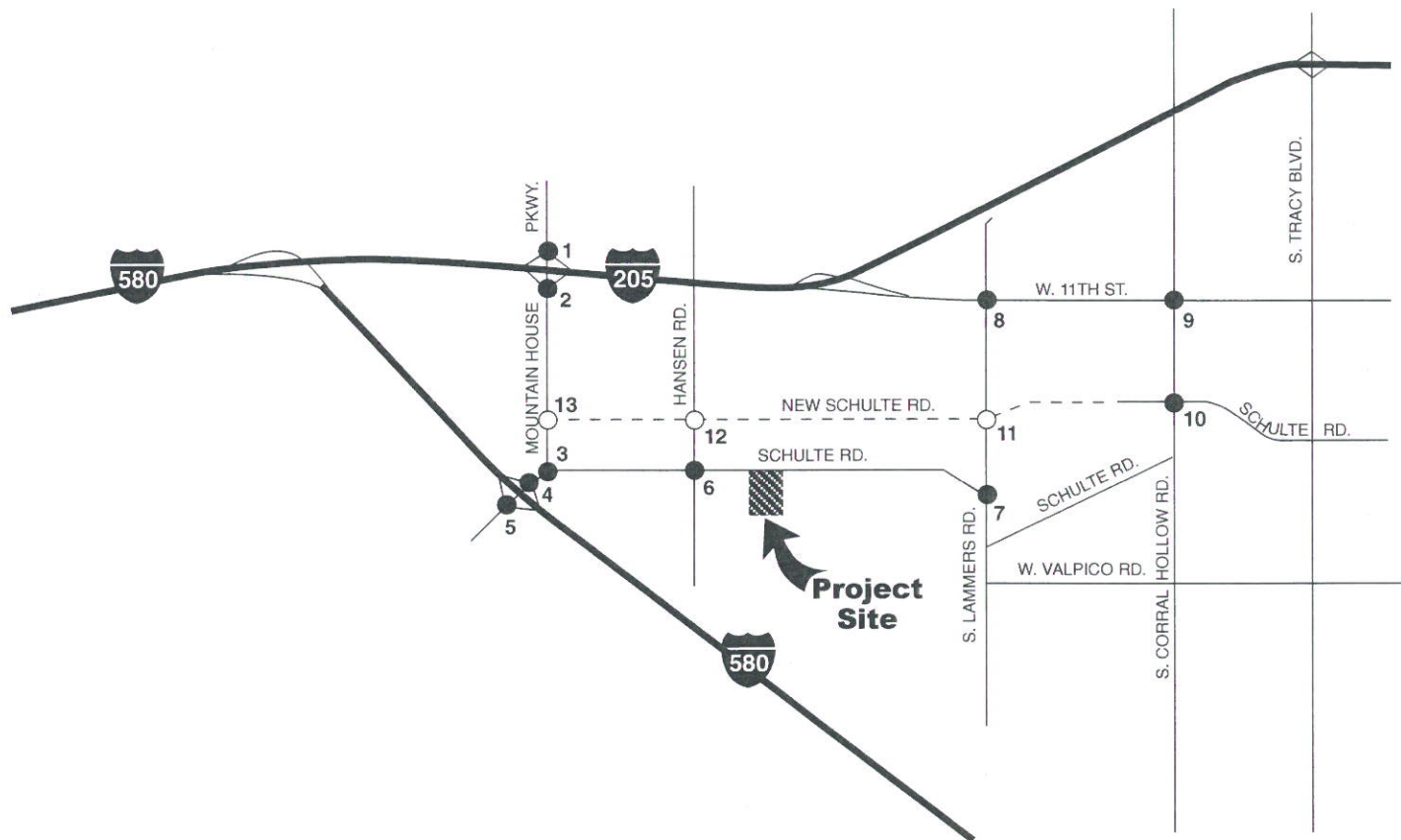


City of Tracy
Tracy Youth Sports Complex
Intersection Lane Configurations

Figure
3



| Intersection #1 I-205 WB Ramps/Mountain House | Intersection #2 I-205 EB Ramps/Mountain House | Intersection #3 Mountain House/Schulte | Intersection #4 I-580 WB Ramps/Mountain House | Intersection #5 I-580 EB Ramps/Mountain House |
|--|--|---|--|--|
| | | | | |
| Intersection #6 Hansen/Schulte | Intersection #7 Lammers/Schulte | Intersection #8 Lammers/Eleventh | Intersection #9 Corral Hollow/Eleventh | Intersection #10 Corral Hollow/Schulte |
| | | | | |



| LEGEND |
|-----------------------|
| ● Study Intersection |
| ○ Future Intersection |
| - - - Future Roadway |



City of Tracy
Tracy Youth Sports Complex
Existing PM Peak Hour Turning Movement Volumes

Figure
4



EXISTING PLUS PROJECT CONDITION

The Existing plus Project scenario adds traffic from the proposed project to existing traffic. The proposed project is assumed to be built in two phases. Therefore, the Existing plus Project scenario is analyzed as two separate scenarios: Existing plus Phase I project, and Existing plus Phase I plus Phase II project Conditions.

Project Description

The proposed project is a multi-activity youth park and a recreational facility (approximately 200 acres) located along the south side of Schulte Road, approximately one mile west of Lammers Road and the westerly City limits of Tracy. The proposed project consists of multi-purpose ball fields, general recreation and picnic facilities and support elements such as parking and sports lighting. The analysis will focus primarily on field sports, including baseball, softball, football and soccer. The project site is proposed to have one project driveway along Schulte Road.

Trip Generation

With the completion of Phase I, the project site is proposed to have three football fields, ten baseball/softball fields, and thirteen soccer fields.

For the baseball and softball fields, 30 players (15 per team) are assumed to use each ball field. Assuming two overlaps with 30 players arriving and leaving during the p.m. peak hour, a total of 60 participants ($2 \times 30 = 60$) are expected for each ball field. In addition to 60 participants per field, a total of 15 spectators, officials, and staff would result in a total of 75 field users for each softball/baseball field. For the football fields, 50 players (25 per team) are assumed to use each ball field. A total of 100 participants assuming two overlaps ($2 \times 50 = 100$) are expected for each ball field. In addition to 100 participants per field, a total of 25 spectators would result in a total of 125 field users for each football field. For the soccer fields, 28 players (14 per team) are assumed to use each ball field. A total of 56 participants assuming two overlaps ($2 \times 28 = 56$) are expected for each ball field. In addition to 56 participants per field, a total of 14 spectators would result in a total of 70 field users for each soccer field. For the football stadium, 80 players (40 per team) are assumed to use each ball field. A total of 160 participants assuming two overlaps ($2 \times 80 = 160$) are expected for the stadium. In addition to 160 participants per stadium, a total of 600 spectators would result in a total of 760 field users for the football stadium.

Considering the concurrent operation of various fields during different times of the year, the months of July and August are expected to experience peak weekday utilization (p.m. peak hour) during Phase I with three football fields and seven baseball/softball fields operating concurrently. During this peak period, the three football fields and seven baseball/softball fields are expected to have a total of 900 field users (75 users per softball/baseball field and 125 users per football field) with 225 cars assuming a vehicle occupancy rate of four persons per car. Thus, the Phase I buildout of the project is expected to generate 225 inbound and 225 outbound trips during the p.m. peak hour of a typical weekday.

In addition to the fields built in Phase I, thirteen baseball/softball fields, one sports/football stadium, one football field, two soccer fields, and a general park/recreational use (50 acres) will be constructed as part of Phase II buildout of the project. Again, similar to Phase I conditions, the project with full buildout (Phase I + Phase II) is expected to experience peak weekday utilization during the months of July and August with four football fields, twenty baseball/softball fields, and one football stadium operating concurrently. During this peak period, the thirteen additional baseball/softball fields, one

additional football field, and one sports/football stadium are expected to generate a total of 1,860 field users (75 users per softball/baseball field, and 760 users for the stadium) with 465 cars assuming a vehicle occupancy rate of four persons per car. The general park use is expected to have a total of 165 users consisting of 100 general recreational users, 40 picnic area users, and 25 playgrounds users. Assuming four persons per car and estimating conservatively, the general park is expected to generate 41 inbound and 41 outbound trips during the p.m. peak hour. Thus, the Phase II buildout of the project is expected to generate 506 (=465+41) inbound and 506 (=465+41) outbound trips during the p.m. peak hour of a typical weekday. Table II summarizes the project trip generation assumptions.

TABLE II: PROJECT WEEKDAY PM PEAK HOUR TRIP GENERATION

| <i>Project Phasing</i> | <i>Vehicle Trips</i> | |
|--------------------------|----------------------|------------|
| | <i>In</i> | <i>Out</i> |
| With Phase I completion | 225 | 225 |
| With Phase II completion | 506 | 506 |
| Total | 731 | 731 |

Lighting is assumed at the end of five years on four soccer fields, one football stadium, and two ninety-foot baseball diamonds. Additional field lighting is assumed at the end of ten years on eight soccer fields, one football stadium, one football field, and seven baseball/softball fields. However, lighting is not expected to affect the peak hour traffic conditions (July and August) because in general lighting is only needed during the winter months when concurrent uses of different sports fields are comparatively lower.

Trip Distribution and Assignment

Trip distribution assumptions for the proposed project were developed based on existing travel patterns, knowledge of the study area and input from the City staff. Project trips were assigned to the study intersections based on these distribution assumptions.

Under the near term scenario, traffic from the proposed project is expected to travel to and from the park according to the distribution assumptions shown on Figure 5 and described below:

- 20% will travel to/from the south via Lammers Road
- 15% will travel to/from the north via Mountain House Parkway
- 15% will travel to/from the east via 11th Street
- 10% will travel to/from the east via State Route 205
- 10% will travel to/from the west via State Route 580
- 10% will travel to/from the south via Tracy Boulevard
- 10% will travel to/from the south via Corral Hollow Road
- 5% will travel to/from the north via Tracy Boulevard
- 5% will travel to/from the southeast via State Route 580

Under the Year 2025 scenario, traffic from the proposed project is expected to travel to and from the park according to the distribution assumptions shown on Figure 6 and described below:

- 20% will travel to/from the south via Lammers Road
- 15% will travel to/from the east via State Route 205
- 15% will travel to/from the north via Mountain House Parkway
- 10% will travel to/from the west via State Route 580
- 10% will travel to/from the south via Tracy Boulevard

- 10% will travel to/from the south via Corral Hollow Road
- 10% will travel to/from the east via 11th Street
- 5% will travel to/from the north via Tracy Boulevard
- 5% will travel to/from the southeast via State Route 580

Figures 7 and 8 show the Phase I project, and Phase I plus Phase II project trip assignments, respectively.

Intersection Level of Service Analysis

Figure 9 and 10 show the Existing plus Phase I project, and Existing plus Phase I plus Phase II project p.m. peak hour traffic volume projections at the study intersections. Tables III and IV summarize the intersection levels of service under Existing plus Phase I project, and Existing plus Phase I plus Phase II project scenarios. Detailed calculations for Existing plus Phase I project, and Existing plus Phase I plus Phase II project scenarios are contained in Appendix C and D, respectively.

Under Existing plus Phase I project Conditions, all ten study intersections are expected to continue to operate at acceptable levels of service except for the intersection of Mountain House Parkway/I-580 Eastbound Ramps, which is expected to continue to operate at LOS E. Signalizing the intersection (same mitigation as Existing Conditions) is expected to improve the LOS to B during the p.m. peak hour under Existing plus Phase I project Conditions.

Under Existing plus Phase I plus Phase II project Conditions, all ten study intersections are expected to continue to operate at acceptable levels of service except for the intersections of Mountain House Parkway/I-580 Eastbound Ramps, Hansen Road/Schulte Road, and Lammers Road/Schulte Road, which are expected to operate at LOS F, LOS E, and LOS F, respectively.

Signalizing the intersection of Mountain House Parkway/I-580 Eastbound Ramps (same mitigation as Existing Conditions) is expected to improve the service level to LOS B during the p.m. peak hour under Existing plus Phase I plus Phase II project Conditions. The full project (Phase I + Phase II) contribution is estimated to be approximately 8 percent of the total traffic under Existing plus Phase I plus Phase II project Conditions.

Modifying the lane configuration on the eastbound Schulte Road approach at the intersection of Hansen Road/Schulte Road to have a shared left turn-through lane and a shared through-right turn lane (currently, the eastbound approach has a shared left turn-through lane and an exclusive right turn lane) is expected to improve the service level to LOS B during the p.m. peak hour under Existing plus Phase I plus Phase II project Conditions. The full project (Phase I + Phase II) contribution is estimated to be approximately 41 percent of the total traffic under Existing plus Phase I plus Phase II project Conditions.

Signalizing the intersection of Lammers Road/Schulte Road and modifying the eastbound Schulte Road approach to have an exclusive left turn lane and an exclusive right turn lane (currently one shared left turn-right turn lane along the eastbound approach) is expected to improve the service level to LOS C during the p.m. peak hour under Existing plus Phase I plus Phase II project Conditions. The full project (Phase I + Phase II) contribution is estimated to be approximately 58 percent of the total traffic under Existing plus Phase I plus Phase II project Conditions.

TABLE III: EXISTING PLUS PHASE I PROJECT INTERSECTION LEVELS OF SERVICE

| <i>Intersection</i> | <i>Control</i> | <i>P.M. Peak Hour</i> | |
|---|----------------|-----------------------|------------|
| | | <i>Delay</i> | <i>LOS</i> |
| 1. Mountain House Pkwy. /I-205 WB Ramps | One-Way STOP | 4.2 (18.0) | A (C) |
| 2. Mountain House Pkwy. /I-205 EB Ramps | One-Way STOP | 6.4 (18.3) | A (C) |
| 3. Mountain House Pkwy. /Schulte Rd. | Signal | 26.4 | C |
| 4. Mountain House Pkwy. /I-580 WB Ramps | One-Way Stop | 1.2 (12.0) | A (B) |
| 5. Mountain House Pkwy. /I-580 EB Ramps | One-Way Stop | 17.5 (46.6) | C (E) |
| -- With Mitigation | Signal | 16.7 | B |
| 6. Hansen Rd. / Schulte Rd. | Four-Way Stop | 16.9 | C |
| 7. Lammers Rd. / Schulte Rd. | Three-Way Stop | 23.1 | C |
| 8. Lammers Rd. / 11 th St. | Signal | 21.0 | C |
| 9. Corral Hollow Rd. / 11 th St. | Signal | 32.7 | C |
| 10. Corral Hollow Rd. / Schulte Rd. | Signal | 30.2 | C |

Notes: LOS = Level of Service

X.X (X.X) = Overall intersection delay (minor approach delay) in seconds per vehicle

Delay = Average stopped delay at signalized intersections and average delay for all movements at Stop- controlled intersections. Values in parenthesis indicated average delay for the critical movement at One- and Two-Way STOP-controlled intersections

TABLE IV: EXISTING PLUS PHASE I PLUS PHASE II PROJECT INTERSECTION LEVELS OF SERVICE

| <i>Intersection</i> | <i>Control</i> | <i>P.M. Peak Hour</i> | |
|---|----------------|-----------------------|------------|
| | | <i>Delay</i> | <i>LOS</i> |
| 1. Mountain House Pkwy. /I-205 WB Ramps | One-Way STOP | 4.8 (24.6) | A (C) |
| 2. Mountain House Pkwy. /I-205 EB Ramps | One-Way STOP | 7.8 (26.6) | A (D) |
| 3. Mountain House Pkwy. /Schulte Rd. | Signal | 29.7 | C |
| 4. Mountain House Pkwy. /I-580 WB Ramps | One-Way Stop | 1.5 (14.8) | A (B) |
| 5. Mountain House Pkwy. /I-580 EB Ramps | One-Way Stop | 33.8 (90.7) | D (F) |
| -- With Mitigation | Signal | 17.6 | B |
| 6. Hansen Rd. / Schulte Rd. | Four-Way Stop | 35.5 | E |
| -- With Mitigation | Four-Way Stop | 12.0 | B |
| 7. Lammers Rd. / Schulte Rd. | Three-Way Stop | 185.1 | F |
| -- With Mitigation | Signal | 21.6 | C |
| 8. Lammers Rd. / 11 th St. | Signal | 34.7 | C |
| 9. Corral Hollow Rd. / 11 th St. | Signal | 33.5 | C |
| 10. Corral Hollow Rd. / Schulte Rd. | Signal | 30.2 | C |

Notes: LOS = Level of Service

X.X (X.X) = Overall intersection delay (minor approach delay) in seconds per vehicle

Delay = Average stopped delay at signalized intersections and average delay for all movements at Stop- controlled intersections. Values in parenthesis indicated average delay for the critical movement at One- and Two-Way STOP-controlled intersections

Site Access, Circulation and Storage Requirements

The project site is proposed to have one project driveway along Schulte Road. The project driveway is proposed to be a two-lane road that would provide access to various on-site parking lots to/from Schulte Road.

The future intersection volumes at the intersection of Schulte Road/Project Driveway is expected to meet the p.m. peak hour signal warrant (see Appendix I) under Existing plus Project, Year 2010 Base

plus Project, and Year 2025 Base plus Project scenarios. Therefore, TJKM recommends a signal based on the peak hour warrant, though further investigation needs to be done based on the other 10 warrants. Table XII illustrates the storage requirements for the right turns and left turns in/out of the project driveway under Existing plus Project Conditions during the p.m. peak hour. For the purpose of storage calculations at the intersection of Schulte Road/Project Driveway, a signal is assumed at the same.

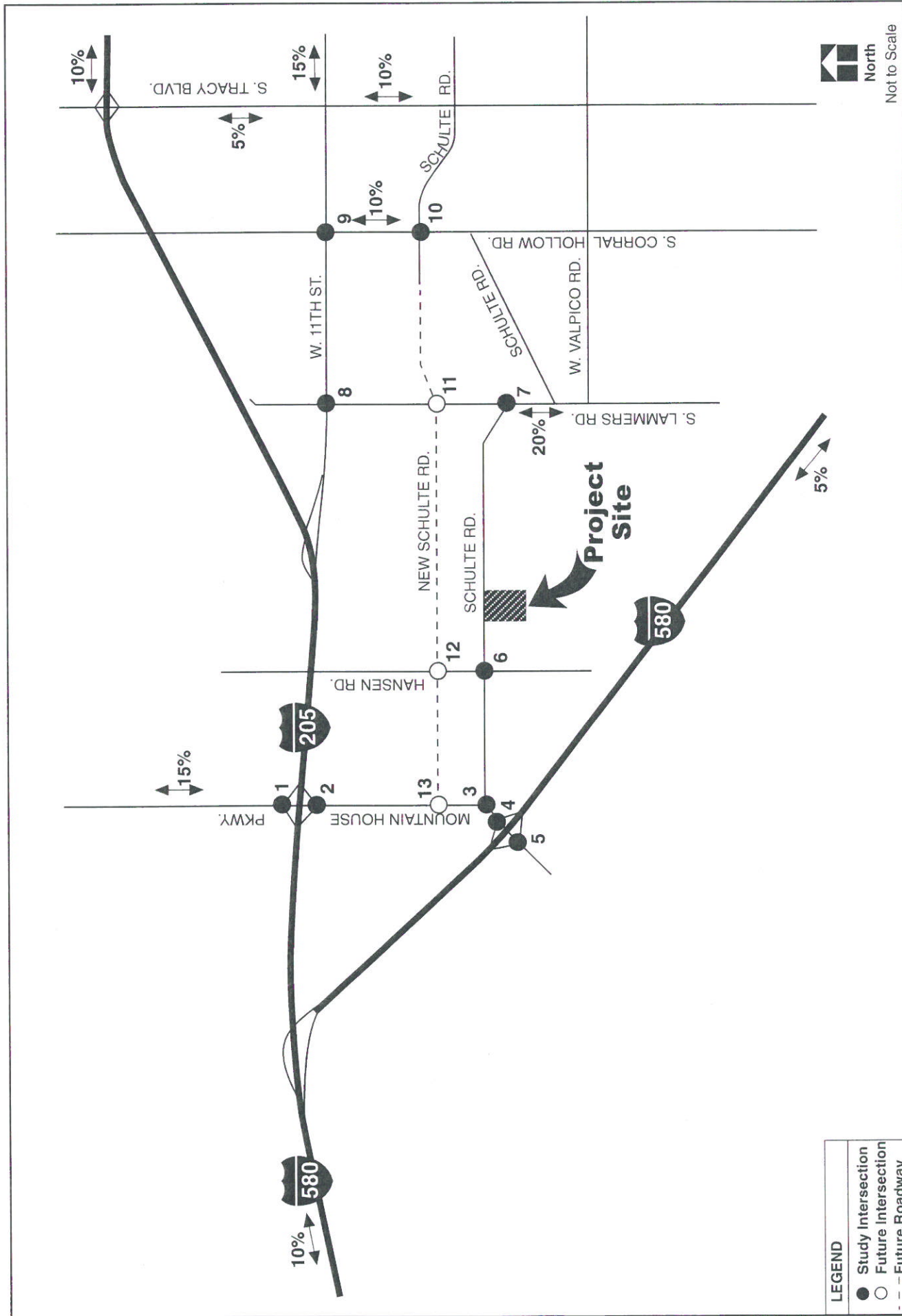
From the Table V, TJKM recommends the following at the Tee-intersection of Schulte Road/Project Driveway:

- Having an exclusive left turn lane with 300 feet of storage along the project driveway to facilitate project vehicles turning left into westbound Schulte Road
- Having two exclusive right turn lanes with 375 feet of storage each along the project driveway to facilitate project vehicles turning right into eastbound Schulte Road
- Having two exclusive left turn lanes with 400 feet of storage each along the westbound Schulte Road to facilitate project vehicles turning left into the project driveway
- Having an exclusive right turn lane with 250 feet of storage along the eastbound Schulte Road to facilitate project vehicles turning right into the project driveway
- Having a minimum of one through lane on eastbound and westbound Schulte Road to serve the through traffic in the future

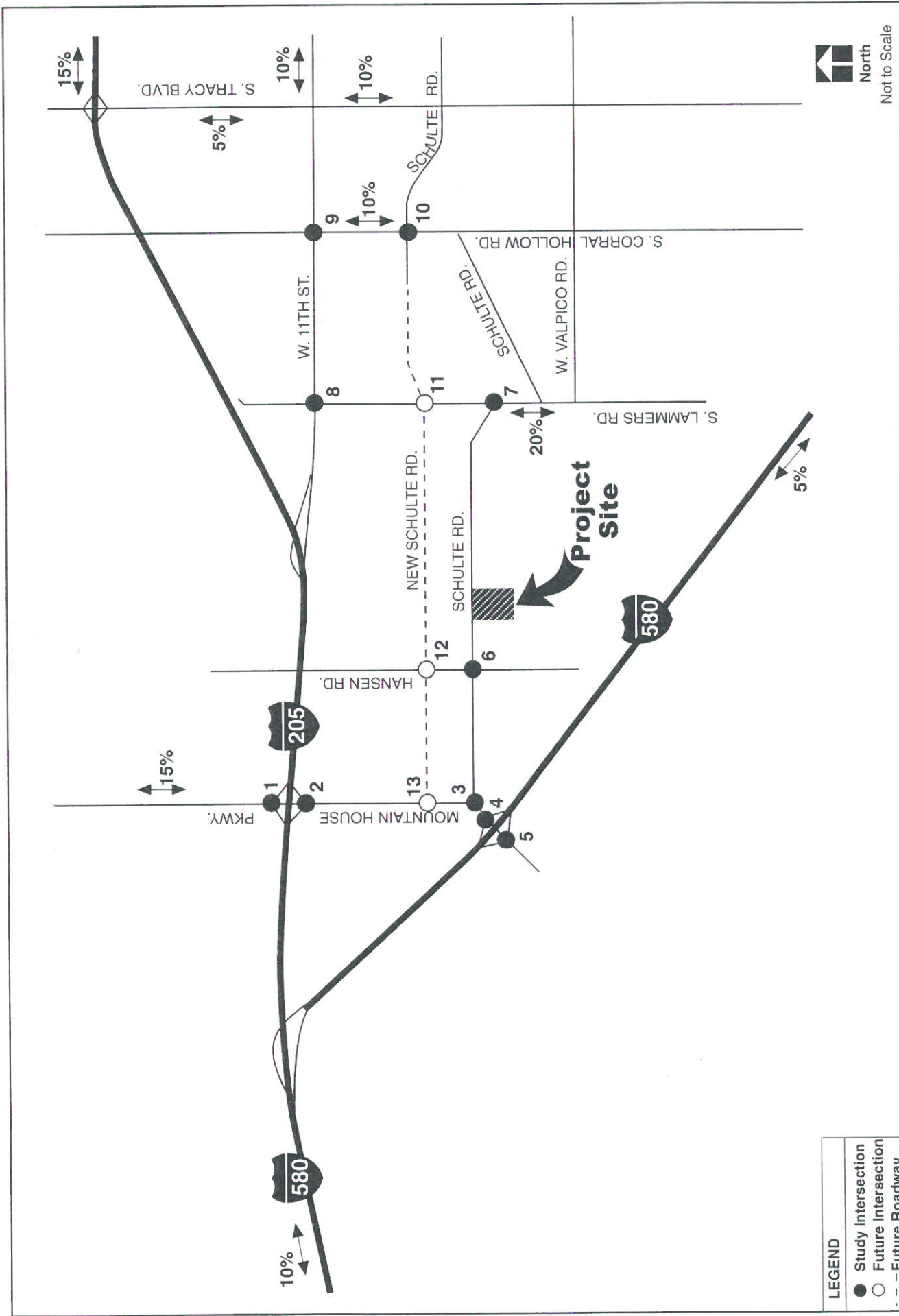
TABLE V: STORAGE REQUIREMENTS AT SCHULTE ROAD/PROJECT DRIVEWAY INTERSECTION

| <i>Turn Pocket</i> | <i>Existing plus project</i> | | |
|---|---------------------------------|--|--|
| | <i>Traffic volume (vph)</i> | <i>95th Percentile Queue (Vehicles)</i> | <i>Storage Length Required in feet (Number of lanes)</i> |
| Northbound Left Turns from Project Dwy. into Westbound Schulte Rd. | 219 | 12 | 300* |
| Northbound Right Turns from Project Dwy. into Eastbound Schulte Rd. | 512 | 15 | 375 (2) |
| Westbound Left Turns from Schulte Rd. into the Project Dwy. | 512 | 16 | 400 (2) |
| Eastbound Right Turns from Schulte Rd. into the Project Dwy. | 219 | 10 | 250 |

* Assumed 25 feet per vehicle for calculating the storage length



City of Tracy
Tracy Youth Sports Complex
Project Trip Distribution (Near Term)

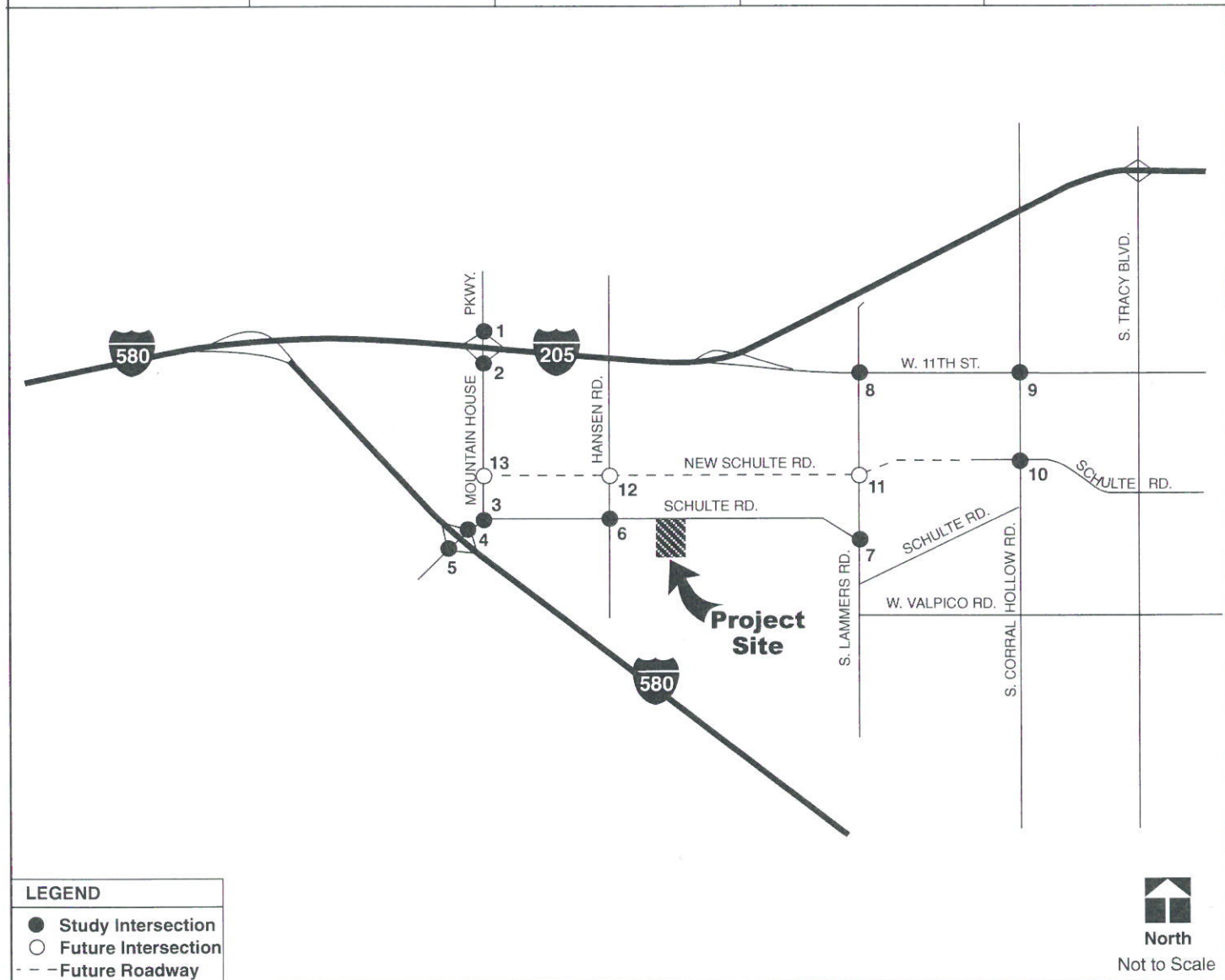


City of Tracy
Tracy Youth Sports Complex
Project Trip Distribution (Year 2025)

Figure 6



| Intersection #1 I-205 WB Ramps/Mountain House | Intersection #2 I-205 EB Ramps/Mountain House | Intersection #3 Mountain House/Schulte | Intersection #4 I-580 WB Ramps/Mountain House | Intersection #5 I-580 EB Ramps/Mountain House |
|--|--|---|--|--|
| | | | | |
| Intersection #6 Hansen/Schulte | Intersection #7 Lammers/Schulte | Intersection #8 Lammers/Eleventh | Intersection #9 Corral Hollow/Eleventh | Intersection #10 Corral Hollow/Schulte |
| | | | | |

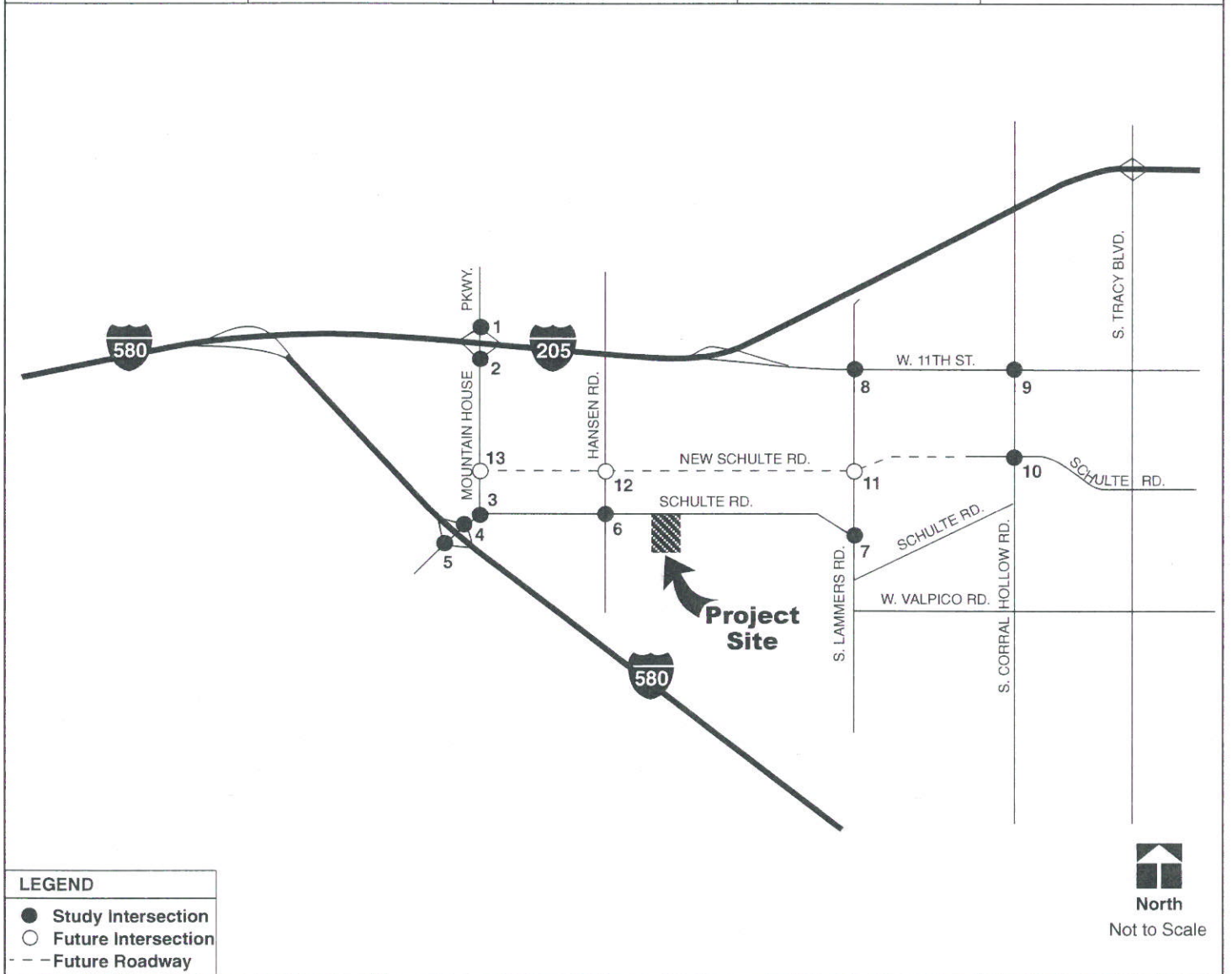


City of Tracy
Tracy Youth Sports Complex
Project (Phase I) PM Peak Hour Turning Movement Volumes 7

Figure

TJKM

| Intersection #1 I-205 WB Ramps/Mountain House | Intersection #2 I-205 EB Ramps/Mountain House | Intersection #3 Mountain House/Schulte | Intersection #4 I-580 WB Ramps/Mountain House | Intersection #5 I-580 EB Ramps/Mountain House |
|--|--|---|--|--|
| | | | | |
| Intersection #6 Hansen/Schulte | Intersection #7 Lammers/Schulte | Intersection #8 Lammers/Eleventh | Intersection #9 Corral Hollow/Eleventh | Intersection #10 Corral Hollow/Schulte |
| | | | | |

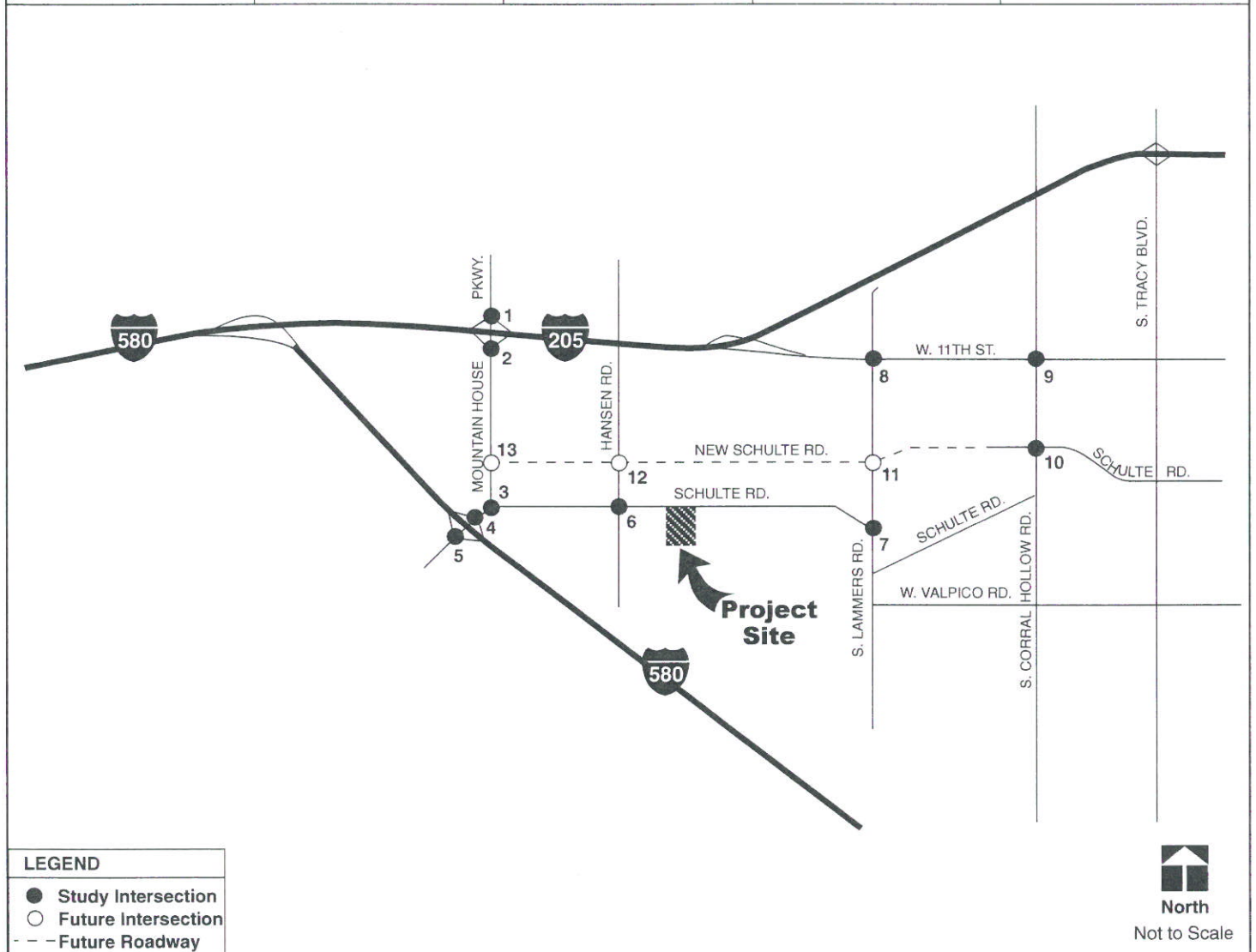


City of Tracy
Tracy Youth Sports Complex
Project (Phase I + Phase II) Trip Assignment

Figure
8



| Intersection #1 I-205 WB Ramps/Mountain House | Intersection #2 I-205 EB Ramps/Mountain House | Intersection #3 Mountain House/Schulte | Intersection #4 I-580 WB Ramps/Mountain House | Intersection #5 I-580 EB Ramps/Mountain House |
|--|--|---|--|--|
| | | | | |
| Intersection #6 Hansen/Schulte | Intersection #7 Lammers/Schulte | Intersection #8 Lammers/Eleventh | Intersection #9 Corral Hollow/Eleventh | Intersection #10 Corral Hollow/Schulte |
| | | | | |

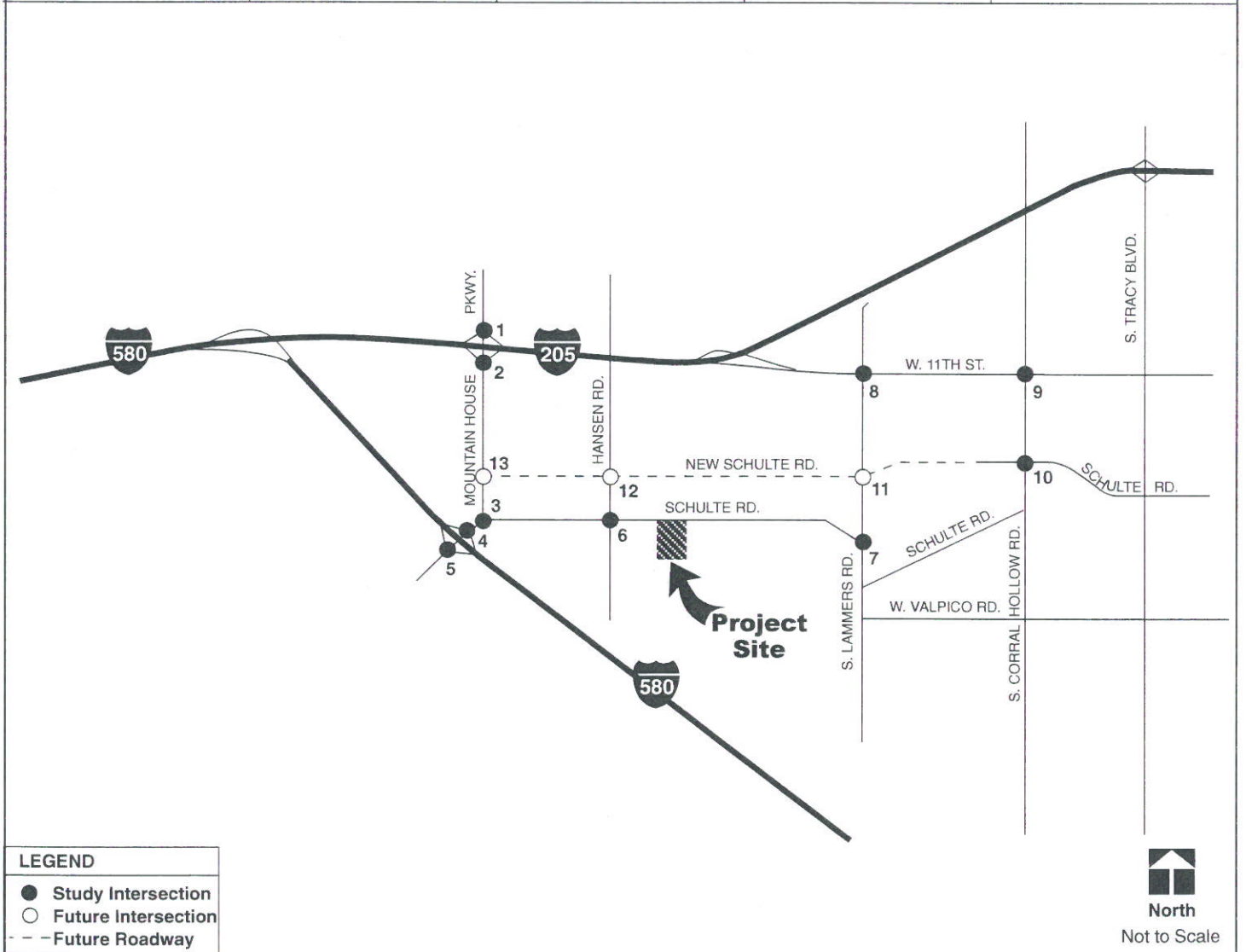


City of Tracy
Tracy Youth Sports Complex
**Existing + Project (Phase I) PM Peak Hour
Turning Movement Volumes**

Figure
9



| Intersection #1 I-205 WB Ramps/Mountain House | Intersection #2 I-205 EB Ramps/Mountain House | Intersection #3 Mountain House/Schulte | Intersection #4 I-580 WB Ramps/Mountain House | Intersection #5 I-580 EB Ramps/Mountain House |
|--|--|---|--|--|
| | | | | |
| Intersection #6 Hansen/Schulte | Intersection #7 Lammers/Schulte | Intersection #8 Lammers/Eleventh | Intersection #9 Corral Hollow/Eleventh | Intersection #10 Corral Hollow/Schulte |
| | | | | |



City of Tracy
Tracy Youth Sports Complex
**Existing plus Project (Phase I + Phase II) PM Peak Hour
Turning Movement Volumes**

Figure
10



NEAR-TERM (YEAR 2010) CONDITIONS

The near-term 2010 base condition is based on Year 2025 traffic projections from the City of Tracy travel demand-forecasting model. TJKM received the Year 2025 p.m. peak hour turning movement data for the study intersections. Year 2010 traffic volumes were derived using the method of interpolation between the existing traffic volumes and the Year 2025 traffic volumes from the City of Tracy travel demand-forecasting model. Year 2010 p.m. peak hour turning movement volumes are shown in Figure 11.

The results of the near-term 2010 Base Conditions LOS analysis are shown in Table VI. The detailed LOS calculation sheets are contained in Appendix E.

Under Year 2010 Base Conditions, all ten study intersections are expected to operate acceptably except for the intersections of Mountain House Parkway/I-205 Westbound Ramps, Mountain House Parkway/I-205 Eastbound Ramps, Mountain House Parkway/I-580 Eastbound Ramps, and Lammers Road/Schulte Road, which are expected to operate at LOS F.

Signalizing the intersection of Mountain House Parkway/I-205 Westbound Ramps is expected to improve the service level to LOS D during the p.m. peak hour under Year 2010 Base Conditions.

Signalizing the intersection of Mountain House Parkway/I-205 Eastbound Ramps is expected to improve the service level to LOS C during the p.m. peak hour under Year 2010 Base Conditions.

Signalizing the intersection (same as Existing Conditions) and modifying the southbound Mountain House Parkway approach to have an exclusive left turn lane and a through lane (currently a shared left turn-through lane on the southbound approach) at the intersection of Mountain House Parkway/I-580 Eastbound Ramps is expected to improve the service level to LOS B during the p.m. peak hour under Year 2010 Base Conditions.

The mitigation described under Existing plus Phase I plus Phase II project Conditions (see Page 14) is expected to improve the service level at the intersection of Lammers Road/Schulte Road to LOS B during the p.m. peak hour under Year 2010 Base Conditions.

TABLE VI: NEAR-TERM 2010 BASE CONDITIONS INTERSECTION LEVELS OF SERVICE

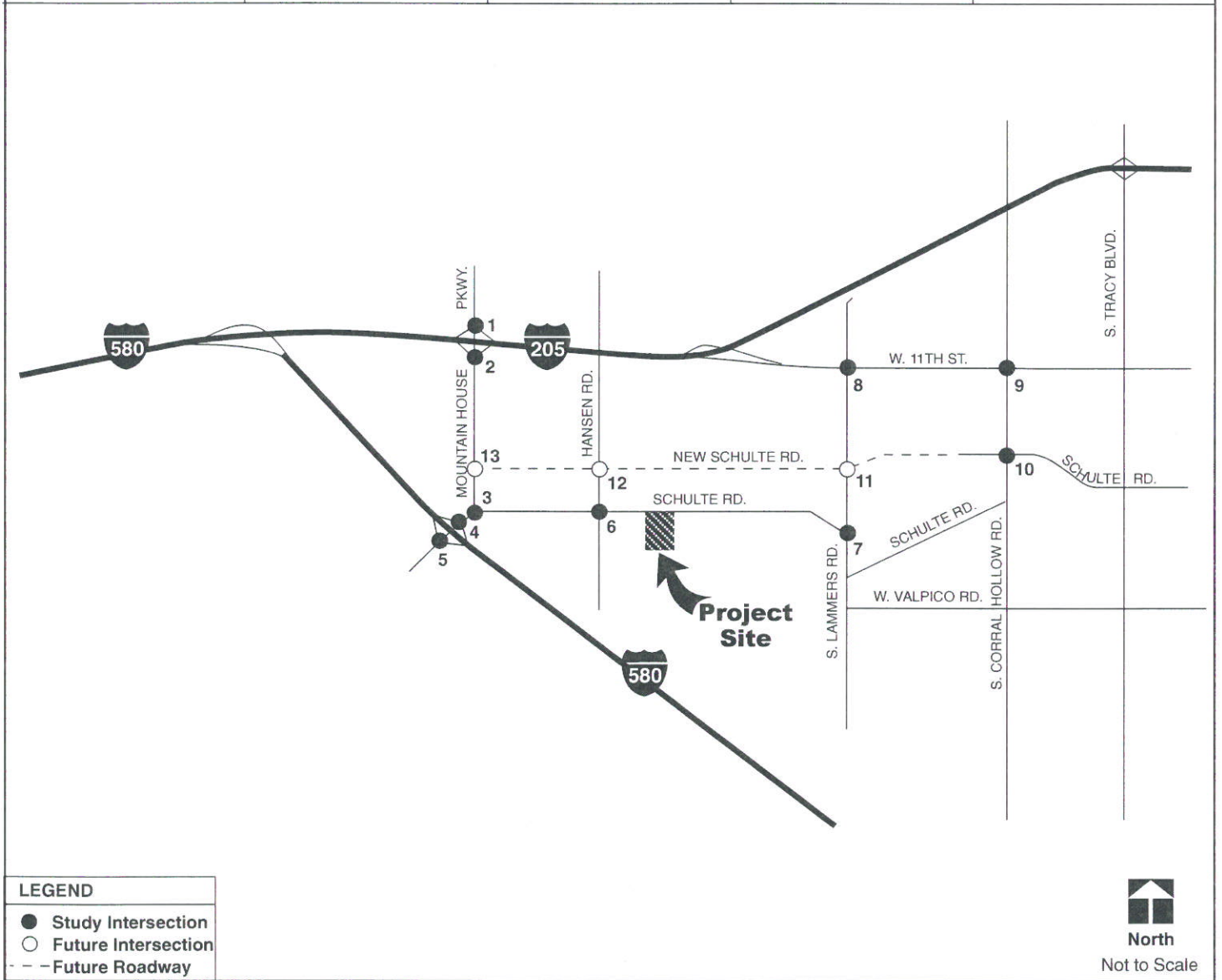
| <i>Intersection</i> | <i>Control</i> | <i>P.M. Peak Hour</i> | |
|---|----------------|-----------------------|------------|
| | | <i>Delay</i> | <i>LOS</i> |
| 1. Mountain House Pkwy. /I-205 WB Ramps | One-Way STOP | 120+ (120+) | F (F) |
| -- With Mitigation | Signal | 36.0 | D |
| 2. Mountain House Pkwy. /I-205 EB Ramps | One-Way STOP | 120+ (120+) | F (F) |
| -- With Mitigation | Signal | 24.6 | C |
| 3. Mountain House Pkwy. /Schulte Rd. | Signal | 22.2 | C |
| 4. Mountain House Pkwy. /I-580 WB Ramps | One-Way Stop | 2.5 (15.1) | A (C) |
| 5. Mountain House Pkwy. /I-580 EB Ramps | One-Way Stop | 120+ (120+) | F (F) |
| -- With Mitigation | Signal | 37.2 | D |
| 6. Hansen Rd. / Schulte Rd. | Four-Way Stop | 12.0 | B |
| 7. Lammers Rd. / Schulte Rd. | Three-Way Stop | 109.9 | F |
| -- With Mitigation | Signal | 16.3 | B |
| 8. Lammers Rd. / 11 th St. | Signal | 25.7 | C |
| 9. Corral Hollow Rd. / 11 th St. | Signal | 33.4 | C |
| 10. Corral Hollow Rd. / Schulte Rd. | Signal | 30.9 | C |

Notes: LOS = Level of Service

X.X (X.X) = Overall intersection delay (minor approach delay) in seconds per vehicle

Delay = Average stopped delay at signalized intersections and average delay for all movements at Stop- controlled intersections. Values in parenthesis indicated average delay for the critical movement at One- and Two-Way STOP-controlled intersections

| Intersection #1 I-205 WB Ramps/Mountain House | Intersection #2 I-205 EB Ramps/Mountain House | Intersection #3 Mountain House/Schulte | Intersection #4 I-580 WB Ramps/Mountain House | Intersection #5 I-580 EB Ramps/Mountain House |
|--|--|---|--|--|
| | | | | |
| Intersection #6 Hansen/Schulte | Intersection #7 Lammers/Schulte | Intersection #8 Lammers/Eleventh | Intersection #9 Corral Hollow/Eleventh | Intersection #10 Corral Hollow/Schulte |
| | | | | |



City of Tracy
Tracy Youth Sports Complex
Year 2010 PM Peak Hour Turning Movement Volumes

Figure
11



NEAR-TERM 2010 BASE CONDITION PLUS PROJECT CONDITION

The Year 2010 plus Project scenario adds traffic from the proposed project to Year 2010 base conditions traffic. The proposed project is assumed to be built in two phases. Therefore, the Year 2010 plus Project scenario is analyzed as two separate scenarios: Year 2010 plus Phase I project, and Year 2010 plus Phase I plus Phase II project Conditions.

Figures 12 and 13 show the projected peak hour turning movement volumes for Year 2010 plus Phase I project, and Year 2010 plus Phase I plus Phase II project scenarios, respectively. Table VII and VIII show the intersection level of service analysis results for Year 2010 plus Phase I project, and Year 2010 plus Phase I plus Phase II project scenarios, respectively. Appendices F and G contain the detailed calculation sheets for Year 2010 plus Phase I project, and Year 2010 plus Phase I plus Phase II project scenarios, respectively.

Under Year 2010 Base plus Phase I project Conditions, all ten study intersections are expected to continue to operate acceptably except for the intersections of Mountain House Parkway/I-205 Westbound Ramps, Mountain House Parkway/I-205 Eastbound Ramps, Mountain House Parkway/I-580 Eastbound Ramps, and Lammers Road/Schulte Road, which are expected to continue to operate at LOS F.

The mitigations described under Year 2010 Base Conditions (see Page 23) are expected to improve the service levels at all study intersections that operate unacceptably to acceptable service levels during the p.m. peak hour under Year 2010 Base plus Phase I project Conditions.

Under Year 2010 Base plus Phase I plus Phase II project Conditions, all the ten study intersections are expected to continue to operate acceptably except for the intersections of Mountain House Parkway/I-205 Westbound Ramps, Mountain House Parkway/I-205 Eastbound Ramps, Mountain House Parkway/I-580 Eastbound Ramps, Hansen Road/Schulte Road, and Lammers Road/Schulte Road, which are expected to operate at LOS F, LOS F, LOS F, LOS D, and LOS F, respectively.

For the intersections of Mountain House Parkway/I-205 Westbound Ramps, Mountain House Parkway/I-205 Eastbound Ramps, Mountain House Parkway/I-580 Eastbound Ramps, the mitigations described under Year 2010 Base Conditions (see Page 23) are expected to improve the service levels to acceptable limits during the p.m. peak hour under Year 2010 Base plus Phase I plus Phase II project Conditions. The full project (Phase I + Phase II) contributions for the intersections of Mountain House Parkway/I-205 Westbound Ramps, Mountain House Parkway/I-205 Eastbound Ramps, Mountain House Parkway/I-580 Eastbound Ramps are estimated to be approximately 10 percent, 13 percent, and 6 percent of the total traffic under Year 2010 Base plus Phase I plus Phase II project Conditions, respectively.

For the intersection of Hansen Road/Schulte Road, the mitigation described under Existing plus Phase I plus Phase II project Conditions (see Page 14) is expected to improve the service level to acceptable limit during the p.m. peak hour under Year 2010 Base plus Phase I plus Phase II project Conditions. The mitigation recommended under Existing plus Phase I plus Phase II project, and Year 2010 Base plus Phase I plus Phase II project Conditions for the intersection of Hansen Road/Schulte Road should be considered as an interim mitigation because the intersection is expected to operate acceptably under both Cumulative Year 2025 Base, and Cumulative Year 2025 Base plus Project Conditions. The full project (Phase I + Phase II) contribution is estimated to be approximately 41 percent of the total traffic under Year 2010 Base plus Phase I plus Phase II project Conditions.

For the intersection of Lammers Road/Schulte Road, in addition to the mitigation measures recommended under Year 2010 Base Conditions (see Page 23), 1) Adding a through lane along the northbound Lammers Road and modifying the lane geometry to have an exclusive left turn lane and a through lane (currently, a shared left turn-through lane), 2) Adding a through lane along the southbound Lammers Road and modifying the lane geometry to have a through lane and a shared through-right turn lane (currently, a shared through-right turn lane), and 3) Facilitating “free” right turns from eastbound Schulte Road approach into southbound Lammers Road, is expected to improve the level of service to an acceptable level under Year 2010 Base plus Phase I plus Phase II project Conditions. The full project (Phase I + Phase II) contribution is estimated to be approximately 36 percent of the total traffic under Year 2010 Base plus Phase I plus Phase II project Conditions.

TABLE VII: YEAR 2010 BASE CONDITIONS+PHASE I PROJECT INTERSECTION LEVELS OF SERVICE

| <i>Intersection</i> | <i>Control</i> | <i>P.M. Peak Hour</i> | |
|---|----------------|-----------------------|------------|
| | | <i>Delay</i> | <i>LOS</i> |
| 1. Mountain House Pkwy. /I-205 WB Ramps | One-Way STOP | 120+ (120+) | F (F) |
| -- With Mitigation | Signal | 38.9 | D |
| 2. Mountain House Pkwy. /I-205 EB Ramps | One-Way STOP | 120+ (120+) | F (F) |
| -- With Mitigation | Signal | 25.9 | C |
| 3. Mountain House Pkwy. /Schulte Rd. | Signal | 23.2 | C |
| 4. Mountain House Pkwy. /I-580 WB Ramps | One-Way Stop | 2.6 15.6 | A (C) |
| 5. Mountain House Pkwy. /I-580 EB Ramps | One-Way Stop | 120+ (120+) | F (F) |
| -- With Mitigation | Signal | 39.1 | D |
| 6. Hansen Rd. / Schulte Rd. | Four-Way Stop | 14.2 | B |
| 7. Lammers Rd. / Schulte Rd. | Three-Way Stop | 120+ | F |
| -- With Mitigation | Signal | 21.3 | C |
| 8. Lammers Rd. / 11 th St. | Signal | 26.3 | C |
| 9. Corral Hollow Rd. / 11 th St. | Signal | 33.7 | C |
| 10. Corral Hollow Rd. / Schulte Rd. | Signal | 31.1 | C |

Notes: LOS = Level of Service

X.X (X.X) = Overall intersection delay (minor approach delay) in seconds per vehicle

Delay = Average stopped delay at signalized intersections and average delay for all movements at Stop-controlled intersections. Values in parenthesis indicated average delay for the critical movement at One-Way and Two-Way STOP-controlled intersections

TABLE VIII: YEAR 2010 BASE CONDITIONS+PHASE I+PHASE II PROJECT INTERSECTION LOS

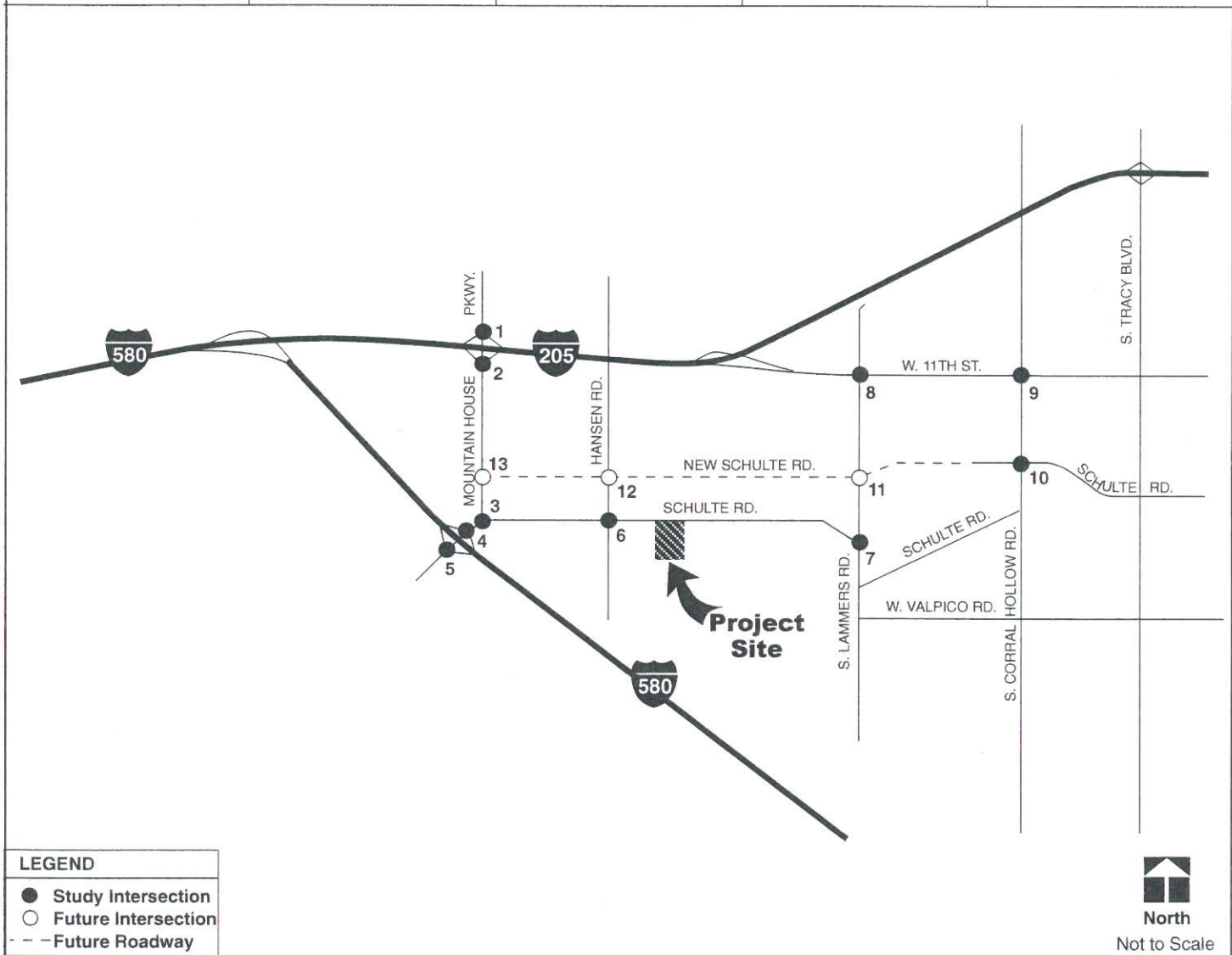
| <i>Intersection</i> | <i>Control</i> | <i>P.M. Peak Hour</i> | |
|---|----------------|-----------------------|--------------|
| | | <i>Delay</i> | <i>LOS</i> |
| 1. Mountain House Pkwy. /I-205 WB Ramps | One-Way STOP | 120+ (120+) | F (F) |
| -- With Mitigation | Signal | 48.0 | D |
| 2. Mountain House Pkwy. /I-205 EB Ramps | One-Way STOP | 120+ (120+) | F (F) |
| -- With Mitigation | Signal | 30.5 | C |
| 3. Mountain House Pkwy. /Schulte Rd. | Signal | 25.2 | C |
| 4. Mountain House Pkwy. /I-580 WB Ramps | One-Way Stop | 2.9 (17.0) | A (C) |
| 5. Mountain House Pkwy. /I-580 EB Ramps | One-Way Stop | 120+ (120+) | F (F) |
| -- With Mitigation | Signal | 44.2 | D |
| 6. Hansen Rd. / Schulte Rd. | Four-Way Stop | 28.1 | D |
| -- With Mitigation | Four-way Stop | 12.5 | B |
| 7. Lammers Rd. / Schulte Rd. | Three-Way Stop | 120+ | F |
| -- With Mitigation | Signal | 31.6 | C |
| 8. Lammers Rd. / 11 th St. | Signal | 34.9 | C |
| 9. Corral Hollow Rd. / 11 th St. | Signal | 34.2 | C |
| 10. Corral Hollow Rd. / Schulte Rd. | Signal | 32.7 | C |

Notes: LOS = Level of Service

X.X (X.X) = Overall intersection delay (minor approach delay) in seconds per vehicle

Delay = Average stopped delay at signalized intersections and average delay for all movements at Stop-controlled intersections. Values in parenthesis indicated average delay for the critical movement at One-Way and Two-Way STOP-controlled intersections

| Intersection #1 I-205 WB Ramps/Mountain House | Intersection #2 I-205 EB Ramps/Mountain House | Intersection #3 Mountain House/Schulte | Intersection #4 I-580 WB Ramps/Mountain House | Intersection #5 I-580 EB Ramps/Mountain House |
|--|--|---|--|--|
| | | | | |
| Intersection #6 Hansen/Schulte | Intersection #7 Lammers/Schulte | Intersection #8 Lammers/Eleventh | Intersection #9 Corral Hollow/Eleventh | Intersection #10 Corral Hollow/Schulte |
| | | | | |

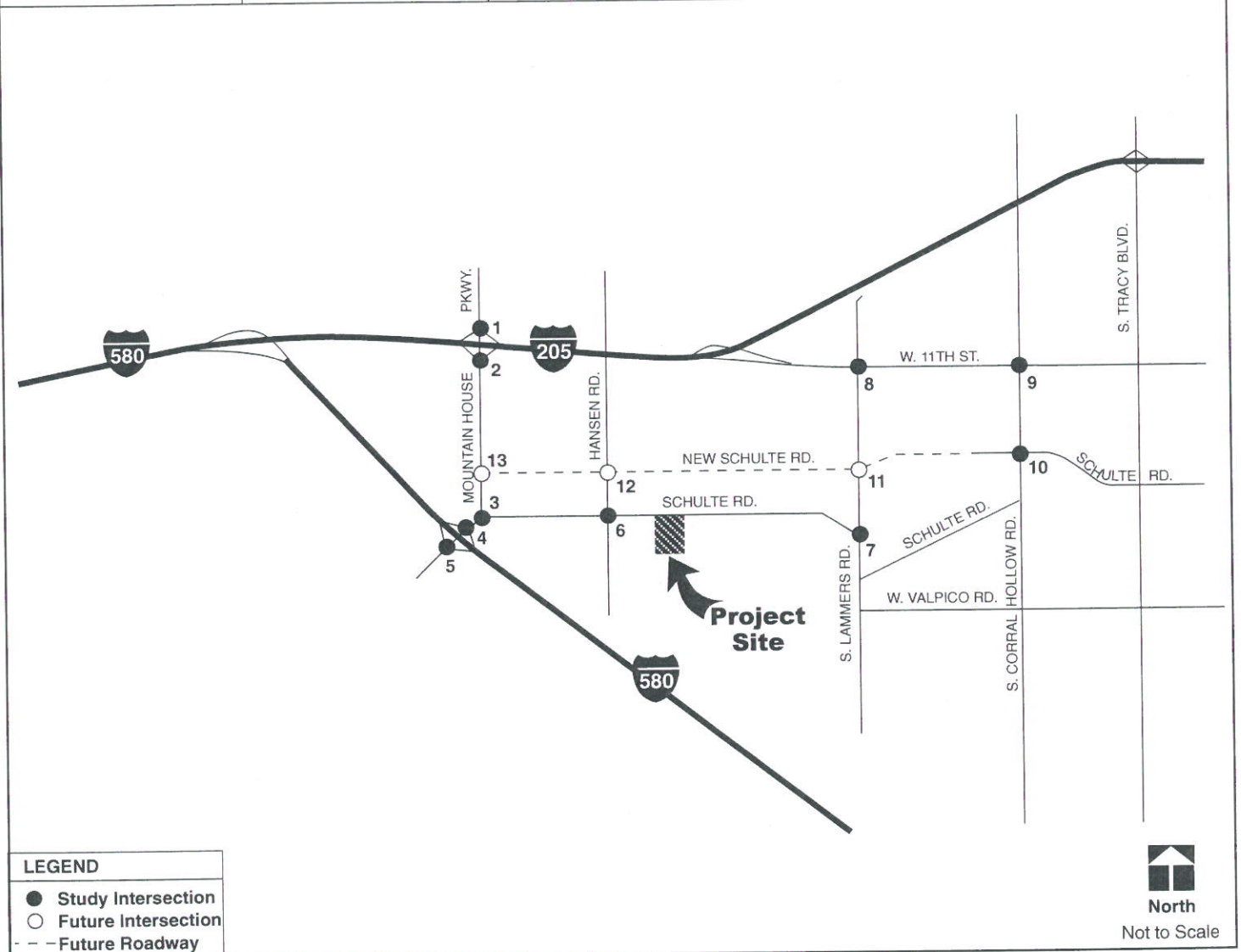


City of Tracy
Tracy Youth Sports Complex
**Year 2010 + Project (Phase I) PM Peak Hour
Turning Movement Volumes**

Figure
12



| Intersection #1 I-205 WB Ramps/Mountain House | Intersection #2 I-205 EB Ramps/Mountain House | Intersection #3 Mountain House/Schulte | Intersection #4 I-580 WB Ramps/Mountain House | Intersection #5 I-580 EB Ramps/Mountain House |
|--|--|---|--|--|
| | | | | |
| Intersection #6 Hansen/Schulte | Intersection #7 Lammers/Schulte | Intersection #8 Lammers/Eleventh | Intersection #9 Corral Hollow/Eleventh | Intersection #10 Corral Hollow/Schulte |
| | | | | |



City of Tracy
Tracy Youth Sports Complex
**Year 2010 + Project (Phase I + II) PM Peak Hour
Turning Movement Volumes**

Figure
13



CUMULATIVE 2025 BASE CONDITIONS

The cumulative 2025 base condition is based on Year 2025 traffic projections from the City of Tracy travel demand-forecasting model. TJKM received the Year 2025 p.m. peak hour turning movement data for the study intersections. Year 2010 p.m. peak hour turning movement volumes are shown in Figure 14. It was assumed that the new Schulte Road extension would be fully built extending from Lammers Road to Mountain House Parkway by Year 2025. As a result of the new Schulte Road extension, three future intersections such as Lammers Road/New Schulte Road, Hansen Road/New Schulte Road, and Mountain House Parkway/New Schulte Road were studied under Year 2025 Base, and Year 2025 Base plus Full Project Conditions. The lane configurations/geometry assumed for these three future study intersections are shown in Figure 3.

The results of the near-term 2010 Base Conditions LOS analysis are shown in Table IX. The detailed LOS calculation sheets are contained in Appendix H.

Under Cumulative Year 2025 Base scenario, all thirteen study intersections are expected to operate acceptably except for the intersections of Mountain House Parkway/I-205 Westbound Ramps, Mountain House Parkway/I-205 Eastbound Ramps, Mountain House Parkway/I-580 Westbound Ramps, Mountain House Parkway/I-580 Eastbound Ramps, Lammers Road/Schulte Road, Lammers Road/11th Street, Corral Hollow Road/11th Street, and Corral Hollow Road/Schulte Road.

For the intersection of Mountain House Parkway/I-205 Westbound Ramps, in addition to signalization (same mitigation as that of Year 2010 Base scenario), 1) Adding a through lane along the northbound Mountain House Parkway and modifying the lane geometry to have an exclusive left turn lane and a through lane (currently, a shared left turn-through lane), 2) Adding a through lane along the southbound Mountain House Parkway and modifying the lane geometry to have a through lane and a shared through-right turn lane (currently, a shared through-right turn lane), and 3) Modifying the lane geometry on westbound off-ramp approach to have a shared left turn-through lane and an exclusive right turn lane (currently, a shared left turn-through-right turn lane) and facilitating “free” right turns from westbound off-ramp approach into northbound Mountain House Parkway, is expected to improve the level of service to an acceptable level under Year 2025 Base Conditions.

For the intersection of Mountain House Parkway/I-205 Eastbound Ramps, in addition to signalization (same mitigation as that of Year 2010 Base scenario), 1) Adding a through lane along the northbound Mountain House Parkway and modifying the lane geometry to have an exclusive right turn lane and a through lane (currently, a shared through-right turn lane), 2) Adding two through lanes along the southbound Mountain House Parkway and modifying the lane geometry to have an exclusive left turn lane and two through lanes (currently, a shared left turn-through lane), and 3) Modifying the lane geometry on eastbound off-ramp approach to have two exclusive left turn lanes and a shared through-right turn lane (currently, a shared left turn-through-right turn lane), is expected to improve the level of service to an acceptable level under Year 2025 Base Conditions.

For the intersection of Mountain House Parkway/I-580 Westbound Ramps, 1) Signalizing the intersection, 2) Modifying the lane geometry along southbound Mountain House Parkway to have a through lane and a shared through-right turn lane (currently, a through lane and an exclusive right turn lane), and 3) Modifying the lane geometry on westbound off-ramp approach to have a shared left turn-right turn lane and an exclusive right turn lane (currently, an exclusive left turn lane and an exclusive right turn lane), is expected to improve the level of service to an acceptable level under Year 2025 Base Conditions.

For the intersection of Mountain House Parkway/I-580 Eastbound Ramps, in addition to the mitigation recommended under Year 2010 Base scenario (see Page 23), adding a left turn lane along the southbound Mountain House Parkway approach is expected to improve the level of service to an acceptable level under Year 2025 Base Conditions.

For the intersection of Lammers Road/Schulte Road, in addition to the mitigation recommended under Year 2010 Base plus Phase I plus Phase II project scenario (see Page 23), adding a through lane along northbound Lammers Road is expected to improve the level of service to an acceptable level under Year 2025 Base Conditions.

For the intersection of Lammers Road/11th Street, 1) Modifying the lane geometry along northbound Lammers Road approach to have two exclusive left turn lanes, two through lanes, and a shared through-right turn lane (currently, two exclusive left turn lanes, two through lanes and an exclusive right turn lane), 2) Adding a through lane along the southbound Lammers Road approach and modifying the lane geometry to have two exclusive left turn lanes, two through lanes, and a shared through-right turn lane (currently, two exclusive left turn lanes, one through lane and an exclusive right turn lane), and 3) Adding a left turn lane along eastbound 11th Street approach, would be needed to improve the level of service to acceptable level under Year 2025 Base Conditions.

For the intersection of Corral Hollow Road/11th Street, adding a through lane each on northbound and southbound Corral Hollow Road approaches is expected to improve the level of service to an acceptable level under Year 2025 Base Conditions.

For the intersection of Corral Hollow Road/Schulte Road, 1) Adding a through lane along the northbound Corral Hollow and modifying the lane geometry to have an exclusive left turn lane, two through lanes, and an exclusive right turn lane (currently, an exclusive left turn lane, one through lane and one shared through-right turn lane), and 2) Utilizing “overlap” phasing for vehicles turning right into northbound Corral Hollow Road from westbound Schulte Road approach.

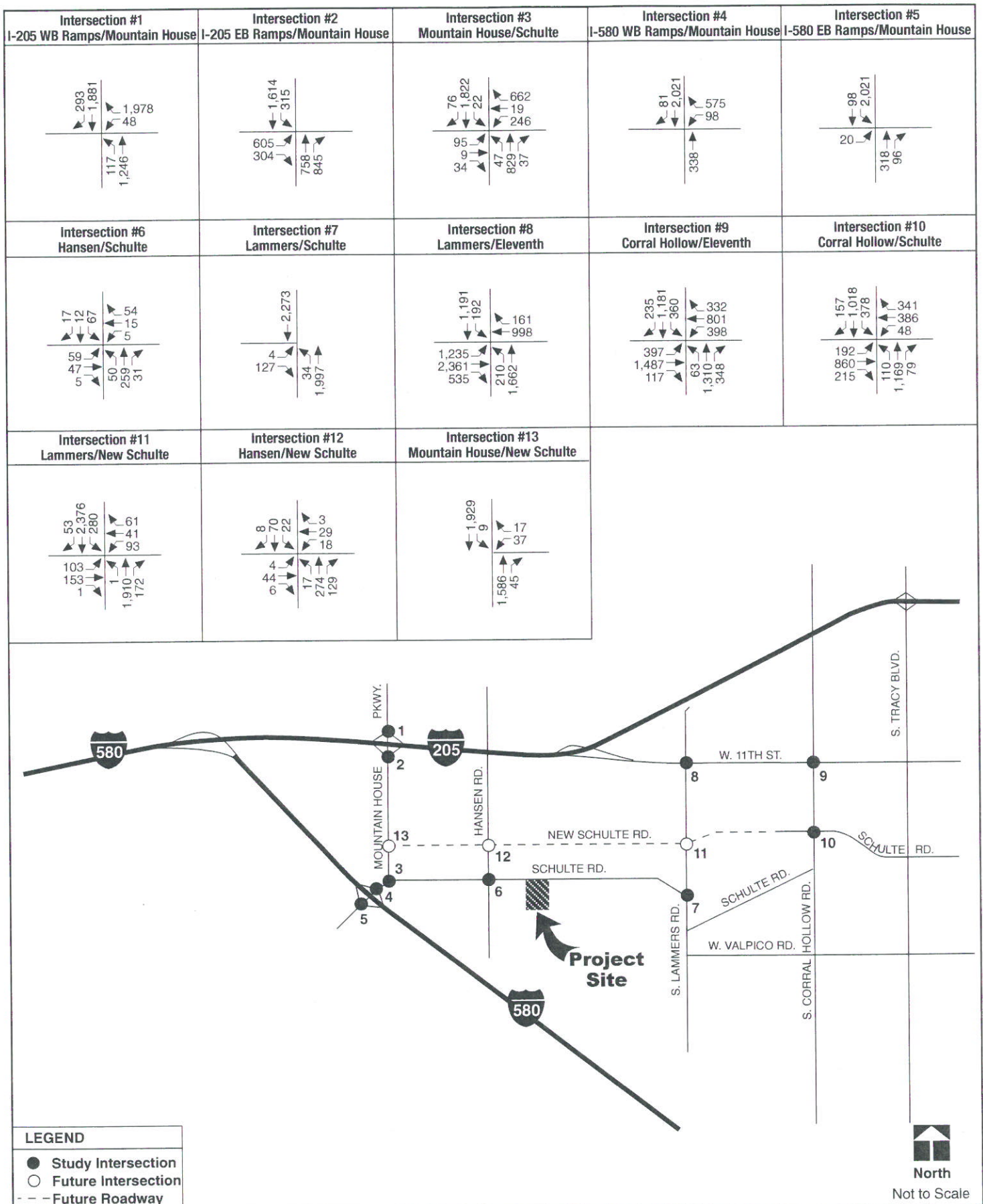
TABLE IX: YEAR 2025 BASE INTERSECTION LOS

| <i>Intersection</i> | <i>Control</i> | <i>P.M. Peak Hour</i> | |
|---|----------------|-----------------------|--------------|
| | | <i>Delay</i> | <i>LOS</i> |
| 1. Mountain House Pkwy. /I-205 WB Ramps | One-Way STOP | 120+ (120+) | F (F) |
| -- With Mitigation | Signal | 9.0 | A |
| 2. Mountain House Pkwy. /I-205 EB Ramps | One-Way STOP | 120+ (120+) | F (F) |
| -- With Mitigation | Signal | 45.9 | D |
| 3. Mountain House Pkwy. /Schulte Rd. | Signal | 37.0 | D |
| 4. Mountain House Pkwy. /I-580 WB Ramps | One-Way Stop | 35.6 (120+) | E (F) |
| -- With Mitigation | Signal | 22.1 | C |
| 5. Mountain House Pkwy. /I-580 EB Ramps | One-Way Stop | 120+ (120+) | F (F) |
| -- With Mitigation | Signal | 25.0 | C |
| 6. Hansen Rd. / Schulte Rd. | Four-Way Stop | 10.2 | B |
| 7. Lammers Rd. / Schulte Rd. | Three-Way Stop | 120+ | F |
| -- With Mitigation | Signal | 2.7 | A |
| 8. Lammers Rd. / 11 th St. | Signal | 120+ | F |
| -- With Mitigation | Signal | 42.8 | D |
| 9. Corral Hollow Rd. / 11 th St. | Signal | 47.0 | D |
| --With Mitigation | Signal | 31.5 | C |
| 10. Corral Hollow Rd. / Schulte Rd. | Signal | 40.3 | D |
| -- With Mitigation | Signal | 33.9 | C |
| 11. Lammers Rd. / New Schulte Rd. | Signal | 18.0 | B |
| 12. Hansen Rd. / New Schulte Rd. | Four-Way Stop | 10.9 | B |
| 13. Mountain House Pkwy. / New Schulte Rd. | Signal | 5.9 | A |

Notes: LOS = Level of Service

X.X (X.X) = Overall intersection delay (minor approach delay) in seconds per vehicle

Delay = Average stopped delay at signalized intersections and average delay for all movements at Stop- controlled intersections. Values in parenthesis indicated average delay for the critical movement at One-Way and Two-Way STOP-controlled intersections



City of Tracy
Tracy Youth Sports Complex
Year 2025 PM Peak Hour Turning Movement Volumes

Figure
14



YEAR 2025 BASE PLUS PROJECT CONDITIONS

The Year 2025 plus Project scenario adds traffic from the proposed project to Year 2025 base conditions traffic. It was assumed that the proposed Youth Sports Park would be fully built with the completion of Phases I and II by Year 2025. Figure 15 shows the project trip assignment at the study intersections with the new Schulte Road extension by Year 2025. Figure 16 shows the projected peak hour turning movement volumes for Year 2025 Base plus Project scenario. Table X shows the intersection level of service analysis results for Year 2025 Base plus Project scenario. Detailed calculation sheets are contained in Appendix I.

Under Cumulative Year 2025 Base plus Project scenario, all the thirteen study intersections are expected to continue to operate acceptably except for the intersections (same as that of Year 2025 Base scenario) of Mountain House Parkway/I-205 Westbound Ramps, Mountain House Parkway/I-205 Eastbound Ramps, Mountain House Parkway/I-580 Westbound Ramps, Mountain House Parkway/I-580 Eastbound Ramps, Lammers Road/Schulte Road, Lammers Road/11th Street, Corral Hollow Road/11th Street, and Corral Hollow Road/Schulte Road.

For the intersections of Mountain House Parkway/I-205 Westbound Ramps and Mountain House Parkway/I-205 Eastbound Ramps, Mountain House Parkway/I-580 Westbound Ramps, Mountain House Parkway/I-580 Eastbound Ramps, Lammers Road/Schulte Road, and Lammers Road/11th Street, the mitigations recommended under Year 2025 Base scenario (see Pages 31 and 32) are expected to improve the levels of service to an acceptable level under Year 2025 Base plus Project scenario.

For the intersection of Corral Hollow Road/11th Street, in addition to the mitigation recommended under Year 2025 Base scenario (see Page 32), utilizing “overlap phasing for vehicle turning right into eastbound 11th Street from northbound Corral Hollow Road is expected to improve the level of service to an acceptable level under Year 2025 Base plus Project Conditions.

For the intersection of Corral Hollow Road/Schulte Road, in addition to the mitigation recommended under Year 2025 Base scenario (see Page 32), 1) Adding a through lane along the westbound Schulte Road, and 2) Adding a through lane along southbound approach and modifying the lane geometry to have two exclusive left turn lanes, two through lanes and an exclusive right turn lane (currently, two exclusive left turn lane, one through lane and one shared through-right turn lane), is expected to improve the level of service to an acceptable level under Year 2025 Base plus Project Conditions.

TABLE X: YEAR 2025 BASE PLUS PROJECT INTERSECTION LEVELS OF SERVICE

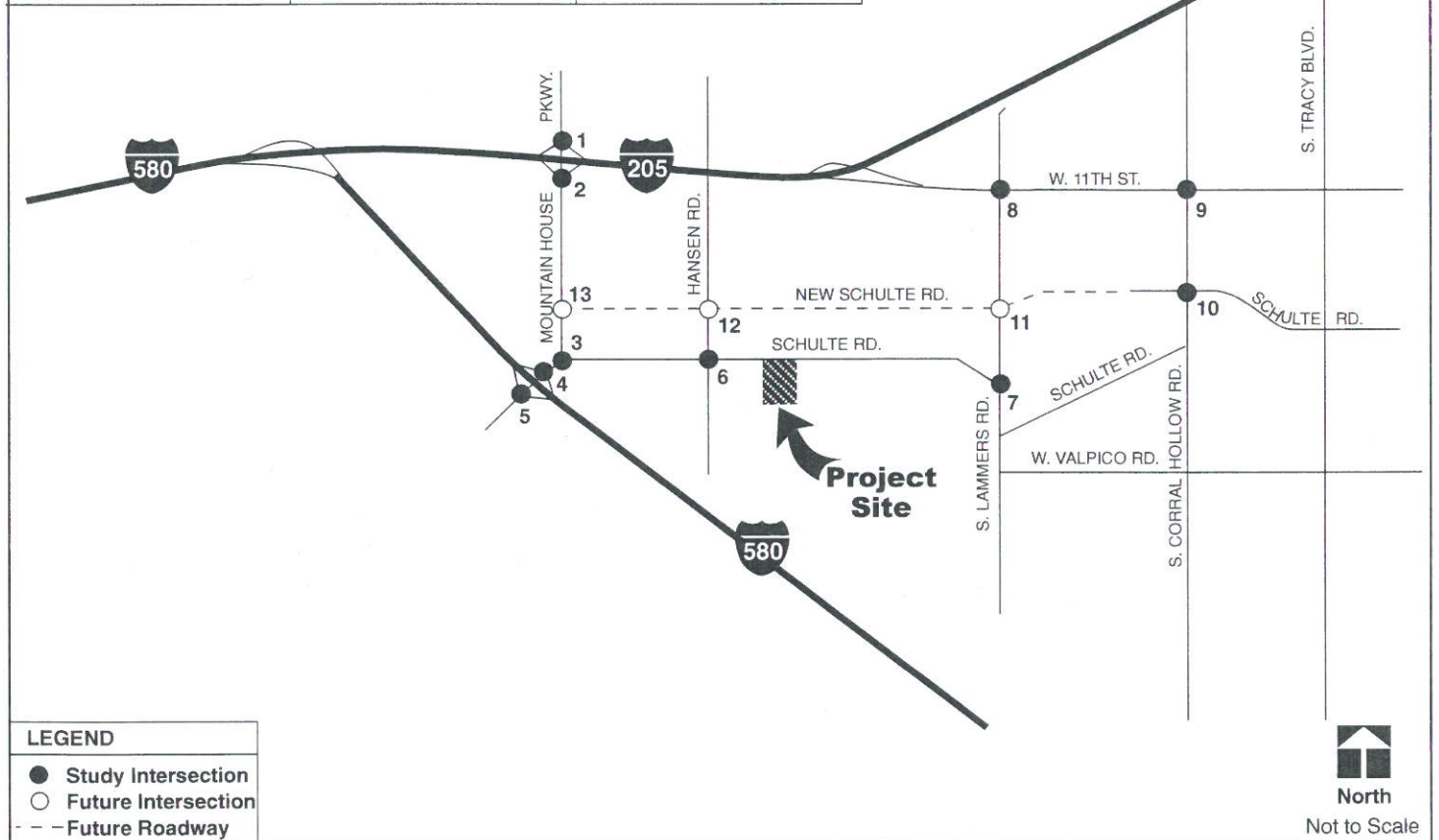
| <i>Intersection</i> | <i>Control</i> | <i>P.M. Peak Hour</i> | |
|---|----------------|-----------------------|--------------|
| | | <i>Delay</i> | <i>LOS</i> |
| 1. Mountain House Pkwy. /I-205 WB Ramps | One-Way STOP | 120+ (120+) | F (F) |
| -- With Mitigation | Signal | 11.3 | B |
| 2. Mountain House Pkwy. /I-205 EB Ramps | One-Way STOP | 120+ (120+) | F (F) |
| -- With Mitigation | Signal | 48.5 | D |
| 3. Mountain House Pkwy. /Schulte Rd. | Signal | 41.6 | D |
| 4. Mountain House Pkwy. /I-580 WB Ramps | One-Way Stop | 43.3 (120+) | E (F) |
| -- With Mitigation | Signal | 25.1 | C |
| 5. Mountain House Pkwy. /I-580 EB Ramps | One-Way Stop | 120+ (120+) | F (F) |
| -- With Mitigation | Signal | 31.7 | C |
| 6. Hansen Rd. / Schulte Rd. | Four-Way Stop | 15.0 | C |
| 7. Lammers Rd. / Schulte Rd. | Three-Way Stop | 120+ | F |
| -- With Mitigation | Signal | 34.2 | C |
| 8. Lammers Rd. / 11 th St. | Signal | 120+ | F |
| -- With Mitigation | Signal | 54.5 | D |
| 9. Corral Hollow Rd. / 11 th St. | Signal | 52.9 | D |
| --With Mitigation | Signal | 34.4 | C |
| 10. Corral Hollow Rd. / Schulte Rd. | Signal | 53.2 | D |
| -- With Mitigation | Signal | 34.2 | C |
| 11. Lammers Rd. / New Schulte Rd. | Signal | 30.2 | C |
| 12. Hansen Rd. / New Schulte Rd. | Four-Way Stop | 11.0 | B |
| 13. Mountain House Pkwy. / New Schulte Rd. | Signal | 7.8 | A |

Notes: LOS = Level of Service

X.X (X.X) = Overall intersection delay (minor approach delay) in seconds per vehicle

Delay = Average stopped delay at signalized intersections and average delay for all movements at Stop-controlled intersections. Values in parenthesis indicated average delay for the critical movement at One-Way and Two-Way STOP-controlled intersections

| | | | | |
|---|---|---|---|---|
| Intersection #1 I-205 WB Ramps/Mountain House | Intersection #2 I-205 EB Ramps/Mountain House | Intersection #3 Mountain House/Schulte | Intersection #4 I-580 WB Ramps/Mountain House | Intersection #5 I-580 EB Ramps/Mountain House |
| | | | | |
| Intersection #6 Hansen/Schulte | Intersection #7 Lammers/Schulte | Intersection #8 Lammers/Eleventh | Intersection #9 Corral Hollow/Eleventh | Intersection #10 Corral Hollow/Schulte |
| | | | | |
| Intersection #11 Lammers/New Schulte | Intersection #12 Hansen/New Schulte | Intersection #13 Mountain House/New Schulte | | |
| | | | | |

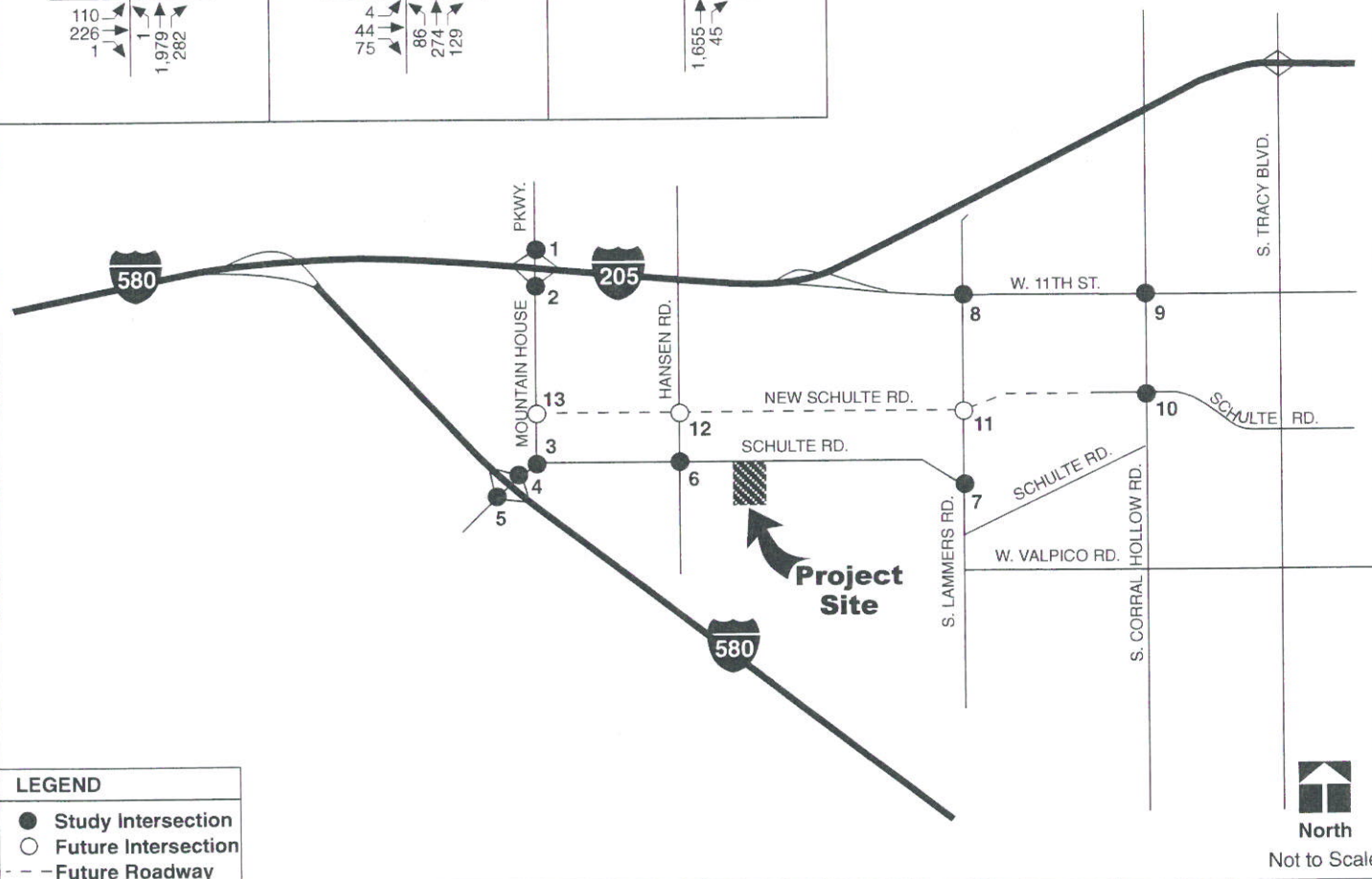


City of Tracy
Tracy Youth Sports Complex
Project Trip Assignment With New Schulte Road Extension 15

Figure



| Intersection #1 I-205 WB Ramps/Mountain House | Intersection #2 I-205 EB Ramps/Mountain House | Intersection #3 Mountain House/Schulte | Intersection #4 I-580 WB Ramps/Mountain House | Intersection #5 I-580 EB Ramps/Mountain House |
|--|--|--|--|--|
| | | | | |
| Intersection #6 Hansen/Schulte | Intersection #7 Lammers/Schulte | Intersection #8 Lammers/Eleventh | Intersection #9 Corral Hollow/Eleventh | Intersection #10 Corral Hollow/Schulte |
| | | | | |
| Intersection #11 Lammers/New Schulte | Intersection #12 Hansen/New Schulte | Intersection #13 Mountain House/New Schulte | | |
| | | | | |



City of Tracy
Tracy Youth Sports Complex
**Year 2025 + Project (Phase I & II) PM Peak Hour
Turning Movement Volumes**

Figure
16



Cumulative Fair Share Analysis

Table XI shows the project fair share analysis under Year 2025 Base plus Project scenario. The project fair share at intersections that operate unacceptably under Year 2025 Base plus Project scenario was calculated by dividing the project trips by the cumulative traffic volume increment from Existing Conditions to Year 2025 plus Project Conditions.

TABLE XI: CUMULATIVE PROJECT FAIR SHARE ANALYSIS

| <i>Intersection</i> | <i>Project Traffic</i> | <i>Cumulative Increment</i> | <i>Percent Project Fair Share</i> |
|---|------------------------|-----------------------------|-----------------------------------|
| 1. Mountain House Pkwy. /I-205 WB Ramps | 249 | 5056 | 4.9 |
| 2. Mountain House Pkwy. /I-205 EB Ramps | 278 | 3986 | 7.0 |
| 4. Mountain House Pkwy. /I-580 WB Ramps | 162 | 2402 | 6.7 |
| 5. Mountain House Pkwy. /I-580 EB Ramps | 81 | 1624 | 5.0 |
| 7. Lammers Rd. / Schulte Rd. | 746 | 4436 | 16.8 |
| 8. Lammers Rd. / 11 th St. | 270 | 6508 | 4.1 |
| 9. Corral Hollow Rd. / 11 th St. | 380 | 3172 | 12.0 |
| 10. Corral Hollow Rd. / Schulte Rd. | 458 | 3155 | 14.5 |

Signal Warrant Analysis

The justification for the installation of a traffic signal at an intersection is based on the warrants stated in the Caltrans Manual and in the Manual On Uniform Traffic Control Devices (MUTCD) published by the Federal Highway Administration (FHWA). There is a total of 11 warrants that evaluate the need for a signal based on many reasons including excessive delay to minor street traffic, large pedestrian volumes, school crossing, signal progression, accident experience and excessive delay during the peak hour. When the design speed/85th percentile speed of traffic on the major street exceeds 40 miles per hour in either in urban or rural area, or when the intersection lies within the built-up area of an isolated community having a population of less than 10,000, the location is considered rural. Based on the above criteria, the rural warrants were considered to complete the signal warrant analysis for the seven selected study intersections.

The decision to install a signal should not be based solely upon the warrants, since the installation of traffic signals may increase certain types of collisions. Delay, congestion, approach conditions, driver confusion, future land use or other evidence of the need for right of way assignment beyond that which could be provided by stop signs must be demonstrated.

TABLE XII: PM PEAK HOUR SIGNAL WARRANT ANALYSIS

| <i>Intersection</i> | | <i>Existing Control</i> | <i>Scenarios where a signal is recommended as a mitigation</i> | <i>Rural Peak-Hour Warrant met?</i> |
|---------------------|--|-------------------------|--|-------------------------------------|
| 1 | Mountain House Pkwy. /I-205 WB Ramps | 1-Way Stop | 2010, 2010+Prj, 2025, 2025+Prj | YES, YES, YES, YES |
| 2 | Mountain House Pkwy. /I-205 EB Ramps | 1-Way Stop | 2010, 2010+Prj, 2025, 2025+Prj | YES, YES, YES, YES |
| 4 | Mountain House Pkwy. /I-580 WB Ramps | 1-Way Stop | 2025, 2025+Prj | YES, YES |
| 5 | Mountain House Pkwy. /I-580 EB Ramps | 1-Way Stop | Ex, Ex+Prj, 2010, 2010+Prj, 2025, 2025+Prj | YES, YES, YES, YES, YES |
| 7 | Lammers Rd. / Schulte Rd. | 3-Way Stop | Ex+Prj, 2010, 2010+Prj, 2025, 2025+Prj | YES, YES, YES, YES, YES |
| 11 | Lammers Rd. / New Schulte Rd. | Future | 2025, 2025+Prj | YES, YES |
| 13 | Mountain House Pkwy. / New Schulte Rd. | Future | 2025, 2025+Prj | NO, YES |

Notes: Ex=Existing Conditions
Ex+Prj=Existing plus Project Conditions
2010=Year 2010 Base Conditions
2025=Year 2025 Base Conditions
2010+Prj=Year 2010 Base plus Project Conditions
2025+Prj=Year 2025 Base plus Project Conditions

The most congested and critical time of day on a roadway usually occurs during the peak hour at the intersection. Therefore, if a signal is warranted based on the peak hour warrant, it is an indication that there is a need to further investigate the need for a signal based on the other 10 warrants. Table XII shows the peak hour signal warrant analysis for the existing unsignalized study intersections that are expected to operate unacceptably under different scenarios and two future study intersections that were analyzed as signalized intersections in Year 2025. Appendix J contains the signal warrant analysis sheets.

CONCLUSIONS AND RECOMMENDATIONS

TJKM has reached the following conclusions regarding the proposed Tracy Youth Sports Park project:

Project Trip Generation

The proposed Tracy Youth Sports Park is expected to generate approximately a total of 1,462 p.m. peak hour trips (731 inbound and 731 outbound) with Phase I and Phase II developments generating 450 trips (225 inbound and 225 outbound) and 1,012 trips (516 inbound and 516 outbound), respectively.

Intersection Level of Service Analysis

Based on discussions with the City of Tracy, only Phase I of the Tracy Sports Facility Project will be constructed in the near term (prior to 2010). Phase II of the proposed project will be constructed after improvements to the existing and future circulation system have been completed. These improvements will add additional capacity at intersections and roadways, which have been identified to operate unacceptably in the future beyond the year 2010. To better understand the impact of the project, which is expected to be built in the near term (prior to 2010) and the Cumulative scenario (beyond 2010), it is important to identify the traffic conditions both with and without the project for the existing, Near-Term (2010) and Cumulative (2025) Conditions:

Existing Traffic Condition

Currently, all the ten study intersections operate at acceptable level of service (LOS) during the p.m. peak hour, except for the intersection of Mountain House Parkway/I-580 Eastbound Ramps, which operates at LOS E. Signalizing the intersection is expected to improve the service level to LOS B during the p.m. peak hour under existing conditions.

Existing plus Project (Phase I) Traffic Conditions:

All study intersections are expected to operate acceptably during the p.m. peak hour, except for the intersection of Mountain House Parkway/I-580 Eastbound Ramps, which is expected to continue to operate at LOS E and currently meets rural peak hour signal warrants. Signalizing this intersection will improve the LOS to B during the p.m. peak hour for Existing and Existing plus phase I Conditions. It is important to note that the LOS E or worse conditions and the need for signalization occur with or without the addition of project traffic. Alternatively, since no improvements are currently proposed at the interchange of Mountain House Parkway /I-580, and future development is in the beginning planning stages with developments such as Cordes Ranch and others, signalizing the intersection of Mountain House Parkway/I-580 Eastbound Ramps could potentially become a throw away improvement when more development occurs and widening of the interchange and possibly the addition of Loop Ramps are needed. Therefore, an alternative mitigation to signalization would be to make Mountain House Parkway/I-580 Eastbound Ramps an all-way stop controlled intersection, which would improve its operation to LOS B.

Near-Term (Year 2010) Traffic Conditions with and without Phase I of the Project:

Under this scenario, all study intersections operate acceptably during the p.m. peak hour, except for the intersections of Mountain House Parkway/I-580 Eastbound Ramps, Mountain House Parkway/I-205 Eastbound Ramps, Mountain House Parkway/I-205 Westbound Ramps and Lammers Road/Schulte Road. It is important to note that all the above-mentioned intersections will operate at unacceptable levels of service with or without the addition of project traffic. Additionally, as part of

the Mountain House Development conditions of approval, an interchange improvement project is currently under design, which will improve the level of service at the I-205/ Mountain House Parkway Eastbound and Westbound Ramps to acceptable conditions.

Cumulative (Year 2025) Traffic Conditions with and without the Project (Phase I plus Phase II):

Year 2025 traffic conditions were based on traffic projections from the City of Tracy travel demand-forecasting model. It was assumed that the new Schulte Road extension would be fully built by Year 2025 and as a result three more intersections (Mountain House Parkway/New Schulte Road, Hansen Road/New Schulte Road, and Lammers Road/New Schulte Road) were studied as part of this scenario. Under this scenario, all thirteen study intersections are expected to operate acceptably during the p.m. peak hour, except for the intersections of Mountain House Parkway/I-205 Westbound Ramps, Mountain House Parkway/I-205 Eastbound Ramps, Mountain House Parkway/I-580 Westbound Ramps, Mountain House Parkway/I-580 Eastbound Ramps, Lammers Road/Schulte Road, Lammers Road/11th Street, Corral Hollow Road/11th Street, and Corral Hollow Road/Schulte Road, which are expected to operate at LOS F, LOS F, LOS F, LOS F, LOS F, and LOS F, LOS D, and LOS D, respectively. With the addition of project traffic, the study intersections, which operate unacceptably under Year 2025 scenario, are expected to continue to operate at unacceptable service levels with the addition of project traffic. It is important to note that the LOS E or worse conditions and the need for signalization occur with or without the addition of project traffic.

In conclusion, two conditions exist relative to the potential need for mitigation required by the Tracy Sports facility:

1. Improvements to the interchange at I-205/Mountain House Parkway will be constructed prior to completion of Phase I of the Tracy Sport Facility Project. Therefore, no additional mitigation will be required by the Tracy Sports Facility Development to achieve acceptable levels of service at the interchange in existing or near term conditions.
2. All other intersections that require mitigation require this mitigation due to conditions that either currently exist or which will exist in the future whether or not the Tracy Sports Facility Development is constructed. The six intersections in this category are Mountain House Parkway/ I-580 Eastbound Ramps, Mountain House Parkway/ I-580 Westbound Ramps, Lammers Road/Schulte Road, Lammers Road/11th Street, Corral Hollow Road/11th Street and Corral Hollow Road/Schulte Road.

Additionally, the following is the detailed description of mitigations recommended under future scenarios:

Existing Plus Proposed Project Traffic Scenario

Under Existing plus Phase I project conditions, all ten study intersections are expected to operate acceptably during the p.m. peak hour, except for the intersection of Mountain House Parkway/I-580 Eastbound Ramps, which is expected to continue to operate at LOS E. Signalizing the intersection (same mitigation as Existing Conditions) is expected to improve the LOS to B during the p.m. peak hour under Existing plus Phase I project Conditions.

Under Existing plus Phase I plus Phase II project conditions, all ten study intersections are expected to operate acceptably during the p.m. peak hour, except for the intersections of Mountain House Parkway/I-580 Eastbound Ramps, Hansen Road/Schulte Road, and Lammers Road/Schulte Road, which are expected to operate at LOS F, LOS E, and LOS F, respectively.

Signalizing the intersection of Mountain House Parkway/I-580 Eastbound Ramps (same mitigation as Existing Conditions) is expected to improve the service level to LOS B during the p.m. peak hour under Existing plus Phase I plus Phase II project Conditions.

Modifying the lane configuration on the eastbound Schulte Road approach at the intersection of Hansen Road/Schulte Road to have a shared left turn-through lane and a shared through-right turn lane (currently, the eastbound approach has a shared left turn-through lane and an exclusive right turn lane) is expected to improve the service level to LOS B during the p.m. peak hour under Existing plus Phase I plus Phase II project Conditions.

Signalizing the intersection of Lammers Road/Schulte Road and modifying the eastbound Schulte Road approach to have an exclusive left turn lane and an exclusive right turn lane (currently one shared left turn-right turn lane along the eastbound approach) is expected to improve the service level to LOS C during the p.m. peak hour under Existing plus Phase I plus Phase II project Conditions.

Near-term (Year 2010) Traffic Scenario

Under this scenario, all ten study intersections are expected to operate acceptably during the p.m. peak hour, except for the intersections of Mountain House Parkway/I-205 Westbound Ramps, Mountain House Parkway/I-205 Eastbound Ramps, Mountain House Parkway/I-580 Eastbound Ramps, and Lammers Road/Schulte Road, which are expected to operate at LOS F.

Signalizing the intersection of Mountain House Parkway/I-205 Westbound Ramps is expected to improve the service level to LOS D during the p.m. peak hour under Year 2010 Base Conditions.

Signalizing the intersection of Mountain House Parkway/I-205 Eastbound Ramps is expected to improve the service level to LOS C during the p.m. peak hour under Year 2010 Base Conditions.

Signalizing the intersection (same as Existing Conditions) and modifying the southbound Mountain House Parkway approach to have an exclusive left turn lane and a through lane (currently a shared left turn-through lane on the southbound approach) at the intersection of Mountain House Parkway/I-580 Eastbound Ramps is expected to improve the service level to LOS B during the p.m. peak hour under Year 2010 Base Conditions.

The mitigation described under Existing plus Phase I plus Phase II project Conditions is expected to improve the service level at the intersection of Lammers Road/Schulte Road to LOS B during the p.m. peak hour under Year 2010 Base Conditions.

Year 2010 Plus Proposed Project Traffic Scenario

Under Year 2010 Base plus Phase I project Conditions, all the ten study intersections are expected to continue to operate acceptably except for the intersections of Mountain House Parkway/I-205 Westbound Ramps, Mountain House Parkway/I-205 Eastbound Ramps, Mountain House Parkway/I-580 Eastbound Ramps, and Lammers Road/Schulte Road, which are expected to continue to operate at LOS F.

The mitigations described under Year 2010 Base Conditions are expected to improve the service levels at all the intersections that operate unacceptably to acceptable service levels during the p.m. peak hour under Year 2010 Base plus Phase I project Conditions.

Under Year 2010 Base plus Phase I plus Phase II project Conditions, all the ten study intersections are expected to continue to operate acceptably except for the intersections of Mountain House

Parkway/I-205 Westbound Ramps, Mountain House Parkway/I-205 Eastbound Ramps, Mountain House Parkway/I-580 Eastbound Ramps, Hansen Road/Schulte Road, and Lammers Road/Schulte Road, which are expected to operate at LOS F, LOS F, LOS F, LOS D, and LOS F, respectively.

For the intersections of Mountain House Parkway/I-205 Westbound Ramps, Mountain House Parkway/I-205 Eastbound Ramps, Mountain House Parkway/I-580 Eastbound Ramps, the mitigations described under Year 2010 Base Conditions are expected to improve the service levels to acceptable limits during the p.m. peak hour under Year 2010 Base plus Phase I plus Phase II project Conditions.

For the intersection of Hansen Road/Schulte Road, the mitigation described under Existing plus Phase I plus Phase II project Conditions is expected to improve the service level to acceptable limit during the p.m. peak hour under Year 2010 Base plus Phase I plus Phase II project Conditions. The mitigation recommended under Existing plus Phase I plus Phase II project, and Year 2010 Base plus Phase I plus Phase II project Conditions for the intersection of Hansen Road/Schulte Road should be considered as an interim mitigation because the intersection is expected to operate acceptably under both Cumulative Year 2025 Base, and Cumulative Year 2025 Base plus Project Conditions.

For the intersection of Lammers Road/Schulte Road, in addition to the mitigation measures recommended under Year 2010 Base Conditions, 1) Adding a through lane along the northbound Lammers Road and modifying the lane geometry to have an exclusive left turn lane and a through lane (currently, a shared left turn-through lane), 2) Adding a through lane along the southbound Lammers Road and modifying the lane geometry to have a through lane and a shared through-right turn lane (currently, a shared through-right turn lane), and 3) Facilitating “free” right turns from eastbound Schulte Road approach into southbound Lammers Road, would be needed to improve the level of service to acceptable limit under Year 2010 Base plus Phase I plus Phase II project Conditions.

Future (Year 2025) Traffic Scenario

Under this scenario, all the thirteen study intersections are expected to operate acceptably during the p.m. peak hour, except for the intersections of Mountain House Parkway/I-205 Westbound Ramps, Mountain House Parkway/I-205 Eastbound Ramps, Mountain House Parkway/I-580 Westbound Ramps, Mountain House Parkway/I-580 Eastbound Ramps, Lammers Road/Schulte Road, Lammers Road/11th Street, Corral Hollow Road/11th Street, and Corral Hollow Road/Schulte Road, which are expected to operate at LOS F, LOS F, LOS F, LOS F, LOS F, and LOS F, LOS D, and LOS D, respectively.

For the intersection of Mountain House Parkway/I-205 Westbound Ramps, in addition to signalization (same mitigation as that of Year 2010 Base scenario), 1) Adding a through lane along the northbound Mountain House Parkway and modifying the lane geometry to have an exclusive left turn lane and a through lane (currently, a shared left turn-through lane), 2) Adding a through lane along the southbound Mountain House Parkway and modifying the lane geometry to have a through lane and a shared through-right turn lane (currently, a shared through-right turn lane), and 3) Modifying the lane geometry on westbound off-ramp approach to have a shared left turn-through lane and an exclusive right turn lane (currently, a shared left turn-through-right turn lane) and facilitating “free” right turns from westbound off-ramp approach into northbound Mountain House Parkway, is expected to improve the level of service to an acceptable level under Year 2025 Base Conditions.

For the intersection of Mountain House Parkway/I-205 Eastbound Ramps, in addition to signalization (same mitigation as that of Year 2010 Base scenario), 1) Adding a through lane along the northbound Mountain House Parkway and modifying the lane geometry to have an exclusive right turn lane and a through lane (currently, a shared through-right turn lane), 2) Adding two through lanes along the

southbound Mountain House Parkway and modifying the lane geometry to have an exclusive left turn lane and two through lanes (currently, a shared left turn-through lane), and 3) Modifying the lane geometry on eastbound off-ramp approach to have two exclusive left turn lanes and a shared through-right turn lane (currently, a shared left turn-through-right turn lane), is expected to improve the level of service to an acceptable level under Year 2025 Base Conditions.

For the intersection of Mountain House Parkway/I-580 Westbound Ramps, 1) Signalizing the intersection, 2) Modifying the lane geometry along southbound Mountain House Parkway to have a through lane and a shared through-right turn lane (currently, a through lane and an exclusive right turn lane), and 3) Modifying the lane geometry on westbound off-ramp approach to have a shared left turn-right turn lane and an exclusive right turn lane (currently, an exclusive left turn lane and an exclusive right turn lane), is expected to improve the level of service to an acceptable level under Year 2025 Base Conditions.

For the intersection of Mountain House Parkway/I-580 Eastbound Ramps, in addition to the mitigation recommended under Year 2010 Base scenario, adding a left turn lane along the southbound Mountain House Parkway approach is expected to improve the level of service to an acceptable level under Year 2025 Base Conditions.

For the intersection of Lammers Road/Schulte Road, in addition to the mitigation recommended under Year 2010 Base plus Phase I plus Phase II project scenario, adding a through lane along northbound Lammers Road is expected to improve the level of service to an acceptable level under Year 2025 Base Conditions.

For the intersection of Lammers Road/11th Street, 1) Modifying the lane geometry along northbound Lammers Road approach to have two exclusive left turn lanes, two through lanes, and a shared through-right turn lane (currently, two exclusive left turn lanes, two through lanes and an exclusive right turn lane), 2) Adding a through lane along the southbound Lammers Road approach and modifying the lane geometry to have two exclusive left turn lanes, two through lanes, and a shared through-right turn lane (currently, two exclusive left turn lanes, one through lane and an exclusive right turn lane), and 3) Adding a left turn lane along eastbound 11th Street approach, is expected to improve the level of service to an acceptable level under Year 2025 Base Conditions.

For the intersection of Corral Hollow Road/11th Street, adding a through lane each on northbound and southbound Corral Hollow Road approaches is expected to improve the level of service to an acceptable level under Year 2025 Base Conditions.

For the intersection of Corral Hollow Road/Schulte Road, 1) Adding a through lane along the northbound Corral Hollow and modifying the lane geometry to have an exclusive left turn lane, two through lanes, and an exclusive right turn lane (currently, an exclusive left turn lane, one through lane and one shared through-right turn lane), and 2) Utilizing “overlap” phasing for vehicles turning right into northbound Corral Hollow Road from westbound Schulte Road approach is expected to improve the level of service to an acceptable level under Year 2025 Base Conditions.

Future (Year 2025) Plus Project Traffic Scenario

Under this scenario, the same study intersections as that of Year 2025 scenario are expected to continue to operate at unacceptable service levels.

For the intersections of Mountain House Parkway/I-205 Westbound Ramps and Mountain House Parkway/I-205 Eastbound Ramps, Mountain House Parkway/I-580 Westbound Ramps, Mountain House Parkway/I-580 Eastbound Ramps, Lammers Road/Schulte Road, and Lammers Road/11th

Street, the mitigations recommended under Year 2025 Base scenario are expected to improve the levels of service to an acceptable level under Year 2025 Base plus Project scenario.

For the intersection of Corral Hollow Road/11th Street, in addition to the mitigation recommended under Year 2025 Base scenario, utilizing “overlap phasing for vehicle turning right into eastbound 11th Street from northbound Corral Hollow Road is expected to improve the level of service to an acceptable level under Year 2025 Base plus Project Conditions.

For the intersection of Corral Hollow Road/Schulte Road, in addition to the mitigation recommended under Year 2025 Base scenario, 1) Adding a through lane along the westbound Schulte Road, and 2) Adding a through lane along southbound approach and modifying the lane geometry to have two exclusive left turn lanes, two through lanes and an exclusive right turn lane (currently, two exclusive left turn lane, one through lane and one shared through-right turn lane), is expected to improve the level of service to an acceptable level under Year 2025 Base plus Project Conditions.

Cumulative Fair Share Analysis (Year 2025 Base plus Project Conditions)

The cumulative fair share analysis (Year 2025 Base plus Project Conditions) shows that the project needs to pay its fair share toward the improvement costs at eight study intersections. The following summarizes the percent project fair share for the eight study intersections:

- Mountain House Parkway/I-205 Westbound Ramps → 4.9 percent
- Mountain House Parkway/I-205 Eastbound Ramps → 7.0 percent
- Mountain House Parkway/I-580 Westbound Ramps → 6.7 percent
- Mountain House Parkway/I-205 Eastbound Ramps → 5.0 percent
- Lammers Road/Schulte Road → 16.8 percent
- Lammers Road/11th Street → 4.1 percent
- Corral Hollow Road/11th Street → 12.0 percent
- Corral Hollow Road/Schulte Road → 14.5 percent

Recommendations at Schulte Road/Project Driveway Intersection with Project Traffic

- Install a signal
- Provide an exclusive left turn lane with 300 feet of storage along the project driveway to facilitate project vehicles turning left into westbound Schulte Road
- Provide two exclusive right turn lanes with 375 feet of storage each along the project driveway to facilitate project vehicles turning right into eastbound Schulte Road
- Provide two exclusive left turn lanes with 400 feet of storage each along the westbound Schulte Road to facilitate project vehicles turning left into the project driveway
- Provide an exclusive right turn lane with 250 feet of storage along the eastbound Schulte Road to facilitate project vehicles turning right into the project driveway
- Provide a minimum of one through lane on eastbound and westbound Schulte Road to serve the through traffic in the future

STUDY REFERENCES

TJKM Personnel

| | |
|---------------------|---------------------|
| Chris D. Kinzel, PE | Principal-in-Charge |
| Gordon Lum | Senior Associate |
| Bradley Thornton | Project Manager |
| Arun Gajendran, EIT | Project Engineer |
| Geri Foley | Graphics Designer |
| Evi Pagh | Word Processor |

Persons Consulted

| | |
|----------------|--|
| John Palmer | City of Tracy Department of Public Works |
| Kuldeep Sharma | City of Tracy Department of Public Works |
| Ripon Bhatia | City of Tracy Department of Public Works |
| Karen McNamara | City of Tracy Parks and Community Services |
| Winnie Chung | Fehr and Peers Inc. |

Reference Materials

Traffic Signal Warrants, Caltrans Traffic Manual
Highway Capacity Manual (HCM) 2000

APPENDIX A – LEVEL OF SERVICE METHODOLOGY

APPENDIX B – LEVEL OF SERVICE WORKSHEETS: EXISTING

**APPENDIX C – LEVEL OF SERVICE WORKSHEETS:
EXISTING + PHASE I PROJECT**

**APPENDIX D – LEVEL OF SERVICE WORKSHEETS:
EXISTING +PHASE I +PHASE II PROJECT**

APPENDIX E – LEVEL OF SERVICE WORKSHEETS:
YEAR 2010 BASE

APPENDIX F – YEAR 2010 BASE + PHASE I PROJECT

APPENDIX G – YEAR 2010 BASE + PHASE I + PHASE II PROJECT

APPENDIX H – YEAR 2025 BASE

APPENDIX I – YEAR 2025 BASE + PROJECT

APPENDIX J – SIGNAL WARRANT ANALYSIS SHEETS

APPENDIX D: SB 610

RESOLUTION 2005-200

APPROVING TRACY YOUTH SPORTS FACILITY SB 610 WATER ASSESSMENT
DETERMINATION THAT CITY WATER SUPPLIES ARE SUFFICIENT TO SATISFY
THE WATER DEMANDS OF THE PROPOSED PROJECT'S 97.8
ACRES OF TURF AREA

WHEREAS, The City is the lead agency for the proposed Tracy Youth Sports Facility Project, and

WHEREAS, The City determines that an SB 610 Water Assessment is necessary for the proposed project, and

WHEREAS, The proposed project is located within the City's water service boundary as described in the City of Tracy Urban Water Management Plan, and

WHEREAS, The proposed project's water demand is accounted for in the City's projected water demands through 2020, and

WHEREAS, The projected water demand for the proposed project at build-out is accounted for in the Urban Water Management Plan, and

WHEREAS, The Urban Water Management Plan and the SB 610 Water Assessment account for water consumption for planned and existing parks, and

WHEREAS, The Tracy Youth Sports Facility SB 610 Water Assessment finds that there are sufficient water supplies to meet the demands of the proposed project's 97.8 acres of turf area;


NOW, THEREFORE, BE IT RESOLVED That the City Council hereby approves the Tracy Youth Sports Facility SB 610 determination that City water supplies are sufficient to satisfy the water demands of the proposed project.

The foregoing Resolution 2005-200 was passed and adopted by the Tracy City Council on the 19th day of July, 2005, by the following vote:

| | | |
|----------|------------------|--------------------------------|
| AYES: | COUNCIL MEMBERS: | IVES, TOLBERT, TUCKER, BILBREY |
| NOES: | COUNCIL MEMBERS: | SUNDBERG |
| ABSENT: | COUNCIL MEMBERS: | NONE |
| ABSTAIN: | COUNCIL MEMBERS: | NONE |


MAYOR

ATTEST:


CITY CLERK

July 19, 2005

AGENDA ITEM 7**REQUEST**

**APPROVE TRACY YOUTH SPORTS FACILITY SB 610 WATER
ASSESSMENT DETERMINATION THAT CITY WATER SUPPLIES ARE
SUFFICIENT TO SATISFY THE WATER DEMANDS OF THE PROPOSED
PROJECT**

DISCUSSION**Project Description/Introduction**

The proposed Tracy Youth Sports Facility (TYSF) project will consist of a combination youth field sports complex located on a 200-acre parcel within one mile of the City of Tracy's city limits. At build-out, the complex will include four football fields, fifteen soccer fields and one sport stadium. Additionally, twenty-three baseball/softball fields are planned for the site. The proposed project will also include 50 acres of general park/recreation area, a corporation yard for maintenance, concession stands, parking and associated lighting.

The purpose of this report is to determine if there are sufficient City water supplies available to serve the proposed TYSF project. Irrigation represents the largest water demand for this proposed project and the subsequent sections and attachments provide analyses and discussions of the project water demand and available water supplies in accordance with the requirements of SB 610. It should be noted that the purpose of the SB 610 water assessment is to conclude whether or not the total overall water supply will be sufficient. The City's treatment, transmission and distribution facilities for the water (as opposed to conveyance to the City) are not part of the SB 610 water assessment requirements.

SB 610 Background

Senate Bill 610 (SB 610) amended state law effective January 1, 2002 to improve the link between information on water supply availability and certain land use decisions made by cities and counties. The intent of SB 610 is to facilitate improved collaboration between public water supply agencies, mainly water districts, and cities/counties regarding water supplies and land use. Even though the City of Tracy is both the public water supply purveyor and lead agency for project approval, the City still must comply with the requirements of SB 610 when considering certain projects.

Under SB 610, water assessments must be furnished to local governments for projects that are subject to the California Environmental Quality Act Division 13 (CEQA) and are defined as a project under Water Code section 10912. Per the Water Code, a project means any of the following:

- 1) A proposed residential development of more than 500 dwelling units.

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- 2) A proposed shopping center or business establishment employing more than 1,000 persons or having more than 500,000 square feet of floor space.
- 3) A proposed commercial office building employing more than 1,000 persons or having more than 250,000 square feet of floor space.
- 4) A proposed hotel or motel, or both, having more than 500 rooms.
- 5) A proposed industrial, manufacturing, or processing plant, or industrial park planned to house more than 1,000 persons, occupying more than 40 acres of land, or having more than 650,000 square feet of floor area.
- 6) A mixed-use project that includes one or more of the projects specified in this subdivision.
- 7) A project that would demand an amount of water equivalent to, or greater than, the amount of water required by a 500 dwelling unit subdivision.

If the lead agency (City) determines that SB 610 applies to a proposed project, the public water supplier must prepare a water assessment and the lead agency must approve the assessment at a regular meeting.

The completion of a water assessment requires that the water purveyor determine if the water supply, based on normal, single and multiple dry years, will meet the water demand projected for the project plus meet the demand for existing and planned future uses. The assessment must quantify water received in prior years from all sources and document the groundwater supply (if groundwater is included).

Urban Water Management Plans (UWMP) are identified by SB 610 as the foundational document for meeting the requirements of the water assessment. The City of Tracy has a current UWMP (revised and adopted March 2002).

Applicability of SB 610 to the Proposed TYSF Project

Attached to this report is a document titled "Tracy Youth Sports Facility SB 610 Water Assessment (TYSF Water Assessment)." This document is arranged in a series of questions and answers that address the elements required for a SB 610 water assessment of the TYSF project.

The first question addresses the applicability of SB 610 to the Tracy Youth Sports Facility (TYSF) project. As described in the Water Assessment, the TYSF is subject to CEQA and will have an estimated total water demand of 387.3 acre-feet per year (AFY) at build-out, which is equivalent to the water demand for approximately 774 dwelling units. Thus, the project is subject to SB 610 as a project based on water demand, however it should be noted that it could be argued that SB 610 does not apply to the TYSF project because:

- 1) The proposed TYSF project will ultimately use recycled water to meet its irrigation needs (approximately 383 AFY).
- 2) The City of Tracy has institutional controls in place through the Tracy Municipal Code (Title 11, Chapter 11.28, Water Management) that would curtail the irrigation of the project site in water emergencies. Therefore,

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the multiple dry year analysis required by SB 610 really does not apply to the TYSF project.

The City of Tracy, however, is proceeding with the SB 610 Water Assessment to ensure that the water supply and demand needs for the project will be met with potable water because it is not certain when recycled water will be available to the project. Also, the City wants to ensure there are no negative impacts to the water supply for existing and planned uses by the TYSF project.

TYSF Project and the City of Tracy Urban Water Management Plan (UWMP)

The City of Tracy has a current UWMP that provides the required information for the main portion of the TYSF Water Assessment. In summary, the City of Tracy UWMP includes the following key pieces of information:

- 1) Descriptions of existing water supply entitlements.
- 2) The historic and projected water use by sector (type of use).
- 3) The reliability of each water supply available to the City in wet, average and multiple dry years.

Based on the UWMP and other water records (Groundwater Monitoring Reports, Water Inventory Reports, metered water data), the following can be determined:

- 1) The proposed project is located in the City's water service boundary as described in the City of Tracy UWMP.
- 2) The City of Tracy's water entitlements provide a maximum supply of 39,000 AFY and an average yield of 31,000 AFY.
- 3) Water usage during 2004 totaled 18,363 acre-feet and 2005 water use is projected at 17,700 acre-feet in the UWMP.
- 4) Irrigation for parks and open space was projected to be 1,200 acre-feet for 2005 in the UWMP and the 2004 actual water use for parks and open space was 700 acre-feet (metered water used).
- 5) The total yield for Tracy's water supplies under average conditions is 31,300 AFY, which is equivalent to the year 2020 water demand projection in the UWMP.
- 6) The projected water demand for the irrigation of parks and open space is 1,500 AFY for 2010.

It is important to note that the water demand for the TYSF project was calculated using the annual metered water consumption at the Tracy Sports Complex. Therefore, empirical data was used for accuracy (as opposed to estimated water demands per acre), as the TYSF project will have soil, climatic and plant characteristics that are essentially the same as the Tracy Sports Complex. The annual application rate for water at the Tracy Sports Complex is 3.96 acre-feet per acre (AFA).

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TYSF Water Assessment Findings

The goal of an SB 610 water assessment is to determine whether or not the water supply is sufficient to serve the proposed project. To make this determination, it is necessary to look at the proposed TYSF project water demand at build-out and compare it to existing park water demands and the projected park water demands based on the construction of planned parks. This is a subset of the larger assessment related to the overall water demands.

The proposed TYSF project will have an estimated total water demand at build out of 387.3 AFY. Based on the information in the UWMP and related documents (cited in the attachment), there is sufficient water for the TYSF project. This finding is based on several factors.

First, the proposed TYSF project is located within the water supply service boundaries in the City's UWMP. Secondly, the estimated project water demand at build-out is within the estimated parks and open space water use as projected in the UWMP. Thirdly, the projected parks and open space water use is a subset of the total projected City water use which is accounted for by the City's water entitlements and reliability analyses. Finally, the UWMP accounts for water consumption for planned parks that are described in the City of Tracy Parks Master Plan (2002). Per the attached TYSF Water Assessment:

The projected water use for parks in 2010 is 1,500 AFA, thus the water demand for the proposed project at build-out is accounted for in the UWMP (700 AFA + 387.3 acre-feet per year = 1,087.3 AFA, leaving 412.7 AFA for additional parks). At 3.96 acre-feet per acre, this means there is water available to develop 104.2 acres of park and open space after completion of the proposed project. The City of Tracy Parks Master Plan (2002) shows 79.49 acres of park being developed between 2005 through 2010, therefore, the UWMP accounts for the water demand of the proposed TYSF project at build-out and the planned park acreage as shown in the City of Tracy Parks Master Plan at the build-out of the proposed project.

In addition to determining that there is sufficient water for the proposed TYSF project in combination with other planned park development, the SB 610 water assessment takes into account how the project fits into the overall projected water demand for the City, including residential, commercial, institutional and industrial water demands. The 2020 water analysis shown in Table 4 of the attached TYSF Water Assessment illustrates the following:

- 1) The TYSF project's water demand is accounted for in the total City water demand through 2020.
- 2) The projected 2020 total water demand is equivalent to the current average available water supply total illustrated in Table 5 of the TYSF Water Assessment (31,600 AFA = projected 2020, 31,300 AFA = avg. current available supply).

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As stated earlier, the purpose of the SB 610 water assessment is to determine if the water supplies are sufficient to serve the proposed project. Given the foregoing information, the assessment finds that the City water supplies are sufficient and, given the fact that the City has the institutional mechanisms to curtail park irrigation during emergencies and droughts, there is an extra measure of protection for City water supplies that would not apply to non-parks projects.

FISCAL IMPACT

There is no fiscal impact associated with the recommended action.

RECOMMENDATION

That the City Council, by resolution, approves the Tracy Youth Sports Facility SB 610 Water Assessment Determination that City water supplies are sufficient to satisfy the water demands of the proposed project.

Prepared by Dr. Nicholas Pinhey, Director of Public Works

Approved by Dan Hobbs, City Manager

01-071105kl

PW

ATTACHMENT A

CITY OF TRACY TRACY YOUTH SPORTS FACILITY SB 610 WATER ASSESSMENT

July 2005

- 1) Does SB 610 apply to the proposed project per Water Code sections 10910 and 10912?
 - a) The proposed project is subject to the California Environmental Quality Act Division 13 (Water Section 10910); therefore it must comply with Water Code Section 10912.
 - b) At build-out, the project has an equivalent water demand in excess of a 500 dwelling unit project (per the calculated application of water for irrigating 97.8 acres of turf). Therefore the proposed project is subject to the SB 610 definition of a "project."
 - c) SB 610 applies to the proposed project.
 - d) SB 610 only applies to the proposed project while it is using potable water. The proposed project will use recycled water for irrigation when recycled water becomes available.
- 2) Who will prepare the SB 610 Assessment?
 - a) The City, as lead agency and public water system operator, is preparing the assessment.
- 3) Has an assessment already been prepared that includes this proposed project per Water Code section 10919?
 - a) No SB 610 assessment has been prepared for the proposed project.
- 4) Is there a current Urban Water Management Plan (UWMP)?
 - a) Yes, the City of Tracy has a current UWMP, revised and adopted in March 2002.
- 5) Is the projected water demand for the proposed project accounted for in the UWMP per Water Code section 10910 (c)(2)?
 - a) The proposed project is located within the City's water service area boundary as described in the City of Tracy Urban Water Management Plan Service Area Boundary (March 2002, Figure 2.2).
 - b) The estimated water demand for the project is 387.3 acre-feet per year (AFA) which is derived as follows: 97.8 acres of turf x 3.96 acre-feet of

Tracy Youth Sports Facility SB 610 Water Assessment**Page 2**

water per acre = 387.3 AFA. The 3.96 acre-feet per acre water demand estimate is based on the actual water application to the Tracy Sports Complex during calendar year 2004 (includes restrooms and concessions).

- c) The water demand for the proposed project is accounted for in the UWMP (March 2002, Table 2-5, p. 2-14). Per the UWMP, projected water use for parks and open space within the Water Service Boundary Area is estimated to be 2,100 AFA in 2020 (March 2002, Table 3-1, p. 3-3). Current park water use in the City of Tracy is approximately 700 AFA (based on metered park water consumption for calendar year 2004). The projected water use for parks in 2010 is 1,500 AFA, thus the water demand for the proposed project at build-out is accounted for in the UWMP (700 AFA + 387.3 acre-feet per year = 1,087.3 AFA, leaving 412.7 AFA for additional parks). At 3.96 acre-feet per acre, this means there is water available to develop 104.2 acres of park and open space after completion of the proposed project. The City of Tracy Parks Master Plan (2002) shows 79.49 acres of park being developed between 2005 through 2010, therefore, the UWMP accounts for the water demand of the proposed TYSF project and the planned park acreage shown in the City of Tracy Parks Master Plan at the build-out of the proposed project.

6) Identify existing water supply entitlements and quantify water received from entitlements.

Table 1. Existing Water Supply Entitlements (2005)

| Source | Entitlement | Maximum Supply (AFY) | Average Yield (use AFA) |
|--------------|---|----------------------|-------------------------|
| DMC | M&I Bureau Contract | 10,000 | 9,000 |
| DMC | Ag Bureau Contract | 10,000 | 6,000 |
| SCSWSP | Contractual (supply has pre-1914 water right) | 10,000 | 9,000 |
| Groundwater | Appropriative Right & Overlying Right | 9,000 | 7,000 |
| Total | | 39,000 | 31,000 |

Refer to City of Tracy UWMP, p. 2-12 for additional details and entitlement information

- a) The City of Tracy currently holds a 40-year municipal and industrial water entitlement contract with the US Bureau of Reclamation (USBR) for an allotment of 10,000 AFA. This water is delivered via the Delta-Mendota Canal (DMC)

Tracy Youth Sports Facility SB 610 Water Assessment

Page 3

- b) The City of Tracy also has an annual allotment of up to 10,000 AFA (agricultural entitlement) through an assignment to its USBR contract.
- c) The City of Tracy will receive 10,000 AFA of water from the South County Surface Water Supply project starting in the summer of 2005.
- d) The City has access to 9,000 AFA of groundwater through appropriative and overlying user rights. The 9,000 AFA is the maximum pumping limit per the City's adopted groundwater management policy.

Table 2. Five-year Water Deliveries by Supply Source

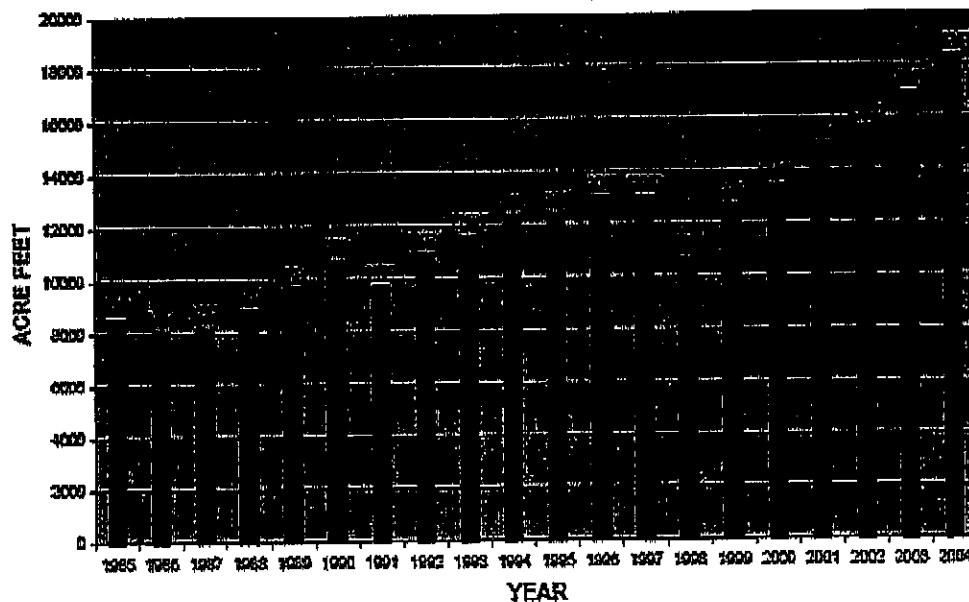
| Year | Surface Water AF* (DMC) | Groundwater AF** | Total AF |
|------|----------------------------|------------------|----------|
| 1999 | 7,584 | 5,561 | 13,144 |
| 2000 | 7,923 | 6,393 | 14,316 |
| 2001 | 7,057 | 7,987 | 15,044 |
| 2002 | 7,963 | 7,717 | 15,680 |
| 2003 | 10,087 | 6,878 | 16,965 |
| 2004 | 11,871 | 6,492 | 18,363 |

*Per City of Tracy Water Inventory Report, February 1, 2005

**Per City of Tracy Mitigation Monitoring Report (Groundwater), January 27, 2005

Table 3. Total Water Received in Prior 20 Years (all sources)

TRACY'S ANNUAL WATER DEMAND



Tracy Youth Sports Facility SB 610 Water Assessment

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Table 4. Historic and Projected Water Use by Sector (COT UWMP 2002)

| Sector/Year | 1990 | 1995 | 2000 | 2005 | 2010 | 2015 | 2020 |
|---------------------------|--------|--------|--------|--------|--------|--------|--------|
| Single Family Residential | 6,000 | 6,500 | 7,000 | 8,900 | 10,900 | 12,800 | 14,800 |
| Multi-Family | 2,200 | 2,300 | 2,500 | 3,600 | 4,600 | 5,700 | 6,700 |
| Commercial | 1,100 | 1,200 | 1,300 | 1,800 | 2,300 | 2,800 | 3,300 |
| Industrial | 1,000 | 1,100 | 1,200 | 1,700 | 2,200 | 2,700 | 3,200 |
| Institutional | 200 | 200 | 200 | 600 | 900 | 1,200 | 1,500 |
| Irrigation parks and open | 1,000 | 1,000 | 1,100 | 1,200* | 1,500 | 1,800 | 2,100 |
| Total | 10,800 | 12,400 | 13,300 | 17,700 | 22,400 | 27,000 | 31,600 |

*Note: Actual irrigation demand for parks was 700 AF in 2004

- 7) Will the projected water supply available during normal, single dry, and multiple dry water years meet the projected water demand of the proposed project, in addition to the water supplier's existing and planned future uses?

- a) Yes, per the UWMP (March 2002, p. 4-5). The reliability of current and future water supplies is illustrated in Table 4 (below).

Table 5. Reliability Associated with Each Current Water Supply

| Source | Entitlement | Wet Year (AFA) | Average | Multiple Dry Year (AFA) |
|-------------|---|----------------|---------|-------------------------|
| DMC* | M&I Bureau Contract | 100% | 75% | 50% |
| DMC* | Ag Bureau Contract | 100% | 58% | 13% |
| SCSWSP | Contractual (supply has pre-1914 water right) | 100% | 90% | 75% |
| Groundwater | Appropriative and Overlying Use | 100% | 100% | 100% |
| Total AFA | ////////// | 39,000 | 31,300 | 22,800 |

*Note: Does not consider water banking programs

- b) Per the City of Tracy Municipal Code, Title 11, Chapter 11.28 Water Management, the priority for water use during droughts and emergencies is health and safety. All potable water use for irrigation is prohibited during Phase V water emergencies; therefore, potable water use for the proposed project would be curtailed during droughts and emergencies. Thus, the multiple dry-year analysis does not apply to the proposed project.

Tracy Youth Sports Facility SB 610 Water Assessment**Page 5****8) Documentation of the groundwater supply**

- a) The City of Tracy overlies the Tracy Sub-Basin consisting of an upper unconfined aquifer zone and a lower confined aquifer zone separated by the Corcoran Clay layer. The City extracts groundwater from the lower confined aquifer zone.
- b) The City holds appropriative rights to groundwater for public use and overlying rights to groundwater due to its ownership of lands overlying the Tracy Sub-Basin (approximately 1,430 acres).
- c) The City of Tracy completed an estimation of the sustainable and operational yields of the lower confined aquifer zone in 2001. Bookman-Edmonston Engineering prepared this estimate for the City in 2001 (Estimated Groundwater Yield Study for the City of Tracy, 2001). Per the Study:
 - i) The estimated sustainable yield for the lower confined aquifer zone is 28,000 AFA.
 - ii) The estimated operational yield for the lower aquifer is 12,000 AFA for the City of Tracy.
- d) Based on the Study, the City of Tracy prepared and adopted a Groundwater Management Policy, Mitigated Negative Declaration in 2001 to assess the potential effects of increasing its annual groundwater extractions from its 6,700 AFA cap to a new limit of 9,000 AFA. The Groundwater Management Policy, Mitigated Negative Declaration required ongoing mitigation monitoring consisting of:
 - i) Ongoing groundwater level and subsidence monitoring by a qualified hydrogeologist.
 - ii) Ongoing groundwater quality monitoring.
 - iii) The establishment of a monitoring well network consisting of 18 clustered monitoring wells and four nested monitoring wells.
 - iv) The establishment of benchmarks at each monitoring well and production well for subsidence monitoring.
- e) The results of the groundwater mitigation monitoring are compiled and analyzed by the hydrogeologist and reported to the City on a semi-annual basis. The reports are presented to the City Council twice a year. Thus far, the groundwater monitoring shows:
 - i) The maximum groundwater extraction for any year was 7,987 acre-feet (2001).
 - ii) That the increased groundwater extractions have created no negative impact to the groundwater levels. There is no overdraft of groundwater.

Tracy Youth Sports Facility SB 610 Water Assessment**Page 6**

- iii) That the increased extractions have created no groundwater water quality impacts.
- iv) With the cycle of groundwater extraction and recharge, groundwater levels are at historic highs (Bookman-Edmonston, 2005).
- f) The delivery of treated surface water from the South County Surface Water Supply Program during the summer of 2005 will allow the City to reserve groundwater for emergency use and peak demand needs, thus the City's groundwater extractions will be reduced to quantities below the current average extraction of 7,765 AFA (6 year average).
- g) The sustainable yield study, the operational yield study and the ongoing mitigation monitoring demonstrate that quantity of groundwater is sufficient for the City of Tracy to continue to extract up to a maximum of 9,000 AFA per its adopted Groundwater Management Policy.

9) Does the assessment conclude that the water supply is sufficient?

Yes, the assessment concludes that the water supply is sufficient to serve the proposed project based on the following:

- a) The UWMP projected water use for the City 2004/2005 is accurate compared to the actual water use.
- b) The UWMP projected water use by sector accounts for the proposed TYSF project's estimated water use.
- c) The UWMP projected water use by sector accounts for the proposed TYSF project's estimated water use and the projected water use for continued park development through 2016 (per the City of Tracy Parks Master Plan, 2002).
- d) Groundwater monitoring and studies indicate that the quantity of available groundwater is sufficient to continue to extract up to a maximum of 9,000 AFA. The groundwater basin is not overdrafted.
- e) The ultimate source of water for irrigation on the proposed project's site will be recycled water.
- f) The Tracy Municipal Code Title 11, Chapter 11.28 Water Management, provides the institutional controls to reduce or curtail the delivery of potable water to the proposed project during emergencies including, but not limited to, multiple dry years.

RESOLUTION 2005-200

APPROVING TRACY YOUTH SPORTS FACILITY SB 610 WATER ASSESSMENT
DETERMINATION THAT CITY WATER SUPPLIES ARE SUFFICIENT TO SATISFY
THE WATER DEMANDS OF THE PROPOSED PROJECT'S 97.8
ACRES OF TURF AREA

WHEREAS, The City is the lead agency for the proposed Tracy Youth Sports Facility Project, and

WHEREAS, The City determines that an SB 610 Water Assessment is necessary for the proposed project, and

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WHEREAS, The Urban Water Management Plan and the SB 610 Water Assessment account for water consumption for planned and existing parks, and

WHEREAS, The Tracy Youth Sports Facility SB 610 Water Assessment finds that there are sufficient water supplies to meet the demands of the proposed project's 97.8 acres of turf area;

NOW, THEREFORE, BE IT RESOLVED That the City Council hereby approves the Tracy Youth Sports Facility SB 610 determination that City water supplies are sufficient to satisfy the water demands of the proposed project.

The foregoing Resolution 2005-200 was passed and adopted by the Tracy City Council on the 19th day of July, 2005, by the following vote:

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| AYES: | COUNCIL MEMBERS: | IVES, TOLBERT, TUCKER, BILBREY |
| NOES: | COUNCIL MEMBERS: | SUNDBERG |
| ABSENT: | COUNCIL MEMBERS: | NONE |
| ABSTAIN: | COUNCIL MEMBERS: | NONE |


MAYOR

ATTEST:


CITY CLERK