FINAL

MASTER ENVIRONMENTAL IMPACT REPORT

for the

TRACY INDUSTRIAL AREAS

SPECIFIC PLAN

Prepared for the

CITY OF TRACY

by

EDAW, Inc.

in association with

Wilsey & Ham
DKS Associates
Bartle-Wells Associates

February 1988

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APPENDIX A: Traffic Data

APPENDIX B: Comment Letters

RESPONSE TO COMMENTS

This section presents formal response to comments made regarding the Draft Environmental Impact Report (Draft EIR) for the proposed Tracy Industrial Areas Specific Plan. This section, combined with the text produced for the Draft EIR, represent the Final EIR.

The following pages contain comments on the Draft which have been extracted from letters submitted by public agencies and individuals during the review period. These comments are identified by numbers which correspond to the text of the letter originals; these originals are provided in their complete form in Appendix B. The comments are followed by responses which have been prepared in association with City of Tracy staff.

Correspondence was received from the following agencies, organizations, and individuals. The numbers assigned before each respondent's name refer to the code assigned to each letter for identification purposes.

1. The Resources Agency of California, Department of Conservation, December 9, 1987.

2. State of California Department of Transportation (CalTrans), December 9, 1987.

3. Department of Transportation, Division of Aeronautics, December 14, 1987.

Comments and Responses

1.1 "The proposal would establish a specific plan for approximately 643.46 acres of agricultural land in the south and east portion of the City of Tracy, none of which is under Williamson Act contract. Part of the land is fallow and part is being used to grow crops. The site is contiguous to development.

The Final Environmental Impact Report (FEIR) should provide information on the number of acres of agricultural land to be developed, the potential agricultural value of the site, the impact of the conversion of that land and possible mitigation actions.

Specifically, we recommend that the FEIR contain information which quantifies the types and relative yields of the crops grown on the portion of the site which is currently being farmed. Information on crop values can be obtained from the County of San Joaquin's Department of Agriculture.

In addition, the Department is concerned with the loss of prime agricultural land as a result of development. The DEIR states on Page 3-23 that soil surveys show the land within the Industrial Specific Plan is "not the most fertile in the area". However, the Soil Conservation Service's District Office in Stockton has indicated that the land in the Plan area is classified Capay Clay (Land Capability IIS-5 when irrigated), which is considered prime agricultural land by San Joaquin County. The California Environmental Quality Act (CEQA) in Appendix G (y) states that a project will normally have a significant effect on the environment it is converts prime agricultural land to non-agricultural use or impairs the agricultural productivity of prime agricultural land. We recommend that the Soil Conservation Service in Stockton be contacted to correctly determine the agricultural quality of the soil in the plan area."

Response: The City of Tracy General Plan and Environmental Impact Report, prepared in 1982, specifically addresses the impacts on agricultural lands and soils from development in the Industrial Specific Plan areas. The Industrial Areas Specific Plan is an implementation tool of the General Plan and is consistent with its policies. It was assumed that the adopted EIR for the General Plan adequately addressed the consequences of development in these areas.

1.2 "Recently, the County of San Joaquin has experienced the development of large amounts of agricultural land, mostly prime land. Also, conversion of agricultural land usually leads to growth-inducing impacts on other farmland in the neighboring areas. We recommend that the cumulative and growth-inducing impacts of the Specific Plan be assessed, and mitigation measures be identified in the Specific Plan that will mitigate these impacts to the point of insignificance. Some possibilities are:

- Direct urban growth to lower-quality soils in order to protect prime agricultural land.

- Protect other, existing farmland of equivalent, or better, quality through the use of Williamson Act contracts.

- Establish buffers such as setbacks, berms, greenbelts and open-space areas to separate farmland from urban uses.

- Implement right-to-farm ordinances to diminish nuisance impacts of urban uses on neighboring agricultural operations, and vice-versa.

Also, farmland trusts, which have been established by other counties, such as the Sonoma Farmland Trust, can effectively preserve agricultural land and should be considered in the analysis of mitigation alternatives."

Response: The stated policy of the Tracy General Plan is to direct primary city expansion to the south and west, where the soils are not of prime quality and will not significantly affect the viability of agriculture in the area. The location of the Industrial Areas, along with the Army Depot are intended to form an eastern buffer from additional residential expansion, and to direct any future development to the west. Furthermore, the cumulative and growth-inducing effects of the Specific Plan are discussed in Sections 5 and 6 of the DEIR.

2.1 "CalTrans has been working with the San Joaquin County Council of Governments, the City of Tracy and others on completion of several traffic studies for the Tracy area and I-205. The fact that these studies are in progress indicates a high level of concern about the quality of highway facilities and services for this area."

Response: Comment acknowledged.

2.2 "This project itself will cause some impacts on the traffic in the project area. The number of recent residential development proposals indicates a cumulative growth impact that may go beyond the levels projected by the current area traffic studies. These studies should include current and projected traffic analysis on streets and highways from all of the proposed developments. Mitigation measures should be adequately planned for

locations where the Level of Service (LOS) is expected to deteriorate to an unacceptable level."

Response: The DEIR noted (p. 4-27) that it is vital for the City of Tracy and other communities in the I-205 corridor to work with the Department of Transportation to develop measures to mitigate all projected growth in the I-205 corridor. However, at the time the DEIR was written traffic impact analyses had not been completed for much of the development projected in the corridor.

2.3 "The current Average Daily Tripends (ADTs) on Route I-205 are 40,800 which is projected to increase to 93,700 ADT by the year 2005.

The existing facility is expected to decline to a LOS of F-2 in ten years, and F-3 in twenty years. If two lanes are added to the facility a LOS of D-43 can be expected in ten years, and F-1 after twenty years. Our route concept is to provide a LOS of D-40. Maintenance of this LOS will require six lanes within ten years and eight lanes within twenty years. Page 8-11 states that 'widening I-205 to six lanes would mitigate the traffic development in Tracy . . .'. This comment appears to satisfy this need only for the next ten years."

Response: Comment acknowledged. The DEIR traffic analysis indicates that six lanes could accommodate potential development in Tracy only, but also notes that other cumulative development outside Tracy will be added during the same timeframe. Mitigation measures to offset the impacts of this additional cumulative development should be determined once the cumulative development scenario is better quantified and analyzed.

2.4 "On Pages 4-18 the discussion of trip distribution should include traffic on I-5. Use of 25% of the trip distribution on I-205 from the north would include traffic from the I-5 and Stockton areas."

Response: Comment acknowledged. The text has been revised to indicate that the 25 percent of project trips presumed to use I-205 do include traffic using I-5 to and from the Stockton area.

2.5 "Pages 4-24 utilize data from 1976 and 1980. If no other data is available, ramp studies should be performed to get current data. Significant population and traffic increases have occurred since 1980 and should be reflected in the projections for I-205."

Response: The 1980 ramp counts by CalTrans were the most recent available. 1986 ramp volumes were estimated by extrapolating the annual rate of increase between 1976 and 1980 to 1986. The ramp volumes thus calculated are approximately 70% higher than the 1980 observed volumes.

2.6 "Pages 4-25 peak hour traffic volumes for I-205 appear to conflict with the data shown in the 1985 or 1986 Traffic Volume Books. The source of the data use needs to be identified and any variations reconciled."

Response: Volumes were taken from the 1985 Traffic Volumes book, but were erroneously transcribed into the text of the DEIR. The correct base volumes are now indicated on Page 4-25. Pages 8-9, 8-10 and 8-11 have been corrected as well.

2.7 "I-205 mitigation measures discussed on Pages 4-27 need to have specific time frames developed. Mitigation generally should be completed before the project is developed and the traffic impacts are created. More specific planning for I-205 traffic mitigation needs to be displayed throughout the study."

Response: Comment acknowledged. Specific timing of I-205 mitigations must await additional studies of other development in the I-205 corridor.

2.8 "Conditions at Grant Line Road and Tracy Boulevard at I-205 are already creating serious safety concerns. Tracy Boulevard in the areas adjacent to I-205 should be widened to five lanes under the bridge structure to handle traffic storage problems."

Response: Comment acknowledged. The City of Tracy is currently examining possible interchange improvements at these locations. The Tracy Boulevard Widening Study

currently underway will specifically examine widening Tracy Boulevard to five lanes under I-205.

2.9 "The ramps at Grant Line Road need to be realigned to provide for traffic flow. To eliminate serious accident concerns at the intersection of Grant Line Road and the traffic from the east bound off ramp this realignment needs to be addressed early in the project."

Response: The City of Tracy is currently evaluating possible improvements at the Grant Line Road/I-205 interchange.

2.10 "Consideration should be given to mitigation of traffic volumes and air quality concerns through traffic reduction measures. Development of commute management facilities including Park and Ride lots, employer incentives and carpool locations would reduce traffic congestion during all phases of the project's development and into the future."

Response: Comment acknowledged. On Page 4-27 of the DEIR a similar recommendation is made.

2.11 "Specific identification of funding sources and responsible entities to improve State Highway facilities as mitigation for development in the specific plan needs to be identified. These responsibilities should also be made part of the conditions for approval of individual developments."

Response: The City of Tracy is considering different funding mechanisms such as builder fees and/or an increase in sales tax by which Specific Plan developers and users would contribute towards needed State Highway improvements. Participation in the funding mechanism, once finalized, would become a condition of development.

3.1 "Portions of the industrial plan area appear to be located within the Tracy Municipal Airport overlay zone. Projects within the Airport area of influence should be reviewed by the San Joaquin County Airport Land Use Commission to determine compatible land uses."

Response: Comment acknowledged. Provisions in Section 4.1.1.4 of the Draft Industrial Areas Specific Plan, February 1988, require projects within the Airport Overlay Zone to comply with those regulations.

ADDENDUM: PAGES FROM DEIR WITH CORRECTED TEXT

- 25 percent: To and from cities to the east reached via Interstate 205 (e.g., Manteca and Ripon) and Interstate 5 North (e.g. Stockton).

- 15 percent: To and from cities to the south reached via I-580 or State Route 132 (e.g., Patterson and Modesto).

- 10 percent: To and from the Bay Area via I-205 and I-580.

It should be noted that the freeway-oriented traffic includes most of pick-up, delivery, office visitor and other non-commute traffic.

Traffic Assignment

Once the trip distribution was determined, new trips were assigned to the Tracy street network and the regional highway system. In general, the shortest path from origin to destination was used, but the routings developed tend to avoid, when possible, areas where heavy traffic is anticipated even without the Industrial Areas Specific Plan. Such heavy traffic areas include segments of Tracy Boulevard, Central Avenue and Eleventh Street.

Analysis of Traffic Impacts - Preferred Alternative (50 percent build-out)

The traffic impacts of the Industrial Areas Specific Plan Preferred Alternative were calculated using an expanded version of the Tracy City-wide TRACS model. In addition to the seven new TAZ's, nine additional intersections--potential points of traffic congestion--were selected for analysis:

- East Street/Grant Line Road
- East Street/Eleventh Street
- MacArthur Drive/Grant Line Road
- MacArthur Drive/Eleventh Street
- MacArthur Drive/Valpico Road
- MacArthur Drive/Linne Road
- Corral Hollow Road/Valpico Road
- Corral Hollow Road/Linne Road
- Tracy Boulevard/Linne Road

Table 4.8

I-205 and I-580 Mainline Volumes - PM Peak Hour
(50 Percent Build-Out)

Location	1985* Existing Volume	Volumes Added by Specific Plan Including Residential	Total Volumes
I-205			
West of Eleventh Street Interchange			
Westbound	--	720	--
Eastbound	--	1,190	--
Total	4,100	1,910	6,010
East of MacArthur Drive Interchange			
Westbound	--	390	--
Eastbound	--	860	--
Total	3,450	1,250	4,700
I-580			
West of Corral Hollow Interchange			
Westbound	--	170	--
Eastbound	--	80	--
Total	1,900	250	2,150
East of Chrisman Road Interchange			
Westbound	--	130	--
Eastbound	--	60	--
Total	730	190	920

*CalTrans, 1985 Traffic Volumes

Table 8.5

I-205 and I-580 Mainline Volumes - PM Peak Hour
(70 Percent Build-Out)

Location	1985 Existing Volume	Volumes Added by Specific Plan Including Residential*	Total Volumes
I-205			
West of Eleventh Street Interchange			
Westbound	--	790	--
Eastbound	--	1,220	--
Total	4,100	2,040	6,140
East of MacArthur Boulevard Interchange			
Westbound	--	550	--
Eastbound	--	1,200	--
Total	3,450	1,750	5,200
I-580			
West of Corral Hollow Interchange			
Westbound	--	240	--
Eastbound	--	120	--
Total	1,900	360	2,260
East of Chrisman Road Interchange			
Westbound	--	90	--
Eastbound	--	180	--
Total	730	270	1,000

*CalTrans, 1985 Traffic Volumes

Table 8.6

I-205 and I-580 Mainline Volumes - PM Peak Hour
(100 Percent Build-Out)

Location	1985 Existing Volume	Volumes Added by Specific Plan Including Residential*	Total Volumes
I-205			
West of Eleventh Street Interchange			
Westbound	--	900	--
Eastbound	--	1,260	--
Total	4,100	2,160	6,250
East of MacArthur Boulevard Interchange			
Westbound	--	780	--
Eastbound	--	1,720	--
Total	3,450	2,500	5,950
I-580			
West of Corral Hollow Interchange			
Westbound	--	340	--
Eastbound	--	170	--
Total	1,900	510	2,410
East of Chrisman Road Interchange			
Westbound	--	260	--
Eastbound	--	130	--
Total	730	390	1,120

*CalTrans, 1985 Traffic Volumes

build-out and 50 percent over capacity under the 100 percent build-out scenario. While some traffic may divert to either the Tracy Boulevard interchange to the west or use Grant Line Road to access I-5 interchanges at Berry Road and Kasson Road to the east, demand at the MacArthur/I-205 eastbound ramp will likely approach capacity (approximately 1500 vehicles per hour) during the p.m. peak. It may be necessary to develop a higher capacity interchange at this location.

Mainline I-205 volumes would be between 5,500 and 6,500 both east and west of the City under the two alternative scenarios. (See Tables 8.4 and 8.5). Under the 100 percent build-out scenario, the current two eastbound lanes I-205 would likely be at capacity in the p.m. peak hour east of the MacArthur interchange. Widening I-205 to six lanes would mitigate the traffic of development in Tracy; however, developments in communities east of Tracy will be adding additional traffic during the same timeframe as the Tracy Residential and Industrial Specific Plans. Such cumulative development in the I-205 corridor needs to be assessed before planning improvements on I-205.

In contrast to I-205, I-580 ramps and mainline lanes in the study area will have considerable excess capacity, even under the 100 percent build-out scenario.

AGENDA
SPECIAL MEETING
TRACY CITY PLANNING COMMISSION
JUNE 1, 1988
7:30 P.M.
TRACY COMMUNITY CENTER
300 E. TENTH STREET

ROLL CALL

MINUTES APPROVAL

* * * * * * * * * * * * *

1. OLD BUSINESS

   A. REVIEW OF THE INDUSTRIAL AREAS SPECIFIC PLAN TEXT AND FINAL ENVIRONMENTAL IMPACT REPORT FOR THE CITY OF TRACY

2. NEW BUSINESS - None

3. ITEMS FROM THE AUDIENCE

4. DIRECTOR'S REPORT

5. ITEMS FROM THE COMMISSION

6. ADJOURNMENT

PLANNING COMMISSION

Staff report

OLD BUSINESS NO. 1-A

June 1, 1988

APPLICATION NO./APPLICANT: #10-88-GPA
City of Tracy

I. INTRODUCTION

A. REQUEST

The City, in cooperation with industrial landowners, hired EDAW, Inc., a planning consultant, to prepare an Industrial Specific Plan. A draft of this plan and an EIR were prepared in October, 1987. After repeated review and discussion with industrialists and others, a revised draft plan and Final EIR is presented for your review.

Bill Clark and Shelly Poticha of EDAW will present the plan to the Commission.

II. DISCUSSION

The proposed Specific Plan implements the City General Plan goals of balancing residential development with new local jobs, improving traffic circulation, especially of trucks, and enhancing the quality and compatibility of land uses.

The plan sets thresholds of 50%, 75%, and 100% of the buildout of 685 acres of industrial development including 5,608,000 square feet of various industrial development at 50% buildout (see Page 2-11 of the EIR.) Beyond the 50% threshold, additional environmental review will be needed as well as the improvement of traffic circulation on MacArthur Drive.

The Plan calls for amendments to the Airport Overlay Zone and establishment of a sand and gravel reclamation ordinance, to facilitate industrial development (page 4-3 & 4). Chapter 4 sets forth standards for design that emphasize the appearance of development visible from the public street through landscaping and architectural criteria.

The cost of implementing the plan is listed in Chapter five. The mechanisms available to finance these costs are identified. Determination of which finance vehicles to use is being discussed with industrialists.

III. RECOMMENDATION

Staff recommends that the Planning Commission:

1) Recommend that the City Council certify that the Final EIR has been completed in compliance with the California Environmental Quality Act, and that the information contain d in the Final EIR was reviewed and considered prior to approving the Industrial Areas Specific Plan for Tracy and that the Final EIR is adequate to address the environmental impacts of the approval of the Industrial Areas Specific Plan as an amendment to the Tracy General Plan.

2) Recommend that the City Council approve and adopt the Industrial Areas Specific Plan and recommend that the City Council amend the Tracy General Plan to incorporate the Industrial Areas Specific Plan as an addendum.

Attachment:

Final Environmental Impact Report

(The Industrial Specific Plan and Draft EIR previously delivered to the Commission under separate cover should accompany this staff report)

02-0527.88

DRAFT

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1.0

Introduction & Summary of Impacts

1. INTRODUCTION AND SUMMARY

1.1 Introduction

In conformance with the California Environmental Quality Act (CEQA) as well as the State CEQA Guidelines and City of Tracy procedures, this document has been prepared to facilitate an objective assessment of the individual and collective environmental impacts associated with the proposed project: Tracy Industrial Areas Specific Plan (Industrial Specific Plan). This Environmental Impact Report (EIR) is intended to inform governmental decision-makers and the public of:

- Existing conditions on and near the proposed planning area including the recently adopted Tracy Residential Areas Specific Plan;
- Potential environmental impacts resulting from implementation of the proposed plan;
- Actions which could mitigate any significant environmental impacts.

The existing General Plan and Zoning Ordinance for the proposed planning area reflect a similar combination of land use types as is proposed. However, specific locations of land uses do differ. According to California Governmental Laws, a Specific Plan must be consistent with the community's General Plan. Therefore, the first step toward adopting the Industrial Areas Specific Plan will be an amendment to the City of Tracy General Plan Map and Text, requiring approval by the City Council. This action, along with the required review of potential impacts from implementation of the Industrial Areas Specific Plan fall under the guidelines of CEQA and necessitate the preparation of an EIR.

The proposed Specific Plan will establish guidelines for numerous projects which will be undertaken by public and private developers over an extended period of time. Section 15165 of the State EIR Guidelines requires an EIR for such a proposal to consider the cumulative effects of all development to be allowed by the proposed Specific Plan. This EIR will act as an umbrella for all future projects within the Specific Plan area which comply with its guidelines.

This document is to be considered a Master Focused Environmental Impact Report due to the reasons stated above, and also because the environmental analysis focuses on the effects determined to be potentially significant in the Initial Study.

Information on this study has been given to the public through a formal scoping meeting, which was open to both governmental agencies and individuals. Upon completion, this and future documents will be circulated to local, state, and federal agencies, as well as public libraries.

In this Draft EIR, references to the "proposed project" shall refer to the Tracy Industrial Areas Specific Plan. References to the "project proponent" shall refer to the City of Tracy.

1.2 Summary of Impacts

Impacts	Mitigable	Comments
1. Geology and Soils		
Some soils may have slow water permeability and high shrink-swell capacity.	Yes	Foundations which divert water runoff will mitigate this impact.
Low to moderate earthquake threat.	Yes	Buildings must be in compliance with standard California building codes.
2. Hydrology and Water Quality		
Delta-Mendota Canal surface water allocation must be used at maximum and will be exceeded. Treatment Plant does not have sufficient capacity.	Yes	Expand water allotment to maximum. Expand Water Treatment Plant or Increase use of groundwater as an additional water source.
Drainage patterns will be altered due to the increase in impervious surfaces.	No	Storm Drainage Master Plan provides a system of conveyance to limit this impact.
Decrease in groundwater recharge within the planning areas.	No	Based on historic patterns, this impact is expected to be minimal.
Increased water-borne pollutants as a result of urban water runoff.	No	Design features in the storm drainage system, such as constant minimum flows and catch basins will mitigate this impact to a level of insignificance.
Groundwater from existing wells is high in total Dissolved Solids and sulfate concentrations.	Yes	Upgrade and/or abandon existing wells. New wells will avoid this problem.
3. Air Quality		
The proposed development will result in increased emissions of various air pollutants, primarily from mobile sources.	No	Providing local employment may reduce current trend and extent of commuting to the Bay Area, thus reducing mobile source pollution.

Impacts	Mitigable	Comments
4. Biotic Resources		
Loss of existing vegetation and wildlife and introduction of ornamental plants.	No	Loss of existing vegetation and wildlife is a normal consequence of development. Introduction of new species can be limited through selective planting.
5. Land Use and Land Use Planning		
Existing land uses will be converted to urban uses.	No	In the 1982 General Plan EIR, the City found socioeconomic considerations justified the conversion of agricultural land for the provision of jobs and a balanced community. Although the permanent change may be unavoidable, it is assumed that this impact will be an adverse one to some, and a positive improvement to others.
Land must be acquired for off-site infrastructure improvements.	Yes	The Financing Plan establishes guidelines for financing these improvements.
Proposed land uses are not consistent with those designated on the General Plan Map.	Yes	Approval of the proposed General Plan amendment will mitigate this impact.
6. Transportation		
Three off-site intersections will be impacted by traffic generated from the Specific Plan.	Yes	Off-site improvements will mitigate this impact.
Traffic on existing city streets will increase.	Yes	On- and off-site improvments will mitigate this impact.
Mainline traffic on I-205 will significantly increase from development in the Specific Plan areas, as well as from nearby communities.	Yes	Local governments should work to secure funding for widening I-205. Paratransit programs could also reduce this impact.
7. Noise		
Noise levels will increase within the Specific Plan areas.	Yes	Setbacks and soundwalls along proposed arterial streets will mitigate

Impacts	Mitigable	Comments
		impacts. Adherence to Uniform Building Codes will also reduce noise impacts within nearby dwellings.
8. Utility Systems		
The existing water supply and treatment system is not sufficient to service the Specific Plan areas.	Yes	Increasing the treatment plant capacity and expanding groundwater sources and the water distribution system as planned, will mitigate this impact.
Temporary interim storm drainage systems will be required prior to completion of the main storm drainage network.	Yes	Guidelines for interim systems are proposed. Studies of the hydraulic design of the main system should be made prior to any development within the Specific Plan areas.
Existing solid waste facilities do not have sufficient capacity to provide service to the Specific Plan areas at build-out.	Yes	A new waste disposal site shall be selected and developed.
9. Public Services		
Police staff and facilities must be expanded.	Yes	The Plan recommends that the existing police facility should be expanded at its present site.
Additional staff for governmental departments will be required.	Yes	Studies should be made to determine staffing needs. Funds are available.
Additional maintenance facilities will be required to maintain the new public works infrastructure.	Yes	Studies should be made to determine maintenance facility needs.

2.0

Project Description

2. PROJECT DESCRIPTION

2.1 Site Location

The City of Tracy is located on the western edge of the San Joaquin Valley, along the Interstate 580/205 Corridor, approximately 25 miles southwest of Stockton and 20 miles east of Livermore (Figure 2.1).

The land addressed by the proposed Industrial Areas Specific Plan abuts existing urban development along the east and south edges of the City of Tracy. All 643 acres of the proposed project area are within the city limits (Figure 2.2).

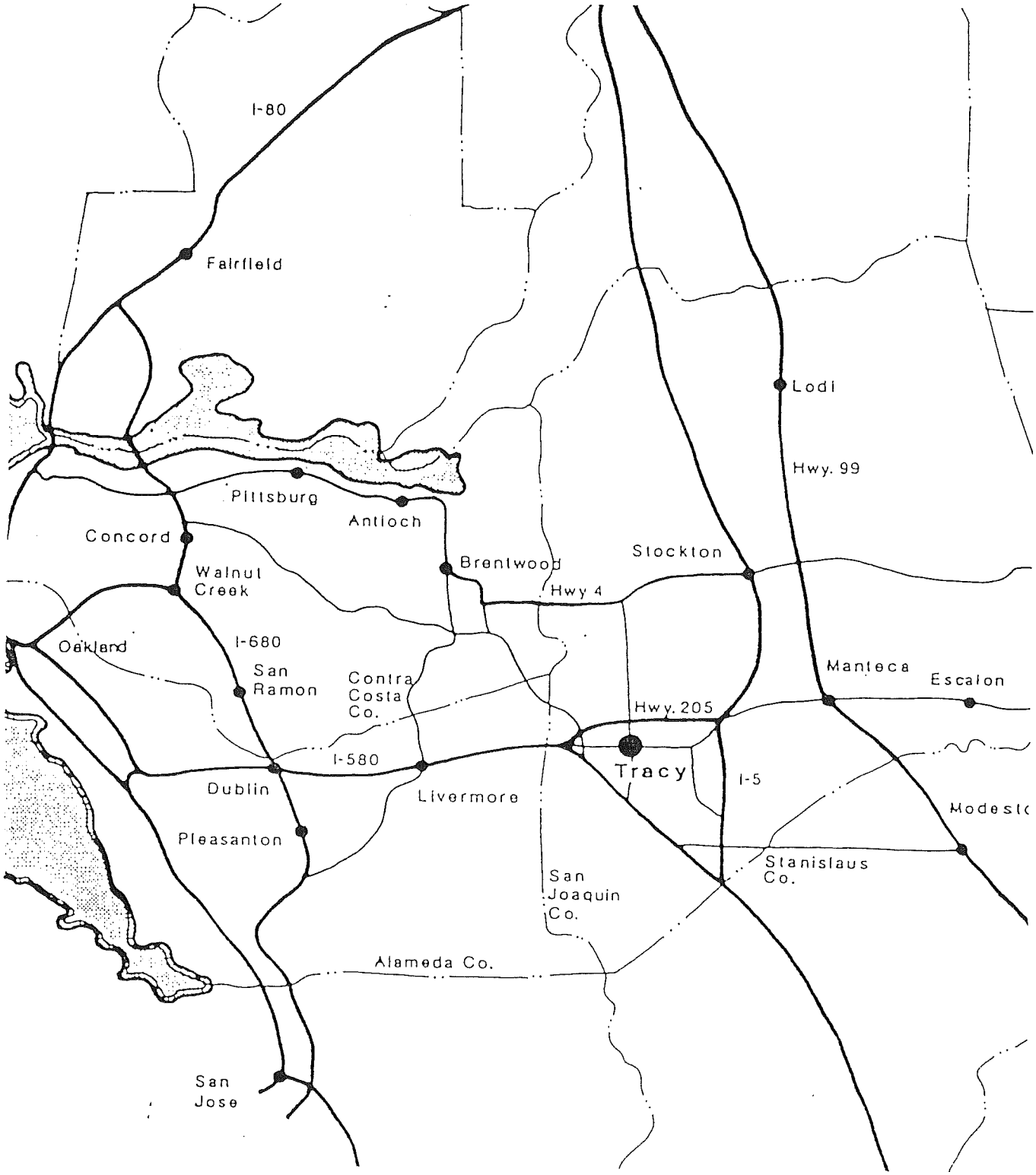
2.2 Site Conditions and Planning Designations

Presently, the proposed project area is primarily made up of active and dormant agricultural lands in the northeastern and southern portions of the City. Most of the northeastern parcels form the outer edge of the community, bounded on the east by heavy residential development. Uses adjacent to the southern parcels include smaller residential communities, active industrial areas and the Tracy Municipal Airport.

Irrigation district channels and railroad tracks cross some parcels, dividing the land and creating certain constraints to its development. A portion of the channels, however, are no longer actively used for irrigation and are often not connected with the main irrigation system.

The existing transportation network within the area consists almost exclusively of rural roads. However, arterial streets run adjacent to many of the parcels, providing easy access to downtown Tracy which is less than two miles from most portions of the proposed project and contains a variety of local-serving retail businesses.

All of the land within the proposed Industrial Specific Plan area is designated by the General Plan as either Limited Industrial (LI) or General Industrial (GI) (Figure 2.3). With the exception of parcel seven, all parcels are zoned as Light Industrial (M-1). Parcel nine additionally falls within the Tracy Municipal Airport overlay zone (Figure 2.4).



Tracy Industrial Area
Specific Plan

Prepared by
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In association with
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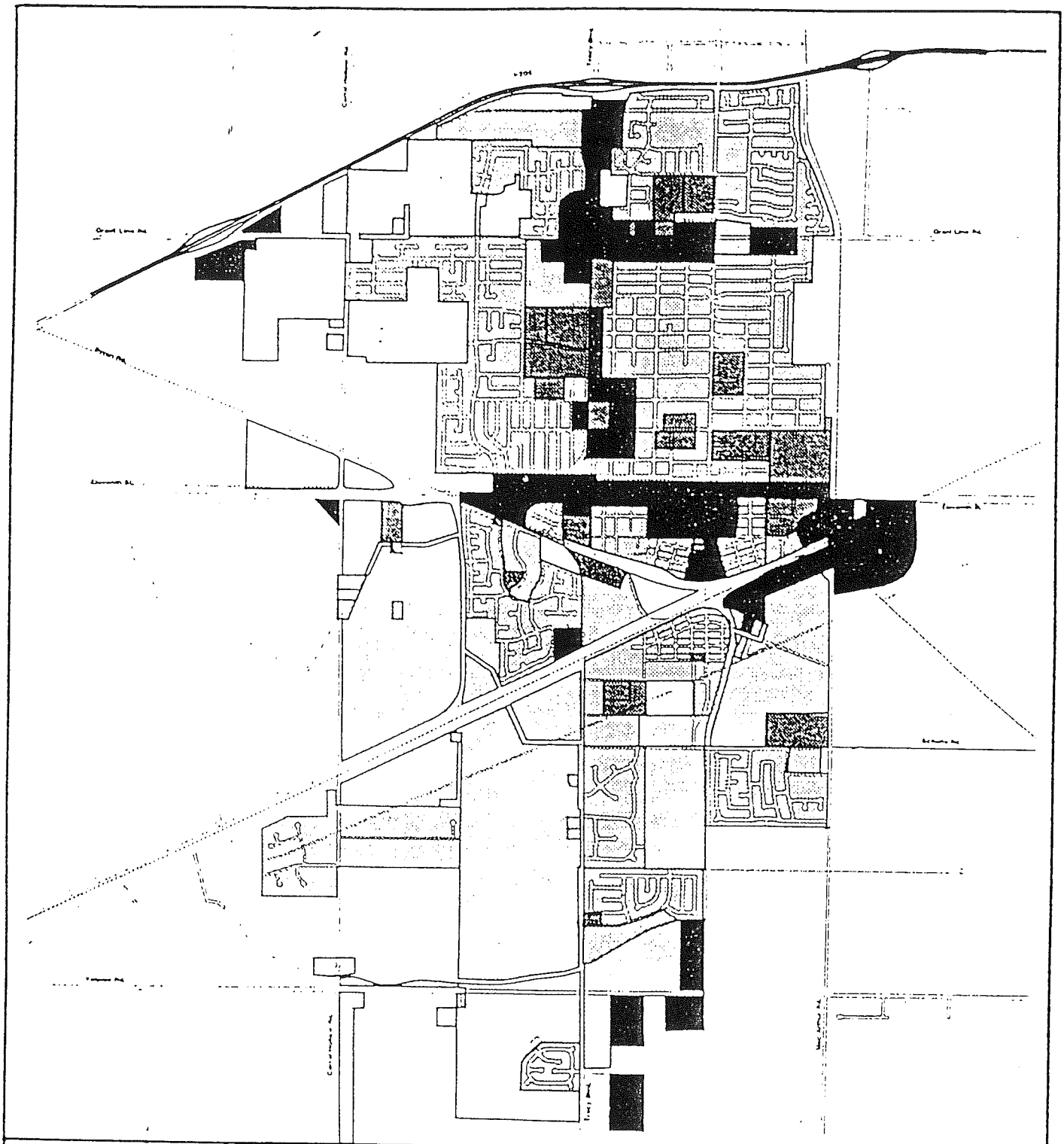
REGIONAL LOCATION MAP

Figure 2.1



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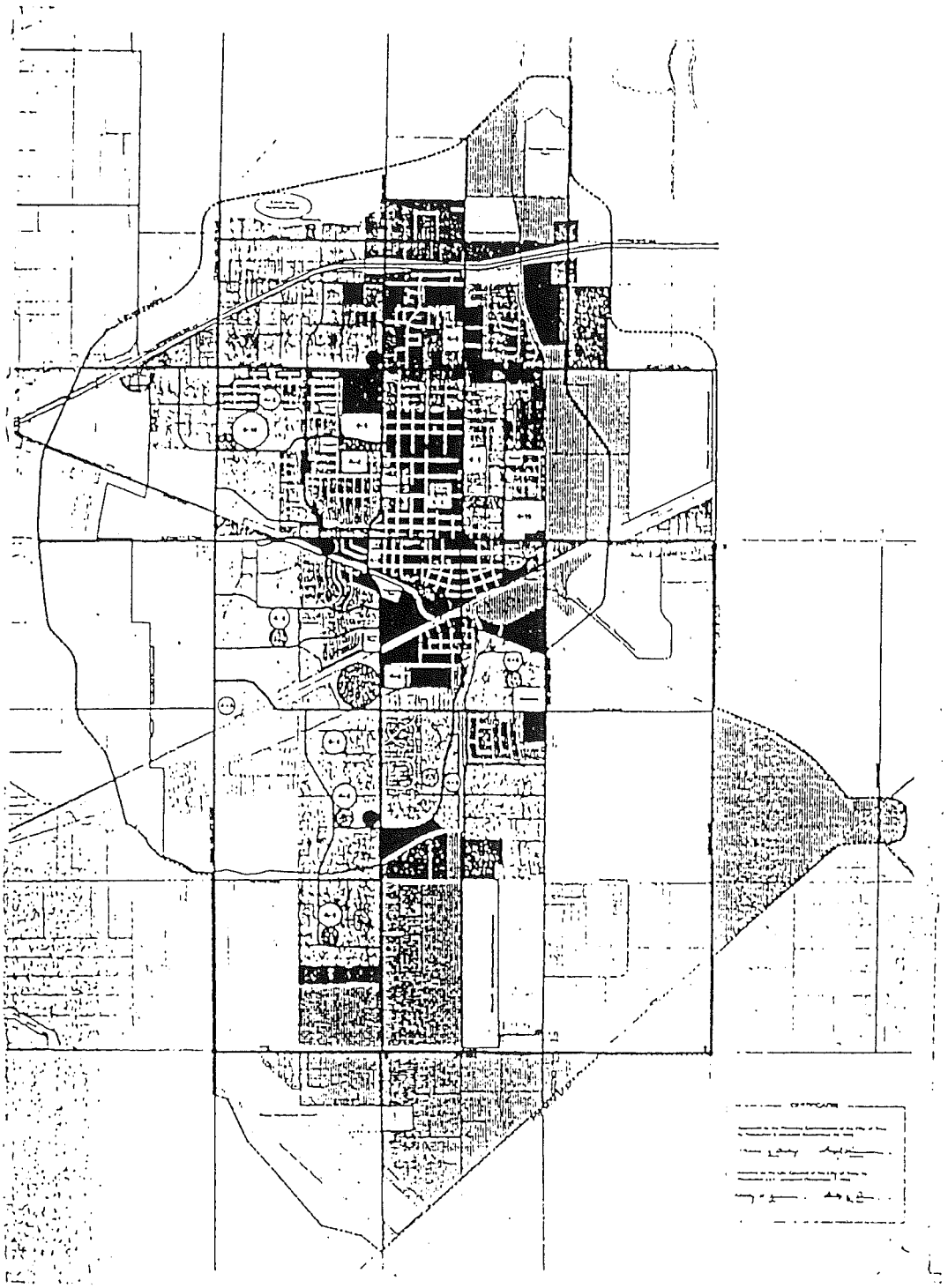
EXISTING LAND USE

- Agricultural
- Residential
- Public, Institutional
- Commercial
- Industrial

Figure 2.2



Tracy Industrial Area Specific Plan

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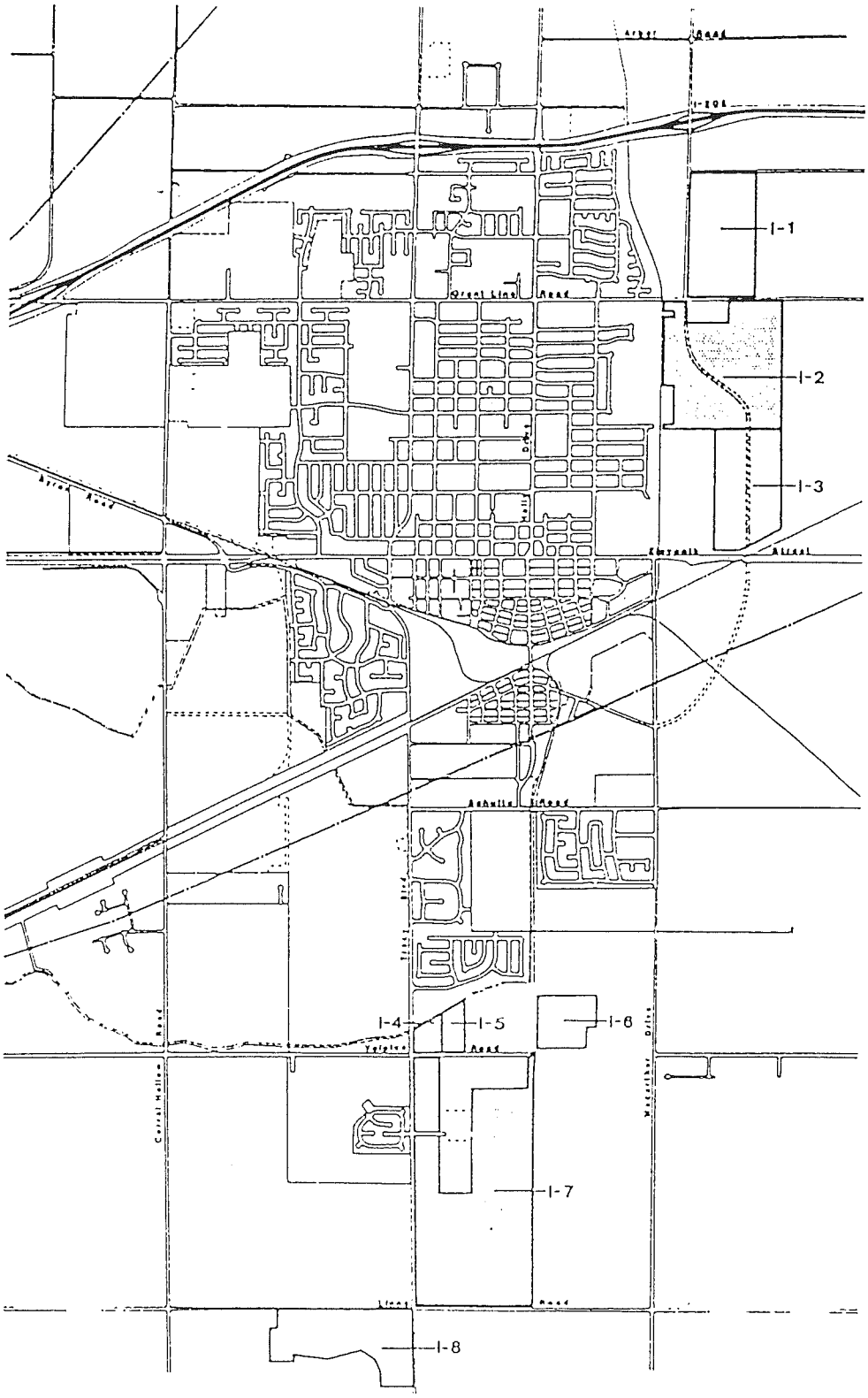
July 24, 1987

GENERAL PLAN

- Very Low Density Residential
- Low-Medium Density Residential
- Medium Density Residential
- High-Medium Density Residential
- Retail Center Commercial
- Shopping Center
- Existing Neighborhood Shopping
- Thoroughfare Commercial
- Office
- Limited Industrial
- General Industrial
- School/Public Facility
- Transit/Public
- Parks and Open Space
- Agricultural
- Major Arterial Street
- Minor Arterial Street
- Collector Street

Figure 2.3



Tracy Industrial Area
Specific Plan

LAND OWNERSHIP

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Parcels Included
I-1 Reference Number

July 24, 1987

Figure 2.4

In 1984, Sewer Assessment District 84-1 was established which financed the expansion of the City's existing wastewater treatment facility and construction of sewer lines to the Specific Plan areas as well as to other areas of the City. These improvements were completed in early-1987.

2.3 Project Description

In 1982, during the process of updating the General Plan, the City of Tracy identified the land within the currently proposed Industrial Areas Specific Plan as land to be targeted for industrial development. The acreage was subsequently annexed to the City and Assessment District 84-1 was created to finance sewer improvements for both the industrial areas and certain residential areas. An industrial specific plan, predicated on the recently adopted Residential Areas Specific Plan, was then proposed for the expansion areas as a mechanism to prepare a comprehensive land use program, coordinate the development plans of the individual property owners, and provide a strategy for constructing essential public improvements.

Because it is expected that additional residential development will occur within Tracy before the Industrial Specific Plan areas are fully developed (Figure 2.5), and therefore sewer, water, storm drainage and roadway capacity will be both used and needed in quantities that cannot be estimated at this time, this EIR assesses the potential impacts associated with 50 percent build-out of the Industrial Areas Specific Plan. At that time, additional plans will be available concerning the proposed location and amount of future residential development, and a subsequent EIR would be better able to assess the cumulative impacts associated with the next increment of community growth. The potential impacts that can be currently estimated with 70 and 100 percent build-out are discussed in the alternatives analysis (Section 8).

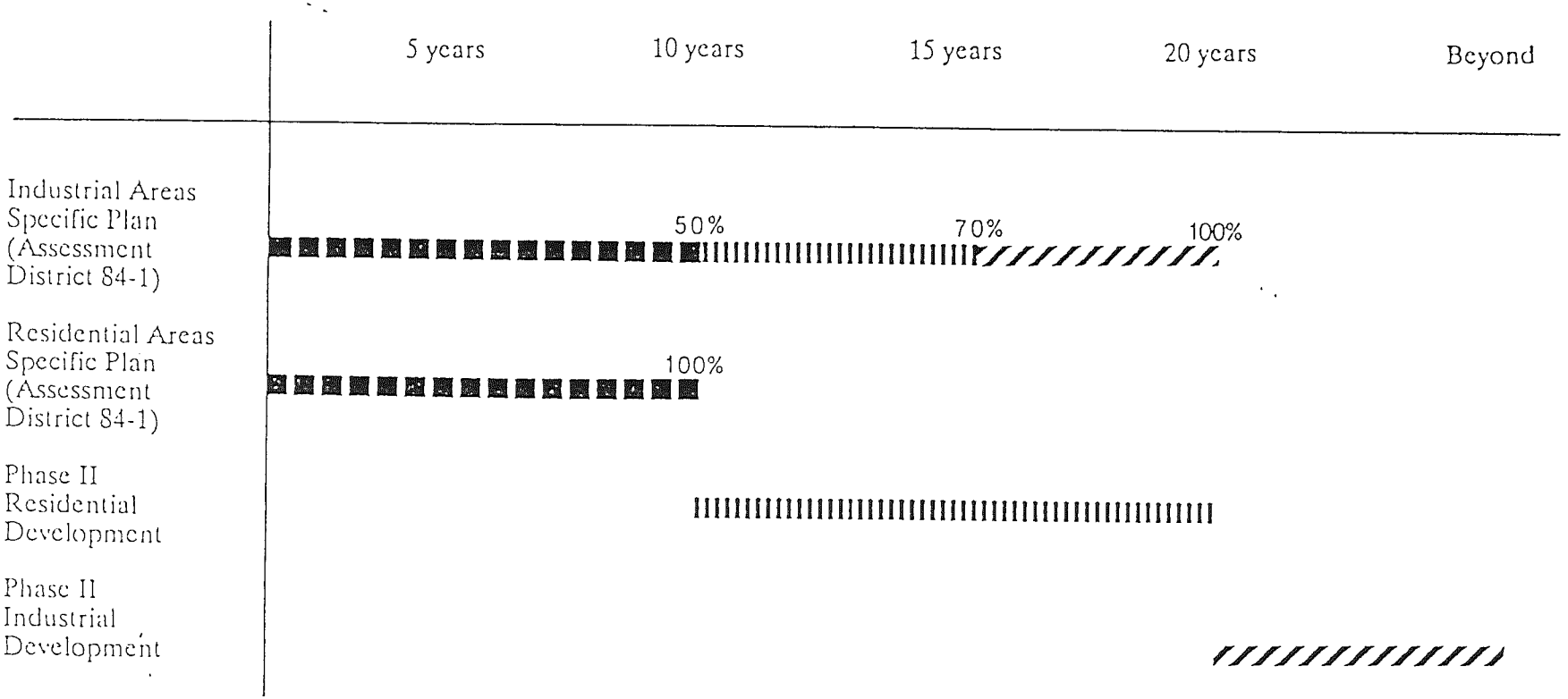
2.3.1 The Development Plan

2.3.1.1 Land Use Concept

The overall land use concept the Tracy Industrial Specific Plan is intended to provide a framework for land development which coordinates public improvements, yet allows flexibility in land use choices to respond to future market conditions. In order to accomplish this, two zoning categories, Limited and General Industrial, are designated for the areas addressed by the

Figure 2.5

Timeline for Development Projects in Tracy



Specific Plan (Figure 2.6). These categories allow a variety of office, industrial and warehousing uses. Heavy industrial uses are allowed in areas with a General Industrial designation and may require additional environmental review if environmental performance standards will not be achieved. Design guidelines are provided in the plan which pertain to site development requirements, parking and on-site circulation, building architecture, lighting, signage and landscaping. Standards are also given for design and development of the roadway and storm drainage systems.

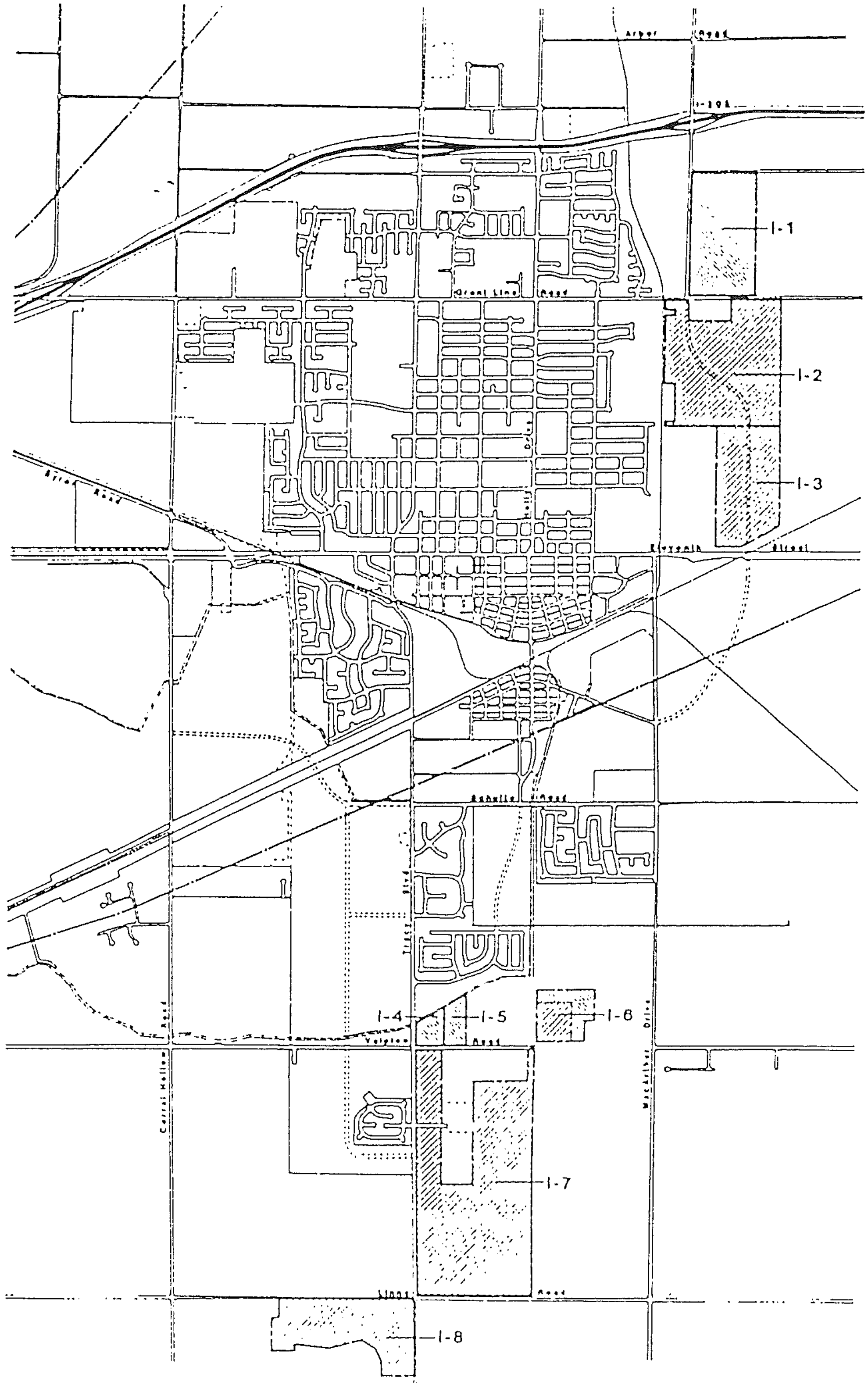
Two tables are provided to supplement the Industrial Areas Specific Plan Land Use Map (Figure 2.6). Table 2.1 describes the land use designations and sewer allocations for each parcel covered by the plan. Table 2.2 represents a typical development scenario at 50 percent build-out. While future development patterns may not result in these exact proportions of land use types and gross square footages, this scenario indicates what is likely to occur given current industrial development trends and the Specific Plan's development guidelines.

A unique feature of the Industrial Specific Plan are the "Environmental Performance Standards" and "Threshold Guidelines." These guidelines establish limits on the amount and type of industrial uses, based upon the availability of infrastructure capacity and the potential for environmental pollutants.

2.3.1.2 Circulation Concept

As the Specific Plan is implemented, Tracy's roadway network will change from a system of rural roads to a network of improved arterial and collector streets capable of providing continuous access throughout the Specific Plan area, and to and from the existing community. The proposed plan specifies the existing roads which will be improved and new roads that are necessary to complete this network. Truck routes will be limited to streets adjacent to industrial areas. Table 2.3 lists the arterial streets which will make up the basic roadway network within the Specific Plan areas and identifies which of these will be part of the truck route system (Figure 2.7).

Since it is predicted that a large proportion of the areas business traffic will be transporting goods to surrounding cities, the local circulation system will be improved to provide better links with regional transportation routes.



Tracy Industrial Area Specific Plan

LAND USE

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July 24, 1987

Limited Industrial
General Industrial
I-1 Reference Number
Proposed Roadways

Figure 2.6

Table 2.1

Industrial Areas Specific Plan

Land Use Program

Development Parcel	Property Owner	Total Acres	General Industrial Acres		Light Industrial Acres
I-1	Interland	76.42	0		76.42
I-2	Santa Fe Pacific	142.13	142.13		0
I-3	Pombo	74.29	74.29		0
I-4	Murphy	10.00	0		10.00
I-5	Murphy	10.00	0		10.00
I-6	Cose	34.09	16.53		17.56
I-7	Union Pacific	221.58	221.58	a	0
I-8	Teichert	74.95	74.95	b	0
	Totals	643.46	529.48		113.98

a 48.21 acres within this designation are within a Design Review Overlay Zone.

b 74.95 acres within this designation are within the Airport Overlay Zone.

Table 2.2

TRACY INDUSTRIAL AREAS SPECIFIC PLAN
ALTERNATIVE PROGRAM SUMMARY TABLES

50% Build-out/ Preferred Alternative

			OFFICE			GENERAL / LIGHT INDUSTRIAL			WAREHOUSE / DISTRIBUTION			TOTAL	TOTAL
PARCEL	GROSS ACREAGE	NET ACREAGE	%	S.F.	Net Acres	%	S.F.	Net Acres	%	S.F.	Net Acres	S.F.	Employees
I-1	76.42	64.96	10%	64,320	5.25	42%	279,651	23.86	48%	325,175	29.86	671,146	1,135
I-2	142.13	120.81	10%	126,324	10.00	42%	518,843	55.40	48%	603,306	55.40	1,248,473	2,118
I-3	74.29	63.15	8%	50,530	4.00	43%	277,029	29.58	50%	322,126	29.58	649,684	1,073
I-4	10.00	8.50	25%	22,738	1.80	35%	31,374	3.35	40%	36,482	3.35	90,594	179
I-5	10.00	8.50	22%	21,475	1.70	0%	0	0.00	78%	74,052	6.80	95,527	166
I-6	34.09	28.98	5%	15,791	1.25	41%	124,373	13.28	53%	160,519	14.74	300,682	478
I-7	221.58	188.34	0%	0	0.00	46%	881,940	94.17	54%	1,025,511	94.17	1,907,451	2,869
I-8	74.95	63.71	0%	0	0.00	46%	298,382	31.86	54%	346,955	31.86	645,337	971
Totals	643.46	546.94	10%	303,178	24.00	37%	2,411,591	257.50	53%	2,894,126	265.76	5,608,895	8,989

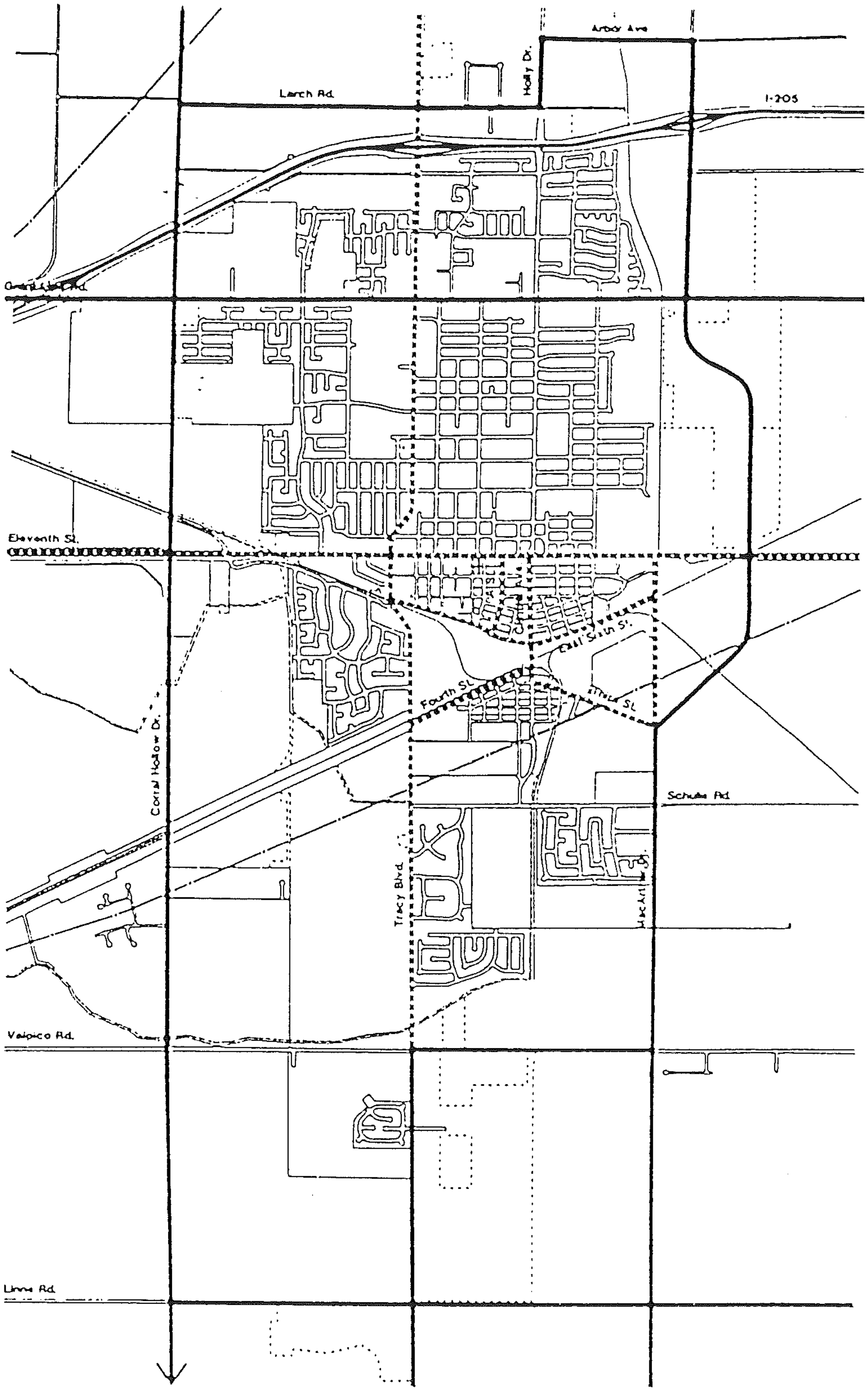
PLANNING FACTORS:

- 15% of gross acreage to roads and drainageways
- Net acreage = gross acreage less roads and drainageways
- % = percentage of parcel's total square-footage
- Parking factors:
  - 1/300 s.f. office
  - 1/600 s.f. light industrial
  - 1/800 s.f. warehouse / distribution
- Site Utilization factors:
  - Office: 2 story, 29% building, 56% parking, 15% landscaping/circulation
  - Light Industrial: 1 story, 43% building, 24% parking, 33% landscaping/circulation
  - Warehouse/Distribution: 1 story, 50% building, 21% parking, 29% landscaping/circulation
- Parking coverage analyzed at 330 s.f. per car

Table 2.3

Specific Plan Major Arterial Streets

Roadway	Segment
Grant Line Road	Chrisman Road to I-205
Corral Hollow Road	Grant Line Road to Schulte Road
Tracy Boulevard	Centre Court to Linne Road
MacArthur Drive	Schulte Road to I-205
Schulte Road	Corral Hollow Road to MacArthur Drive
Valpico Road	Corral Hollow Road to Chrisman Road
Linne Road	Corral Hollow Road to Chrisman Road



Tracy Industrial Area
Specific Plan

Prepared by
EDAW

TRUCK ROUTES

— Truck Routes
..... Temporary Truck Routes

Figure 2.7

This EIR only assesses the potential transportation impacts associated with roadway improvements required to provide adequate capacity for 50 percent of the total potential build-out of the Industrial Specific Plan areas. These improvements include:

- Widening MacArthur Drive to four lanes from I-205 south to Schulte Road.
- Construct the extension of Valpico Road west of MacArthur Drive as a two-lane facility.

2.3.1.3 Storm Drainage Concept

The system proposed in the Industrial Areas Specific Plan will implement the adopted Storm Drainage Master Plan. The proposed system divides presently unserviced areas of the City into two drainage areas. The west side system will drain the lands north of Linne Road and west of Central Avenue. All flows will drain to a basin, which will be located north of Interstate-205, and eventually flow easterly to Sugar Cut. The east side system will drain the parcels adjacent to MacArthur Drive, collect in a temporary basin at Eleventh Street and MacArthur Drive, and flow northerly to Sugar Cut. The parcels below Linne Road will provide their own on-site drainage facilities.

An additional feature of the system is its use as an open space and recreational amenity. Storm drainage channels will be landscaped and their rights-of-way will include pedestrian and bicycle paths.

2.3.1.4 Utilities

The primary objective of the Industrial Areas Specific Plan, as it pertains to utility systems, is to ensure that new industrial development is provided with adequate service prior to development. The utilities concept refers to sewer, water, solid waste, electric and natural gas systems.

Wastewater System

The City of Tracy is currently implementing capital improvements to the existing sewer plant and wastewater collection system to expand treatment capacity. This expansion is being financed by

the 84-1 Assessment District and will be completed prior to development in the Specific Plan areas. The 84-1 Assessment District also provides capacity to the Residential Specific Plan areas and infill parcels within the City.

Municipal Water System

The City maintains its own municipal water and treatment facilities. Currently, the treatment plant is operating at capacity, able to process only 70% of its annual entitlement from the Delta-Mendota Canal.

In addition to this more immediate need for increased treatment capacity, long range forecasts indicate that as the Industrial and Residential Specific Plan areas grow, another water supply source will need to be found as well.

Solid Waste

The solid waste disposal site currently used by the City of Tracy is a joint operation between Tracy and San Joaquin County. The site is located at the southeasterly corner of Corral Hollow Road and Interstate-580. All solid waste generated within the Specific Plan areas will be sent to this site or a new waste disposal site, once selected.

Gas and Electric

Natural gas and electric power will be provided to the users within the Industrial Specific Plan areas by Pacific Gas and Electric.

2.4 Proposed General Plan Amendment

The City of Tracy is proposing a General Plan Amendment to allow the Industrial Areas Specific Plan to conform to the General Plan as required by Government Code Section 65450. The adoption of the Specific Plan will simultaneously effect an amendment to the General Plan map and text.

The General Plan Map would be amended to reflect the land use designations identified on the Specific Plan Preferred Alternative Land Use Map. The goals and policies of the current General Plan would remain unchanged.

3.0

Environmental Setting

3. ENVIRONMENTAL SETTING

3.1 Physical Elements

3.1.1 Geology and Soils

Tracy lies in the upland valley portion of the Central Valley geomorphic province. From the edges of the Delta, the upland valley rises gradually in elevation toward the west and the southwest. Most of the area lies at elevations between sea level and 100 feet (30 meters) above sea level. The upland valley, flat and featureless in most places, is broken by the bottomlands of the major rivers and the smaller streams. It has been extensively leveled and graded in the course of cultivation and urban development.

The soils of the upland valley consist of mineral alluvium, produced through the erosion of rocks in the surrounding mountains and foothills and transported to the valley floor by rivers and streams.

A number of systems are presently in use for classifying soils on the basis of their usefulness for agriculture. The two most widely used in California are the Storie Index, developed by the University of California, and the Land Use Capability System, developed by the Soil Conservation Service of the United States Department of Agriculture.

The Storie Index classifies soils on a 0-100 numerical scale on the basis of the number of types of crops that they can support. The Land Use Capability System assigns soils to Classes I through VIII on the basis of the number of problems they present for plant growth, with Class I soils presenting the fewest problems. Class I and II soils under the Land Use Capability System and soils rated 80-100 under the Storie Index are usually considered prime. Prime soils within the Tracy Sphere of Influence are generally located southeast of the city.

A majority of the soils south of the railroad tracks are a mix of Los Robles gravelly Clay Loam and Rincon Clay Loam. These soils have moderate to slow permeability of water and moderate to high shrink-swell capacity.

The northern portions of the Specific Plan areas are characterized by some Rincon Clay Loam soils and Capay Clay soils. Permeability of the Capay soil is slow and available water capacity is high. This soil type also has a high shrink-swell capacity.

Due to the nature of these soils, potential impacts from water erosion are unlikely.

3.1.1.1 Geologic Hazards

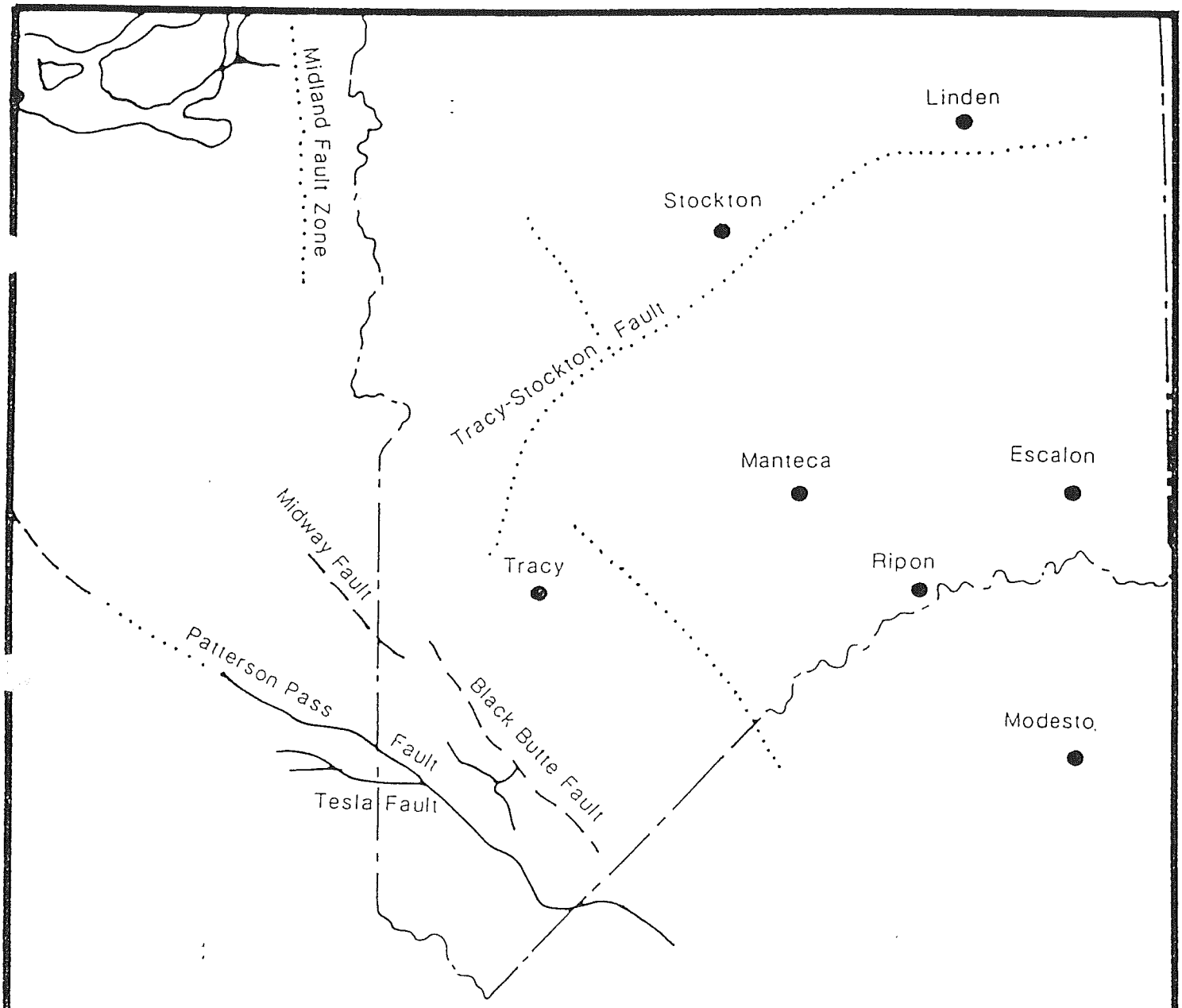
During the tectonic development of California, numerous faults were developed in the bedrock of both the Coast Range to the west and the Sierra Nevada to the east. A few faults have also been delineated as cutting sediments of the Central Valley. Faults which have historically been the source of earthquakes felt in Tracy include the San Andreas, Calaveras, Hayward, Midland, Green Valley and Tracy-Stockton.

The Tracy area itself has a low to moderate seismic history. In the past it has been subject mainly to ground motions from several earthquakes at moderate to great distances, perhaps up to more than 100 miles. None of these earthquakes had a magnitude greater than 3.9 on the Richter Scale within Tracy.

Figure 3.1 illustrates the faults which are most important to the proposed project site. They include the Tracy-Stockton Fault and the San Joaquin Fault.

Subsurface data indicate that no appreciable movement has occurred on the Tracy-Stockton Fault for five million years or more. Ordinarily, this would indicate that the fault is inactive, and therefore poses no threat. However, inconclusive evidence of activity was found at the eastern edge of the fault in 1881 and 1940. Therefore, it is not certain whether this is an active fault, although experts indicate the possibility of a 5.0 magnitude earthquake should one occur.

The San Joaquin Fault extends from Tracy to Los Banos, paralleling the I-5 freeway. Geologic studies show that the zone has sustained activity during the Quarternary period, but no significant earthquakes have been felt in Tracy.



Tracy Industrial Area
Specific Plan

Visible Fault
Inferred Fault
Buried Fault

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DKS Associates
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Figure 3.1

FAULT MAP

3.1.2 Hydrology and Water Quality

3.1.2.1 Hydrology

Surface Hydrology

Within the project area, the irrigation canals and drainage systems are the sole sources of surface oriented water. There are no lakes, streams, vernal ponds or other water resources on any parcel in the plan areas. Currently the City is working to integrate these networks into a Storm Drainage Master Plan as part of its effort to both consolidate the system and facilitate service to the Industrial and Residential Specific Plan areas.

Ground Water Resources

The foothills southwest of Tracy is the watershed area for the City's water system. Surface water percolates through superficial alluvial deposits into a groundwater basin of the Tulare Formation and Corcoran clay. This lower clay level effectively divides the basin into two aquifers, an upper zone which is subject to contamination from Delta water and thus produces water of poor quality and a lower zone yielding higher quality fresh water. However, at depths above 900 feet the lower aquifer may become brackish because of mixing with recharge from the San Joaquin River System. This system is the principal source of groundwater recharge for the upper aquifer. No part of it lies within the Specific Plan areas (Tracy General Plan).

Storm Drainage

The topography of the greater Tracy area is such that there is no inflow of surface water from outside the study area. Lands to the north and east drain northerly toward the San Joaquin River. Corral Hollow and the foothill areas drain in generally easterly directions. Land to the west drain generally northeasterly and do not contribute to storm flow within the study area.

The prevalent drainage pattern is overland flow in a generally northern direction to intereception by a conveyance system. This conveyance system can be categorized as follows:

a. Gravity flow
b. Pumped flow
c. Detention basins
d. Retention ponds

One portion of the existing gravity collection system flows to the City's outfall channel which extends northerly from Grant Line Road to Sugar Cut, between Holly Drive and MacArthur Road. A second gravity outlet utilized for stormflow is the Westside Irrigation District (WSID), Main Drain, which flows northwesterly to the WSID main intake canal at the Old San Joaquin River.

The pumped drainage flow area generally lies north of Grant Line Road and west of Balboa Avenue. Under the Tracy Boulevard Assessment District (TBAD) project in 1979 a new major pumping station was installed on Larch Road.

Until 1978, only the older portions of the City had a continuous storm drainage system. With new development in the southern areas, a temporary system of detention basins was built. There are seven retention basins currently scattered throughout the southern portion of the City. The City, however, has expressed dissatisfaction with the retention basin concept and desires to ultimately eliminate these facilities.

The conduit system within the presently developed areas is adequate to handle a 10-year storm with temporary ponding. The present capacity of the Main Drain discharge point is limited by the size of several downstream culverts and siltation in some reaches. Present capacity is approximately 45 cfs. With minor improvements, capacity of the drain could be increased to nearly 200 cfs. An agreement between the City and WSID permits a discharge rate to the Main Drain of 20 cfs. This is presently the limiting peak flow in the storm drain system. Any additional tributary flow would increase the peak, and the City would have to incorporate a detention system in order to meter discharge into the existing system or negotiate with the WSID for increased capacity.

To expand and coordinate the city-wide storm drainage system, the City has adopted a multiple criteria policy, as discussed in the Storm Drainage Master Plan, for future drainage system design. The policies are as follows:

a. The 100-year storm is to be contained within the right-of-way of the public street.
b. The 10-year storm is to be contained within the top of the street curb.
c. Storm drain facilities will be required where either of the above conditions cannot be satisfied.

The adopted criteria are intended primarily for new construction and make use of the surface capacity of the streets as a part of the detention/discharge system.

The Tracy area, historically, is an agricultural community, and therefore contains numerous irrigation systems, including canals and pipelines, being served by the Westside Irrigation District, Banta-Carbona Irrigation District and El Pescadero Irrigation District. As development occurs, more land is removed from agricultural uses, which also reduces the need for irrigation systems. It is the City's intent, as stated in the Storm Drainage Master Plan, to utilize the irrigation canals as drainage channels where physically possible.

The Storm Drainage Master Plan, as adopted, and revised for both the Industrial and Residential Specific Plans, includes only one permanent detention basin which is to be located north of I-205 on an extension of the Corral Hollow Road alignment. A temporary retention basin is located near Eleventh Street at the extension of MacArthur Drive. This basin will be phased out when the downstream conveyance channel is constructed.

The Master Plan, as adopted, indicates development of a system that would discharge all increased flow due to new development through this detention facility to Sugar Cut Canal. Negotiation with the WSID continue, however, for rights to discharge additional runoff to the Main Drain.

3.1.2.2 Water Quality

Ground water quality in the Tracy area is generally considered poor for two reasons. First, the level of total dissolved solids found is often more than twice the 500 parts per million (ppm) desired maximum and seems to be increasing. Secondly, the levels of calcium carbonate, which measure water hardness, are often more than three times as high as the 100 ppm desired maximum. Additional problems, as suggested earlier, stem from contamination from Delta water (Tracy General Plan).

3.1.3 Climate and Meteorology

The Tracy planning area shares the Mediterranean-type climate of the Great Central Valley, with its hot, rainless summers and cool, moist winters.

The mean temperature at Tracy is 94.7F for July and 43.5F for January. Summer nighttime temperatures usually drop to the low sixties Fahrenheit, resulting in summer daily temperature ranges of as much as 35F. Temperatures often drop to or slightly below freezing on winter nights, rising to the low fifties Fahrenheit during the days.

Mean annual precipitation in Tracy is approximately 10 inches. Over 90 percent of the precipitation is brought on by northwesterly Pacific storms between November and April. Infrequent spring and summer thunderstorms, usually from the south, bring most of the remainder. Prevailing winds are from the northwest.

Dense radiation fogs ("tule fogs") are a prominent characteristic in fall and winter. They normally form at night and dissipate during the day, but under stagnant atmospheric conditions in January and February, fogs may persist for four to five weeks with only brief clearings.

San Joaquin County has the longest average growing season in the Central Valley, with an average period of approximately 280 days between killing frosts in the vicinity of Tracy (Tracy General Plan, 1982).

3.1.4 Air Quality

3.1.4.1 Air Quality Factors

Climate may be the single most important factor influencing smog concentrations in the San Joaquin Valley air basin. Violations of smog standards in the basin have historically occurred between April and October, with the worst violations occurring when the temperature approached or exceeded 100F. There are several meteorological factors characteristic of the San Joaquin Valley which combine to create high smog concentrations:

- The San Joaquin Valley experiences high summertime temperatures, which accelerate the rate of smog formation.

- The valley is dominated by high pressure in the summer, creating stable air with low wind speeds. As a result, there is very little atmospheric mixing and pollutants do not readily disperse.

- Temperature inversions (an increase in temperature with height) frequently trap pollutants close to the ground, thereby increasing the pollutant concentrations and further inhibiting dispersion.

Tracy is located approximately in the middle of the Sacramento/San Joaquin Valley, which is about 500 miles long and 100 miles wide. The trough-like configuration of the Valley forms an ideal trap for pollutants. Mountain ranges surrounding the Valley restrict the horizontal airflow and often present temperature inversions which prevent the air from rising vertically above the height of the mountains. Despite the northwesterly prevailing winds, the area's geographical features, in effect, form a bowl and the inversions act as a lid on the bowl, preventing the escape of pollutants that enter the Valley's atmosphere. As the level of the inversion lowers, the pollutants are trapped in smaller volume of air, increasing their concentration, (Tracy General Plan, 1982).

3.1.4.2 Air Quality Standards and Management Plans

San Joaquin County has been identified by the California Air Resources Board and the U.S. Environmental Protection Agency as an area with an air pollution problem, and is designated as being within the San Joaquin-Stanislaus County Air Quality Maintenance Area (AQMA), established in an effort to meet the National Ambient Air Quality Standards (NAAQS).

These national standards have been established as a result of the Clean Air Act. They are divided into primary standards which are designed to protect the public health and secondary standards which are intended to protect the public welfare from effects such as visibility reduction, soiling, nuisance, and other forms of damage. The State of California has also adopted its own ambient air quality standards. Table 3.1 summarizes these National and California air quality standards.

Table 3.1

Ambient Air Quality Standards

Pollutant	Averaging Time	Concentrations		
			National Standards[a]	
		California Standards[b]	Primary[c]	Secondary[d]
Oxidant[e]	1 hour	0.10 ppm ($200\ ug/m^3$)	—	—
Ozone	1 hour	—	0.12 ppm ($235\ ug/m^3$)	Same as primary standard
Carbon monoxide	8 hours	9 ppm	10 mg/m^3 (9 ppm)	Same as primary standards
	1 hour	20 ppm	40 mg/m^3 (35 ppm)	
Nitrogen dioxide	Annual average	—	100 ug/m^3 (0.05 ppm)	Same as primary standard
	1 hour	0.25 ppm ($470\ ug/m^3$)	—	—
Sulfur dioxide	Annual average	—	80 ug/m^3 (0.03 ppm)	—
	24 hours	0.05 ppm[f] ($131\ ug/m^3$)	365 ug/m^3 (0.14 ppm)	—
	3 hours	—	—	1,300 ug/m^3 (0.5 ppm)
	1 hour	0.50 ppm ($1310\ ug/m^3$)	—	—
Suspended particulate matter	Annual geometric mean	--g	75 ug/m^3	60 ug/m^3
	24 hours	—g	260 ug/m^3	150 ug/m^3

Source: California Air Resources Board.

a National standards, other than those based on annual averages or annual geometric means, are not to be exceeded more than once per year.

b California standards are values that are not to be equaled or exceeded.

c National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

e Measured as ozone.

f At locations where the state standards for oxidant and/or suspended particulate matter are violated. National standards apply elsewhere.

g The California Air Resources Board has adopted an "inhalable" particulate standard for PM 10 of 50 ug/m^3 24-hour average and 30 ug/m^3 annual geometric mean.

Note: ppm—parts per million by volume; ug/m^3—micrograms per cubic meter; mg/m^3—milligrams per cubic meter.

Concentrations are expressed first in units in which standards were promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25 degrees C and a reference pressure of 760 millimeters of mercury.

The San Joaquin County Planning Department prepared the County's first Air Quality Maintenance Plan in 1979. The plan was revised in 1982 for attaining national standards on ozone, carbon monoxide, and particulate concentrations, by 1987.

3.1.4.3 Ambient Air Quality

As discussed above, San Joaquin County is designated, by the U.S. Environmental Protection Agency, as a non-attainment area for ozone, carbon monoxide, and suspended particulates. Data for each of these factors is reviewed below. The only air monitoring station in San Joaquin County which has been operating consistently since 1977 is the Stockton/Hazelton Station. Several other stations have been operating periodically at various locations within the County. Therefore, to show air quality trends, only the data from the Stockton/Hazelton station are used throughout this section.

Ozone

Ozone is a regional pollutant which is not emitted directly to the atmosphere by any source, but is the result of a chemical reaction in the atmosphere in the presence of sunlight. The major pollutants involved in this reaction, known as ozone precursors, are reactive organic gases and oxides of nitrogen. The sources of these precursor pollutants are numerous and widespread and include vehicles, industrial processes, combustion, solvents, and paints.

Because of the time delay of several hours involved in the formation of ozone, ozone concentrations are much more uniform over an area, with the highest concentrations found downwind of an urban area. Ozone also can be transported long distances by wind, so that ozone created in one region may affect other regions.

Air quality in San Joaquin County shows that the National Ambient Air Quality Standards (NAAQS) have had periodic violations since 1979. As shown in Table 3.2, ozone levels have fluctuated since 1977. The number of violation days has, however, declined in recent years (Table 3.3). The County's "1983/1984 Preliminary Progress Report" notes that fluctuations in pollutant levels are being reestablished in a downward trend after a rise in levels during the three year period ending in 1983. The data is in three year periods to comply with EPA requirements for determining whether an area meets air pollution standards.

Table 3.2

May - October Data for Ozone

Period	Number of Days at 12 pphm[a] or Greater	Fourth Highest Hourly Concen. pphm	Mean Daily Max. Hourly Conc. pphm
1977, 78*, 79	7	13	6.3
1978*, 79, 80	7	12	6.6
1979, 80, 81	11	14	6.4
1980, 81, 82	9	13	6.2
1981, 82, 83	12	13	6.1
1982, 83, 84	9	13	5.7

a Parts per hundred million
* No data available for 1978.

Source: Preliminary Draft 1983/1984
Reasonable Further Progress Report of Air Quality, August 1985.

Table 3.3

Mean May-October Data for Ozone

Calendar Year	Mean Daily Max. Hourly Conc., pphm[a]	Max. Surface Temperature, F[b]	Morning Temp. at 5,000 Ft., F[c]
1977	5.8	82.7	60.5
1978	No Data	89.2	64.5
1979	6.7	90.2	62.7
1980	6.4	87.6	60.7
1981	6.2	90.3	64.2
1982	5.9	86.5	59.7**
1983	5.3	87.5	62.2**
1984	5.0	87.4	62.2**

a Parts per hundred million

b Temperature at Stockton Metropolitan Airport
c Temperature at Sacramento
**Combined data from Sacramento and Davis

Source: Preliminary Draft 1983/1984
Reasonable Further Progress Report of Air Quality, August 1985.

Carbon Monoxide

Carbon monoxide (CO) 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 exhaust. Elevated concentrations, therefore, usually are found near areas of high traffic volumes.

On a daily basis, CO levels usually track with increasing and decreasing traffic flows during shallow and persistent inversion periods. Typically, morning and early evening rush hour traffic levels correspond closely to elevation of CO levels. The morning CO peak usually dissipates as the inversion weakens and/or is broken by solar heating at the surface. The evening peak normally persists into the later evening and CO levels decline to pre-rush hour levels at approximately midnight.

Exceedances of CO usually occur during periods when shallow temperature inversions are strong. The Central Valley is notorious for strong temperature inversions during the fall and early winter, and all San Joaquin County CO violations have occurred during this period.

Federal standards for carbon monoxide are slightly higher than state standards. The federal NAAQS for CO is 9 ppm for an eight hour average or 35 ppm for one hour. The 9 ppm/8 hour average standard has been occasionally violated in San Joaquin County.

As shown on Tables 3.4 and 3.5, the number of days during which the NAAQS was reached or exceeded has dropped steadily since the three-year period ending with 1981. There were only three days in 1983 during which the NAAQS was reached or exceeded. During the reporting year 1984, there were no days during which the NAAQS was reached or exceeded.

Suspended Particulates

Until recently, ambient particulate levels were measured as total suspended particulates (TSP) and both the state and national ambient air quality standards were for TSP. However, the state has recently adopted a fine particulate standard, and EPA is in the process of developing a similar type of standard. The reason for the change in standards is that the fine particulates are inhalable and thus can be detrimental to human health.

Table 3.4

Jan, Feb, and Oct-Dec Data for CO

Period	Number of Days at 9 PPM[a] or Greater	Fourth Highest Hourly Concen. PPM	Mean Daily Max. Hourly Conc. PPM
1977, 78, 79	15	12.1	3.4
1978, 79, 80	18	12.1	3.5
1979, 80, 81	13	11.6	3.3
1980, 81, 82	8	8.9	3.1
1981, 82, 83	4	9.1	2.4
1982, 83, 84	4	9.1	2.3

a Parts per million

Source: Preliminary Draft 1983/1984
Reasonable Further Progress
Report of Air Quality, August 1985.

Table 3.5

Mean Jan, Feb, and Oct-Dec Data for CO

Calendar Year	Mean Daily Max. 8-Hourly Conc., PPM[a]
1977	3.9
1978	2.9
1979	3.4
1980	4.1
1981	2.3
1982	2.8
1983	2.1
1984	2.0

Temperature at Stockton Metropolitan Airport

a Parts per million

Source: Preliminary Draft 1983/1984
Reasonable Further Progress
Report of Air Quality, August 1985.

The national primary TSP standard is 75 micrograms per cubic meter. Recent data in San Joaquin County shows that this standard is being exceeded and is frequently violated (Table 3.6). The particulates were, in fact, a Central Valley-wide problem and violations of the standards are observed yearly at all locations in the San Joaquin Valley Air Basin.

Summary of Findings

Air quality for ozone and carbon monoxide has shown no deterioration since 1978. Ozone standards are still occasionally violated each ozone season (May through October). The County is very close to meeting the carbon monoxide standard and should be able to show attainment 1987. The federal ozone standard allows for no more than an average of one hour of exceedance of the 0.12 ppm concentration per year. Several federal carbon monoxide standards exist (for one hour and eight hour average concentrations), and San Joaquin County has occasionally violated the 8-hour standard (which requires that the 8-hour average not exceed 9.0 ppm carbon monoxide).

3.2 Biological Environment

3.2.1 Vegetation

There is little native vegetation in the Industrial Specific Plan areas. Most has been disturbed through continuous cultivation over many years. Active agricultural lands generally are planted in row crops and alfalfa. Isolated areas of ruderal or weedy vegetation are scattered throughout the proposed project site.

Caper fruited tropidocarpum (Tropidocarpum Capparideum) is a rare species identified by the California Natural Diversity Data Base (CNDDB) as potentially existing within the Industrial Specific Plan areas. The CNDDB priority of this plant is B1.2. This priority is ranked fifth among the CNDDB priorities, and compares with that assigned to a species considered rare and threatened or a rare and endangered subspecies. These priorities do not give any special legal status to this species. The plant is, however, a candidate for federal listing, Category 2, and will be given full protection by the federal government if located on-site (Bob Mapes, personal communication). The continuous cultivation of the land in the project area most likely indicates absence of this plant type.

Table 3.6

Total Suspended Particulate Data for San Joaquin County

1979-80, 1983-84
Stockton Station

	Number of Observations	High	Second High	Geometric Mean
1979	55	150	143	75.0
1980	53	298	236	84.6
1983	59	254	218	69.8
1983	58	186	181	81.9

Source: California Air Quality Data, 1979, 1980, 1983, 1984, Air Resources Board

3.2.2 Wildlife

Wildlife in the study area is primarily limited to small animals, such as rabbits, mice and game birds, typically found in cultivated lands and requiring habitat with little cover. Use of this habitat type is regularly disrupted by planting and harvesting, which limits nesting and burrowing opportunities for many species. Vegetation along fence lines, irrigation ditches, or unused land do provide appropriate habitat for these animals, but weed abatement programs often continually remove the vegetation.

The San Joaquin Kit Fox (Vulpes Macrotis Mutica), is known to exist in the foothills south of Tracy, and as a roaming animal, has no specific habitat boundary. While it is listed by the CNDDB as B2.1 priority, meaning an uncommon or threatened species, it is listed as a federal endangered species and a California threatened species. Recent sitings indicate the Kit Fox limits its habitat to the area between the foothills and the California Aqueduct. It most likely does not exist in the Industrial Specific Plan area because its habitat needs are not met by an increasingly urban environment (Bob Mapes, personal communication).

The Swainson's hawk (Buted Swainsoui) has been sited nesting at the intersection of Grant Line Road and Tracy Blvd. The Swainson's hawk is a CNDDB B1.2 priority (a rare and threatened species), a candidate for federal listing, Candidate 2, and a California threatened species. Swainson's hawks formerly nested over much of lowland California, except for the Mojave and Colorado Deserts. California breeding populations are only found now in portions of the Central Valley and Klamath Basin. Although scarce in California, they are the most common hawk of the Canadian prairie (LSA, 1986). The most recent siting of the hawk in Tracy was in 1981. No adults or nest were found in 1983. Since that time the land use at the intersection of Grant Line Road and Tracy Blvd. has changed from agricultural to commercial uses. This transition has probably displaced the hawk.

3.3 Sociocultural Environment

3.3.1 Cultural Characteristics

The City of Tracy and San Joaquin County as a whole have grown steadily since 1960, experiencing a surge of growth as the country pulled out of its economic recession in the mid-1980's. In June 1987, the City adopted the Residential Areas Specific Plan which, over the next 8 to 10 years, will add approximately 7,540 new households to the community. Additionally, the proposed Industrial Areas Specific Plan is expected to ultimately increase the City's employment base by over 18,000 jobs. An overview of aspects describing existing conditions in Tracy before this increase in its growth rate and employment base is important to understanding the impact of residential developments on its future. The statistics in Table 3.7 present a general portrait of the community.

Historic Population Trends

Statistics on historic population growth for San Joaquin County and Tracy are shown in Table 3.7. Tracy has grown more quickly than has the county as a whole for the twenty-five year period from 1960 to 1985. The population increased by 26.9 percent in the 1960's and 22.7 percent in the 1970's. The county experienced an increases of only 15.3 percent and 17.8 percent for the same periods. During the five-year period of 1980-1985, both the city and county populations jumped dramatically: from 18,428 to 23,400 in Tracy (48.9 percent), and from 347,342 to 407,500 (32.5 percent) in San Joaquin County.

Employment

Table 3.8 summarizes pertinent employment characteristics for the City of Tracy in 1980. Technical, sales and support work made up the largest occupational group of employed persons, with operators, fabricators and laborers as a group accounting for only a few hundred less jobs. Similarly, by industry, the largest sectors were services (26.8 percent of the employed work force); and manufacturing (20.3 percent).

Table 3.7

Historic Population Growth

					Percentage Change**		
	1960	1970	1980	1985	60-70	70-80	80-85
Tracy	11,289	14,724	18,428	23,400*	26.9	22.7	48.9
San Joaquin County	249,989	291,073	347,342	407,500*	15.3	17.8	32.5

*Department of Finance estimates

**EDAW estimates

Source: U.S. Census of Population, California Department of Finance, EDAW

Table 3.8

Employment: 1980

Population	18,428
Persons 16 and Over	13,344
Labor Force	8,293
Civilian Labor Force	8,269
Employed	7,385
Unemployed	884
Occupations of Employed Persons	
Managerial, Professional	1,085
Technical, Sales and Support	21,164
Services	971
Farming, Forestry and Fishing	293
Precision Production, Crafts, Repair	996
Operators, Fabricators, Laborers	1,876
Employment by Selected Industries	
Mining	4
Construction	307
Manufacturing	1,499
Transportation, Communication, Utilities	788
Wholesale Trade	277
Retail Trade	1,107
Finance, Insurance, Real Estate	106
Banking and Credit Agencies	127
Services	1,980
Public Administration	891
Agriculture	299
Class of Worker	
Private Wage and Salary	4,888
Government: State and Federal	1,214
Government: Local	776
Self-Employed	480

Source: U.S. Census, 1980

Census figures show that, in 1980, San Joaquin County had a larger number of people employed within its area than it had residing there implying an in-commute of workers. Only 7.1 percent of county residents travelled to jobs outside of the county.

Income

In 1979, the median yearly household income in Tracy was $16,630, a figure $1,613 below the state median (Table 3.9). Median family income stood at $19,358 for Tracy in 1979 which, along with median household income, was higher than corresponding figures for San Joaquin county as a whole. The lower per capita income in Tracy indicates that the higher relative medians for families and households may be attributed to larger average family sizes in Tracy than in the county.

3.3.2 Historic Resources

According to the files of the Central California Information Center, which catalogues data on cultural resources in the San Joaquin Valley, no historic sites have been located within the Industrial Specific Plan areas and no cultural resource surveys have been conducted.

Because virtually all acreage within the study area is disturbed agricultural land, it is unlikely that there are any historic sites remaining.

3.3.3 Land Use and Land Use Planning

3.3.3.1 Land Use

The Industrial Specific Plan areas abut existing urban development along the west and south edges of the City of Tracy. Presently, the entire 675 acres scheduled for development are either active or dormant agricultural land and are accessible by local-serving rural roads.

Soil surveys listed in the 1982 Tracy General Plan, indicate that the land within the Industrial Specific Plan is not the most fertile in the area. The objective of that plan was to target the industrial growth to areas adjacent to existing development and away from prime soils.

Table 3.9

Income: 1980

	City of Tracy	San Joaquin County	State of California
Total Households	6,625	125,039	8,644,633
Household Income			
Less than $10,000	1,907	39,538	2,270,644
$10,000 to $19,999	2,023	36,361	2,425,961
$20,000 to $24,999	973	15,244	1,045,319
$25,000 to $34,999	1,177	19,393	1,429,229
$35,000 to $49,999	391	9,779	923,669
Over $50,000	154	4,724	549,811
Median Household Income	$16,630	$16,071	$18,23
Median Family Income	$19,358	$19,116	$21,537
Per Capital Income	$6,719	$7,016	$8,295

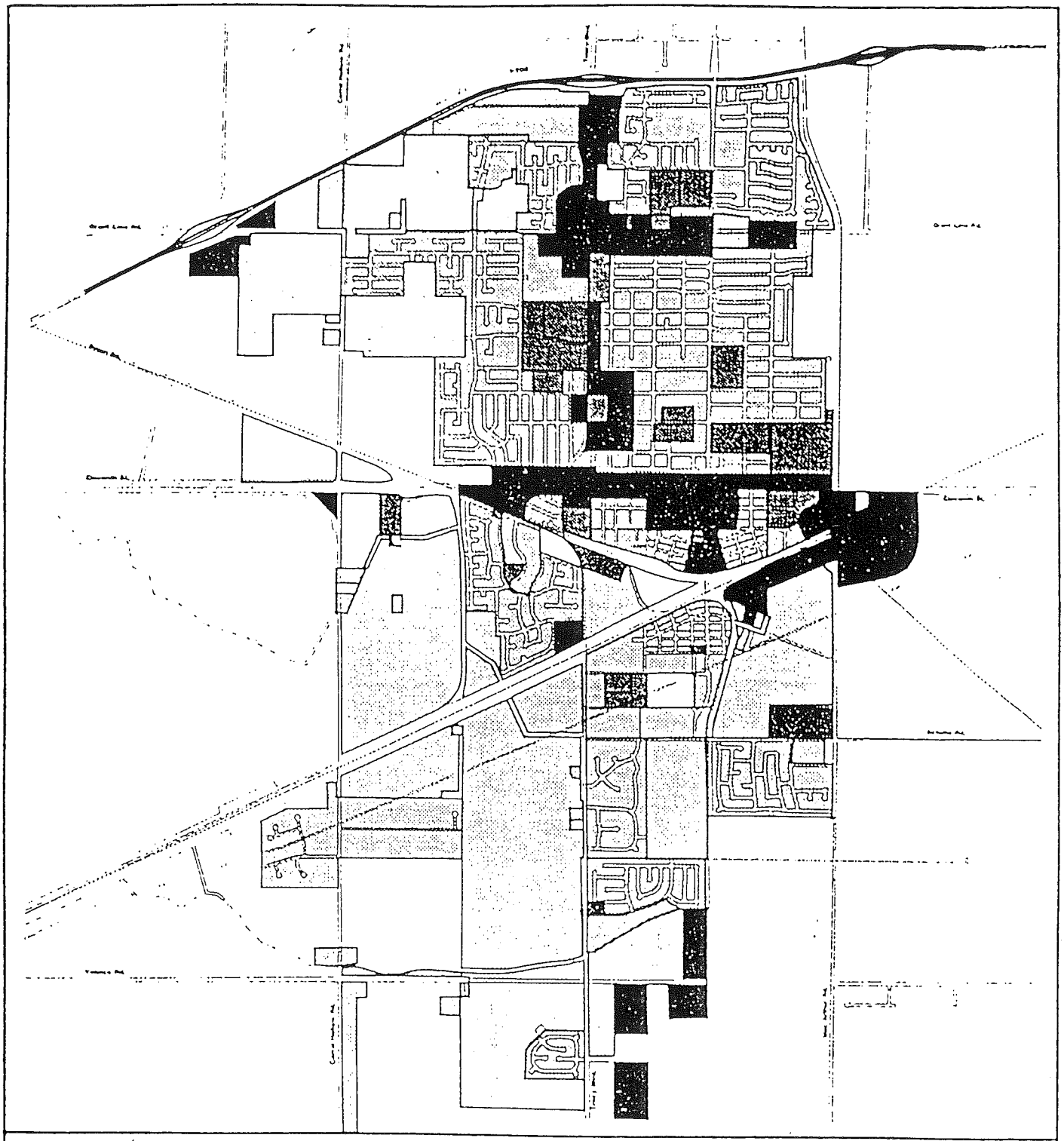
Railroad lines criss-cross the city and the Specific Plan areas, forming divisions of the land but, they are also sources of noise, and have created pockets of underutilized land.

The City itself is mainly characterized by established single-family neighborhoods crossed by tree lined streets. While some of the recent subdivisions do not have the extensive landscaping which makes the older neighborhoods so attractive, the City has reinforced its policies and currently requires street trees in new subdivisions. Several of the newest areas are lined with concrete walls which form barriers to the adjacent community. The central downtown district is composed of one- and two-story buildings which contain local-serving retail businesses. Eleventh Street is also a growing highway-serving commercial strip hosting a number of new shopping centers and fast-food restaurants. At the intersection of Tracy Blvd. and Grant Line Road, a complex of highway-serving restaurants and community oriented retail stores, including a K-Mart, forms another community focal point (Figure 3.2).

In addition to the land currently being considered for industrial development, a significant portion of the City's land was recently allocated to the residential sector. In 1982, during the process of updating the General Plan, the City of Tracy identified land within the recently adopted Residential Areas Specific Plan as areas to be targeted for future urban expansion. This plan is intended to provide a planned community that expands and enhances the amenities of the city. In order to accomplish this, the plan allows a variety of residential product types, commercial complexes, school facilities, parks, recreation and open space amenities and an improved circulation system. This plan promises to figure prominently in future land use decisions, and so the effects of its implementation have been included in the current document. Figure 3.3 illustrates the land use designations of the parcels included in the Residential Areas Specific Plan.

3.3.3.2 Land Ownership

The approximately 643 acres within the proposed Specific Plan are owned by eight separate parties. Table 3.10 and Figure 3.4 list these property owners and the location of their parcels.



Tracy Industrial Area
Specific Plan

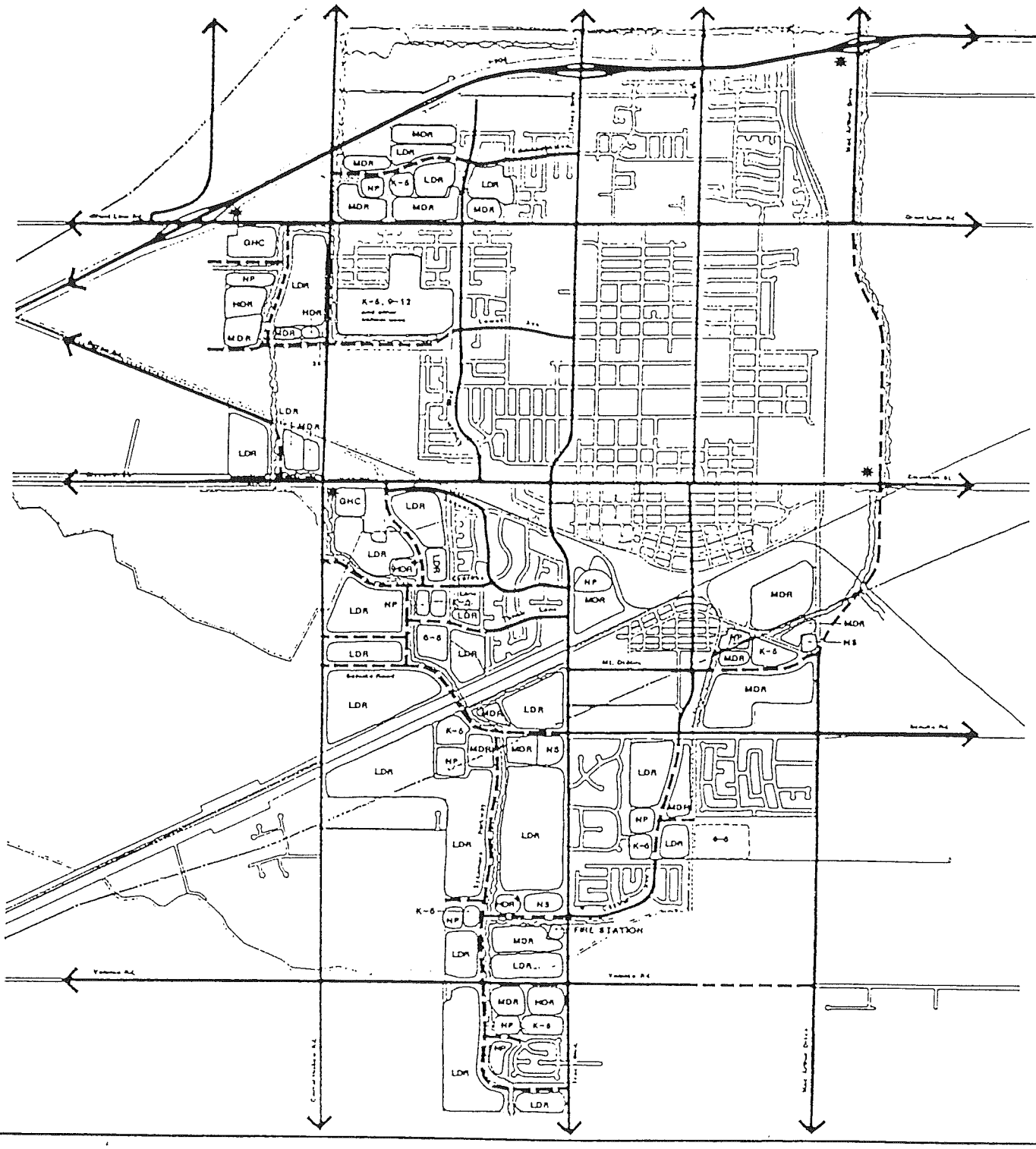
EXISTING LAND USE

Prepared by
EDAW Inc.

in association with
Wesley & Hamm
DKS Associates
Barrie Wells Associates

- Agricultural
- Residential
- Public, Institutional
- Commercial
- Industrial

Figure 3.2



Tracy Residential Areas Specific Plan

SPECIFIC PLAN

Prepared by
EDAW Inc.
in association with
Wilsey & Ham
DKS Associates
Barde-Wells Associates

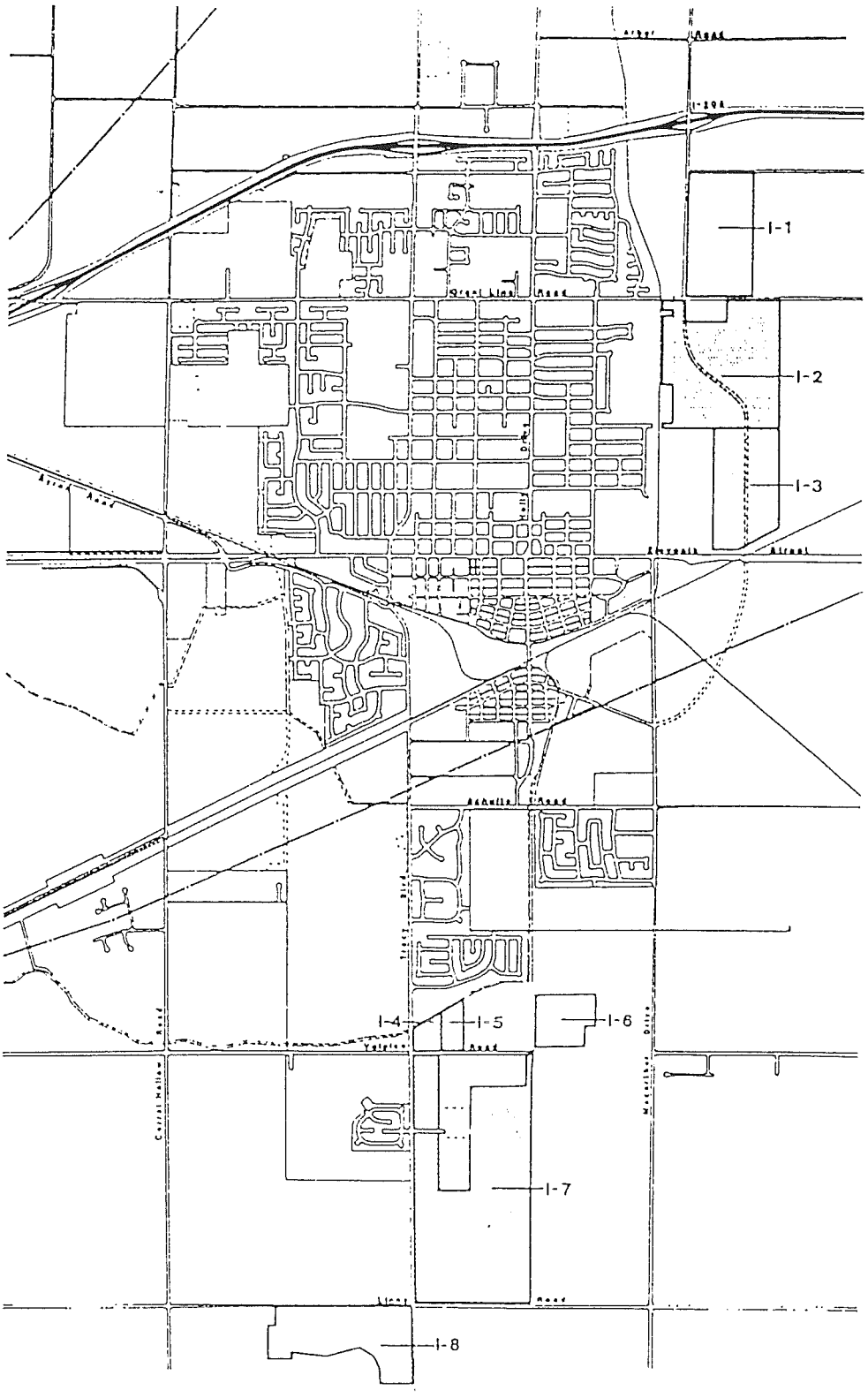
June 1987

- Retention Basin
- Storm Drain/Open Space Corridor
- Existing Arterials and Collectors
- Proposed Arterials and Collectors
- LDR — Low Density Residential
- NP — Neighborhood Park
- MDR — Medium Density Residential
- GHC — General Highway Commercial
- HDR — High Density Residential
- NS — Neighborhood Shopping Center
- 9-12 — High School
- Gateway Treatment
- 6-8 — Middle School
- K-5 — Elementary School

Figure 3.3

Table 3.10
Tracy Industrial Areas Specific Plan
Existing Land Use Data

Development Parcel	Property Owner	Total Acres	General Plan Designation
I-1	Interland	76.42	LI
I-2	Santa Fe Pacific	142.13	GI
I-3	Pombo	74.29	LI
I-4	Murphy	10.00	LI
I-5	Murphy	10.00	LI
I-6	Cose	34.09	GI
I-7	Union Pacific	221.58	GI
I-8	Teichert	74.95	GI
TOTALS		643.46	



Tracy Industrial Area
Specific Plan

LAND OWNERSHIP

Prepared by
EDAW
In association with

Parcels Included
I-1 Reference Number

July 24, 1987

Figure 3.4

3.3.3.3 Land Use Planning

All of the land within the proposed Industrial Specific Plan area is designated by the General Plan as either Limited Industrial (LI) or General Industrial (GI). With the exception of parcel seven, all parcels are zoned as Light Industrial (M-1) (Figure 2.3). Parcel nine additionally falls within the Tracy Municipal Airport overlay zone.

Permitted uses under such zoning include, but are not limited to, commercial amusement and entertainment establishments, contract construction, warehousing and storage, and light industrial uses. Conditionally permitted uses include but are not limited to mining and quarrying, general consumer and business services, wholesale, trade establishments and intermediate and heavy manufacturing uses.

3.3.4 Transportation

3.3.4.1 Highway Access to Tracy

The City of Tracy is well served by intercity freeways. Interstate 5 (I-5), California's primary north-south freeway, passes within five miles of Tracy to the east. I-205, an east-west freeway link connecting I-5 to I-580, passes through northern Tracy. I-580, which extends from I-5 to the San Francisco-Oakland Bay Bridge, passes within five miles of Tracy to the southwest. I-205 and I-580 together constitute the main accessway between Tracy and the San Francisco Bay Area. I-205 is a four-lane facility. I-580 is also four lanes until it is joined by I-205 near the Altamont Pass; west of this point, I-580 has eight lanes.

Two non-freeway roads which provide access to Tracy are San Joaquin County Routes J2 and J4. Route J2 (which becomes Corral Hollow Road within the City of Tracy) is a two-lane facility connecting Tracy to State Route 4 (S. R. 4) ten miles to the north. Route J4, also known as Byron Road, is a two-lane facility connecting Tracy and the community of Byron and other communities in eastern Contra Costa County.

3.3.4.2 Key Roadways Within Tracy

The Tracy street system is essentially a grid system with arterials (major traffic streets) spaced at intervals of approximately one mile. Key existing and planned arterials and average daily traffic volumes are shown on Figure 3.5 and include:

Central Avenue

Central Avenue is a north-south roadway in central Tracy extending approximately one mile south from Eleventh Street through Tracy's Central Business District (CBD) to Schulte Road. After a discontinuity of approximately three-quarters of a mile south of Schulte Road, Central Avenue resumes, turning west to a terminus at Tracy Boulevard.

Central Avenue currently has two travel lanes plus parking between Eleventh and First Streets, and for an 800-foot segment between Mt. Oso Avenue and Schulte Road. Elsewhere, Central Avenue is a four-lane arterial. Ultimately, Central Avenue is planned for four travel lanes for its entire length south of First Street.

The alignment of Central Avenue is straight. There is a traffic signal at the Central-Holly/Eleventh Street intersection and stop signs on Central Avenue at Schulte Road and at Tracy Boulevard. Other side streets are stop sign controlled.

Corral Hollow Road

Corral Hollow Road is currently a two-lane north-south roadway at the western edge of Tracy. It is planned to become a major four-lane arterial serving future development in west Tracy. The alignment of Corral Hollow is straight as it passes through the planned development area.

East Street

East Street is a north-south roadway serving Tracy's east side. It extends approximately 1.3 miles from Sixth Street to Grant Line Road. It serves two lanes of moving traffic. North of Eleventh Street, East Street carries about 6,300 vehicles daily.

Eleventh Street

Eleventh Street is the major east-west arterial roadway serving central Tracy. To the west, Eleventh Street has an interchange connection to I-205. Some 2.3 miles are within the City limit. Eleventh Street serves four lanes of traffic.

The alignment of Eleventh Street is straight. Traffic control includes traffic signals at Tracy Boulevard, at Lincoln Boulevard, at Parker Avenue, at Holly Drive, and at East Street. All other side streets are stop sign controlled. Speed limit signs are used to indicate the speed limits varying between 30 MPH and 50 MPH. The highest traffic volumes along Eleventh Street occur between Central Avenue and Parker Avenue where daily volumes exceed 15,000. West of Lincoln Boulevard, the average daily traffic (ADT)[1] is about 9,200 and to the east of MacArthur Drive it reaches 12,100 vehicles per day. Eleventh Street is a designated truck route.

Grant Line Road

Grant Line Road is an east-west arterial roadway in the northern part of Tracy. To the west, Grant Line Road has an interchange connection to I-205. Some 3.4 miles of Grant Line Road is within the City limit. Grant Line Road serves two lanes of traffic with a central two-way left-turn lane between Tracy Boulevard and East Street. Between Holly Drive and East Street, a second eastbound lane is present. Ultimately, Grant Line Road will be widened to serve four lanes of through traffic.

The alignment of Grant Line Road is straight. Traffic control includes traffic signals at Tracy Boulevard, at Holly Drive at East Street, and at Lincoln Boulevard. All other side streets are stop sign controlled. Speed limit signs are used to indicate the 35 MPH speed limit between Tracy Boulevard and MacArthur Drive and 45 MPH to the west of the 35 MPH speed limit. Daily traffic volume along Grant Line Road west of Corral Hollow Road is about 4,400 and about 3,600 east of MacArthur Drive. The highest volumes along Grant Line Road occur between Tracy Boulevard and MacArthur Drive. Grant Line Road is a designated truck route.

1/ All ADT figures are from 1983.

Holly Drive

Holly Drive is a north-south roadway in the central part of Tracy extending some 2.1 miles between Eleventh Street and the northerly City limits. Holly Drive serves two lanes for its entire length. Between Eleventh Street and Clover Road, Holly Drive is 40 to 48 feet wide. North of Clover Road, the pavement width narrows to 24 to 30 feet.

The alignment of Holly Drive is straight. Traffic control includes traffic signals at Grant Line Road and at Eleventh Street. Other side streets are stop sign controlled. Speed limit signs are used to indicate the 25 MPH speed limit between Eleventh Street and I-205. Daily traffic volume along Holly Drive south of Beverly Place is about 6,200 and about 5,600 north of Grant Line Road. Daily volume north of Clover Road is about 1,300 and this drops to about 950 per day near Arbor Avenue.

Linne Road

Linne Road is a two-lane, east-west roadway at the southern edge of Tracy and passes just north of the Tracy Municipal Airport. It extends from Corral Hollow Road (County Road J2) to County Road J4.

MacArthur Drive

MacArthur Drive is a 2.4-mile-long north-south roadway in the eastern part of Tracy providing two lanes of traffic between the southerly City limits and Eleventh Street and between Grant Line Road and the northerly City limits. The width of MacArthur Drive typically varies between 25 and 35 feet with most of its length yet to be fully improved.

The alignment of MacArthur Drive is straight. Traffic control includes stop signs at Grant Line Road and at Eleventh Street. Side streets are stop sign controlled. Speed limit signs are used to indicate the speed limit. Daily traffic volume along MacArthur Drive is about 4,100 north of Grant Line Road and 900 immediately to the south of Arbor Avenue. The daily volume north of Schulte Road is about 2,700 and about 2,400 south of Schulte Road. MacArthur Drive is a designated truck route.

Tracy Boulevard

Tracy Boulevard is the major north-south arterial providing a continuous route between the northerly and southerly City limits. Tracy Boulevard serves as a two-lane street north of I-205 and to the south of Tennis Lane. Tracy Boulevard has four traffic lanes between Grant Line Road and Tennis Lane. Localized widening also occurs at Kavanaugh Avenue and at Grant Line Road.

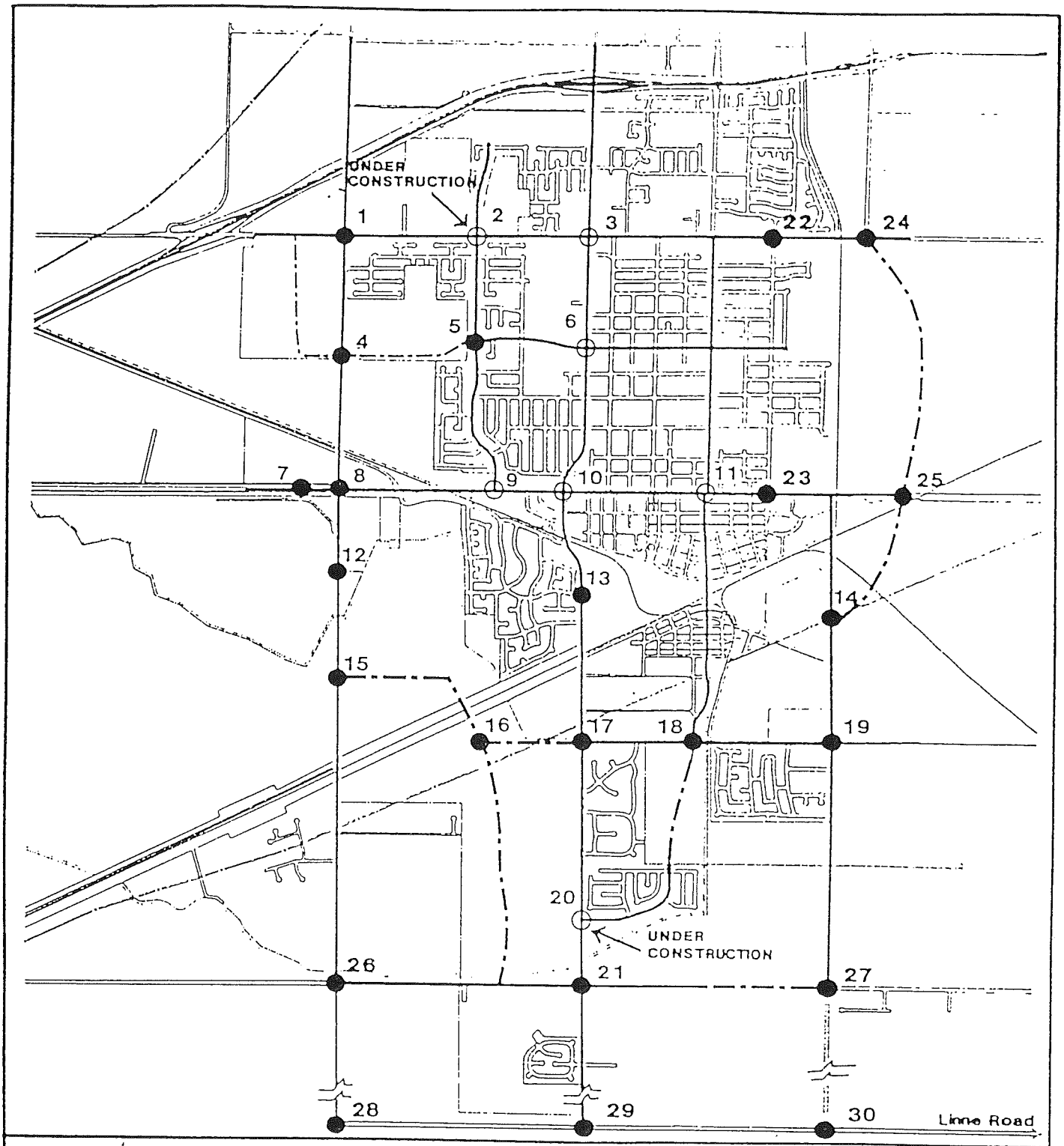
The alignment of Tracy Boulevard is basically straight with curves in the vicinity of Twelfth Street and south of the railroad crossing of the Southern Pacific tracks. Traffic control include traffic signals at Eleventh Street, Lowell Avenue, Grant Line Road, Kavanaugh Avenue and Clover Road. A traffic signal is currently under construction at West Central Avenue, Tracy Boulevard is stop sign controlled at Linne Road. All other intersecting side streets are stop sign controlled. Daily traffic volume along Tracy Boulevard exceeds 11,600 per day immediately south of Grant Line Road and has been measured as high as 13,800 near Eaton Street. Daily traffic volumes decrease to about 1,100 at Linne Road and to about 1,400 north of Larch Road. Tracy Boulevard is a designated truck route.

Valpico Road

Valpico Road is currently a two-lane roadway which passes through southern Tracy. It extends 4.3 miles from Chrisman Road to Lammers Road except for a missing one-half-mile segment immediately west of MacArthur Drive. The City of Tracy plans to develop Valpico as a four-lane arterial.

3.3.4.3 Existing Traffic Volumes

For purposes of analyzing intersection design and performance, peak-hour turning volumes are much more useful than Average Daily Traffic (ADT) volumes (Figure 3.5)(Table 3.11). DKS Associates collected afternoon peak-hour turning volumes for 18 key intersections in January and March, 1986 (Figure 3.6). For 7 other intersections, 1984 afternoon peak-hour counts were extrapolated to 1986 levels by assuming four percent growth in the intervening two years. These existing afternoon peak-hour volumes together with information on existing intersection



Tracy Industrial Area Specific Plan

STUDY INTERSECTIONS

Prepared by
EDAW Inc.

in association with
Wilsey & Ham
DKS Associates
Barton-Webb Associates

○ Intersection with Signal

● Intersection without Signal

Figure 3.6

Table 3.11

Table Industrial Specific Plans
Existing Conditions--1986
Report of Total Volumes by Turning Movement, Volume/Capacity Ratios and Level of Service

			Northbound			Southbound			Eastbound			Westbound		
	Intersection	V/C	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
1	Corral Hollow & Grant Line Rd.	0.28 A	12	16	14	22	10	11	13	281	42	14	94	13
2	Lincoln Blvd. & Grant Line	0.43 A	24	15	134	10	9	1	20	284	58	134	132	16
3	Tracy Blvd. & Grant Line	0.59 A	162	164	128	88	241	69	66	362	224	139	309	74
4	Corral Hollow & Lowell Ave.	N/A	0	40	0	0	64	0	0	0	0	0	0	0
5	Lincoln Blvd. & Lowell Ave.	0.09 A	0	139	28	26	95	0	0	0	0	25	0	30
6	Tracy Blvd. & Lowell Ave.	0.22 A	73	148	29	6	289	89	25	19	42	5	23	15
7	Byron Rd. & Eleventh St.	N/A	0	0	0	0	0	0	0	537	0	0	156	0
8	Corral Hollow & Eleventh St.	0.30 A	9	28	82	16	14	3	5	509	23	54	144	7
9	Lincoln Blvd. & Eleventh St.	0.35 A	36	38	49	70	35	23	81	445	50	54	277	133
10	Tracy Blvd. & Eleventh St.	0.49 A	121	281	87	171	262	75	85	354	108	79	270	196
11	Holly-Central & Eleventh St.	0.50 A	112	168	108	56	164	54	60	345	119	60	502	79
12	Corral Hollow & Cypress Drive	N/A	0	119	0	0	81	0	0	0	0	0	0	0
13	Tracy Blvd. & Centre Court	0.24 A	40	300	0	0	400	50	40	0	5	0	0	0
14	MacArthur Dr. & Third St.	0.10 A	31	62	0	0	92	2	4	0	26	0	0	0
15	Corral Hollow & Schulte Rd.	N/A	0	119	0	0	81	0	0	0	0	0	0	0
16	Sycamore & Schulte	N/A	0	0	0	0	0	0	0	0	0	0	0	0
17	Tracy Blvd. & Schulte	0.31 A	0	160	39	162	214	0	0	0	0	13	0	75
18	Central Ave. & Schulte	0.21 A	0	0	0	68	0	36	28	180	0	0	88	52
19	MacArthur & Schulte	0.14 A	32	64	4	8	88	32	4	48	12	12	16	16
20	Tracy Blvd. & Central	0.16 A	0	168	6	120	99	0	0	0	0	9	0	36
21	Tracy Blvd. & Valpico Rd.	0.13 A	6	99	6	9	78	9	21	1	6	6	15	39
22	East St. & Grant Line Rd.	0.31A	159	49	72	20	41	16	55	277	83	59	241	83
23	East St. & Eleventh St.	0.32A	17	137	46	29	67	110	33	343	40	73	279	181
24	MacArthur Dr. & Grant Line Rd.	0.36A	0	0	0	30	0	218	223	148	0	0	163	19
25	MacArthur Dr. & Eleventh St.	0.18A	67	0	60	0	0	0	0	300	30	41	250	0
26	Corral Hollow & Valpico Rd.	0.08A	5	65	10	12	65	3	1	6	1	10	5	15
27	MacArthur Dr. & Valpico Rd.	0.10A	0	80	10	10	80	0	0	0	0	5	40	5
28	Corral Hollow & Linne Rd.	0.09A	0	45	8	33	40	0	0	0	0	13	0	29
29	Tracy Blvd. & Linne Rd.	0.11A	10	80	10	7	55	7	10	28	5	12	25	15
30	MacArthur Dr. & Linne Rd.	0.11A	10	80	10	7	70	7	15	30	5	5	40	5

- Not Applicable

geometrics (lane stripings) were used to calculate the existing traffic volume-to-capacity (V/C) ratios and associated level of service (LOS) grades for the 25 key existing intersections. Capacity utilization was calculated using the planning method of the Transportation Research Board's Circular 212 update of the 1965 Highway Capacity Manual. Existing V/C ratios and LOS grades are shown in Table 3.11. Table 3.12 characterizes different intersection levels of service.

Existing Transit Service

Tracy Transit, a dial-a-ride para-transit service, currently serves all parts of the City including the Specific Plan areas. The operation consists of five vans, four of which are in service during hours of operation (7 a.m. to 7 p.m.). The service is available to all Tracy residents. Fares are 75 cents per ride (50 cents for senior citizens and handicapped persons). Annual ridership was approximately 47,000 in 1985.

3.3.5 Noise

Noise levels within the City of Tracy, on the major street network, were measured in 1981 and reported in the General Plan. The data showed that on residential streets, the noise levels were between 60 and 65 LDN within 50 feet of the roadway, making the noise levels conditionally acceptable for residential use. Noise levels along commercial streets were higher, but generally acceptable.

The 1981 data gave information for several streets within the Specific Plan areas. Findings were consistent with those for the city as a whole, however, several streets within the planning areas were not measured.

Trains are also noise producers within Tracy. The two Southern Pacific Railroad lines which cross the City, together average 11 trains per day (Tracy General Plan). The rail spur which extends to the Owens-Corning plant southwest of the City is used infrequently. A Western Pacific Railroad line runs southeast of Tracy. Noise from this line does not affect the Specific Plan areas.

Table 3.12

LEVEL OF SERVICE INTERPRETATION - SIGNALIZED INTERSECTIONS

Level of Service	Description	Average Vehicle Delay (Seconds)	Volume to Capacity Ratio
A	**Free Flow.** No approach phase is fully utilized by traffic and no vehicle waits longer than one red indication. Insignificant delays.	0-5	0.0-0.59
B	**Stable Operation.** An occasional approach phase is fully utilized. Many drivers begin to feel somewhat restricted within platoons of vehicles. Minimal delays.	5-15	0.60-0.69
C	**Stable Operation.** Major approach phase may become fully utilized. Most drivers feel somewhat restricted. Acceptable delays.	15-25	0.70-0.79
D	**Approaching Unstable.** Drivers may have to wait through more than one red signal indication. Queues may develop but dissipate rapidly, without excessive delays.	25-40	0.80-0.89
E	**Unstable Operation.** Volumes at or near capacity. Vehicles may wait through several signal cycles. Long queues form upstream from intersection. Significant delays.	40-60	0.90-0.99
F	**Forced Flow.** Represents jammed conditions. Intersection operates below capacity with low volumes. Queues may block upstream intersections.	60 or greater	n/a

Source: "Highway Capacity Manual," Highway Research Board, Special Report No. 87, Washington D.C., 1965.

"Interim Materials on Highway Capacity," Transportation Research Board, Circular No. 212, Washington, D.C., January 1980.

DKS Associates.

3.4 Public Facility Considerations

3.4.1 Utilities

3.4.1.1 Municipal Water Systems

The City of Tracy has as its primary source of water, the Delta-Mendota Canal, running south and west of the City. Tracy's present entitlement will provide for 10,000 acre-feet of water, equivalent to an annual consumption rate of 8.9 mgd. However, its present water treatment plant can only provide up to 7,000 acre-feet annually of treated water. Additional elements of the water treatment plant, originally deferred, are planned to permit the City to take its maximum entitlement from the canal.

In order to provide for a secondary water source, in the event of an emergency, the City must continue to maintain its system of wells and pumping facilities, and/or look to the California Aqueduct for alternate supplies. Of the City's eight wells, two have been recently abandoned due to deterioration of casings and other operational problems leaving six actively operable. The California Aqueduct is located 3,800 feet southwest of the City's present turn-out from the Delta-Mendota Canal, which is located south of the Tracy Municipal Airport, and just west of Tracy Boulevard.

Present surface water supplied as of good to acceptable quality and can be adequately treated by the water treatment plant which is located east of Tracy Boulevard just south of the Tracy Municipal Airport. The present treatment plant capacity is 7.0 MGD with a peak 10 hour capacity of 10.0 MGD.

The water supply network consists of a looped system of mains that adequately serve the existing areas of the City. Service is divided into three pressure areas as indicated in Figure 4.3.

The City of Tracy currently maintains a Class 3 fire rating and has four of its existing well pumps powered by diesel engines that can adequately provide for fire protection and domestic needs on a limited basis. Fire hydrants are located at appropriate spacing throughout the City.

The City has two existing elevated water towers or reservoirs in its public water system. Both tanks are vintage steel tanks with cage-steel legs. One is located on the south side of Tenth Street, across the street from City Hall and the second is located in the City utility yard property, east of Tracy Boulevard and south of the railroad tracks. Both of these tanks are unused except for brief periods of time when the Delta-Mendota Canal is shut down for cleaning and/or repair. The balance of the time, the City uses the clear-well at the water treatment plant for developing head and as a reservoir.

There is a water pressure booster station located at the corner of Valpico Road and Tracy Boulevard. This includes a fire booster pump on the southeast corner and a domestic booster pump on the southwest corner. There are also pumps located at each City well site from which water is pumped directly into the water mains.

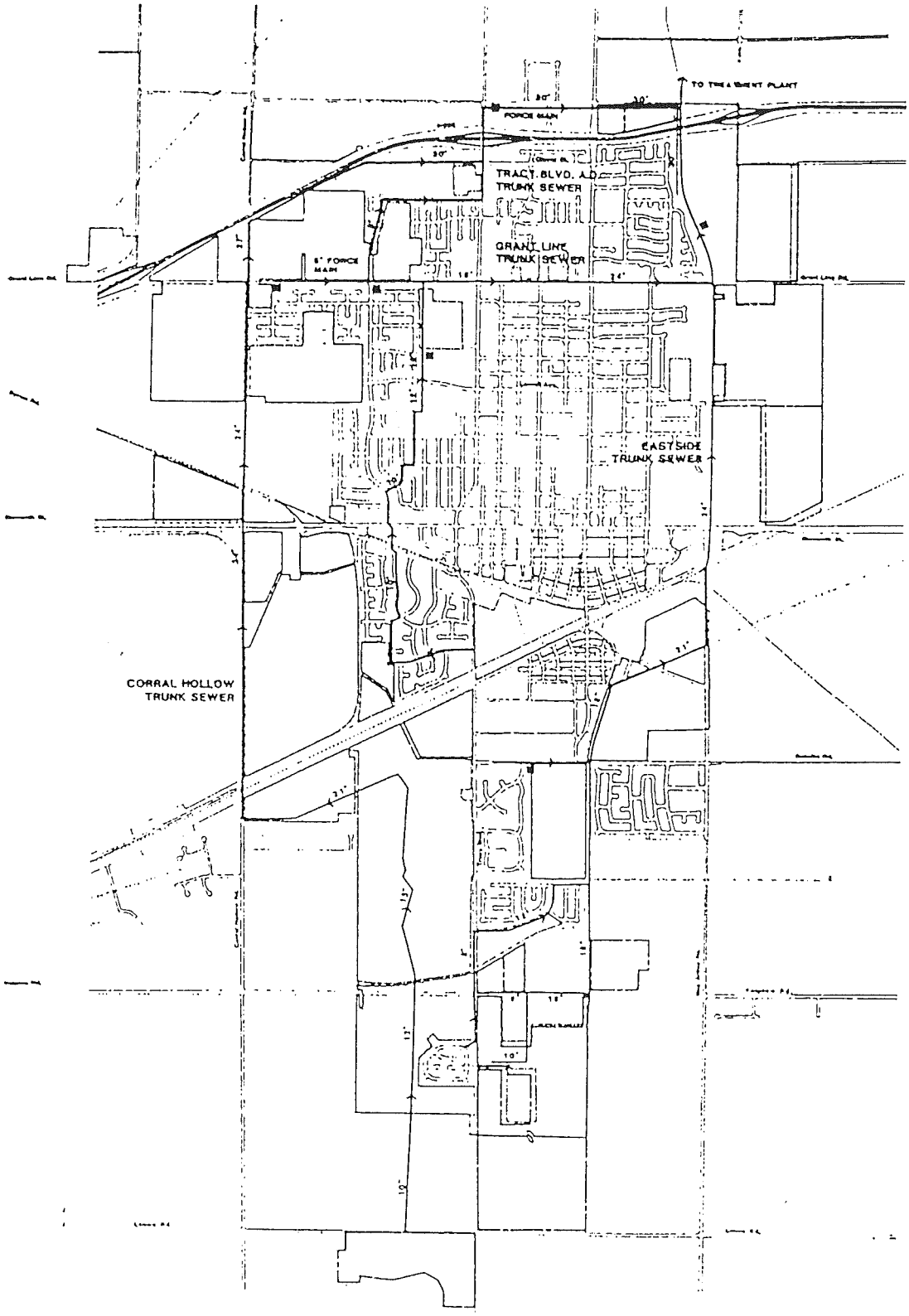
The West Side Irrigation District provides irrigation water to the agricultural areas west of town. The Banta-Carbona Irrigation District provides irrigation water to the area from Valpico road southerly and from Banta Road easterly. Numerous irrigation ditches exist around the agricultural perimeters of the developed areas. These channels will either generally be phased out as the areas develop, or they will be converted into drainage ditches.

3.4.1.2 Municipal Wastewater

The existing wastewater collection system consists of both a gravity flow system and a pumped flow system. The sewer plant is located in the northeast quadrant of Tracy, fronting Holly Drive and Arbor Avenue (Figure 3.7). Existing capacity of the plant is 6.0 million gallons per day (m.g.d.)

A treatment plant and collection system expansion is currently under construction and is funded, as explained earlier, by Assessment District 84-1. These improvements will be completed prior to residential and industrial development. For the purpose of this report, these new improvements are considered part of the existing system.

Under the current phase of treatment plant construction, the project will provide for an increased average domestic plant flow of 3.5 m.g.d. The major items include: a primary effluent



Tracy Industrial Area
Specific Plan

Prepared by
EDAW
in association with
Bartle Wells • DKS • Wilsey & Ham

May 22, 1987

EXISTING WASTEWATER SYSTEM

— Existing Truck Lines

▪ Existing Lift Stations

— — Assessment District 84-1 Boundary

Figure 3.7

pipeline, a secondary clarifier over sizing, anaerobic digester oversizing, domestic primary clarifiers, effluent pump modifications, and a chlorine contact basin. This phase of construction was approximately 50 percent complete as of March 1986. A capacity of 0.15 m.g.d. has been slated for urban infill, therefore, the net available capacity for continued residential, commercial and industrial growth is 3.35 m.g.d.

Currently there are four main trunk lines serving the City. They are:

1. Tracy Boulevard Assessment District (TBAD) Trunk Sewer
2. Grant Line Trunk Sewer
3. Eastside Trunk Sewer
4. Corral Hollow Trunk Sewer

The TBAD Trunk Sewer serves the areas north of Grant Line Road. The maximum pipe capacity at the downstream end is 3.8 m.g.d.

The Grant Line Trunk Sewer primarily services the inner-city. This area includes lands bounded by Grant Line Road on the north, the railroad on the south, MacArthur Drive on the east, and Lincoln Boulevard on the west. The maximum pipe capacity at the downstream end is 4.4 m.g.d.

The Eastside Trunk sewer serves, for the most part, the industries on the east side of MacArthur Drive, north of the railroad. The trunk sewer also serves most of the lands south of the railroad, north of Linne Road, west of MacArthur Drive, and east of Tracy Boulevard. The maximum pipe capacity on the downstream end is 5.1 m.g.d.

The Corral Hollow Trunk Sewer serves most of the lands between Grant Line Road to the north, Southern Pacific Railroad to the south, Chester Drive to the east, and Lincoln Boulevard to the west. In addition, it serves a portion of the lands between the railroads to the north and south, and Hickory Avenue and Tracy Boulevard to the east and west. The maximum pipe capacity at the downstream end is 2.3 m.g.d.

There are a total of six existing lift stations in the wastewater collection system located as indicated on Figure 3.7.

3.4.1.3 Solid Waste

Solid waste collection within the City of Tracy is presently handled by the Tracy-Delta Disposal Service of Tracy. Their operation is comprised of 6 trucks and 18 staff in the field plus a small office staff with billing and payment collections handled by the City of Tracy.

The City has 6,927 billing entities for collection. They contribute approximately 30,000 cubic yards of solid waste monthly to a 20-acre joint city/county solid waste disposal site located at the southeasterly corner of Corral Hollow Road and I-580. This is a landfill operation operated by the City Department of Public Works.

3.4.1.4 Electric Power

Pacific Gas and Electric presently serves the entire City of Tracy including both Specific Plan areas. There is a set of electric transmission towers owned by PGandE, which runs across the City, parallel to the railroad in a southwesterly to northeasterly direction. Their substation is located on their transmission tower line in the vicinity of Chrisman Road and West Eleventh Street.

3.4.1.5 Natural Gas

Gas is presently served to the densely developed portions of the City by Pacific Gas and Electric. Extension of gas service is readily available and will be provided under the normal State Public Utilities Commission regulations.

3.4.1.6 Telephone/Cable Television

Telephone service to the entire area is provided by Pacific Bell, headquartered in Stockton.

3.4.2 Public Services

3.4.2.1 Police Service

Facilities and Staffing

The City of Tracy Police Facility was occupied in 1979, and is located within the City Hall complex at 400 East Tenth Street. Originally built to provide space for 39 employees, the current full-time staff of 45 and reserve and volunteer staff of 35 has filled the facility to capacity. The building includes a jail which sleeps six prisoners and it was built to federal correctional facility standards.

The Police Department has a total of 45 full-time employees (33 sworn officers and 12 civilian) in the following positions:

25 patrol officers (including two beginning January 1, 1986 and 6 investigators)
5 sergeants
9 communications personnel
1 records supervisor
1 secretary
12 aides
3 administrative personnel (2 lieutenants, 1 chief)

Additionally, the Department has ten adult crossing guards, 13 volunteer Reserve Officers, and 12 volunteer Cadets.

While new staff hiring is presently evaluated by the workloads of existing officers, the ratio of the community population to officers is essentially 1 officer/1000 population.

Organizationally, the Department is divided into two major divisions: the Operations Division and the Investigations Division. Each is headed by a Lieutenant under the direction of the Chief of Police.

Police service is carried out with the use of 7 marked patrol vehicles, 5 unmarked vehicles, 1 van, 1 parking enforcement 3-wheel Cushman, and 2 Honda 125 motorcycles.

Tracy was among the first cities in California to implement a 911 Emergency System. The present police facility features a modern two station communications console allowing two operators to simultaneously receive incoming calls and dispatch emergency units. The dispatch center is equipped with a dictaphone dual 24-hour taping of all incoming and outgoing calls through the center. It allows the operator to visually monitor the booking area of the jail, as well as the inside corridor. The dispatch operator is also able to perform audio monitoring of all cells within the jail, and has electronic control of all jail doors, as well as the primary entrance doors to the facility.

The City of Tracy is patrolled using a beat system. The City is divided into four beat areas with one officer assigned to each beat.

In 1985, the department responded to 17,054 calls and made 2,951 arrests. The number of calls increased approximately 12 percent over 1984 (15,194). Response time to emergency calls is still between two to three minutes, however, non-emergency calls, at times, have to be prioritized, and frequently responses cannot be made for 30 to 45 minutes.

3.4.2.2 Fire Protection

Facilities and Staffing

The Tracy Fire Department currently conducts operations out of three fire stations: Station No. One is located at Ninth Street and Central Avenue; Station No. Two is located at Parker Avenue and Grant Line Road (at the entrance to El Pescadero Park); and Station No. Three is located at Tracy Boulevard and West Central Avenue. The latter is an interim facility, to be in use until a permanent facility is built in this area.

The Fire Department operation consists of three twenty-four hour shifts. The Tracy Fire Department is service oriented and responds to all fire, first aid, and rescue incidents, as well as citizen service calls.

Currently the Standard Fire Insurance Rating for the department is a three, (using a scale of 1 to 10, one being the highest). The department was reevaluated in April 1986 resulting in a promotion from Class 4 to Class 3.

The Fire Department has a mutual aid agreement with all Fire Departments in San Joaquin County, along with Livermore Radiation Lab, in which fire or rescue equipment and personnel are available in case of a major emergency. The Department also has an agreement with the State of California in which it will assist in an emergency anywhere in the State in exchange for the use of a fire pumper as a reserve apparatus for City use.

The Tracy Fire Department is headed by the Fire Chief and has 18 firefighters, six shift officers, two 40-hour administrators and one secretary. The firefighter staffing for each station is as follows:

Main Station (9th and Central)

Maximum: 4 firefighters plus two administrators
Minimum: 3 firefighters

North Station (Grant Line Road and Parker Avenue)

Two firefighters on duty at all times

Temporary South Station (Tracy Blvd. and West Central)

Two firefighters on duty at all times.

90 percent of the fire force are trained as Emergency Medical Technicians.

Fire service is carried out with the following equipment:

Station #1	1977	1500 gpm pumper
	1968	1500 gpm snorkel (elevated platform)
	1972	1250 gpm Reserve pumper
	1975	Rescue Squad
	1985	Utility truck
	1980	Dodge pickup
	(Emergency Communications Trailer)	
Station #2	1982	1500 gpm pumper
	1968	1000 gpm reserve pumper - State rig (OES)
Station #3	1985	1500 gpm pumper
Chiefs Car	1983	Dodge

The hospital dispatches all ambulance calls. Ambulance service is provided by "Mobile Life Support," a private firm.

Fire Programs

Tracy Fire Department programs consist of fire prevention inspections of commercial, industrial and residential properties, weed abatement and auto abatement programs, a smoke detector program for senior, C.P.R. instruction, school fire prevention programs and public education.

3.4.2.3 Department of Public Works

Responsibilities of the Department

The Department of Public Works is responsible for providing a variety of physical facilities and public services needed to support urban development, including those items more recently referred to as infrastructure: such as streets and highways, public buildings, water supply, wastewater treatment, street lighting and traffic control, transportation, parks and open space, storm drainage, airports and equipment services.

Engineering Services

The services of this division include the design, inspection and consultant coordination for all capital improvement and private development projects.

Public Works Administration

This division provides support services to manage and coordinate all public maintenance and engineering activities.

Street Maintenance

This division is responsible for patching, paving and repairing the City's streets and for the replacement of curbs and sidewalks damaged by street trees. Other responsibilities include maintenance of all traffic control devices, (including signs, pavement markings, traffic signals and street lighting), and street sweeping services for all city streets.

Storm Drainage System Maintenance

The primary responsibility of this division is to maintain the ability of the City's storm drainage system to effectively drain the City's streets.

Water Distribution System

This division maintains the City's water distribution system to ensure the provision of adequate fire protection and customer service needs. It is responsible for repair of damages to the system of water mains, water services and water meters which distribute the water supply to customers and to the fire protection system.

Sewage Collection System

The Public Works Department also maintains the sewage collection system.

Park and Street Tree Maintenance

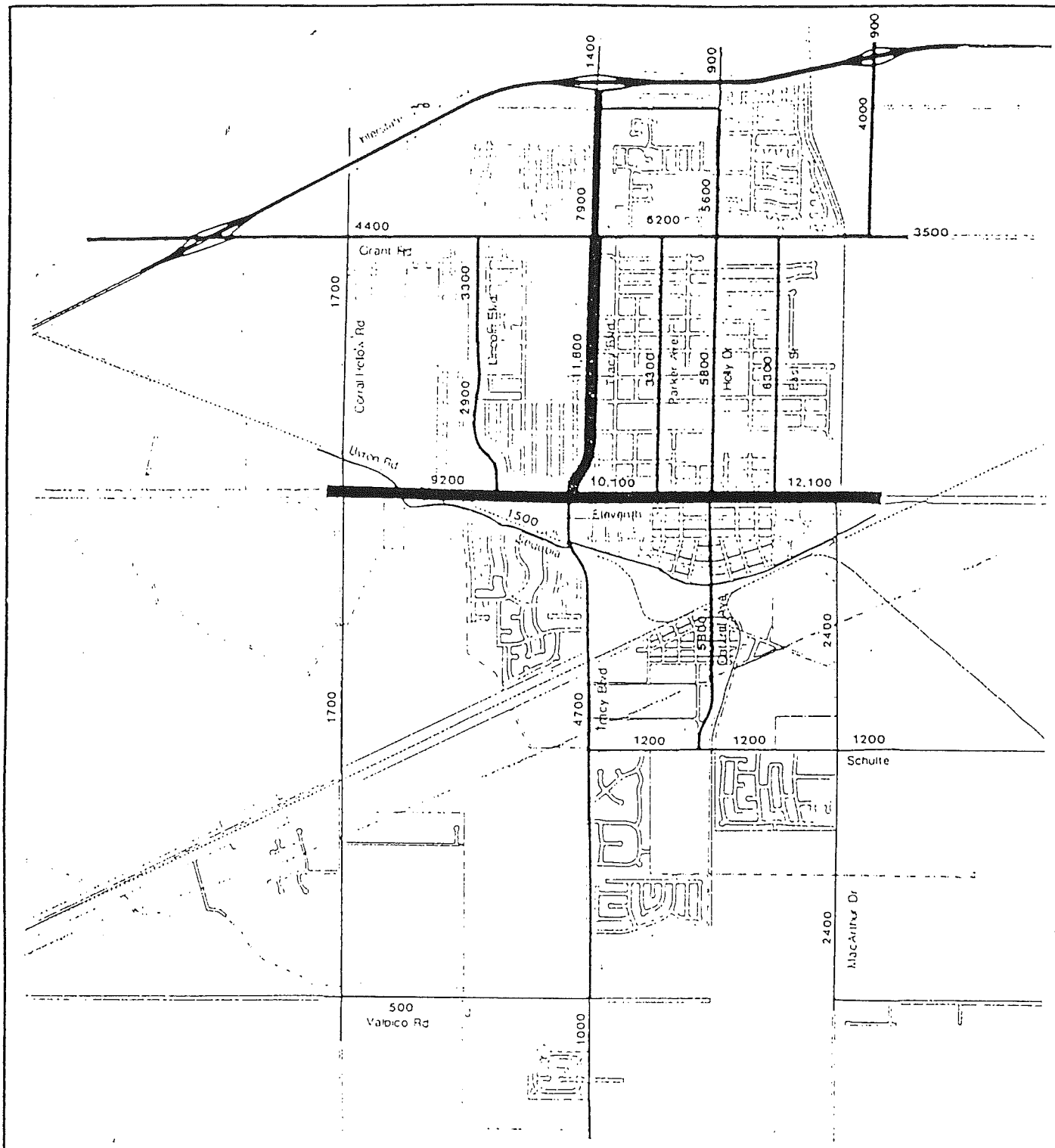
The division provides maintenance of all parks and open space within the City, as well as periodic street tree pruning and maintenance.

3.4.2.4 General Government

The departments discussed in this section include: Community Development, Finance, Personnel and the City Manager's staff. Each of these departments currently has its office within City Hall, which is located at 400 East 10th Street.

City Hall has recently been expanded to consolidate existing departments into one building. Portions of the Community Development Department, however, are still in temporary facilities adjacent to the main building. No additional office space is presently available within City Hall.

The Community Development Department is organizing a "one-stop" permitting process. Once in place, this system will streamline the procedure for obtaining subdivision, zoning and building permits. A Planning Technician position has been created which will give advice to inquiring developers and review plans that are submitted.



Tracy Industrial Area Specific Plan

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Wesley A. Ham
CH.S Associates
Barton-Wells Associates

EXISTING (1983) TRAFFIC VOLUMES

Average Daily Traffic

- 500 - 2500 ADT
- 2501 - 7000 ADT
- 7001 - 9000 ADT
- 9001-12,500 ADT

Figure 3.5

4.0

Impacts & Mitigation

4. IMPACTS AND MITIGATION

4.1 Physical Environment

4.1.1 Geology and Soils Impacts and Mitigation

4.1.1.1 Impacts

While some soils within the Industrial Specific Plan areas are characterized by slow water permeability and moderate to high shrink-swell capacity, properly designed building foundations which divert runoff to the proposed storm drainage system should avoid potential impacts.

4.1.1.2 Mitigation

Building in compliance with standard California building codes will most likely mitigate impacts associated with soils and earthquake hazards.

4.1.2 Hydrology and Water Quality Impacts and Mitigation

4.1.2.1 Impacts

Surface Hydrology

No impacts are anticipated.

Groundwater Resources

The groundwater basin has in the past met the City's additional demands for potable water. However, this water is of a lower quality than that received from the Delta-Mendota Canal. The groundwater in the Tracy area has historically been high in Total Dissolved Solids (TDS) and calcium carbonate concentrations. It is expected that approximately 35 percent of the maximum daily demand will have to be supplied by groundwater at ultimate build-out of the Specific Plans.

Historically the drawdown on existing wells has had little impact on the groundwater supply in Tracy. During winter months the groundwater table has been relatively high in northern areas of the City. With existing municipal wells being greater than 200 feet deep, it appears that any resulting impacts will be inconsequential.

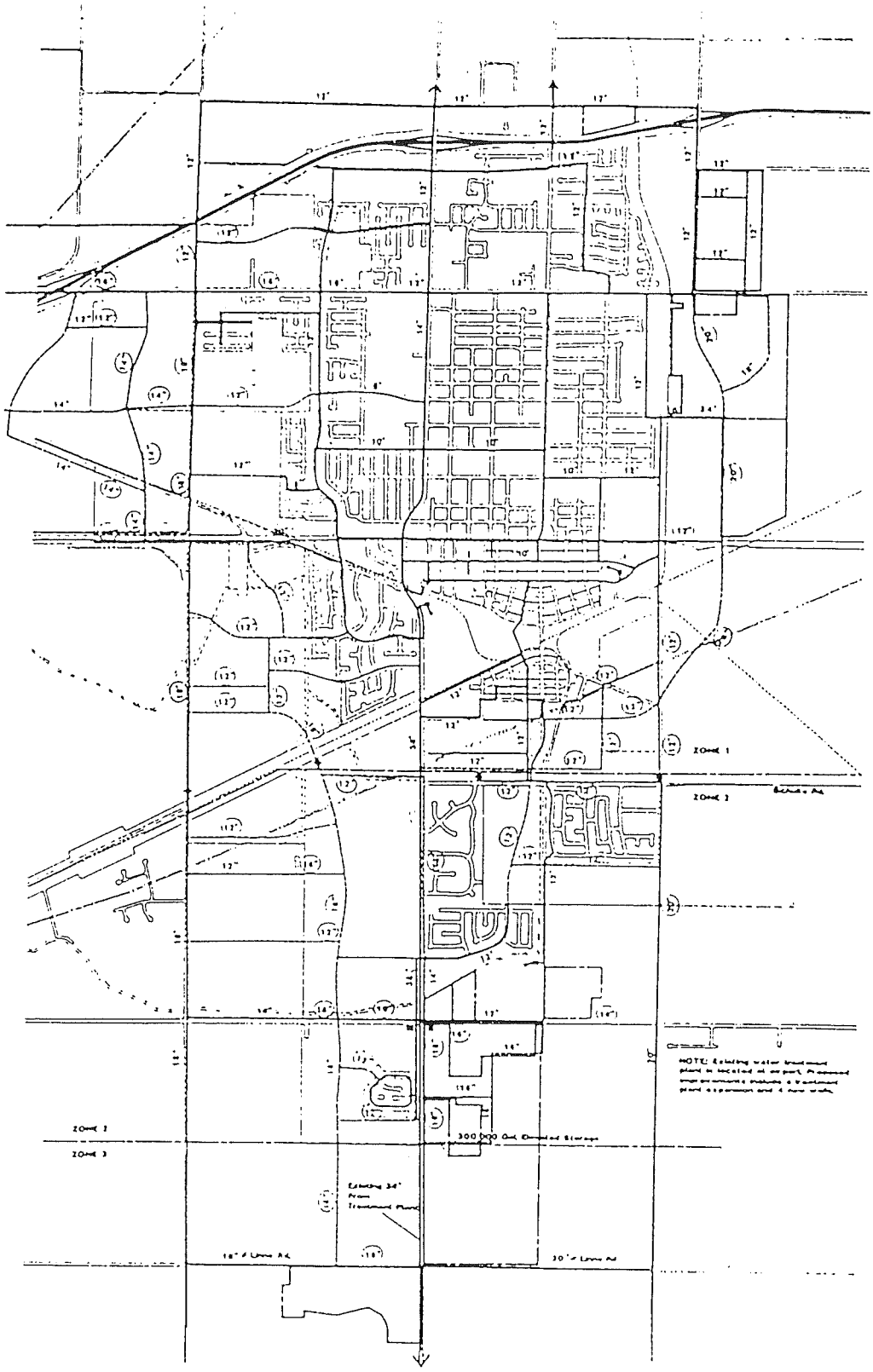
Storm Drainage

The Specific Plan designates the type and size of a storm drainage network that will carry the anticipated storm runoff. In some areas it replaces and/or relocates some portions of the drainage network adopted in the Storm Drainage Master Plan (Figure 4.1).

The Master Plan will require revisions to account for these changes. In general, these changes relocate the west branch of the system in the reach between Eleventh Street and Valpico Road. The new location will parallel the proposed Sycamore Parkway as indicated in Figure 4.1. The east branch of the system will essentially remain as proposed in the Master Plan. These deviations will not impact the overall performance of the system.

Two alternative concepts were considered for storm drainage discharge. The first alternative considers running the outfall along Corral Hollow to a basin north of Larch Road as indicated in Figure 4.1. The outfall for this basin would be an open channel running easterly to Sugar Cut. The second alternative considers utilizing the facilities of the Westside Irrigation District as the outfall of the system. The existing facility runs westerly along Grant Line Boulevard. The first of these alternatives have been used in determining a drainage system for the Specific Plan Area. Both alternatives are under active consideration by the City of Tracy.

During most of the year the channel networks will have water running in them. The channels, for the most part, will be in a flow condition (i.e, less than one foot depth), and hence, will not pose any hazard to persons within the Specific Plan areas. During the few times when the channels are in high flow conditions, there may be some hazard, and in order to mitigate these hazards, the channels will be designed to have a maximum velocity of four to six feet per second and side slopes planned to allow a person who has accidentally fallen into the channel to be able to escape without major difficulty.



Tracy Industrial Area
Specific Plan

Prepared by
EDAW

May 23, 1997

EXISTING/PROPOSED WATER DISTRIBUTION SYSTEM

- Existing Water Main & Size
- Proposed
- Proposed, Required for Specific Plan
- Pressure Zone
- Existing/Proposed Pump
- Existing/Proposed Water Tank
- Proposed Reservoir
- Pressure Reducing Valve

Figure 4.1

Since 1984, the City has been working towards implementing the adopted Storm Drainage Master Plan. Historically, however, new developments in the southern areas have been built with temporary systems of retention basins on site. The Specific Plan subdivisions will also be required to develop interim systems (i.e., retention basins) if all segments of the storm drainage network are not constructed concurrently. This could become an impact, especially in the southern areas of the City, where the better quality groundwater system. A set of criteria for mitigating these potential impacts from numerous interim systems is included in the Specific Plan.

Additionally, the Specific Plan area development will alter existing drainage patterns and may increase the water surface runoff in localized areas beyond that which was estimated in the Master Storm Drainage Plan. Any increased water surface runoff would invariably mean an increase in water-borne pollutants caused by development. These pollutants could be, but not limited to, various kinds of oils and detergents. As an example, oils or detergents from road parking lot and industrial surfaces could be introduced into the storm drainage system. They in turn could be transported to a retention basin allowing infiltration into the groundwater or transported to local river basins causing an increase in the concentration of pollutants.

Water Quality

It is estimated that at buildout of the Industrial and Residential Specific Plan areas water demand will have increased 70 percent. To meet this demand, the Kennedy Jenks Report dated July 1985, suggests combining groundwater with the current water supply. The resulting mixture would be higher in both TDS and calcium carbonate levels. The quality of water, however, is still expected to meet health standards (see Section 4.2.1.1, Municipal Water for more information).

4.1.2.2 Mitigation

In addition to the measures addressed below, further actions, if necessary, will fall under the "Threshold Guidelines," which establish limits on the amount and type of industrial uses based on then-current infrastructure capacity (see Section 2.3.1.1).

Surface Hydrology

The decision to convert irrigation channels to storm drainage channels was made during the preparation of the Storm Drainage Master Plan. Any necessary mitigation measures will be implemented in conjunction with that document. Expansion plans of the treatment plant should be initiated to accommodate the maximum allowable allotment by Delta-Mendota Canal.

Ground Water Resources

In order to mitigate the impacts of high TDS and sulfates, some wells will be upgraded or abandoned to lower or eliminate these levels. Studies of the water supply options for the City of Tracy's water system have indicated which existing wells will be upgraded or abandoned. These recommendations are outlined in the Final Report on the Evaluation of Water Supply Options by Kennedy/Jenks Engineers dated July 1985.

Storm Drainage

In order to properly implement the storm drainage plan proposed by the Specific Plan, the hydraulic design of the system must be verified prior to any development within the Specific Plan areas. Construction of the storm drainage system could be performed in stages, starting at the outfall and working its way upstream. Development not yet served by the channel network could be allowed to develop provided that the intact drainage systems are designed to the hydraulic gradient of the channel. Temporary retention basins will be used until the construction of the channel reaches these developments. The temporary basins will then be phased out and proper connections made to the channel.

During low flow conditions in the channel, there could potentially be unacceptable levels of pollutants in the water. In order to mitigate this problem, several measures can be taken to lower the pollutant levels to acceptable standards. These measures could be incorporated into the final design of the channel system. One possibility might be to provide a constant minimum flow in the channel system. The other might be to incorporate a series of "trapped" catch basins. In either case, the final solution would be dependent upon the requirements of the various governing agencies involved.

Water Quality

In order to mitigate the impacts of high TDS and sulfates, some wells will be upgraded or abandoned to lower or eliminate these levels. Studies of the water supply options for the City of Tracy's water system have indicated which existing wells will be upgraded or abandoned. These recommendations are outlined in the Final Report on the Evaluation of Water Supply Options by Kennedy/Jenks Engineers dated July 1985.

4.1.3 Air Quality Impacts and Mitigation

Air Quality

4.1.3.1 Impacts

The only potentially significant air quality impacts associated with the Specific Plan are the direct result of increased motor travel. Using an average work-based trip length of ten miles, the estimated 10,851 average daily vehicle trips associated with the plan result in 108,510 additional vehicle miles of travel per day. Using the 1995 Vehicle Emission Factors and assuming that vehicles are operated from a cold start condition 21 percent of the time, a hot start condition 27 percent of the time, and a hot stabilized condition 52 percent of the time, the following emission levels for an average speed of 25 miles per hour:[1]

POLLUTANT	EMISSION RATE	TOTAL EMISSIONS
Carbon Monoxide	14.84 gm/mi	1.80 tons/day
Hydrocarbons	1.46 gm/mi	0.18 tons/day
Nitrogen Oxides	1.25 gm/mi	0.15 tons/day
Sulfur Oxides	0.24 gm/mi	0.03 tons/day
Particulates	0.32 gm/mi	0.04 tons/day

1/ EMFACGC Emission Factors, California Statewide Mix of Vehicles 1980-2000. The Air Resources Board. 1981

The carbon monoxide emissions are 1 percent of the 1987 projected emissions for San Joaquin County, while the hydrocarbon and nitrogen oxide emissions are 1 and 5 percent, respectively.[2]

4.1.3.2 Mitigation

Mitigation measures in addition to those prescribed by the San Joaquin County Air Quality Management Plan could include implementation of the proposed bikeway plan and increased transit programs.

4.2 Biological Environment

4.2.1 Vegetation and Wildlife Impacts and Mitigation

4.2.1.1 Impacts

Vegetation

Existing vegetation will be removed and replaced with ornamental landscaping, structures and other improvements.

Due to the primarily agricultural use and low habitat significance of the on-site vegetation, these changes would not be significant impacts.

Wildlife

Wildlife currently found on the site would be significantly reduced. Most of the little wildlife habitat on the site would be eliminated and replaced with urban habitat. Most species currently on the site would decline in numbers, and species associated with urban habitats would increase.

2/ "San Joaquin County 1982 Air Quality Management Plan", the San Joaquin County Planning Department, June 22, 1982.

4.2.1.2 Mitigation

Reduction in on-site vegetation and wildlife is considered unavoidable, but not a significant impact. If any evidence of an endangered plant or animal is found, a qualified biologist should be consulted. As a mitigation measure, drainage channels and parkways could be designed partly as a wildlife habitat.

4.3 Sociocultural Environment

4.3.1 Cultural Characteristics Impacts and Mitigation

4.3.1.1 Impacts

Fifty percent build-out of the Industrial Areas Specific Plan is expected to generate approximately 9,000 additional jobs within Tracy. These jobs will be primarily available in manufacturing, transportation and service industries. Temporary construction employment may be available.

While this increment of industrial development is planned to coincide with full build-out of the Residential Areas Specific Plan, only 30 percent of the 10,300 employed residents are expected to work in Tracy. Assuming one-half of those employed residents work in the industrial areas, approximately 1,545 jobs would be held by local residents living in the Residential Specific Plan areas. Additionally, a portion of the industrial areas' employees may be derived from existing community residents. With a high estimate of 15 percent of the total available jobs (1,360 jobs), plus the employees from the Residential Areas, local-based employees could be approximately 2,900, or 32 percent at fifty percent build-out of the plan.

As the industrial areas continue to develop, the proportion of workers from outside the community may lessen and Tracy will evolve into a community with a balance of jobs and housing.

4.3.1.2 Mitigation

No mitigation measures are necessary.

4.3.2 Historic Resource Impacts and Mitigation

4.3.2.1 Impacts

Due to the disturbed nature of the lands within the Industrial Areas Specific Plan and the absence of previous historic site documentation, no historic resource impacts are anticipated.

4.3.2.2 Mitigation

If an historic site is located during any on-site excavation, a qualified archaeologist should be retained to oversee the excavation process.

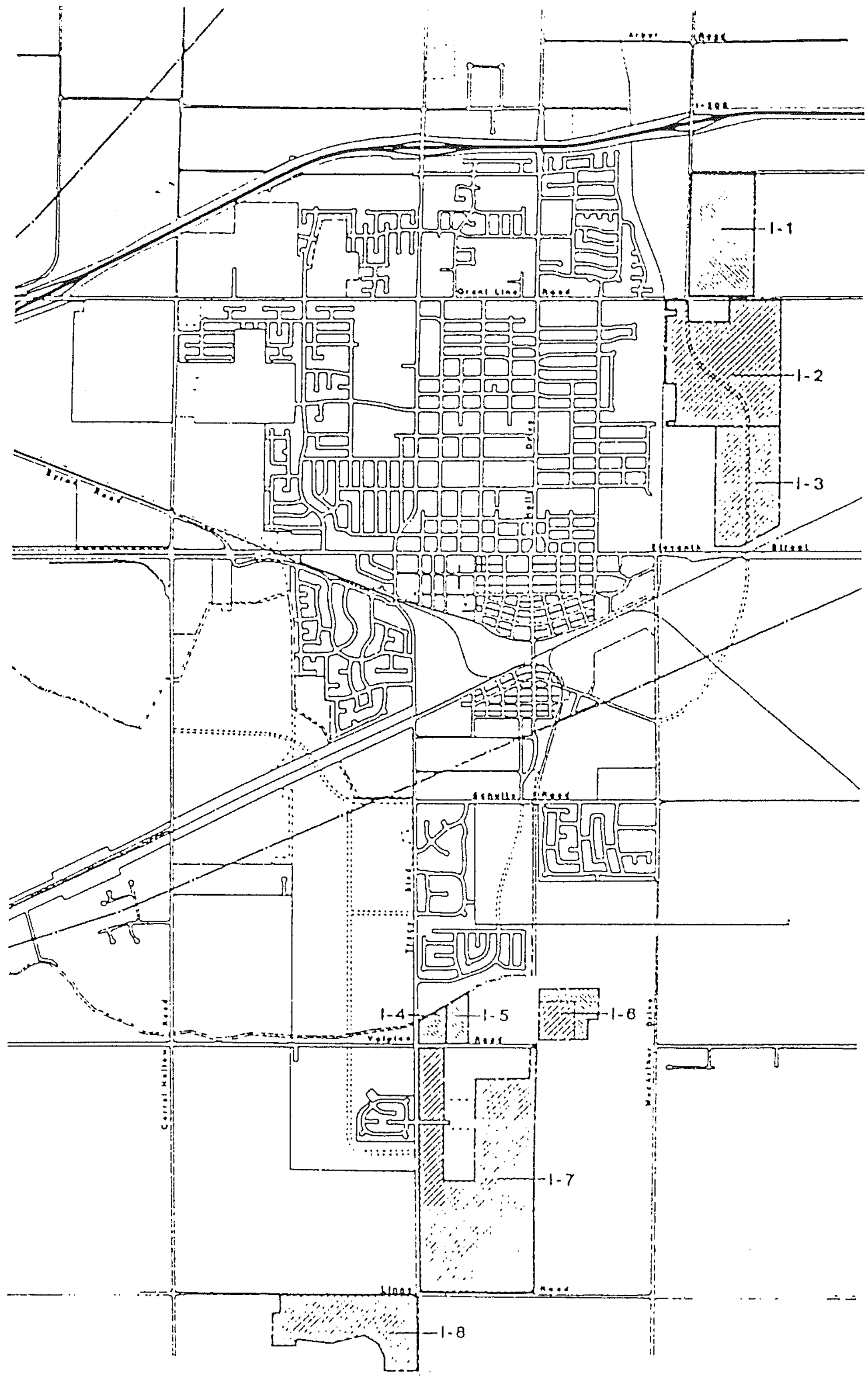
4.3.3 Land Use and Land Use Planning Impacts and Mitigation

4.3.3.1 Impacts

Land Use

The overall land use concept the Tracy Industrial Specific Plan is intended to provide a framework for land development which coordinates public improvements, yet allows flexibility in land use choices to respond to future market conditions. In order to accomplish this, two zoning categories, Limited and General Industrial, are designated for the areas addressed by the Specific Plan (Figure 4.2). These categories allow a variety of office, industrial and warehousing uses. Heavy industrial uses are allowed in areas with a General Industrial designation and may require additional environmental review if environmental performance standards will not be achieved. Design guidelines are provided in the plan which pertain to site development requirements, parking and on-site circulation, building architecture, lighting, signage and landscaping. Standards are also given for design and development of the roadway and storm drainage systems.

Two tables are provided to supplement the Industrial Areas Specific Plan Land Use Map (Figure 4.2). Table 4.1 describes the land use designations and sewer allocations for each parcel covered by the plan. Table 4.2 represents a typical development scenario at 50 percent build-out.



Tracy Industrial Area Specific Plan

LAND USE

Prepared by
EDAW

Limited Industrial
General Industrial
I-1 Reference Number
Proposed Roadways

Figure 4.2

Table 4.1

Industrial Areas Specific Plan
Land Use Program

Development Parcel	Property Owner	Total Acres	General Industrial Acres	Estimated Industrial Acres
I-1	Interland	76.42	0	76.42
I-2	Santa Fe Pacific	142.13	142.13	0
I-3	Pombo	74.29	74.29	0
I-4	Murphy	10.00	0	10.00
I-5	Murphy	10.00	0	10.00
I-6	Cose	34.09	16.53	17.56
I-7	Union Pacific	221.58	221.58[a]	
I-8	Teichert	74.95	74.95[b]	0
	Totals	643.46	529.48	113.98

a 48.21 acres within this designation are within a Design Review Overlay Zone.

b 74.95 acres within this designation are within the Airport Overlay Zone.

Table 4.2

TRACY INDUSTRIAL AREAS SPECIFIC PLAN
ALTERNATIVE PROGRAM SUMMARY TABLES

50% Build-out/ Preferred Alternative

PARCEL	GROSS ACREAGE	NET ACREAGE	OFFICE			GENERAL / LIGHT INDUSTRIAL			WAREHOUSE / DISTRIBUTION			TOTAL	TOTAL
			%	S.F.	Net Acres	%	S.F.	Net Acres	%	S.F.	Net Acres	S.F.	Employees
I-1	74.42	64.96	10%	66,320	5.25	42%	279,651	29.86	48%	325,175	29.86	671,146	1,135
I-2	142.13	120.81	10%	126,324	10.00	42%	518,843	55.40	48%	603,306	55.40	1,248,473	2,118
I-3	74.29	63.15	8%	50,530	4.00	43%	277,029	29.58	50%	322,126	29.58	649,684	1,073
I-4	10.00	8.50	25%	22,738	1.80	35%	31,374	3.35	40%	36,482	3.35	90,594	179
I-5	10.00	8.50	22%	21,475	1.70	0%	0	0.00	78%	74,052	6.80	95,527	166
I-6	34.09	28.98	5%	15,791	1.25	41%	124,373	13.28	53%	160,519	14.74	300,682	478
I-7	221.58	188.34	0%	0	0.00	46%	881,940	94.17	54%	1,025,511	94.17	1,907,451	2,869
I-8	74.95	63.71	0%	0	0.00	46%	298,382	31.86	54%	346,955	31.86	645,337	971
Totals	643.46	546.94	10%	303,178	24.00	37%	2,411,591	257.50	53%	2,894,126	265.76	5,608,895	8,989

PLANNING FACTORS:

- 15% of gross acreage to roads and drainageways
- Net acreage = gross acreage less roads and drainageways
- % = percentage of parcel's total square-footage
- Parking factors:
  - 1/300 s.f. office
  - 1/600 s.f. light industrial
  - 1/800 s.f. warehouse / distribution
- Site Utilization factors:
  - Office: 2 story, 29% building, 56% parking, 15% landscaping/circulation
  - Light Industrial: 1 story, 43% building, 24% parking, 33% landscaping/circulation
  - Warehouse/Distribution: 1 story, 50% building, 21% parking, 29% landscaping/circulation
- Parking coverage analyzed at 330 s.f. per car

While future development patterns may not result in these exact proportions of land use types and gross square footages, this scenario indicates what is likely to occur given current industrial development trends and the Specific Plan's development guidelines.

A unique feature of the Industrial Specific Plan are the "Environmental Performance Standards" and "Threshold Guidelines." These guidelines establish limits on the amount and type of industrial uses, based upon the availability of infrastructure capacity and the potential for environmental pollutants.

Development in the Specific Plan areas will have the effect of extending the city's urban edge and permanently converting agricultural lands to industrial uses. Approximately ten percent of this land is currently used for a variety of row crops. Taking this minimal amount of land out of active production does not appear to represent a significant impact on agricultural production in the County. Furthermore, several of the parcels are presently surrounded by existing urban development or development scheduled by the Residential Areas Specific Plan. Converting these lands will represent infill development, will reduce the discomforts caused by farming activities to adjacent residents and the resulting impacts on valuable agricultural land use are considered, as stated in the 1982 General Plan EIR, to be overridden by the social and economic benefits of the provision of jobs and a balanced community. The remaining agricultural lands have been dormant for some time. Their conversion has been planned since adoption of the 1982 General Plan and EIR and does not represent a negative impact.

Land Ownership

Numerous privately owned parcels must be acquired to provide land for storm drainage and roadway rights-of-way. The Specific Plan requires owners to set aside land for facilities designated on their property. While some rights-of-way may require on-site land dedication, in most cases, owners will be reimbursed for property reserved for public facilities. The Specific Plan implementation section (Section 5.0) establishes guidelines for property dedication and financing strategies for reimbursement.

Certain capital improvements, such as roads and the storm drainage system, will require off-site land acquisition to complete the network of facilities. In particular, the improvements to

MacArthur Drive, the segment of the storm drainage system which is proposed between the railroad line and Lowell Avenue, and the storm drainage channel to Sugar Cut will necessitate the City to negotiate land acquisition through a process of eminent domain. These parcels are currently owned by private parties which are not participants in the 84-1 Assessment District. Land acquisition could possibly be limited to acquisition of development rights. Appraised value of these lands is unknown.

Land Use Planning

The proposed Specific Plan is consistent with the goals and objectives of the Tracy General Plan. Section 2.0 of the Specific Plan document includes goals and objectives taken directly from the general plan which pertain to the proposed project.

The proposed Specific Plan land use map differs from the current general plan map for its designated locations of General Industrial and Limited Industrial. The land identified for industrial use is, however, the same land planned for by the Industrial Areas Specific Plan.

Land uses allowed by the Industrial Areas Specific Plan are not consistent with the permitted uses under the current Tracy Zoning Code standards for M-1 and M-2 zones. However, the uses allowed by the Specific Plan are generally more limited than those permitted by the Zoning Code.

4.3.3.2 Mitigation

Land Use

If the design guidelines of the Specific Plan are followed, no additional mitigation measures are required.

Land Ownership

Specific details for off-site improvements land acquisition should be developed. If land cannot be acquired, the infrastructure systems must be redesigned.

Land Use Planning

The following mitigation measures are suggested to mitigate impacts associated with Land Use Planning:

- Approval of the proposed General Plan amendment.
- Amendment of the Zoning Ordinance to be consistent with both the Specific Plan and the General Plan, as required by Government Code Section 65455.

4.3.4 Transportation Impacts and Mitigation

Summary

Within the City of Tracy, the traffic impacts of the combined development of the Residential Areas Specific Plan and the Industrial Area Specific Plan at 50 percent of build-out (the Preferred Alternative) are largely mitigated by roadway improvements incorporated into the Specific Plan itself. However, there will be significant additional impacts to the regional freeway system, particularly Interstate 205. Cooperative efforts to find solutions to the problem of rising travel demand in the I-205 corridor become all the more important given development of the industrial areas.

4.3.4.1 Impacts

To facilitate the traffic impact analysis of the Industrial Areas Specific Plan, seven new traffic analyses zones (TAZ's) were added to the Tracy City-wide TRACS model originally created to study the Residential Areas Specific Plan's traffic impacts. Table 4.3 indicates the correspondence between Development Parcels and TAZ's, as well as traffic generation by TAZ.

Trip Generation

Table 4.3 indicates the expected trip generation of each TAZ under the Industrial Areas Specific Plan Preferred Alternative. Trip generation rates assumed for the three major types of uses within the industrial areas are as shown in Table 4.4

Table 4.3

Trip Generation by Traffic Analysis Zone (TAZ)

50% Buildout (Preferred Alternative)

TAZ #	Land Use	Quantity	PM Peak Volumes	ADT Volumes	Equivalent Development Parcel
16	Office	66.3 KSF	142	792	I-1
	Lt. Industrial	279.7 KSF	229	1,522	
	Warehouse	325.2 KSF	237	1,587	
	Total Zone 16	671.1 KSF	608	3,901	
17	Office	176.9 KSF	389	2,176	I-2, I-3
	Lt. Industrial	795.9 KSF	653	4,330	
	Warehouse	925.5 KSF	676	4,516	
	Total Zone 17	1,898.2 KSF	1717	11,022	
18	Office	15.8 KSF	35	194	I-6
	Lt. Industrial	124.4 KSF	102	677	
	Warehouse	160.5 KSF	117	783	
	Total Zone 18	300.7 KSF	259	1,654	
19	Office	44.2 KSF	97	544	I-7
	Lt. Industrial	31.4 KSF	26	171	
	Warehouse	110.6 KSF	81	539	
	Total Zone 19	186.1 KSF	204	1,253	
20	Office	0 KSF	80	0	I-7
	Lt. Industrial	955.2 KSF	783	5,196	
	Warehouse	1,110.7 KSF	811	5,420	
	Total Zone 20	2,065.9 KSF	1,574	10,617	
21	Office	0 KSF	0	0	I-8
	Lt. Industrial	298.4 KSF	245	1,623	
	Warehouse	347.0 KSF	253	1693	
	Total Zone 21	645.3 KSF	498	3,317	
	TOTALS	5,895.3 KSF	5,001	32,542	

Note: KSF = Thousands of square feet

Table 4.4

Project Trip Generation Rates

	Daily Trips Per 1,000 Sq. Ft.	PM Peak Hour Trips In	Out	Total
Warehouse	4.88	0.24	0.49	0.73
Lt. Industrial	5.43	0.27	0.54	0.81
Office	12.30	0.40	1.80	2.20

These rates were developed based on surveys of these uses by the Institute of Transportation Engineers (ITE) and the California Department of Transportation CalTrans).[3]

Trip Distribution

Trip distribution entails determining destinations for trips generated by the project. Since the vast majority of trips generated by the industrial uses during the afternoon peak hour represent employee commute trips, the distribution of Industrial Areas Specific Plan trips is largely a function of where Industrial Areas Specific Plan employees will live. A smaller proportion of trips generated by industrial area uses will represent non-commute trips: pick-up and deliveries, office visitor trips, etc.

Based on discussions with City of Tracy staff and the types of land uses involved, the following trip distribution was assumed for the Industrial Areas Specific Plan:

- 15 percent: To and from existing residential areas or the Residential Specific Plan Areas.
- 30 percent: To and from the "Phase 2" residential areas generally west of the current Specific Plan Residential Area. Tracy's Sewer System Master Plan indicates that this area could support on the order of 5,000 dwelling units.
- 5 percent: To and from potential new residential areas south and east of the current limit of urban development.

3/ ITE Trip General (1982) and CalTrans District 4, Progress Reports on Trip Ends General Research Counts. (Various dates).

- 25 percent: To and from cities to the east reached via Interstate 205 (e.g., Manteca and Ripon).
- 15 percent: To and from cities to the south reached via I-580 or State Route 132 (e.g., Patterson and Modesto).
- 10 percent: To and from the Bay Area via I-205 and I-580.

It should be noted that the freeway-oriented traffic includes most of pick-up, delivery, office visitor and other non-commute traffic.

Traffic Assignment

Once the trip distribution was determined, new trips were assigned to the Tracy street network and the regional highway system. In general, the shortest path from origin to destination was used, but the routings developed tend to avoid, when possible, areas where heavy traffic is anticipated even without the Industrial Areas Specific Plan. Such heavy traffic areas include segments of Tracy Boulevard, Central Avenue and Eleventh Street.

Analysis of Traffic Impacts - Preferred Alternative (50 percent build-out)

The traffic impacts of the Industrial Areas Specific Plan Preferred Alternative were calculated using an expanded version of the Tracy City-wide TRACS model. In addition to the seven new TAZ's, nine additional intersections--potential points of traffic congestion--were selected for analysis:

- East Street/Grant Line Road
- East Street/Eleventh Street
- MacArthur Drive/Grant Line Road
- MacArthur Drive/Eleventh Street
- MacArthur Drive/Valpico Road
- MacArthur Drive/Linne Road
- Corral Hollow Road/Valpico Road
- Corral Hollow Road/Linne Road
- Tracy Boulevard/Linne Road

In the model, street improvements under the "with project" scenario were assumed to be the same as those assumed for the Residential Areas Specific Plan, with two important additions.

- MacArthur Drive is assumed to be developed as a four-lane major arterial from Eleventh Street to Schulte Road.

- The one-half mile "missing link" of Valpico Road west of MacArthur Drive is presumed to be built as a two-lane facility.

Table 4.5 summarizes all Specific Plan Arterial Improvements.

Afternoon peak-hour volume-to-capacity (V/C) calculations were performed at a total of 25 existing and five future intersections. Table 4.6 compares 1986 baseline conditions with those which will prevail given development of the Industrial Areas Specific Plan Preferred Alternative, the Residential Areas Specific Plan and the roadway improvements associated with these Plans. Volume/capacity ratios were calculated using the planning methodology described in the Transportation Research Board's Circular 212, (1980). Refer to Level of Service Table in the "Setting" section for a description of the concepts of intersection volume/capacity ratio and levels of service (LOS).

All intersections in the study area currently exhibit LOS "A" - excellent operations. Given development of both the Residential Areas Specific Plan and the Industrial Specific Plan Preferred Alternative service levels would degrade, but with three exceptions, no intersection would exhibit a LOS worse than LOS "C" (LOS "C" has been adopted as the limit of acceptability for the Specific Plan areas). Potential improvements to the three intersections with unacceptable service levels (Tracy/Eleventh, Holly-Central/Eleventh and Corral Hollow/Schulte) are discussed in the "Mitigation" section below.

Figure 4.3 presents Average Daily Traffic volumes projected to occur under the Preferred Alternative.

Table 4.5

Specific Plan Arterial Street Improvements Assumed in Traffic Model

Residential Areas Specific Plan:

Roadway	Segment	Improvement
Grant Line Road	Tracy Blvd. to I-205	Widen to 4 lanes + median
Corral Hollow Road	Grant Line to E. Schulte	Widen to 4 lanes + median
Tracy Boulevard	Centre Court to Linne	Widen to 4 lanes
MacArthur Drive	Schulte Road to 11th St.	Widen to 4 lanes + median
Lowell Avenue	Corral Hollow to Lincoln	Build 4-lane arterial
Schulte Road	Corral Hollow to MacArthur Dr.	Extend road and widen to 4 lanes
Central Avenue	N. of Schulte to Tracy Blvd.	Extend road to 4-lane arterial
Sycamore Parkway	Corral Hollow to Tracy Blvd.	Build 4-lane arterial

Industrial Areas Specific Plan

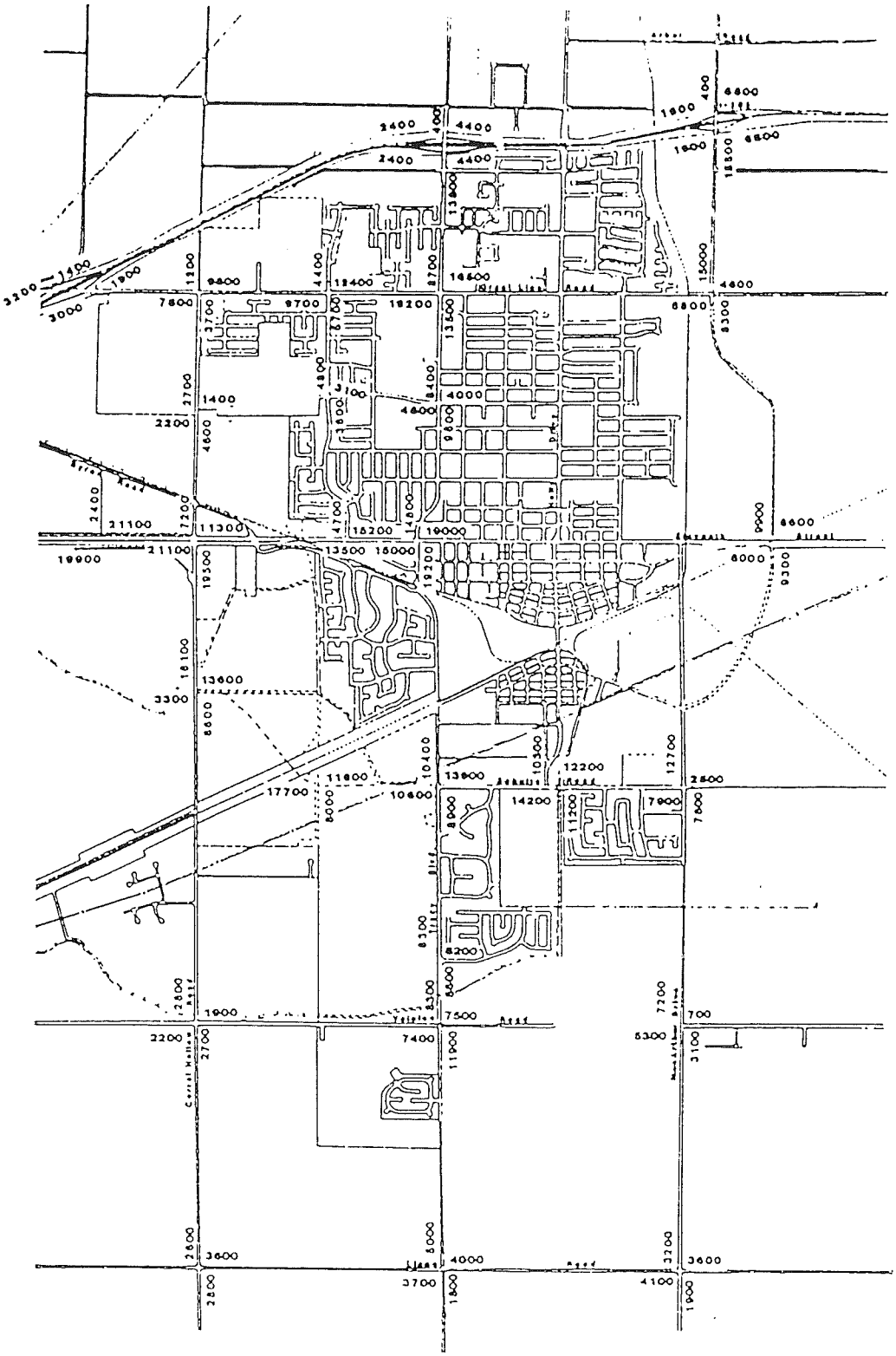
Roadway	Segment	Improvement
MacArthur Drive	11th Street to I-205	Build 4-lane arterial
Valpico Road	West of MacArthur Dr.	Extend roadway

Table 4.6

Volume/Capacity Ratios and Service Levels at Key Intersections

	Intersection	Existing	With Preferred Alt. (Residential and Industrial) +550 Units Infill
1.	Corral Hollow/Grant Line	0.28A	0.36A
2.	Lincoln Boulevard/Grant Line	0.43A	0.45A
3.	Tracy/Grant Line	0.59A	0.67A
4.	Corral Hollow/Lowell	N/A	0.18A
5.	Lincoln/Lowell	0.09A	0.20A
6.	Tracy/Lowell	0.22A	0.51A
7.	Bryon/Eleventh	N/A	0.50A
8.	Corral Hollow/Eleventh	0.30A	0.69B
9.	Lincoln/Eleventh	0.35A	0.42A
10.	Tracy/Eleventh	0.49A	0.91E*
11.	Holly-Central/Eleventh	0.50A	0.86D*
12.	Corral Hollow/Cypress	N/A	0.40A
13.	Tracy/Centre Court	0.24A	0.44A
14.	MacArthur/Third-Mt. Diablo	0.10A	0.37A
15.	Corral Hollow/Schulte	N/A	0.80D*
16.	Sycamore/Schulte	N/A	0.53A
17.	Tracy/Schulte	0.31A	0.54A
18.	Central/Schulte	0.21A	0.71C
19.	MacArthur/Schulte	0.14A	0.43A
20.	Tracy/Central	0.16A	0.38A
21.	Tracy/Valpico	0.13A	0.65B
22.	East/Grant Line	0.33A	0.34A
23.	East/Eleventh	0.34A	0.37A
24.	MacArthur/Grant Line	0.38A	0.62B
25.	MacArthur/Eleventh	0.20A	0.47A
26.	Corral Hollow/Valpico	0.09A	0.26A
27.	MacArthur/Valpico	0.11A	0.60B
28.	Corral Hollow/Linne	0.09A	0.36A
29.	Tracy/Linne	0.12A	0.45A
30.	MacArthur/Linne	0.12A	0.36A

*Intersection requiring mitigation.



Tracy Industrial Area
Specific Plan

Prepared by
EDAW
In association with

May 31, 1987

PROJECTED TRAFFIC VOLUMES

16000 Average Daily Traffic (ADT) Levels at 50 percent build-out

Figure 4.3

Freeway Impacts

Table 4.7 summarizes the Industrial and Residential Areas Specific Plans' combined impact on key freeway ramps. Table 4.8 summarizes impacts to mainline freeway volumes. Ramp impacts of the Industrial Areas Specific Plan will be substantial on I-205, particularly at the eastbound on-ramp of the MacArthur Drive interchange, where 860 new trips can be expected during the p.m. peak hour due to industrial development. This added traffic will bring total peak hour traffic on the ramp to about 1,080 or 72 percent of capacity (approximately 1,500 vehicles per hour). Mainline freeway volumes will also increase substantially on I-205 with most of the traffic added by the Industrial Areas Specific Plan occurring to the east of the MacArthur Drive interchange.

Public Transit

Although Tracy's existing paratransit service (Tracy Transit) is open to all Tracy residents, in practice most patrons do not use its service for journey-to-work and journey-from-work trips. Thus, the impact of industrial development on existing services should not be as extensive as that of the Residential Areas Specific Plan.

4.3.4.2 Mitigation

Additional Intersection Improvements

The majority of transportation impacts of the Industrial Areas Specific Plan Preferred Alternative are pre-mitigated by roadway improvements incorporated into the Specific Plan itself. Table 4.9 indicates additional off-site improvements at three intersections. The cost for all of these improvements is estimated to be on the order of $150,000.

Table 4.7

Freeway Ramp Volumes-PM Peak Hour
(50 Percent Build-Out)

Ramp Location	1986 Existing Volume	Volumes Added by Specific Plan Including Residential*	Total Volumes
I-205			
1. Eleventh St. Interchange			
Westbound on	250	410	660
Eastbound off	250	830	1,080
2. Grant Line Interchange			
Eastbound on	150	20	170
Westbound off	150	40	190
Westbound on	100	140	240
Eastbound off	80	280	360
3. Tracy Bl. Interchange			
Eastbound on	370	30	400
Westbound off	370	60	430
Westbound on	220	10	230
Eastbound off	220	10	230
4. MacArthur Interchange			
Eastbound on	220	860	1,080
Westbound off	210	390	600
Westbound on	70	160	230
Eastbound off	70	70	140
I-580			
5. Corral Hollow Interchange			
Eastbound on	30	0	30
Westbound off	30	0	30
Westbound on	20	170	190
Eastbound off	20	80	100
6. Chrisman Interchange			
Eastbound on	50	130	180
Westbound off	90	60	150
Westbound on	0	0	0
Eastbound off	0	0	0

*Estimated based on CalTrans volumes in 1976 and 1980.

Table 4.8

I-205 and I-580 Mainline Volumes - PM Peak Hour
(50 Percent Build-Out)

Location	1986 Existing Volume	Volumes Added by Specific Plan Including Residential*	Total Volumes
I-205			
West of Eleventh Street Interchange			
Westbound	--	720	--
Eastbound	--	1,190	--
Total	3,150	1,910	5,060
East of MacArthur Drive Interchange			
Westbound	--	390	--
Eastbound	--	860	--
Total	2,950	1,250	4,200
I-580			
West of Corral Hollow Interchange			
Westbound	--	170	--
Eastbound	--	80	--
Total	1,900	250	2,150
East of Chrisman Road Interchange			
Westbound	--	130	--
Eastbound	--	60	--
Total	730	190	920

*CalTrans, 1985 Traffic Volumes

Table 4.9

Additional Off-Site Intersection Improvements

	Intersection	Improvement	V/C and LOS Before	After
1.	Holly-Central/Eleventh*	Add left turn pockets east-west	.87D	.76C
2.	Tracy/Eleventh*	Add northbound, eastbound and southbound right turn pocket	.91E	.79C
3.	Corral Hollow/Schulte	Add second southbound left turn pocket	.80D	.60B

*Note: These improvements supersede the mitigation measures developed for the Residential Areas Specific Plan development only.

Intersection Signalizations

Analysis of projected average daily traffic (ADT) volumes given build-out of the Residential Areas Specific Plan and the Industrial Areas Specific Plan Preferred Alternative indicates that signals will be required at the following intersections:

Industrial Areas Specific Plan

Eleventh/Corral Hollow
Mt. Diablo/MacArthur Drive
Schulte/MacArthur Drive
Valpico/Tracy Boulevard
Eleventh/MacArthur Drive
Grant Line/MacArthur Drive
Grant Line/Corral Hollow

Residential Areas Specific Plan

Corral Hollow/Lowell Avenue
Lincoln/Lowell
Corral Hollow/Cypress Drive
Corral Hollow/Schulte
Sycamore/Schulte
Tracy Boulevard/Centre Court
Tracy Boulevard/Tennis Lane
Tracy Boulevard/Schulte
Central/Schulte
West Eleventh/New Byron Road
Eleventh/Fabian

I-205 Mitigation

While freeway ramps serving Tracy have adequate capacity to accommodate 50 percent build-out of the Industrial Areas Specific Plan, the freeway impacts identified in the preceding section are substantial. Development of the Industrial and Residential Areas Specific Plans, plus continuing development in Manteca, Ripon and other communities dependent upon I-205, make it important for these communities to work with each other and with CalTrans to increase the capacity of this freeway link. City of Tracy officials should adopt a policy to pursue funding for the widening of I-205. Local officials should also work to promote traffic mitigation measures throughout the I-205 corridor to delay this need for widening.

Paratransit and Transit Mitigations

Although demand for paratransit services is more a function of residential rather than industrial growth, development of the Industrial Areas Specific Plan will spur further residential growth in Tracy. Furthermore, by creating large new employment concentrations, industrial development could generate demand for fixed route transit service. These new employment concentrations will certainly create new markets for car and vanpool services, particularly among employees living outside of Tracy. Employers and landowners in the Industrial Areas Specific Plan should work with local government agencies to help plan and promote an appropriate mix of transit and paratransit services as the City grows and changes.

4.3.5 Noise Impacts and Mitigation

4.3.5.1 Impacts

The primary source of noise associated with the Specific Plan will be directly related to increases in highway traffic. In order to assess the noise impacts associated with the Specific Plan, increases in highway generated noise[4] were estimated using the traffic volumes depicted in Section 3.3.5, and the 1981 Noise Contours in the 1982 Tracy General Plan. For selected major

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4/ "Highway Noise Generation and Control," The Transportation Research Board, NCHRP Report 173. 1976.

arterial or freeway segments, an increase in noise level was first calculated on the basis of projected increases in traffic volumes resulting from the Specific Plan. Subsequently, the 1981 noise contours were adjusted to reflect the higher calculated noise levels. The results of this analysis appear in Table 4.10.

All of the projected impacts are less than two decibels--the level at which the change in noise level would begin to become perceptible.[5] The segment from Tracy to East Street on Grant Line Road ((+3.12 dB) is an exception, however, the distance to the Ldn 65dB contour is less than 130 feet, which is reasonable for urban arterial streets. Ldn 65db contour distances exceed 200 feet along I-205, and 150 feet on Eleventh Street between Lincoln and Holly Boulevard, and Central Avenue between Eleventh and Third Streets.

The Southern Pacific and Western Pacific Railroads are also significant sources of noise in Tracy, but trail frequency is not expected to change as a result of the Tracy Specific Plan. The 1981 and 1995 Noise Contours reported in the Tracy General Plan are therefore applicable to the Tracy Specific Plan, with the maximum Ldn 65db contour distances reaching 130 feet on the Tracy to Lathrop Line of the Southern Pacific Railroad and 180 feet along the Western Pacific Railroad.

4.3.5.2 Mitigation

The Industrial Areas Specific Plan addresses the issue of noise in Sections 4.1.2, Environmental Standards and 4.2.8, Noise Standards. The former prohibits uses which create a sound pressure level in violation of any regulation of any public body having jurisdiction. The latter provides design guidelines including berms, noise insulation, landscaping and setbacks to minimize noise impacts. It also proposes to, where possible, avoid locating other noise-sensitive uses on sites with an exterior noise level greater than 60 dBA Ldn.

5/ "Public Health and Welfare Criteria for Noise", U. S. Environmental Protection Agency Report No. 55019-73-002. 1973.

Table 4.10

Noise Impacts and Contour Distances
Resulting from Implementation of the
Tracy Specific Plan

Road	Road Segment	Increase Over 1983 Levels (Ldn)	Distance from the Edge of the Roadway (Feet) 75Ldn	70Ldn	65Ldn	60Ldn
I-205	Corral Hollow to Tracy Blvd.	+0.70dB	56	120	256	548
	East of Tracy Blvd.	+1.52dB	63	136	290	620
Grant Line Rd.	Corral Hollow to Lincoln Blvd.	+1.74dB	22	46	99	213
	Lincoln to Tracy Blvd.	+1.71dB	21	45	98	211
	Tracy to East St.	+3.12dB	27	57	122	261
Tracy Blvd.	I-205 to Grant Line Rd.	+0.16dB	17	36	78	166
	Grant Line Rd. to Lowell	+0.85dB	19	40	86	185
	Lowell to Eleventh St.	+1.51dB	21	45	95	204
Eleventh Street	Corral Hollow to Lincoln Blvd.	+0.50dB	30	65	139	299
	Lincoln St. to Tracy Blvd.	+1.00dB	33	70	151	322
	Tracy Blvd. to Holley St.	+1.51dB	36	76	163	349

4.4 Public Facilities

4.4.1 Utility System Impacts and Mitigation

4.4.1.1 Impacts

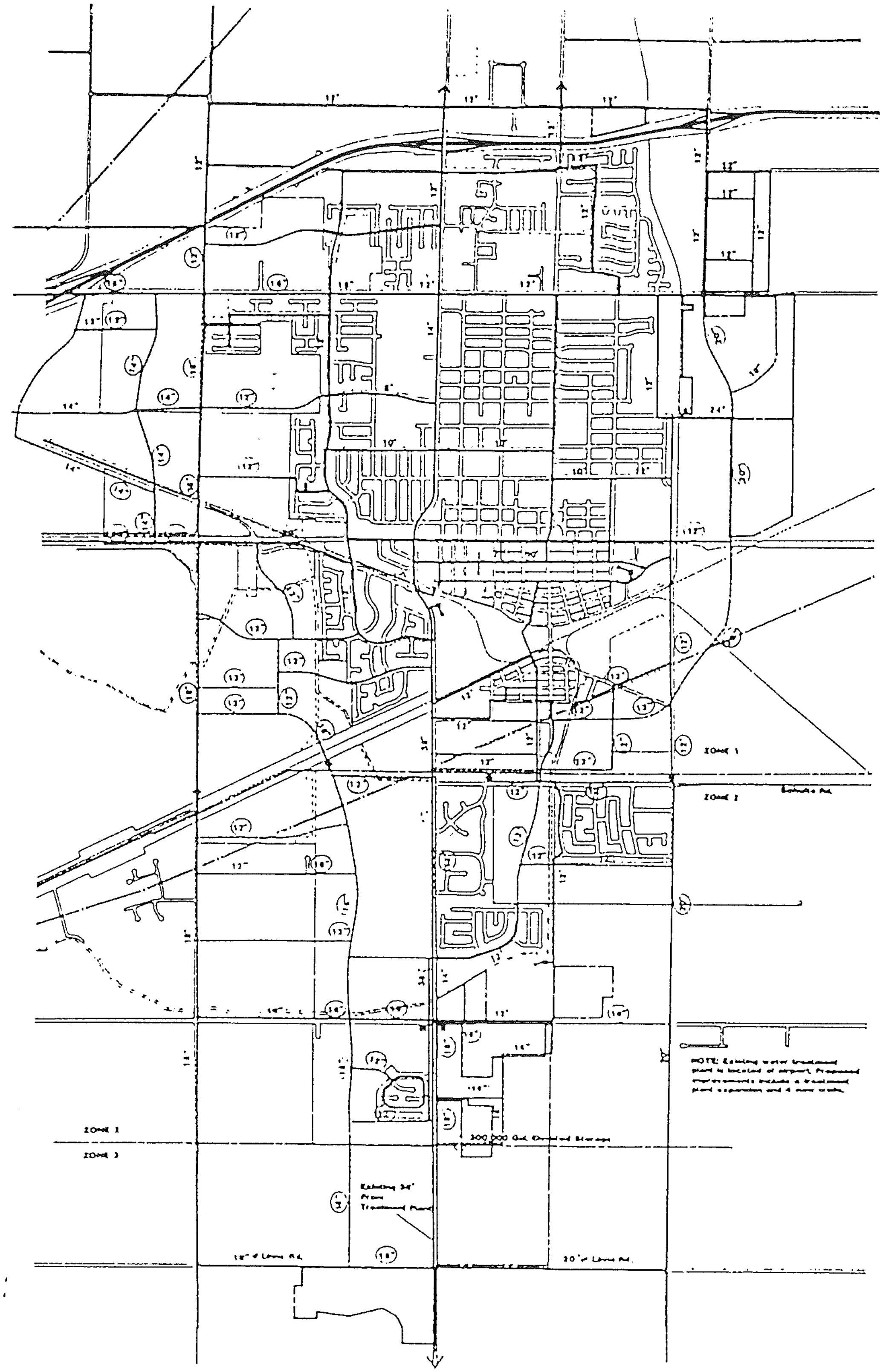
Municipal Water

Presently the City of Tracy has the available water supply and distribution system to meet its current demand. However, future growth cannot be accommodated by the system unless an expansion plan is undertaken.

It is estimated that the Industrial and Residential Specific Plan areas will increase the demand on the existing system by approximately 70 percent at ultimate build-out. Based on the projected growth rate of these areas and infill development, the current allocation will be exceeded by the year 1989. Thus a second source of potable water must be found.

While possible sources include (1) an increased entitlement from the Delta-Mendota Canal, (2) acquisition of an entitlement from the California Aqueduct and (3) new wells drilled where ground water of better quality exists, it was concluded from the Kennedy/Jenks report dated July 1985, that the most viable solution to expanding the water supply would be for the City to combine groundwater with the treated water from Delta-Mendota Canal. Thus as the Specific Plan areas grow, the percentage of groundwater in the system increases to meet this demand. Being that the groundwater has high TDS and sulfate levels, the net result would be a slight lowering of the overall quality of potable water. It is anticipated, however, that the overall quality of water delivered to the City will be within the Department of Health Service's Secondary Drinking Water Standards for TDS and sulfates.

The Kennedy/Jenks report additionally calls for increasing the capacity of the treatment plant to 15 mgd, upgrading and abandoning certain existing wells, and drilling new wells in areas of lower TDS and sulfate levels. These measures, along with the addition of an elevated storage tank and new primary and secondary transmission mains would meet the needs of the future growth of the community. The proposed Specific Plan would provide for these mitigation measures, with the exception of several water mains which are not considered necessary to the Plan (Figure 4.4).



Tracy Industrial Area
Specific Plan

EXISTING/PROPOSED WATER DISTRIBUTION SYSTEM

Prepared by
EDAW

24" Existing Water Main & Size
14" Proposed
(14") Proposed, Required for Specific Plan
Pressure Zone

Existing/Proposed Pump
Existing/Proposed Water Tank
Proposed Reservoir
Pressure Reducing Valve

Figure 4.4

Wastewater

Construction is presently underway to expand the wastewater treatment plant to accommodate the increased demand included in Assessment District 84-1. The Specific Plan areas are all located within this district. Therefore, the necessary sewer services have been allowed for. The Specific Plan guidelines take this into account and densities have been, in part, based on these allocations.

Solid Waste

The planned growth within the Specific Plan areas will increase the requirements for solid waste disposal. The present remaining capacity of the disposal site is estimated to be approximately 800,000 cubic yards. This is roughly equivalent to a remaining service life of four to five years at the present volume of wastes received.

The Specific Plan areas annual projected growth will reduce the service life of the disposal site to approximately three years. This reduced service life will encourage the City and County to accelerate their efforts to find new alternative sites for continued waste disposal services.

Electrical and Natural Gas

Existing electrical and natural gas lines may require relocation within the roadway for roads that are specified to be improved as outlined by the Specific Plan. Service may temporarily be disrupted during the relocations of these facilities.

Telephone

Telephone lines and facilities may require relocation within the roadway template for roads that are to be improved by the Specific Plan. Service may temporarily be disrupted during the relocation of these lines and facilities.

4.4.1.2 Mitigation

Municipal Water

The Specific Plan does not provide any mitigation measures to lower the TDS and sulfates introduced into the water system, other than providing locations for new wells that have minimum levels of these contaminates. A detailed engineering analysis and report on the proposed water system improvements will be needed to verify the pipe sizes and the configuration of the system proposed by the Kennedy/Jenks report.

Solid Waste

In order to mitigate the impacts of the solid waste disposal, efforts must be accelerated to find a new disposal site for Tracy. Final selection of the site should be made at least one year prior to the existing site reaching its capacity.

To mitigate the increased cost for equipment and operations, the City should make every effort to review on an annual basis its user fees, franchise fees and transfer station revenues. Any cost increases should be distributed appropriately.

4.4.2 Public Service Impacts and Mitigation

4.4.2.1 Impacts

Police Services

While the need for increased police services is readily apparent, the extent of such services will be largely dependent upon the specific amount of growth ultimately generated. It is anticipated that services will increase incrementally as needed. Demand for support staff, including communications personnel, record supervisors, secretaries, and aides, will increase proportionally with the demand for officers.

The police department is rapidly approaching the need to establish a fifth beat within the city. The determination of a fifth beat incorporates two factors, the estimated number of calls for service and the size of the area to be covered. As Tracy continues to expand southward, the ability of one unit to adequately cover the area decreases. The addition of a fifth beat would also require additional personnel for proper beat management (Tracy Police Department, January 17, 1986).

The increased demand for police department staff also generates a demand for office space at the station. The department would prefer to remain centrally located in one facility.

Fire Protection

The Residential Areas Specific Plan has designated a site in the southwest quadrant of the intersection of Tracy Blvd. and West Central Avenue for a permanent South Station. This station will serve the south industrial area and will replace the nearby interim station and will have the capacity to house a 1,500 gpm Pumper Truck, an 85-foot Aerial Snorkel Truck, and support vehicles. It will also provide space for three firefighters and a shift officer. The eastern industrial area will be served by the main station.

In addition to the proposed staff at the new station, the Fire Department estimates a need for another firefighter position at the North Station and an Administrative Captain position at the Main Station. Support staff may be required as well.

The department has also estimated a need for an updated dispatch system and a training tower.

Public Works

Additional staff and equipment will be required to operate the new capital facilities required by the Specific Plans, and to maintain the additional roads, utility systems, street trees, and parks. Estimates of the required number of new positions was not available at the time of this writing, however, staff can in some instances be reduced through economies of scale.

The proposed financing mechanisms will have the ability to provide funds for a portion of these costs. The remainder will be generated from tax revenues funneled to the General Fund.

General Government

As the community expands, additional staff and possibly new departments may be necessary. For instance, as the City government staff increases, the alternative of a separate personnel department which coordinates all personnel related issues may need review. Precise estimates of these staffing needs cannot be made until individual workloads begin increasing.

4.4.2.2 Mitigation

Police Services

Funds for police staff and building expansion could be generated either through the proposed Mello Roos Community Facilities District or impact fees. Matching funds from either state or federal sources should be pursued.

Expansion of police headquarters should be coordinated with the plans of the entire governmental complex.

Fire Protection

Funding mitigation is identical to that specified for the Police Department.

Public Works

Precise staffing and equipment estimates should be prepared, so that specific funds can be generated over time.

General Government

Precise staffing and equipment estimates should be prepared, so that specific funds can be generated over time.

5.0

Growth-Inducing Impacts

5. GROWTH INDUCING IMPACTS

The Tracy Industrial Areas Specific Plan, under the 50 percent build-out scenario, proposes approximately 5.6 million sq. ft. of office, general and light industrial and warehousing and distribution uses. The areas targeted for this development are within the City's first planned expansion ring, identified as "Phase I" by the Tracy General Plan.

Implementation of the Industrial Areas Specific Plan, as well as the Residential Areas Specific Plan, will cause the local infrastructure, specifically the roadway network, the water, sewer, and storm drainage systems, and the utility lines, to be expanded. While land outside the City must be annexed prior to any provision of municipal service, the excess capacities and location of these new infrastructure systems will inevitably make it easier and more efficient to develop outside the existing city boundaries. For example, the Industrial Areas Specific Plan's proposed extension of Valpico Road from Tracy Boulevard through to MacArthur Drive could induce growth both to the north and south of that segment. Additionally, ultimate widening of MacArthur Drive to a six-lane arterial, with storm drainage and water system improvements, could provide sufficient excess capacity to induce growth to the east. While the land south of Valpico Road to Linne Road and portions of the land between MacArthur Drive and Chrisman Road are designated as Phase II Industrial Development Areas, and uncontrolled transfer of sewer capacity from Assessment District 84-1 could result in isolated development surrounded by vacant land, growth beyond these areas would be contrary to current General Plan policies.

To mitigate these potential growth inducing impacts, the City could adopt a policy pertaining to sewer capacity transfers outside the 84-1 Assessment District, which would limit transfers to areas which when developed will be orderly, compact, contiguous, logical, planned growth of the City well-served by municipal services. Such a policy is currently being considered for adoption by the City. However, it is expected that additional phases of capacity expansion for the sewage treatment plant will be underway before the increment of development allowed by this EIR is completed. Therefore, additional infrastructure capacity may be available for further industrial and residential development and similar capacity transfer policies should be adopted in the future.

The growth inducing impacts of the proposed plan may be considered from two points of view: (1) the plan is responding to the regional demand for industrial development which is being generated by economic, employment and housing growth in the Tri-Valley subregion and in San Joaquin County; and (2) the Industrial Areas Specific Plan could help the City of Tracy realize its stated General Plan goal of establishing a balance of jobs and housing in the community.

6.0

Cumulative Impacts

6. CUMULATIVE IMPACTS

The Tracy Industrial Areas Specific Plan represents a large portion of the nonresidential development potential within the current City limits. This 643-acre project accounts for all of the City's land targeted for Phase I industrial development. Other projects affecting the natural and built environment include: infill development within the City, the Residential Areas Specific Plan, Phase II industrial development and a proposed mixed use development along I-205 within San Joaquin County jurisdiction.

Infill development within the City is presently limited to 550 equivalent dwelling units by Sewer Assessment District 84-1. The Residential Areas Specific Plan proposes approximately 7,540 new residential units. Future utility demands from both of these programs have been included in the master planning for each utility system. These units were also added into the transportation model during the assessment of traffic impacts. The results of this analysis are discussed in Section 4.3.4.1. No other additional cumulative impacts are anticipated as a result of the combined Specific Plan and infill development.

The 1982 General Plan identified approximately 475 acres within the City's sphere of influence as areas for Phase II Industrial Development. These lands do not have sewer, water or storm drainage service at this time. Future sewage treatment plant expansions and additional water sources, as well as certain roads, would be required to provide infrastructure service to these parcels. There are no plans by the City, at this time, to provide such improvements.

Cumulative impacts from development along I-205 also cannot be estimated due to the preliminary nature of this project. A market study is currently being prepared to determine the scope of future commercial growth in this area. However, once the project is defined, an Environmental Impact Report will be prepared.

7.0

Unavoidable Adverse Impacts

7. UNAVOIDABLE ADVERSE IMPACTS

The environmental impacts discussed in Sections 4.0, 5.0, 6.0, and 9.0 consist of short-term, long-term and cumulative effects which may be associated with implementation of the proposed Specific Plan. Those impacts which would be unavoidable or potentially unavoidable despite mitigation measures are summarized below under the headings as presented in Section 4.0 where they are discussed in greater detail.

7.1 Physical Environment

7.1.1 Geology and Soils

No unavoidable adverse impacts relating to geology and soils are anticipated to result from the proposed Industrial Areas Specific Plan.

7.1.2 Hydrology and Water Quality

Unavoidable adverse hydrology and water quality impacts include: (1) alteration of existing drainage patterns, (2) a decrease in groundwater recharge over the planning areas, (3) an increase in water-borne pollutants as a result of runoff from urbanized areas.

7.1.3 Air Quality

As a result of project implementation, there will be an unavoidable increase in the emissions of carbon monoxide, ozone, and suspended particulates, primarily associated with mobile sources.

7.2 Biotic Resources

7.2.1 Vegetation

Unavoidable adverse impacts on botanical resources include: (1) loss of existing vegetation and associated wildlife habitat; (2) loss of productive agricultural land; (3) introduction of ornamental plants, both weedy and horticultural.

7.2.2 Wildlife

Unavoidable adverse impacts on wildlife include loss or displacement of wildlife through removal or alteration of habitat.

7.3 Sociocultural Environment

7.3.1 Cultural Characteristics

No unavoidable adverse impacts are anticipated.

7.3.2 Historic Resources

No unavoidable adverse impacts are anticipated.

7.3.3 Land Use and Land Use Planning

Unavoidable adverse impacts on existing land use include conversion of existing active and dormant agricultural lands to urbanized uses. It is assumed that, in general, this impact may be an adverse one to some and a positive improvement to others.

7.3.4 Transportation

No unavoidable adverse impacts are anticipated.

7.3.5 Noise

No unavoidable adverse impacts are anticipated.

7.4 Public Facilities

No unavoidable adverse impacts are anticipated.

7.4.1 Utility Systems

No unavoidable adverse impacts are anticipated.

7.4.2 Public Services

No unavoidable adverse impacts are anticipated.

8.0

Alternatives

8. ALTERNATIVES

Four land use alternatives were considered for the areas within the Specific Plan:

- No Project Alternative
- Preferred Alternative (50 percent build-out)
- 70 percent Build-out Alternative
- 100 percent Build-out Alternative

The following sections describe each alternative and assess their potential impacts. The discussion of impacts is generalized and is intended to be used in conjunction with the more detailed analysis provided in Section 4.0. A final section compares the alternatives in terms of their estimated traffic impacts.

No Project Alternative

This alternative assumes that no development will occur within the Industrial Specific Plan areas. It is an unlikely scenario because the program to expand the wastewater system is already under construction and sewer allocations have been purchased by the area's landowners. Prohibiting development would require the City to return the funds which have been paid to the project; a prohibitively costly undertaking.

The municipal water system improvements would have to be implemented regardless of no development because the State has requested the City to develop alternative water resources in the event of a disaster. Most segments of the Storm Drainage Master Plan would be constructed in order to serve the Industrial Specific Plan areas. Expansions to the public service departments would not be needed.

In summary, the No Project Alternative, while retaining several active agricultural parcels, would require significant capital outlays by the City without obvious opportunities for generating revenues. Impacts on the City budget would most likely be significant.

Preferred Alternative (50 Percent Build-out)

This alternative assumes fifty percent of the land within the Industrial Areas Specific Plan will be developed in a ten-year period according to the land use program shown previously in Figure 2.6. The impacts associated with this alternative have been assessed in Section 4: Impacts and Mitigation. It is assumed that prior to approval of the next increment of industrial growth in these areas, additional environmental analysis will be required.

70 Percent Build-out Alternative

In this alternative, 70 percent of the land within the Industrial Areas Specific Plan will be developed over a 15-year period. Implementation of this alternative will require improvement of several intersections, as well as expansion of MacArthur Drive to a six-lane arterial. All other infrastructure systems (water, sewer, storm drainage) will be built to full capacity prior to 50 percent build-out.

Because it is expected that additional residential development will occur in the vicinity of the Industrial Specific Plan areas following 50 percent build-out of the plan, impacts on these areas and cumulative transportation impacts cannot be estimated.

100 Percent Build-out Alternative

This alternative assumes full build-out of the development potential of the Industrial Areas Specific Plan. Build-out is expected to occur over a 20-year period. Implementation of this alternative will not only require improvement of MacArthur Drive to a six-lane arterial, but will also require expansion of an on-ramp to Interstate 205 (either at MacArthur Drive or at Eleventh Street) and possible mainline I-205 improvements.

Comparison of Traffic Impacts

The traffic impacts of two alternative levels of industrial development--70 percent and 100 percent build-out--were modeled in addition to the Preferred Alternative (50 percent). As with the Preferred Alternative, the traffic impacts of the two other alternatives were modeled in

Table 8.1
TRACY INDUSTRIAL AREAS SPECIFIC PLAN
ALTERNATIVE PROGRAM SUMMARY TABLES

50% Build-out/ Preferred Alternative

PARCEL	GROSS ACREAGE	NET ACREAGE	OFFICE			GENERAL / LIGHT INDUSTRIAL			WAREHOUSE / DISTRIBUTION			TOTAL	TOTAL
			%	S.F.	Net Acres	%	S.F.	Net Acres	%	S.F.	Net Acres	S.F.	Employees
I-1	76.42	64.96	10%	66,320	5.25	42%	279,651	29.86	48%	325,175	29.86	671,146	1,135
I-2	142.13	120.81	10%	126,324	10.00	42%	518,843	55.40	48%	603,306	55.40	1,248,473	2,118
I-3	74.29	63.15	8%	50,530	4.00	43%	277,029	29.58	50%	322,126	29.58	649,684	1,073
I-4	10.00	8.50	25%	22,738	1.80	35%	31,374	3.35	40%	36,482	3.35	90,594	179
I-5	10.00	8.50	22%	21,475	1.70	0%	0	0.00	78%	74,052	6.80	95,527	166
I-6	34.09	28.98	5%	15,791	1.25	41%	124,373	13.28	53%	160,519	14.74	300,682	478
I-7	221.58	188.34	0%	0	0.00	46%	881,940	94.17	54%	1,025,511	94.17	1,907,451	2,869
I-8	74.95	63.71	0%	0	0.00	46%	298,382	31.86	54%	346,955	31.86	645,337	971
Totals	643.46	546.94	10%	303,178	24.00	37%	2,411,591	257.50	53%	2,894,126	265.76	5,608,895	8,989

PLANNING FACTORS:

- 15% of gross acreage to roads and drainageways
- Net acreage = gross acreage less roads and drainageways
- % = percentage of parcel's total square-footage
- Parking factors:
  - 1/300 s.f. office
  - 1/600 s.f. light industrial
  - 1/800 s.f. warehouse / disribution
- Site Utilization factors:
  - Office: 2 story, 29% building, 56% parking, 15% landscaping/circulation
  - Light Industrial: 1 story, 43% building, 24% parking, 33% landscaping/circulation
  - Warehouse/Distribution: 1 story, 50% building, 21% parking, 29% landscaping/circulation
- Parking coverage analyzed at 330 s.f. per car

Table 8.1 Continued
TRACY INDUSTRIAL AREAS SPECIFIC PLAN
ALTERNATIVE PROGRAM SUMMARY TABLES

70% Build-out Alternative

PARCEL	GROSS ACREAGE	NET ACREAGE	OFFICE			GENERAL / LIGHT INDUSTRIAL			WAREHOUSE / DISTRIBUTION			TOTAL	TOTAL
			%	S.F	Net Acres	%	S.F.	Net Acres	%	S.F.	Net Acres	S.F.	Employees
1-1	76.42	64.96	10%	92,848	5.25	42%	391,511	29.86	48%	455,246	29.86	939,605	1,589
1-2	142.13	120.81	10%	176,854	10.00	42%	726,380	55.40	48%	844,628	55.40	1,747,862	2,965
1-3	74.29	63.15	8%	70,741	4.00	43%	387,840	29.58	50%	450,977	29.58	909,558	1,502
1-4	10.00	8.50	25%	31,834	1.80	35%	43,924	3.35	40%	51,074	3.35	126,831	251
1-5	10.00	8.50	22%	30,065	1.70	0%	0	0.00	78%	103,673	6.80	133,738	232
1-6	34.09	28.98	5%	22,107	1.25	41%	174,122	13.28	53%	224,726	14.74	420,954	669
1-7	221.58	188.34	0%	0	0.00	46%	1,234,716	94.17	54%	1,435,716	94.17	2,670,431	4,017
1-8	74.95	63.71	0%	0	0.00	46%	417,734	31.86	54%	485,738	31.86	903,472	1,359
Totals	643.46	546.94	10%	424,449	24.00	37%	3,376,227	257.50	53%	4,051,777	265.76	7,852,452	12,585

100% Build-out Alternative

PARCEL	GROSS ACREAGE	NET ACREAGE	OFFICE			GENERAL / LIGHT INDUSTRIAL			WAREHOUSE / DISTRIBUTION			TOTAL	TOT
			%	S.F.	Net Acres	%	S.F.	Net Acres	%	S.F.	Net Acres	S.F.	Employees
1-1	76.42	64.96	10%	132,640	5.25	42%	559,302	29.86	48%	650,351	29.86	1,342,293	2,271
1-2	142.13	120.81	10%	252,648	10.00	42%	1,037,686	55.40	48%	1,206,612	55.40	2,496,946	4,235
1-3	74.29	63.15	8%	101,059	4.00	43%	554,057	29.58	50%	644,252	29.58	1,299,369	2,146
1-4	10.00	8.50	25%	45,477	1.80	35%	62,748	3.35	40%	72,963	3.35	181,188	359
1-5	10.00	8.50	22%	42,950	1.70	0%	0	0.00	78%	148,104	6.80	191,054	331
1-6	34.09	28.98	5%	31,581	1.25	41%	248,745	13.28	53%	321,037	14.74	601,363	956
1-7	221.58	188.34	0%	0	0.00	46%	1,763,879	94.17	54%	2,051,023	94.17	3,814,902	5,739
1-8	74.95	63.71	0%	0	0.00	46%	596,763	31.86	54%	693,911	31.86	1,290,674	1,942
Totals	643.46	546.94	5%	606,355	24	43%	4,823,181	258	52%	5,788,253	266	11,217,789	17,979

conjunction with full development of the Residential Areas Specific Plan and 550 infill development units. The trip distribution and traffic assignment assumed for the Preferred Alternative was also assumed for the 70 percent build-out and 100 percent build-out scenarios. The same trip generation rates were also used for all three alternatives.

A comparative analysis of the impacts of the Preferred Alternative (50 percent build-out) and the two alternatives' impacts on intersection service levels is presented in Table 8.2.

Analysis of Traffic Impacts

Both the 70 percent build-out and the 100 percent build-out scenarios would require additional traffic mitigation measures. Examining Table 8.2, it is evident that under the 70 percent build-out scenario a total of five intersections show unacceptable service levels (LOS "D" or worse) compared with three intersections under the Preferred Alternative (50 percent build-out). Given 100 percent build-out of the industrial areas, the traffic forecast model indicates the number of intersections at LOS "D" or worse would climb to ten.

For the significantly impacted intersections south of Eleventh Street, it will be possible under either of the alternatives to develop fairly simple and inexpensive mitigations that can be implemented within planned rights of way (ROW), e.g., turn pockets and auxiliary lanes not more than a few hundred feet in length. At the intersections of Eleventh Street with Tracy Boulevard and Holly-Central, the mitigations identified in Table 4.9 will be marginally adequate under the 70 percent build-out scenario and possibly adequate under the 100 percent build-out scenario.

On MacArthur Drive above Eleventh Street, more substantial mitigations appear warranted. Under the 70 percent build-out scenario it would be desirable to develop MacArthur as a six-lane facility; under the 100 percent build-out scenario it would be imperative to do so.

Freeway ramp and mainline freeway impacts may be of even greater significance than impacts to local streets. Examination of Table 8.3 and 8.4 indicates that under either Industrial Areas Specific Plan alternative, the eastbound on ramp at the MacArthur interchange on I-205 will be close to or above theoretical capacity--within ten percent of capacity under the 70 percent

Table 8.2

Comparison of Volume/Capacity Ratios and Service Levels
at Key Intersections - Preferred Industrial Alternative
and 70 Percent and 100 Percent Build-Out of Industrial Areas

	Intersection	50% Build-Out	70% Build-Out	100% Build-Out
1.	Corral Hollow/Grant Line	0.36A	0.34A	0.43A
2.	Lincoln Bl./Grant Line	0.45A	0.46A	0.52A
3.	Tracy/Grant Line	0.67A	0.68B	0.69B
4.	Corral Hollow/Lowell	0.18A	0.19A	0.21A
5.	Lincoln/Lowell	0.20A	0.20A	0.20A
6.	Tracy/Lowell	0.51A	0.51A	0.52A
7.	Byron/Eleventh	0.50A	0.50A	0.50A
8.	Corral Hollow/Eleventh	0.69B	0.71C	0.75C
9.	Lincoln/Eleventh	0.42A	0.44A	0.47A
10.	Tracy/Eleventh	0.91E*	0.91E*	0.93E*
11.	Holly-Central/Eleventh	0.86D*	0.88D*	0.91E*
12.	Corral Hollow/Cypress	0.40A	0.43A	0.47A
13.	Tracy/Centre Court	0.44A	0.44A	0.45A
14.	MacArthur/Third-Mt. Diablo	0.37A	0.45A	0.56A
15.	Corral Hollow/Schulte	0.80D*	0.87D*	1.01F*
16.	Sycamore/Schulte*	0.53A	0.61B	0.82D*
17.	Tracy/Schulte	0.54A	0.55A	0.57A
18.	Central/Schulte	0.71C	0.75C	0.82D*
19.	MacArthur/Schulte	0.43A	0.52A	0.66B
20.	Tracy/Central	0.38A	0.38A	0.38A
21.	Tracy/Valpico	0.65B	0.85D*	1.29F*
22.	East/Grant Line	0.34A	0.35A	0.37A
23.	East/Eleventh	0.37A	0.39A	0.41A
24.	MacArthur/Grant Line	0.62B	0.76C	1.00F*
25.	MacArthur/Eleventh	0.47A	0.63B	0.85D*
26.	Corral Hollow/Valpico	0.26A	0.32A	0.44A
27.	MacArthur/Valpico	0.60B	0.81D*	1.13F*
28.	Corral Hollow/Linne	0.36A	0.47A	0.63A
29.	MacArthur/Linne	0.45A	0.60B	0.83D*
30.	MacArthur/Linne	0.36A	0.46A	0.61B

*Intersection requiring mitigation.

Note: All three scenarios assume full development of the Residential Areas Specific Plan Preferred Alternative and 550 infill development units.

Table 8.3

Freeway Ramp Volumes-PM Peak Hour
(70 Percent Build-Out)

Ramp Location	1986 Existing Volume*	Volumes Added by Specific Plan Including Residential	Total Volumes
I-205			
1. Eleventh St. Interchange			
Westbound on	250	410	660
Eastbound off	250	830	1,080
2. Grant Line Interchange			
Eastbound on	150	20	170
Westbound off	150	40	190
Westbound on	100	140	240
Eastbound off	80	280	360
3. Tracy Bl. Interchange			
Eastbound on	370	30	400
Westbound off	370	60	430
Westbound on	220	20	240
Eastbound off	220	10	230
4. MacArthur Interchange			
Eastbound on	220	1,200	1,420
Westbound off	210	550	760
Westbound on	70	230	300
Eastbound off	70	100	170
I-580			
5. Corral Hollow Interchange			
Eastbound on	30	0	30
Westbound off	30	0	30
Westbound on	20	240	260
Eastbound off	20	120	140
6. Chrisman Interchange			
Eastbound on	50	180	230
Westbound off	90	90	180
Westbound on	0	0	0
Eastbound off	0	0	0

*Estimated based on CalTrans counts in 1976 and 1980.

Table 8.4

Freeway Ramp Volumes-PM Peak Hour
(100 Percent Build-Out)

Ramp Location	1986 Existing Volume*	Volumes Added by Specific Plan Including Residential	Total Volumes
I-205			
1. Eleventh St. Interchange			
Westbound on	250	410	660
Eastbound off	250	830	1,080
2. Grant Line Interchange			
Eastbound on	150	20	170
Westbound off	150	40	190
Westbound on	100	140	240
Eastbound off	80	280	360
3. Tracy Bl. Interchange			
Eastbound on	370	30	400
Westbound off	370	60	430
Westbound on	220	20	240
Eastbound off	220	10	230
4. MacArthur Interchange			
Eastbound on	220	1,720	1,940
Westbound off	210	780	990
Westbound on	70	330	400
Eastbound off	70	140	210
I-580			
5. Corral Hollow Interchange			
Eastbound on	30	0	30
Westbound off	30	0	30
Westbound on	20	340	360
Eastbound off	20	170	190
6. Chrisman Interchange			
Eastbound on	50	260	340
Westbound off	90	130	220
Westbound on	0	0	0
Eastbound off	0	0	0

*Estimated based on CalTrans counts in 1976 and 1980.

Table 8.5

I-205 and I-580 Mainline Volumes - PM Peak Hour
(70 Percent Build-Out)

Location	1986 Existing Volume	Volumes Added by Specific Plan Including Residential*	Total Volumes
I-205			
West of Eleventh Street Interchange			
Westbound	--	790	--
Eastbound	--	1,220	--
Total	3,150	2,040	5,160
East of MacArthur Boulevard Interchange			
Westbound	--	550	--
Eastbound	--	1,200	--
Total	2,950	1,750	4,700
I-580			
West of Corral Hollow Interchange			
Westbound	--	240	--
Eastbound	--	120	--
Total	1,900	360	2,260
East of Chrisman Road Interchange			
Westbound	--	90	--
Eastbound	--	180	--
Total	730	270	1,000

*CalTrans, 1985 Traffic Volumes

Table 8.6

I-205 and I-580 Mainline Volumes - PM Peak Hour
(100 Percent Build-Out)

Location	1986 Existing Volume	Volumes Added by Specific Plan Including Residential*	Total Volumes
I-205			
West of Eleventh Street Interchange			
Westbound	--	900	--
Eastbound	--	1,260	--
Total	3,150	2,160	5,300
East of MacArthur Boulevard Interchange			
Westbound	--	780	--
Eastbound	--	1,720	--
Total	2,950	2,500	5,450
I-580			
West of Corral Hollow Interchange			
Westbound	--	340	--
Eastbound	--	170	--
Total	1,900	510	2,410
East of Chrisman Road Interchange			
Westbound	--	260	--
Eastbound	--	130	--
Total	730	390	1,120

*CalTrans, 1985 Traffic Volumes

build-out and 50 percent over capacity under the 100 percent build-out scenario. While some traffic may divert to either the Tracy Boulevard interchange to the west or use Grant Line Road to access I-5 interchanges at Berry Road and Kasson Road to the east, demand at the MacArthur/I-205 eastbound ramp will likely approach capacity (approximately 1500 vehicles per hour) during the p.m. peak. It may be necessary to develop a higher capacity interchange at this location.

Mainline I-205 volumes would be between 5,000 and 6,000 both east and west of the City under the two alternative scenarios. (See Tables 8.4 and 8.5). Under the 100 percent build-out scenario, the current two eastbound lanes I-205 would likely be at capacity in the p.m. peak hour east of the MacArthur interchange. Widening I-205 to six lanes would mitigate the traffic of development in Tracy; however, developments in communities east of Tracy will be adding additional traffic during the same timeframe as the Tracy Residential and Industrial Specific Plans. Such cumulative development in the I-205 corridor needs to be assessed before planning improvements on I-205.

In contrast to I-205, I-580 ramps and mainline lanes in the study area will have considerable excess capacity, even under the 100 percent build-out scenario.

9.0

Short-Term
Long-Term
Productivity

9. SHORT-TERM USE OF MAN'S ENVIRONMENT VERSUS THE MAINTENANCE AND ENHANCEMENT OF LONG-TERM PRODUCTIVITY

In terms of current overall productivity, the primary value of the project area focuses upon its passive status as partially productive agriculture and open space. By anticipating significant urban development, the proposed project places strong emphasis upon socially and economically productive long-term uses. As the project is implemented, values related to the provision of housing, commercial services, employment and an expansion of the local economic base would be realized. At the same time the inherent productivity of the project area as agricultural land and open space would be reduced. From a local perspective, the potential for implementing the proposed urban development while retaining existing values is slight. Provisions within the proposed plan which mandate open space (e.g., buffers, parkways, and storm drainage channels) will aid in maintaining important environmental quality values. A general change from the current perception of expansive open space to one of urban development would, however, be unavoidable.

Development as proposed for Tracy presents tradeoff considerations similar to most urban development in the region. To some extent (dependent upon response to mandatory and optional guidelines for the project), existing visual, open space and biological productivity will be lost in favor of the social and economic productivity of urban development and growth. In this case, significant existing values may be retained and integrated while growth is accommodated in an area not characterized by high agricultural productivity. A long-term overall commitment of the project area to an urban focus will result.

10.0

Energy Supplies

10. IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF ENERGY SUPPLIES AND OTHER RESOURCES

Implementation of the proposed project would commit the project area, as a land resource, to long-term industrial use. Industrial facilities and office complexes would be built, utilities installed and a network of roadways constructed, all comprising a portion of an urban community. At that point, the likelihood of reversion to a less intense or significantly different set of uses would become highly improbable because of the large labor and capital investments already committed. As previously discussed, to the extent that open space is preserved through adherence to proposed planning policies and development standards, some conservation of these existing resources can be achieved.

As in any urban development project, implementation of the proposed project will require commitment of several types of limited resources both for actual construction and long-term operation. Obviously, facility construction overall will require relatively large commitments of such resources as lumber and other forest products, sand and gravel, asphalt, petrochemical construction materials, various metals, equipment fuel, and other building materials manufactured from natural resources. In addition, the project would require an irreversible commitment of labor, capital and social and public maintenance services.

Alternative energy sources, such as solar energy, are presently not in widespread use and it will probably be some time before a real savings in finite energy supplies, e.g., oil and natural gas, can be realized through widespread solar planning and design. Therefore, the proposed project, if approved and implemented, will result in an irretrievable commitment of finite energy resources. Although urban development on the site will comply with all applicable state and local insulation, building and conservation standards, the increase in the intensity of land uses will result in a concomitant increase in energy consumption. Inasmuch as fossil fuels are the principal source of energy, project implementation will involve increased consumption of fuel oil (electricity), natural gas and gasoline for transportation of future residents.

11.0

List of Preparers, Bibliography & Persons Contacted

11. BIBLIOGRAPHY AND LIST OF PREPARERS

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12.0

Appendices

TRACY RESIDENTIAL SPECIFIC PLANS
EXISTING CONDITIONS---1986
DKS ASSOCIATES

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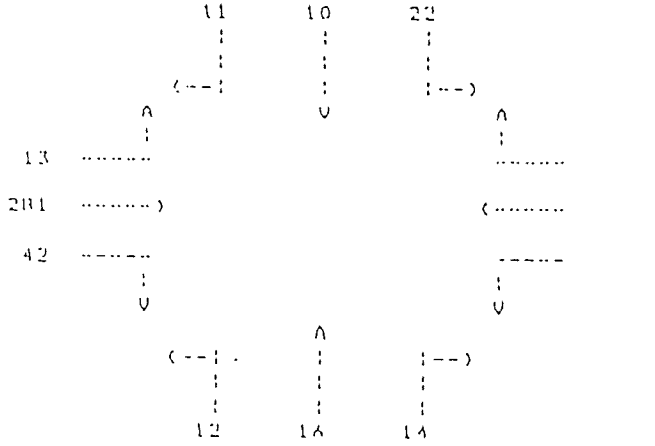
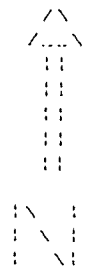
DETAILED REPORT FOR INTERSECTION 1

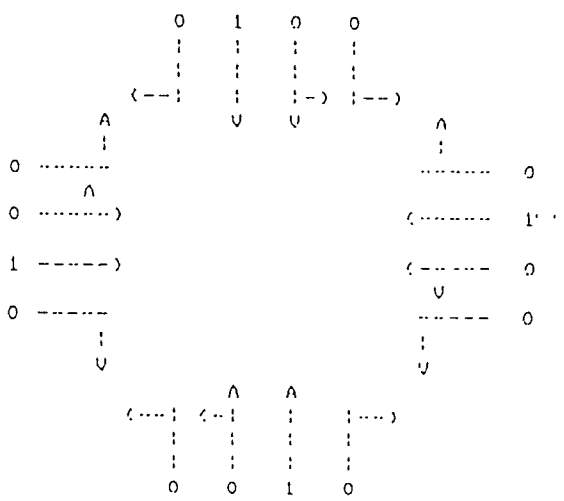
Corral Hollow & Grant Line

TOTAL VOLUMES





LANE CONFIGURATION



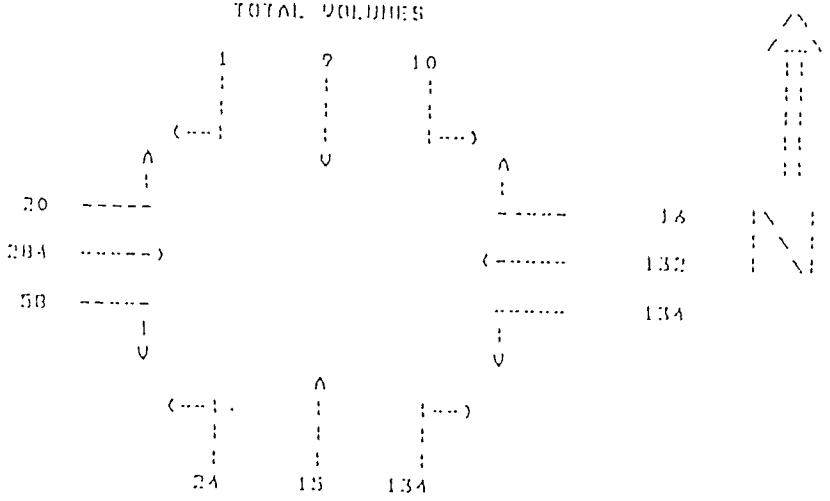
STREET	DIRECTION	CRITICAL VOLUME PER LANE	TOTAL APPROACH VOLUME	MINIMUM LEFT TURN LANE LENGTH (FT PER LANE)	SIGNAL CODE	MINIMUM GREEN	CAPACITY PER LANE
Corral Hollow	NORTHBOUND	42	42	0	1	0	1500
Corral Hollow	SOUTHBOUND	22	43	0	1	0	1500
Grant Line	EASTBOUND	336	336	0	1	0	1500
Grant Line	WESTBOUND	14	121	0	1	0	1500
TOTAL		414	542		CYCLE LENGTH	60	
PER LANE CAPACITY		1500					
"RAW" V/C RATIO		0.28					
LOSS DUE TO MINIMUM PED TIME		0.00					
VOLUME - CAPACITY RATIO		0.28					
SERVICE LEVEL		A					

APPENDIX A
TRAFFIC DATA

DETAILED REPORT FOR INTERSECTION 2

Lincoln Blvd & Grant Line

TOTAL VOLUMES



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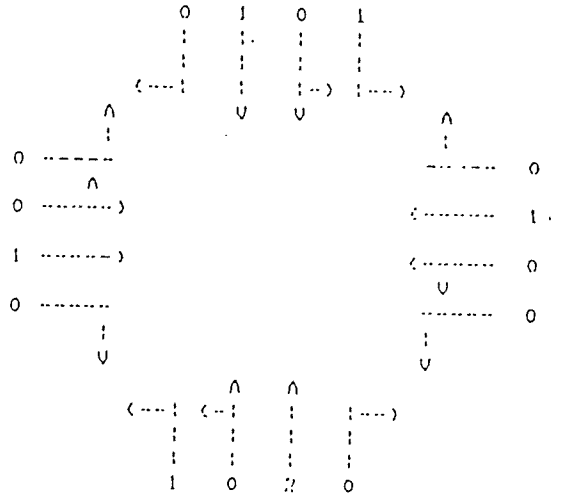
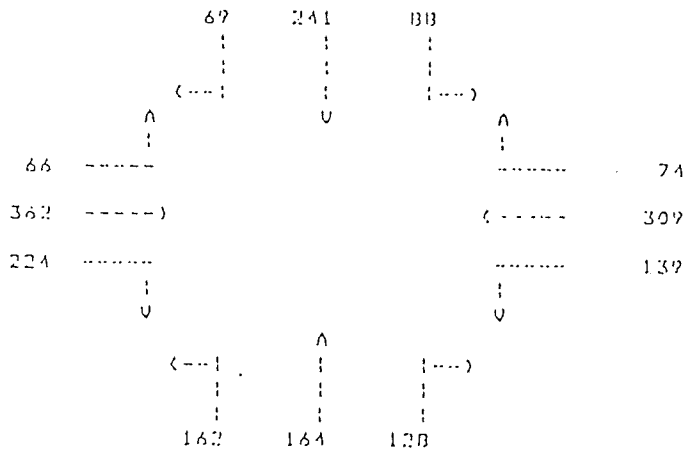


STREET	DIRECTION	CRITICAL VOLUME PER LANE	TOTAL APPROACH VOLUME	MINIMUM LEFT TURN LANE LENGTH (FT PER LANE)	SIGNAL CODE	MINIMUM GREEN	CAPACITY PER LANE
Lincoln Blvd	NORTHBOUND	134	173	23	1	0	1500
Lincoln Blvd	SOUTHBOUND	10	20	14	1	0	1500
Grant Line	EASTBOUND	342	342	0	1	0	1500
Grant Line	WESTBOUND	134	282	0	1	0	1500
TOTAL		640	832				
PER LANE CAPACITY		1500			CYCLE LENGTH	60	
"RAW" V/C RATIO		0.43					
LOSS DUE TO MINIMUM PER LANE		0.00					
VOLUME - CAPACITY RATIO		0.43					
SERVICE LEVEL		A					

DETAILED REPORT FOR INTERSECTION 3

Tracy Blvd & Grant Line

TOTAL VOLUMES



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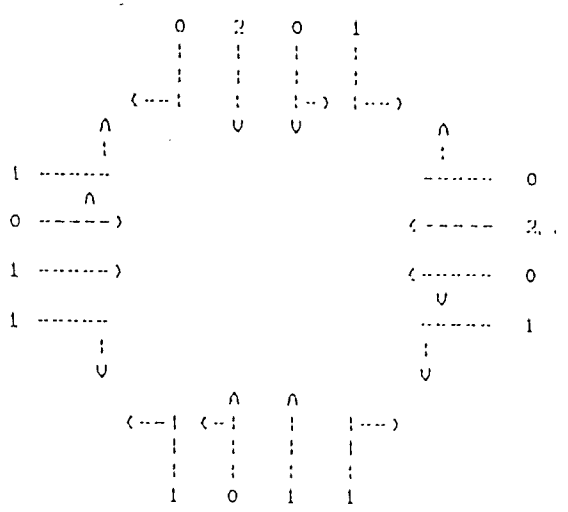

STREET	DIRECTION	CRITICAL VOLUME PER LANE	TOTAL APPROACH VOLUME	MINIMUM LEFT TURN LANE LENGTH (FT PER LANE)	SIGNAL CODE	MINIMUM GREEN	CAPACITY PER LANE
Tracy Blvd	NORTHBOUND	162	454	111	2	0	1500
Tracy Blvd	SOUTHBOUND	155	398	84	2	0	1500
Grant Line	EASTBOUND	362	652	50	5	0	1500
Grant Line	WESTBOUND	139	522	96	5	0	1500

TOTAL	818	2026	CYCLE LENGTH 60
PER LANE CAPACITY	1375		
"RAW" V/C RATIO	0.59		
LOSS DUE TO MINIMUM PED TIME	0.00		
VOLUME - CAPACITY RATIO	0.59		
SERVICE LEVEL	A		

TRACY RESIDENTIAL SPECIFIC PLANS
EXISTING CONDITIONS--1986
DKS ASSOCIATES

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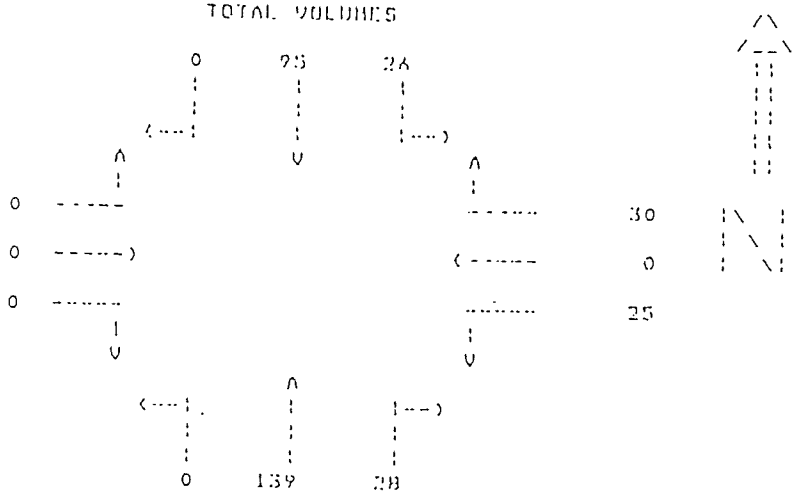
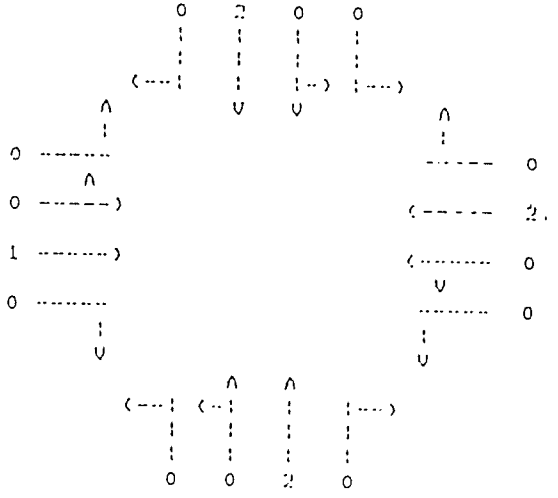
DETAILED REPORT FOR INTERSECTION 5

Lincoln Blvd. & Lowell Ave.

TOTAL VOLUMES



LANE CONFIGURATION



STREET	DIRECTION	CRITICAL VOLUME PER LANE	TOTAL APPROACH VOLUME	MINIMUM LEFT TURN LANE LENGTH (FT PER LANE)	SIGNAL CODE	MINIMUM GREEN	CAPACITY PER LANE
Lincoln Blvd.	NORTHBOUND	83	167	0	1	0	1500
Lincoln Blvd.	SOUTHBOUND	26	121	0	1	0	1500
Lowell Ave.	EASTBOUND	0	0	0	1	0	1500
Lowell Ave.	WESTBOUND	30	55	0	1	0	1500

TOTAL	139
PER LANE CAPACITY	1500
"RAW" V/C RATIO	0.09
LOSS DUE TO MINIMUM PED TIME	0.00
VOLUME - CAPACITY RATIO	0.09
SERVICE LEVEL	A

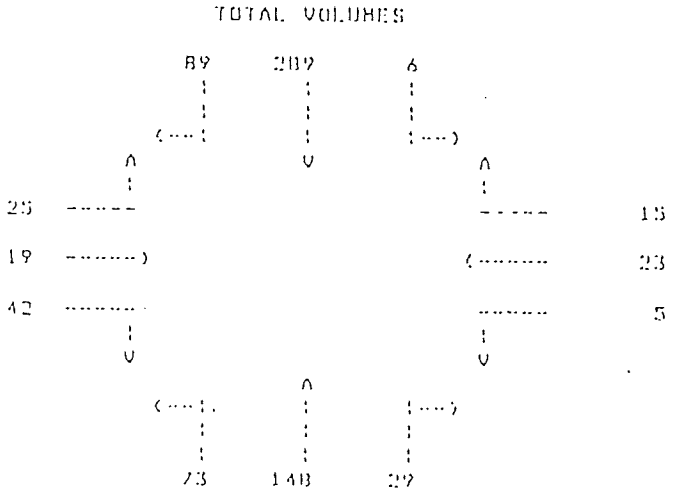
TOTAL APPROACH VOLUME: 343

CYCLE LENGTH: 60

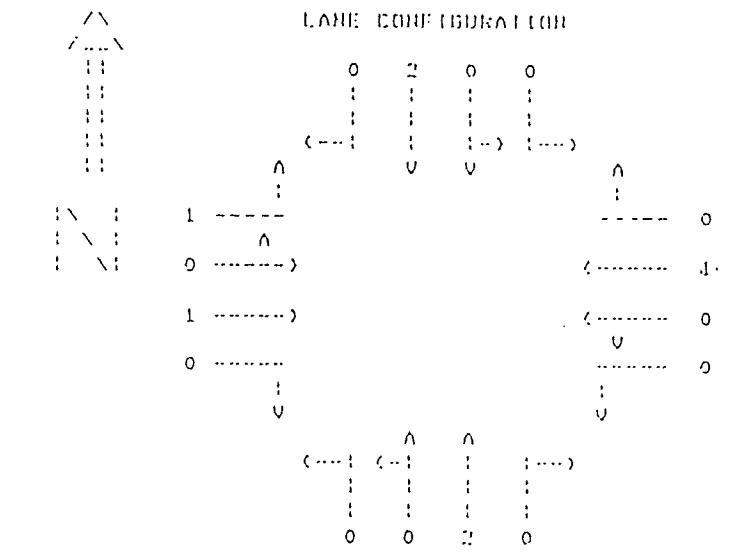
DETAILED REPORT FOR INTERSECTION 6

Tracy Blvd. & Lowell Ave.

TOTAL VOLUMES



LANE CONFIGURATION



STREET	DIRECTION	CRITICAL VOLUME PER LANE	TOTAL APPROACH VOLUME	MINIMUM LEFT TURN LANE LENGTH (FT PER LANE)	SIGNAL CODE	MINIMUM GREEN	CAPACITY PER LANE
Tracy Blvd.	NORTHBOUND	73	250	0	1	0	1500
Tracy Blvd.	SOUTHBOUND	192	384	0	1	0	1500
Lowell Ave.	EASTBOUND	25	86	24	4	0	1500
Lowell Ave.	WESTBOUND	43	43	0	1	0	1500

TOTAL	333	763	CYCLE LENGTH 60
PER LANE CAPACITY	1500		
TRAFFIC V/C RATIO	0.22		
LOSS DUE TO MINIMUM PER TIME	0.00		
VOLUME - CAPACITY RATIO	0.22		
SERVICE LEVEL	A		

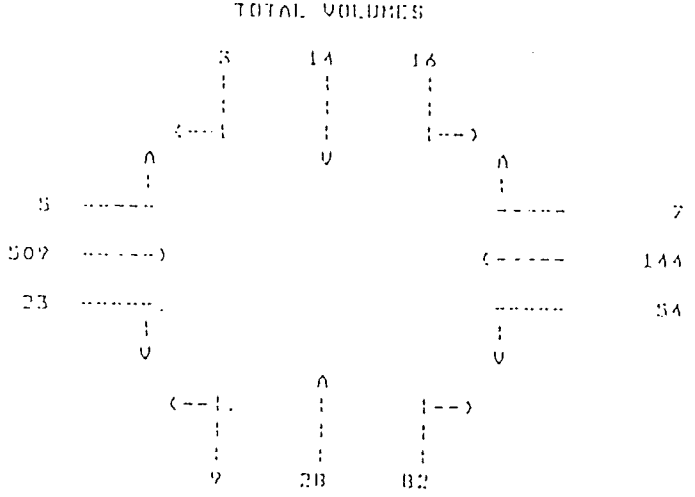
TRACY RESIDENTIAL SPECIFIC PLANS
EXISTING CONDITIONS--1986
DKS ASSOCIATES

4/4/86 13:45:41

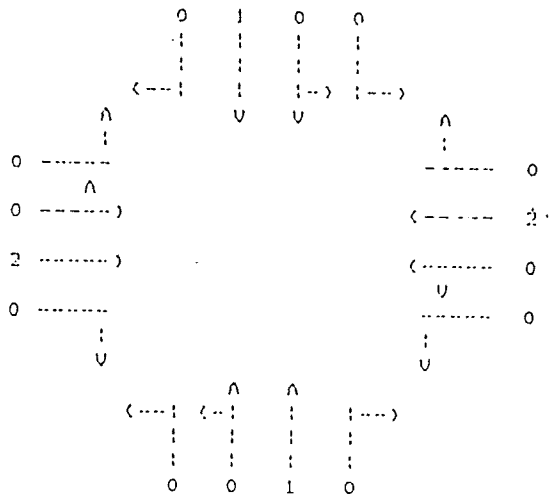
DETAILED REPORT FOR INTERSECTION 8

Corral Hollow & Eleventh

TOTAL VOLUMES



LANE CONFIGURATION

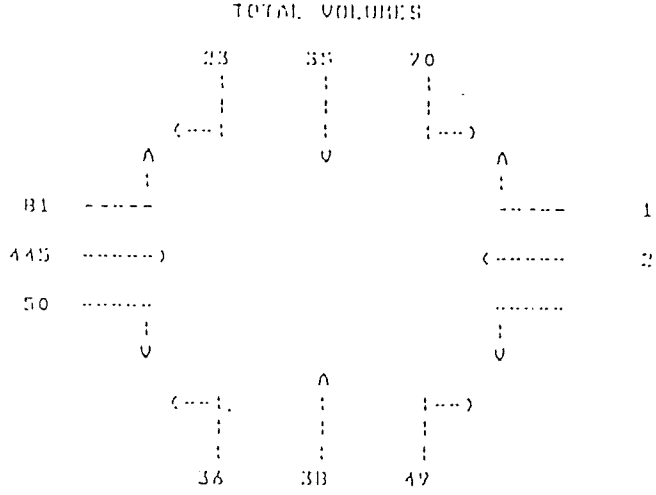


STREET	DIRECTION	CRITICAL VOLUME PER LANE	TOTAL APPROACH VOLUME	MINIMUM LEFT TURN LANE LENGTH (FT PER LANE)	SIGNAL CODE	MINIMUM GREEN	CAPACITY PER LANE
Corral Hollow	NORTHBOUND	119	119	0	1	0	1500
Corral Hollow	SOUTHBOUND	16	33	0	1	0	1500
Eleventh	EASTBOUND	268	537	0	1	0	1500
Eleventh	WESTBOUND	34	295	0	1	0	1500
TOTAL		457	824		CYCLE LENGTH	60	
PER LANE CAPACITY		1500					
"RAW" V/C RATIO		0.30					
LOSS DUE TO MINIMUM PER TIME		0.00					
VOLUME - CAPACITY RATIO		0.30					
SERVICE LEVEL		A					

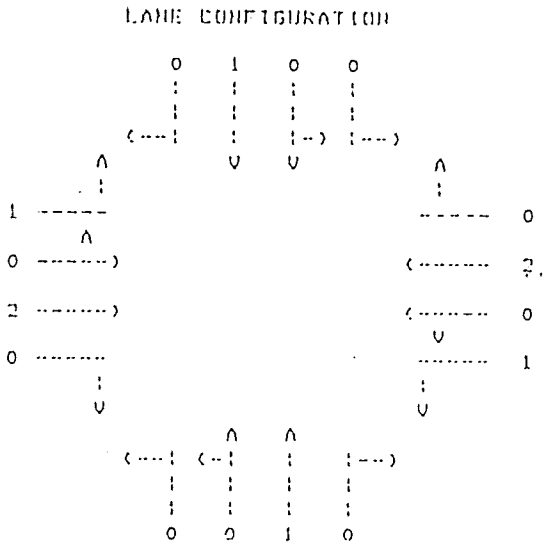
DETAILED REPORT FOR INTERSECTION 9

Lincoln Blvd. & Eleventh St.

TOTAL VOLUMES



LANE CONFIGURATION



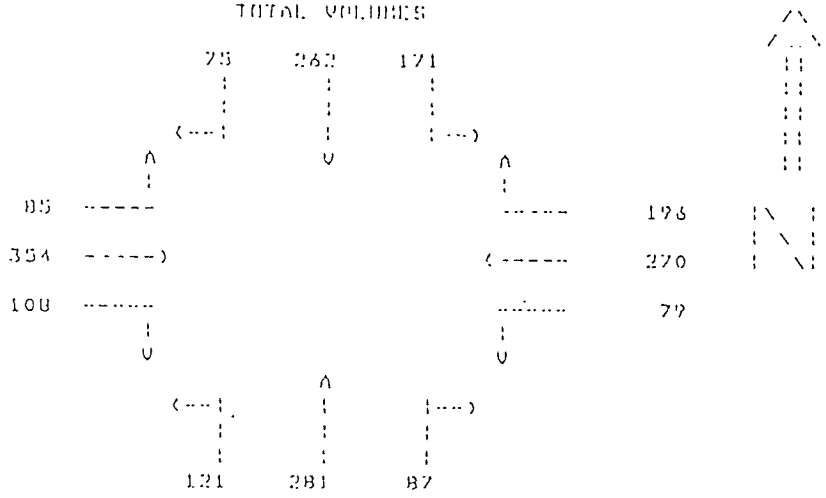
STREET	DIRECTION	CRITICAL VOLUME PER LANE	TOTAL APPROACH VOLUME	MINIMUM LEFT TURN LANE LENGTH (FT PER LANE)	SIGNAL CODE	MINIMUM GREEN	CAPACITY PER LANE
Lincoln Blvd.	NORTHBOUND	123	123	0	1	0	1500
Lincoln Blvd.	SOUTHBOUND	70	128	0	1	0	1500
Eleventh St.	EASTBOUND	247	526	59	2	0	1500
Eleventh St.	WESTBOUND	54	464	42	2	0	1500

TOTAL	424	1291	CYCLE LENGTH 60
PER LANE CAPACITY	1425		
TRAFFIC V/C RATIO	0.35		
LOSS DUE TO MINIMUM PED TIME	0.00		
VOLUME - CAPACITY RATIO	0.35		
SERVICE LEVEL	A		

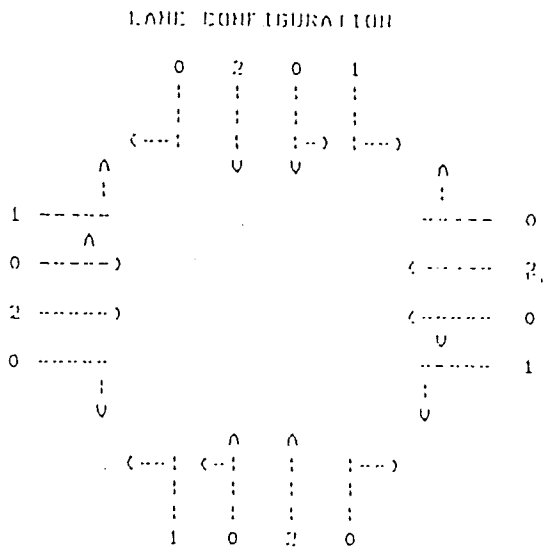
DETAILED REPORT FOR INTERSECTION 10

Tracy Blvd & Eleventh St.

TOTAL VOLUMES



LANE CONFIGURATION



STREET	DIRECTION	CRITICAL VOLUME PER LANE	TOTAL APPROACH VOLUME	MINIMUM LEFT TURN LANE LENGTH (FT PER LANE)	SIGNAL CODE	MINIMUM GREEN	CAPACITY PER LANE
Tracy Blvd	NORTHBOUND	164	489	162	2	0	1500
Tracy Blvd	SOUTHBOUND	171	508	229	2	0	1500
Eleventh St.	EASTBOUND	85	542	117	2	0	1500
Eleventh St.	WESTBOUND	233	545	169	2	0	1500

TOTAL	823	2084
PER LANE CAPACITY	1375	
"RAW" V/C RATIO	0.49	
LOSS DUE TO MINIMUM PER TIME	0.00	
VOLUME - CAPACITY RATIO	0.49	
SERVICE LEVEL	A	

CYCLE LENGTH 120

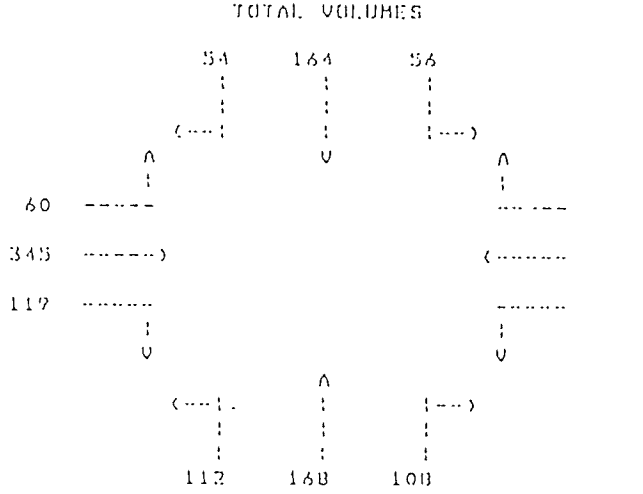
TRACY RESIDENTIAL SPECIFIC PLANS
EXISTING CONDITIONS--1986
DKS ASSOCIATES

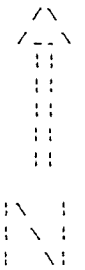
4/4/86 13:45:42

DETAILED REPORT FOR INTERSECTION 11

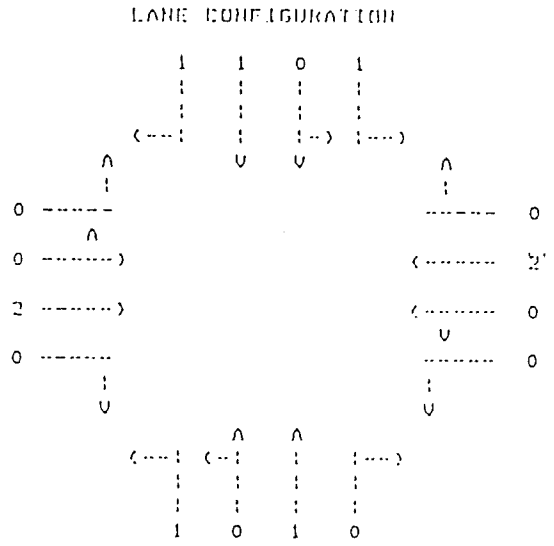
Holly-Central & Eleventh St.

TOTAL VOLUMES





LANE CONFIGURATION

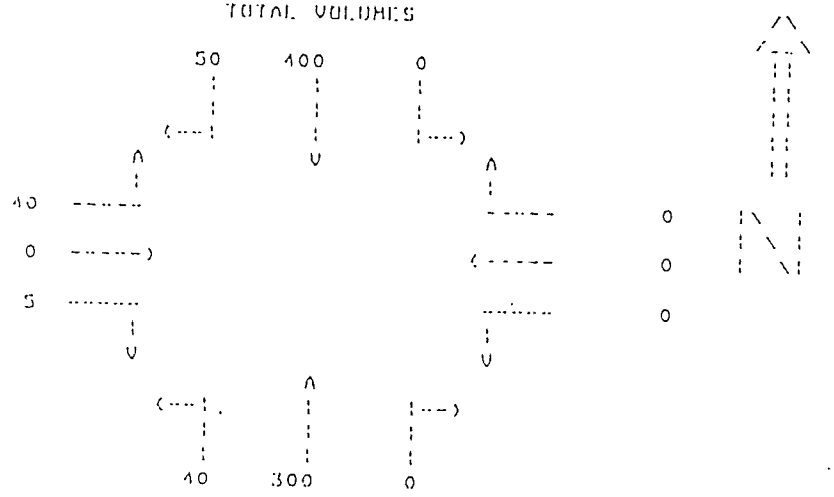


STREET	DIRECTION	CRITICAL VOLUME PER LANE	TOTAL APPROACH VOLUME	MINIMUM LEFT TURN LANE LENGTH (FT PER LANE)	SIGNAL CODE	MINIMUM GREEN	CAPACITY PER LANE
Holly-Central	NORTHBOUND	224	388	151	2	0	1500
Holly-Central	SOUTHBOUND	56	274	80	2	0	1500
Eleventh St.	EASTBOUND	60	524	0	1	0	1500
Eleventh St.	WESTBOUND	320	641	0	1	0	1500
TOTAL		712	1827		CYCLE LENGTH	120	
PER LANE CAPACITY		1425					
"RAW" V/C RATIO		0.50					
LOSS DUE TO MINIMUM PER TIME		0.00					
VOLUME - CAPACITY RATIO		0.50					
SERVICE LEVEL		A					

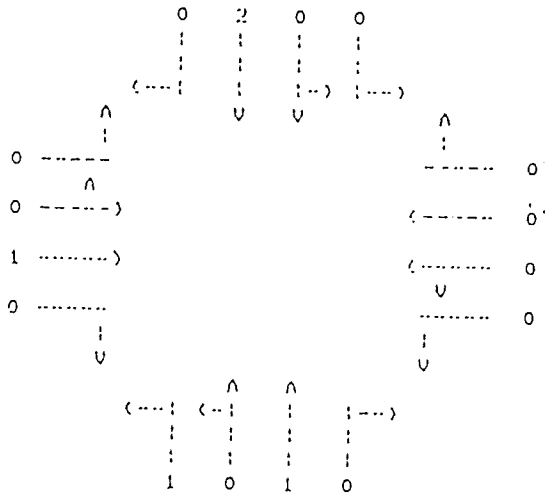
DETAILED REPORT FOR INTERSECTION 13

Tracy Blvd. & Centre Court

TOTAL VOLUMES



LANE CONFIGURATION



STREET	DIRECTION	CRITICAL VOLUME PER LANE	TOTAL APPROACH VOLUME	MINIMUM LEFT TURN LANE LENGTH (FT PER LANE)	SIGNAL CODE	MINIMUM GREEN	CAPACITY PER LANE
Tracy Blvd.	NORTHBOUND	300	340	33	2	0	1500
Tracy Blvd.	SOUTHBOUND	0	450	0	2	0	1500
Centre Court	EASTBOUND	45	45	0	3	0	1500
Centre Court	WESTBOUND	0	0	0	0	0	1500

TOTAL	345
PER LANE CAPACITY	1425
"RAW" V/C RATIO	0.24
LOSS DUE TO MINIMUM PER TIME	0.00
VOLUME - CAPACITY RATIO	0.24
SERVICE LEVEL	A

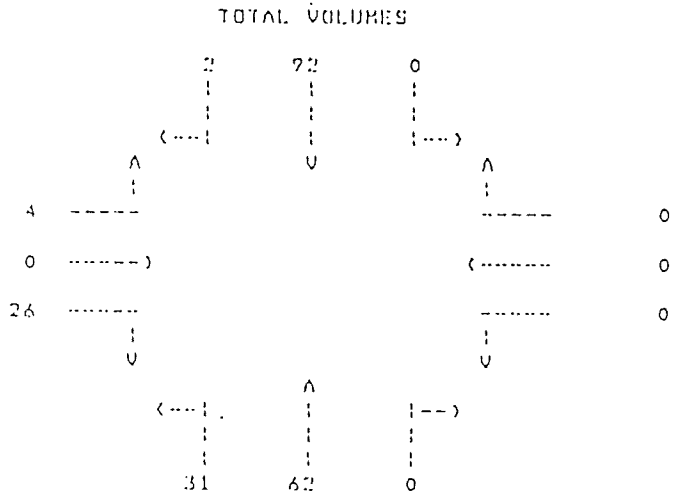
TOTAL APPROACH VOLUME: 835

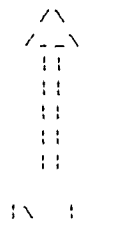
CYCLE LENGTH: 60

DETAILED REPORT FOR INTERSECTION 14

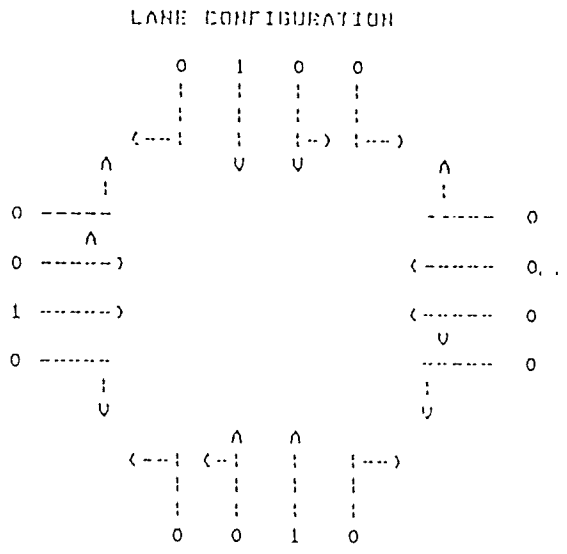
MacArthur Dr. & 3rd/Mt. Diablo

TOTAL VOLUMES





LANE CONFIGURATION



STREET	DIRECTION	CRITICAL VOLUME PER LANE	TOTAL APPROACH VOLUME	MINIMUM LEFT TURN LANE LENGTH (FT PER LANE)	SIGNAL CODE	MINIMUM GREEN	CAPACITY PER LANE
MacArthur Dr.	NORTHBOUND	31	93	0	1	0	1500
MacArthur Dr.	SOUTHBOUND	94	94	0	1	0	1500
3rd/Mt. Diablo	EASTBOUND	30	30	0	3	0	1500
3rd/Mt. Diablo	WESTBOUND	0	0	0	0	0	1500
TOTAL		155	217		CYCLE LENGTH	60	
PER LANE CAPACITY		1500					
"RAW" V/C RATIO		0.10					
LOSS DUE TO MINIMUM PED TIME		0.00					
VOLUME - CAPACITY RATIO		0.10					
SERVICE LEVEL		A					

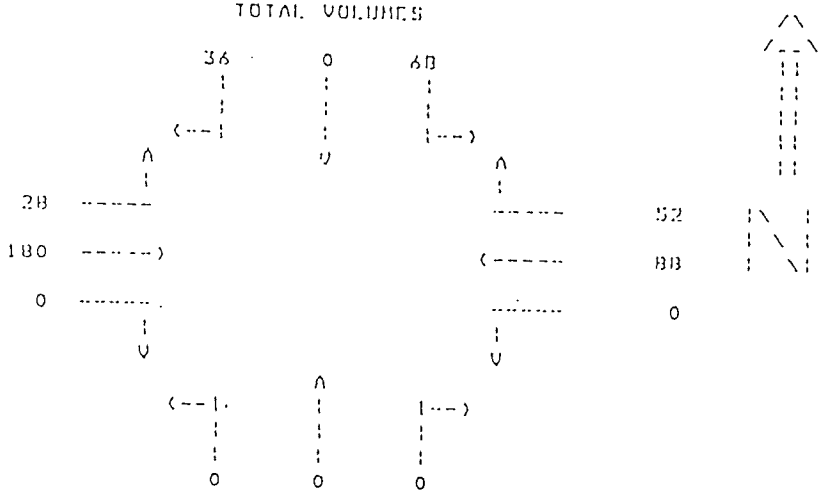
TRACY RESIDENTIAL SPECIFIC PLANS
EXISTING CONDITIONS--1986
DKS ASSOCIATES

4/4/86 13:45:52

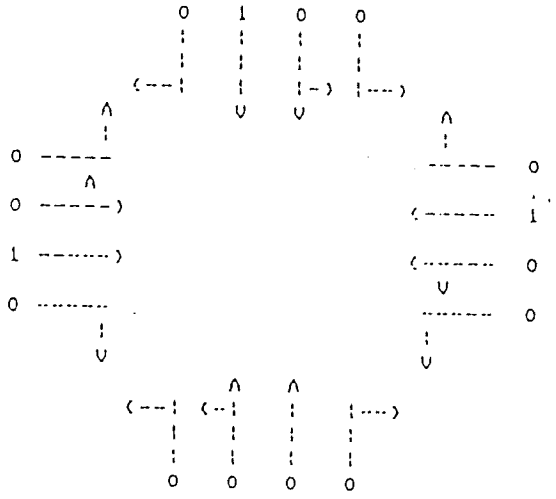
DETAILED REPORT FOR INTERSECTION 18

Central & Schulte

TOTAL VOLUMES



LANE CONFIGURATION



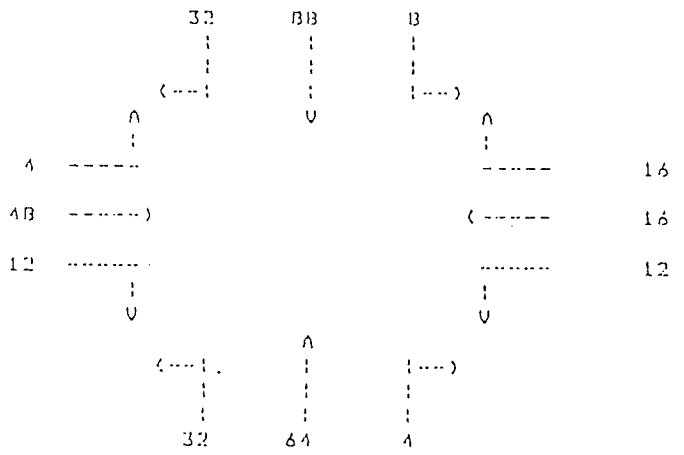
STREET	DIRECTION	CRITICAL VOLUME PER LANE	TOTAL APPROACH VOLUME	MINIMUM LEFT TURN LANE LENGTH (FT PER LANE)	SIGNAL CODE	MINIMUM GREEN	CAPACITY PER LANE
Central	NORTHBOUND	0	0	0	0	0	1500
Central	SOUTHBOUND	104	104	0	3	0	1500
Schulte	EASTBOUND	208	208	0	1	0	1500
Schulte	WESTBOUND	0	140	0	1	0	1500

TOTAL	312	452	
PER LANE CAPACITY	1500		
"TRAP" V/C RATIO	0.21	CYCLE LENGTH	60
LOSS DUE TO MINIMUM PER TIME	0.00		
VOLUME + CAPACITY RATIO	0.21		
SERVICE LEVEL	A		

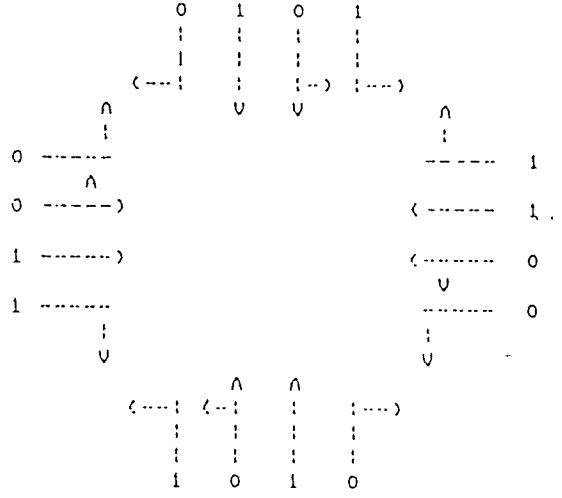
DETAILED REPORT FOR INTERSECTION 19

MacArthur & Schulte

TOTAL VOLUMES



LANE CONFIGURATION



STREET	DIRECTION	CRITICAL VOLUME PER LANE	TOTAL APPROACH VOLUME	MINIMUM LEFT TURN LANE LENGTH (FT PER LANE)	SIGNAL CODE	MINIMUM GREEN	CAPACITY PER LANE
MacArthur	NORTHBOUND	32	100	28	4	0	1500
MacArthur	SOUTHBOUND	120	128	13	1	0	1500
Schulte	EASTBOUND	52	64	0	1	0	1500
Schulte	WESTBOUND	12	44	0	1	0	1500

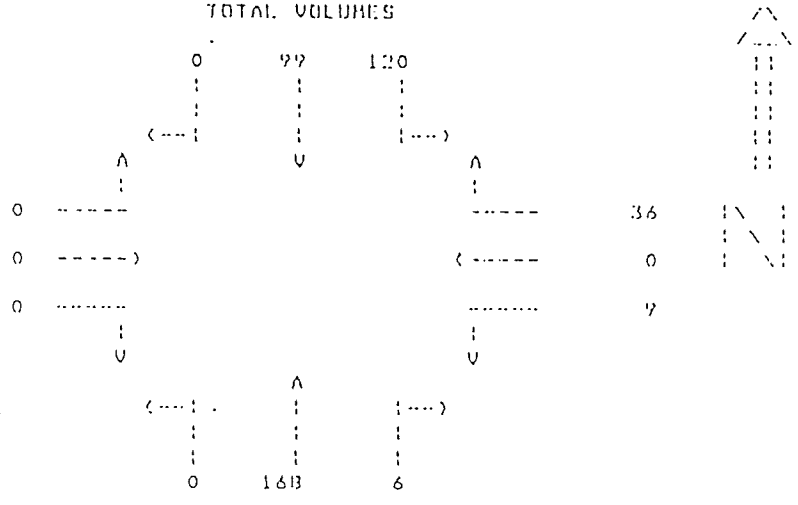
TOTAL	216	336
PER LANE CAPACITY	1500	
"RAW" V/C RATIO	0.14	
LOSS DUE TO MINIMUM PED TIME	0.00	
VOLUME - CAPACITY RATIO	0.14	
SERVICE LEVEL	A	

CYCLE LENGTH 60

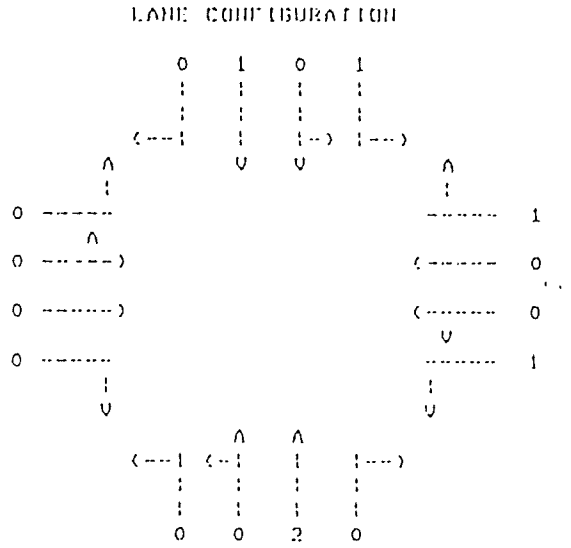
DETAILED REPORT FOR INTERSECTION 20

Tracy Blvd. & Central

TOTAL VOLUMES



LANE CONFIGURATION



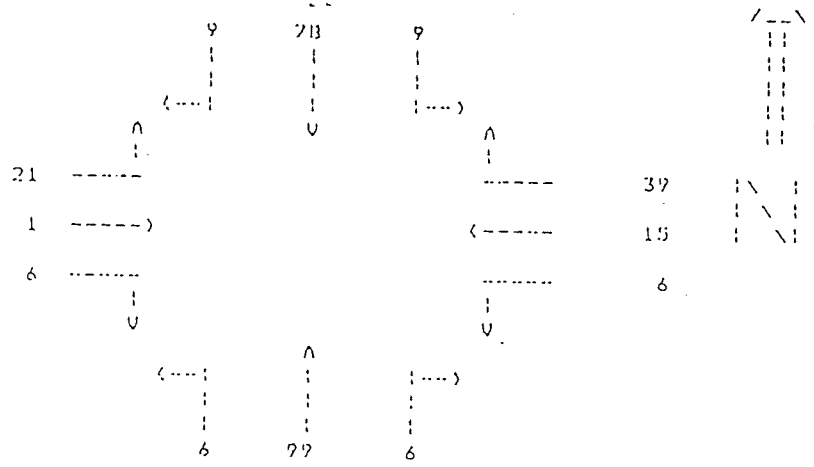
STREET	DIRECTION	CRITICAL VOLUME PER LANE	TOTAL APPROACH VOLUME	MINIMUM LEFT TURN LANE LENGTH (FT PER LANE)	SIGNAL CODE	MINIMUM GREEN	CAPACITY PER LANE
Tracy Blvd.	NORTHBOUND	87	174	0	1	0	1500
Tracy Blvd.	SOUTHBOUND	120	219	84	1	0	1500
Central	EASTBOUND	0	0	0	0	0	1500
Central	WESTBOUND	36	45	14	3	0	1500

TOTAL	243	438	CYCLE LENGTH 60
PER LANE CAPACITY	1500		
"RAW" V/C RATIO	0.16		
LOSS DUE TO MINIMUM PER TIME	0.00		
VOLUME - CAPACITY RATIO	0.16		
SERVICE LEVEL	A		

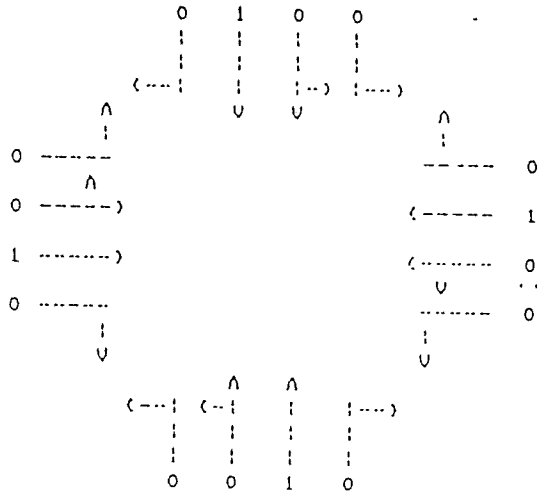
DETAILED REPORT FOR INTERSECTION 21

Tracy Blvd & Valpico Rd

TOTAL VOLUMES



LANE CONFIGURATION



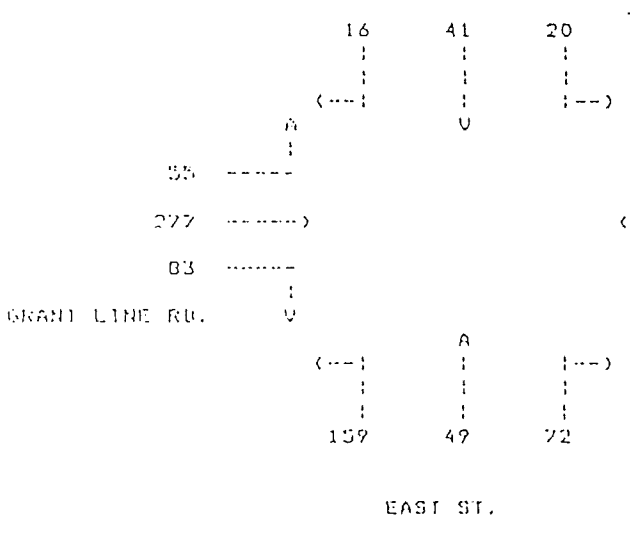
STREET	DIRECTION	CRITICAL VOLUME PER LANE	TOTAL APPROACH VOLUME	MINIMUM LEFT TURN LANE LENGTH (FT PER LANE)	SIGNAL CODE	MINIMUM GREEN	CAPACITY PER LANE
Tracy Blvd	NORTHBOUND	105	111	0	4	0	1500
Tracy Blvd	SOUTHBOUND	9	96	0	1	0	1500
Valpico Rd	EASTBOUND	21	28	0	1	0	1500
Valpico Rd	WESTBOUND	60	60	0	1	0	1500
TOTAL		195	295		CYCLE LENGTH	60	
PER LANE CAPACITY		1500					
"RAW" V/C RATIO		0.13					
LOSS DUE TO MINIMUM PED TIME		0.00					
VOLUME - CAPACITY RATIO		0.13					
SERVICE LEVEL		A					

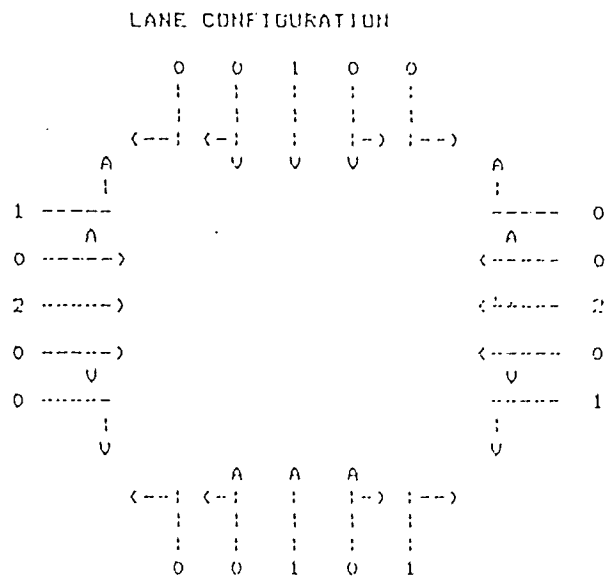
INTERSECTION CAPACITY CALCULATION

INTERSECTION

EAST ST.
& GRANT LINE RD.

TOTAL VOLUMES





LANE CONFIGURATION

SIGNAL OPERATION

	NORTH/SOUTH	EAST/WEST
SIGNAL CODE	4/4	1/1
SIGNAL TYPE	Single Phase	Single Phase
MINIMUM GREEN	0 Seconds	0 Seconds
CYCLE LENGTH	0 Seconds	

STREET	DIRECTION	CRITICAL MOVEMENT	TOTAL APPROACH VOLUME	CRITICAL VOLUME PER LANE	BASIC CAPACITY PER LANE	CAPACITY ADJUSTED FOR YELLOW TIME LOSS	TRAFFIC V/C RATIO	MINIMUM GREEN G/C RATIO	CRITICAL V/C RATIO	MINIMUM LEFT TURN LANE LENGTH (FT PER LANE)
EAST ST.	Northbound	Through	280	208	1500	1500	0.14			0
	Southbound	Left	77	20	1500	1500	0.01			0
	Subtotal	North-South					0.15	0.00	0.15	
GRANT LINE RD.	Eastbound	Through	415	100	1500	1500	0.12			0
	Westbound	Left	383	59	1500	1500	0.04			0
	Subtotal	East-West					0.16	0.00	0.16	
	TOTAL		1155	467					0.31	
							SERVICE LEVEL		A	

TRACY SPECIFIC PLANS
PM PEAK HOUR BACKGROUND FACTOR = 1.00
1986 BASE VOLUMES - INTERSECTIONS NOT INCLUDED IN RESIDENTIAL PLAN MODEL

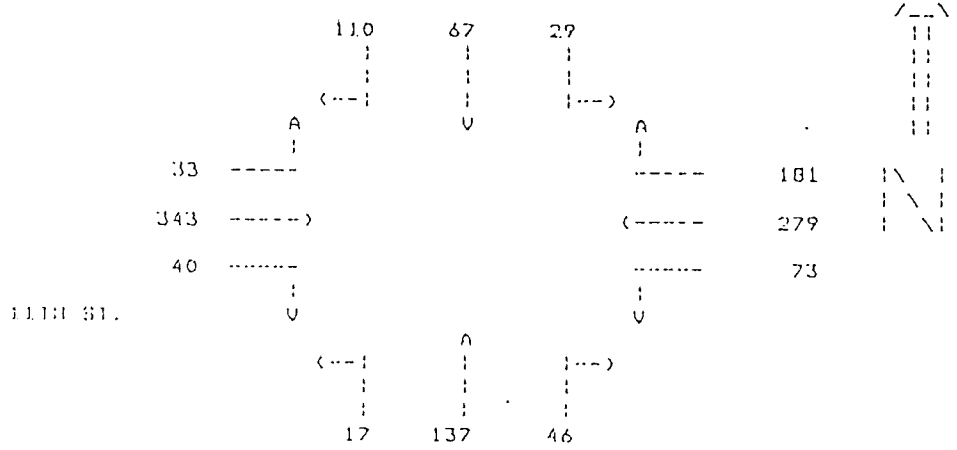
DKS ASSOCIATES
TRACS 4.2
10/9/87 10:47:30

INTERSECTION CAPACITY CALCULATION

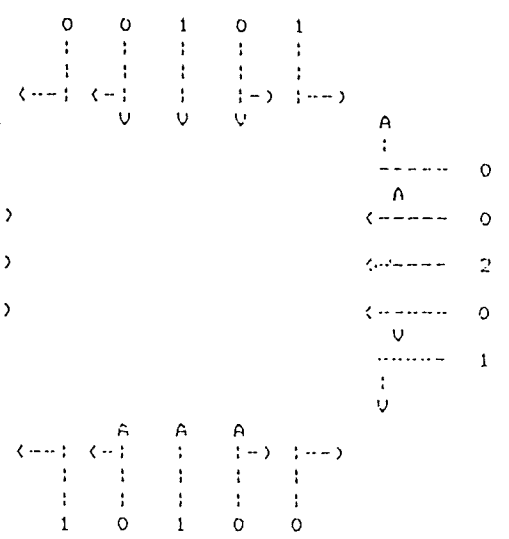
INTERSECTION

EAST ST.
& 11TH ST.

TOTAL VOLUMES



LANE CONFIGURATION



SIGNAL OPERATION

	NORTH/SOUTH	EAST/WEST
SIGNAL CODE	1/1	1/1
SIGNAL TYPE	Single Phase	Single Phase
MINIMUM GREEN	0 Seconds	0 Seconds
CYCLE LENGTH	0 Seconds	

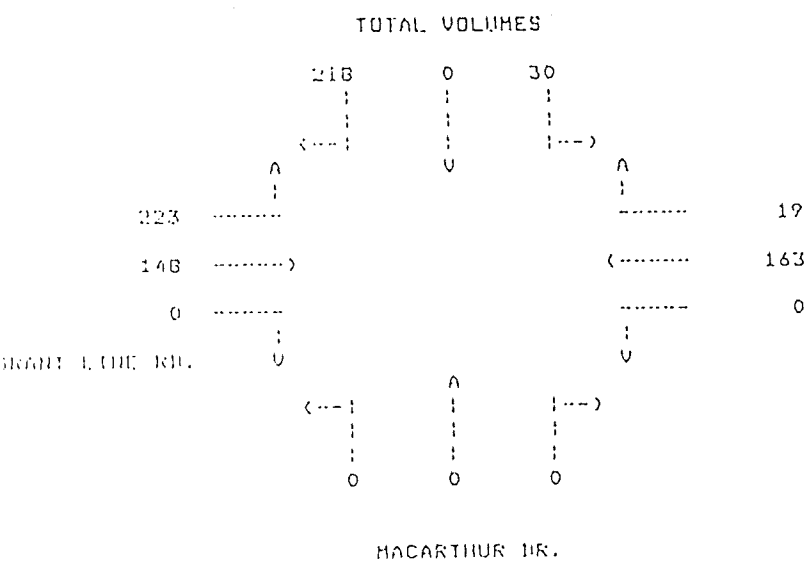
STREET	DIRECTION	CRITICAL MOVEMENT	TOTAL APPROACH VOLUME	CRITICAL VOLUME PER LANE	BASIC CAPACITY PER LANE	CAPACITY ADJUSTED FOR YELLOW TIME LOSS	TRAFFIC V/C RATIO	MINIMUM GREEN G/C RATIO	CRITICAL V/C RATIO	MINIMUM LEFT TURN LANE LENGTH (FT PER LANE)
EAST ST.	Northbound	Through	200	183	1500	1500	0.12			0
	Southbound	Left	206	29	1500	1500	0.02			0
	Subtotal	North-South					0.14	0.00	0.14	
11TH ST.	Eastbound	Through	416	191	1500	1500	0.13			0
	Westbound	Left	533	73	1500	1500	0.05			0
	Subtotal	East-West					0.18	0.00	0.18	
	TOTAL		1355	476					0.32	
							SERVICE LEVEL		A	

NTERSECTION CAPACITY CALCULATION

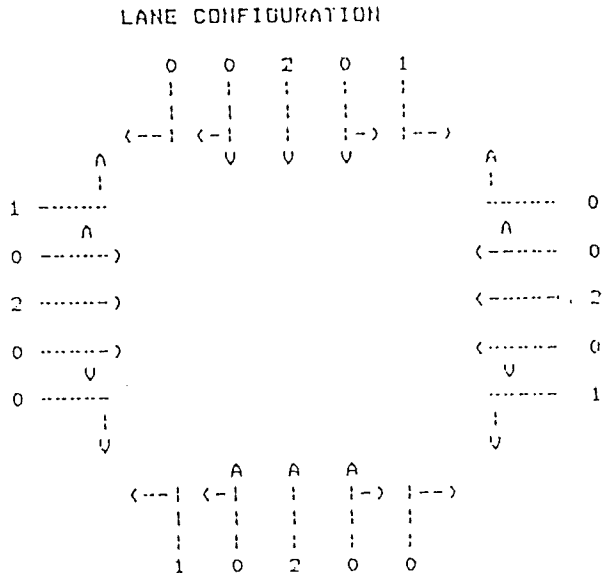
NTERSECTION

MACARTHUR DR.
GRANT LINE RD.

TOTAL VOLUMES



LANE CONFIGURATION



SIGNAL OPERATION	NORTH/SOUTH	EAST/WEST
SIGNAL CODE	1/1	1/1
SIGNAL TYPE	Single Phase	Single Phase
MINIMUM GREEN	0 Seconds	0 Seconds
CYCLE LENGTH	0 Seconds	

STREET	DIRECTION	CRITICAL MOVEMENT	TOTAL APPROACH VOLUME	CRITICAL VOLUME PER LANE	BASIC CAPACITY PER LANE	CAPACITY ADJUSTED FOR YELLOW TIME LOSS	TRAFFIC V/C RATIO	MINIMUM GREEN G/C RATIO	CRITICAL V/C RATIO	MINIMUM LEFT TURN LANE LENGTH (FT PER LANE)
MACARTHUR DR.	Northbound	Left	0	0	1500	1500	0.00			0
	Southbound	Right	248	218	1500	1500	0.15			0
	Subtotal	North-South					0.15	0.00	0.15	
GRANT LINE RD.	Eastbound	Left	371	223	1500	1500	0.15			0
	Westbound	Through	182	91	1500	1500	0.06			0
	Subtotal	East-West					0.21	0.00	0.21	
	TOTAL		801	532					0.36	
							SERVICE LEVEL		A	

TRACY SPECIFIC PLANS
PM PEAK HOUR BACKGROUND FACTOR = 1.00
1986 BASE VOLUMES - INTERSECTIONS NOT INCLUDED IN RESIDENTIAL PLAN MODEL

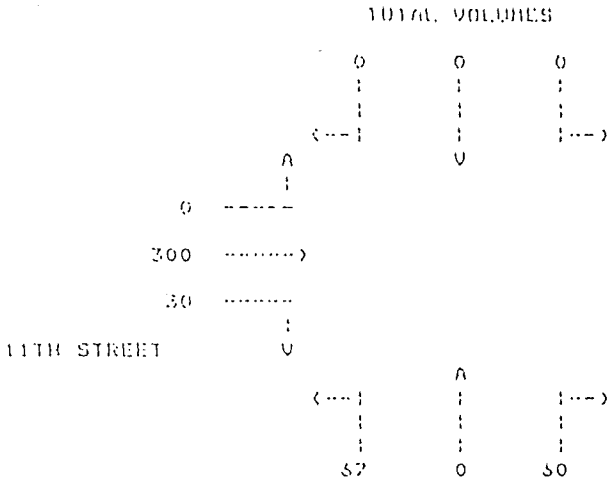
DKS ASSOCIATES
TRACS 4.2
10/9/87 10:47:30

INTERSECTION CAPACITY CALCULATION

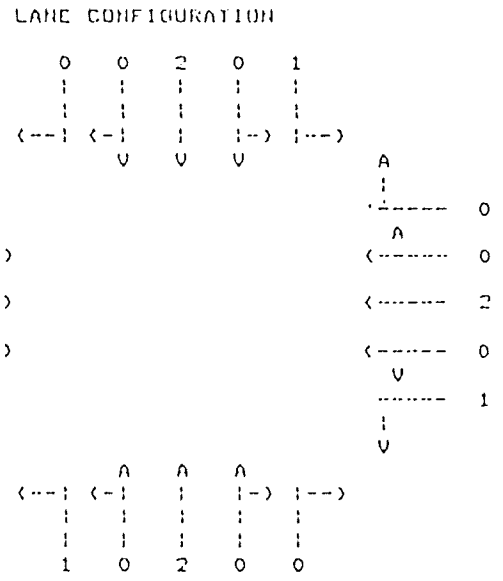
INTERSECTION

MACARTHUR DR.
& 11TH STREET

TOTAL VOLUMES



LANE CONFIGURATION



SIGNAL OPERATION

	NORTH/SOUTH	EAST/WEST
SIGNAL CODE	1/1	1/1
SIGNAL TYPE	Single Phase	Single Phase
MINIMUM GREEN	0 Seconds	0 Seconds
CYCLE LENGTH	0 Seconds	

STREET	DIRECTION	CRITICAL MOVEMENT	TOTAL APPROACH VOLUME	CRITICAL VOLUME PER LANE	BASIC CAPACITY PER LANE	CAPACITY ADJUSTED FOR YELLOW TIME LOSS	TRAFFIC V/C RATIO	MINIMUM GREEN G/C RATIO	CRITICAL V/C RATIO	MINIMUM LEFT TURN LANE LENGTH (FT PER LANE)
MACARTHUR DR.	Northbound	Left	127	67	1500	1500	0.04			0
	Southbound	Through	0	0	1500	1500	0.00			0
	Subtotal	North-South					0.04	0.00	0.04	
11TH STREET	Eastbound	Through	330	165	1500	1500	0.11			0
	Westbound	Left	291	41	1500	1500	0.03			0
	Subtotal	East-West					0.14	0.00	0.14	
	TOTAL		748	273					0.18	
							SERVICE LEVEL		A	

TRACY SPECIFIC PLANS
PM PEAK HOUR BACKGROUND FACTOR = 1.00
1988 BASE VOLUMES - INTERSECTIONS NOT INCLUDED IN RESIDENTIAL PLAN MODEL

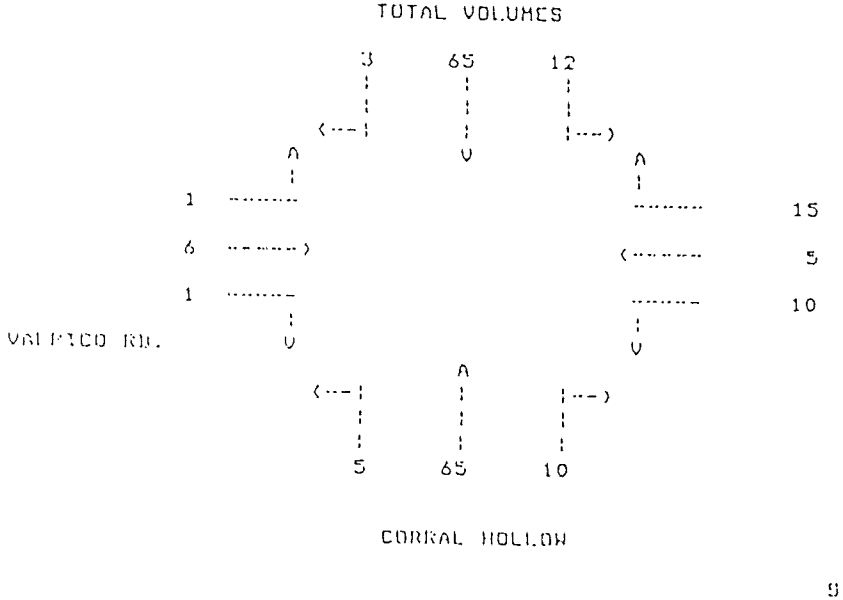
DKS ASSOCIATES
TRACS 4.2
10/9/87 10:47:30

INTERSECTION CAPACITY CALCULATION

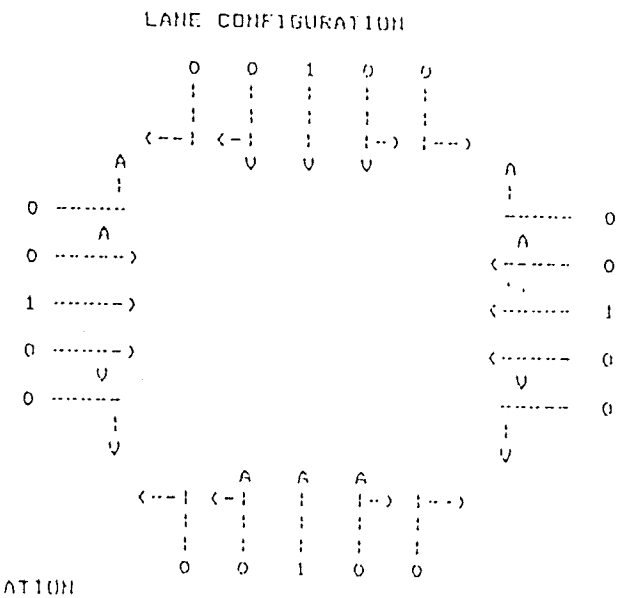
INTERSECTION

CORRAL HOLLOW
& VALPICO RD.

TOTAL VOLUMES



LANE CONFIGURATION



SIGNAL OPERATION

	NORTH/SOUTH	EAST/WEST
SIGNAL CODE	1/1	1/1
SIGNAL TYPE	Single Phase	Single Phase
MINIMUM GREEN	0 Seconds	0 Seconds
CYCLE LENGTH	0 Seconds	

STREET	DIRECTION	CRITICAL MOVEMENT	TOTAL APPROACH VOLUME	CRITICAL VOLUME PER LANE	BASIC CAPACITY PER LANE	CAPACITY ADJUSTED FOR YELLOW TIME LOSS	TRAFFIC V/C RATIO	MINIMUM GREEN G/C RATIO	CRITICAL V/C RATIO	MINIMUM LEFT TURN LANE LENGTH (FT PER LANE)
CORRAL HOLLOW	Northbound	Through	80	80	1500	1500	0.05			0
	Southbound	Left	80	12	1500	1500	0.01			0
	Subtotal	North-South					0.06	0.00	0.04	
VALPICO RD.	Eastbound	Left	8	1	1500	1500	0.00			0
	Westbound	Through	30	30	1500	1500	0.02			0
	Subtotal	East-West					0.02	0.00	0.02	
	TOTAL		190	123					0.08	
							SERVICE LEVEL		A	

TRACY SPECIFIC PLANS
PM PEAK HOUR BACKGROUND FACTOR = 1.00
1986 BASE VOLUMES - INTERSECTIONS NOT INCLUDED IN RESIDENTIAL PLAN MODEL

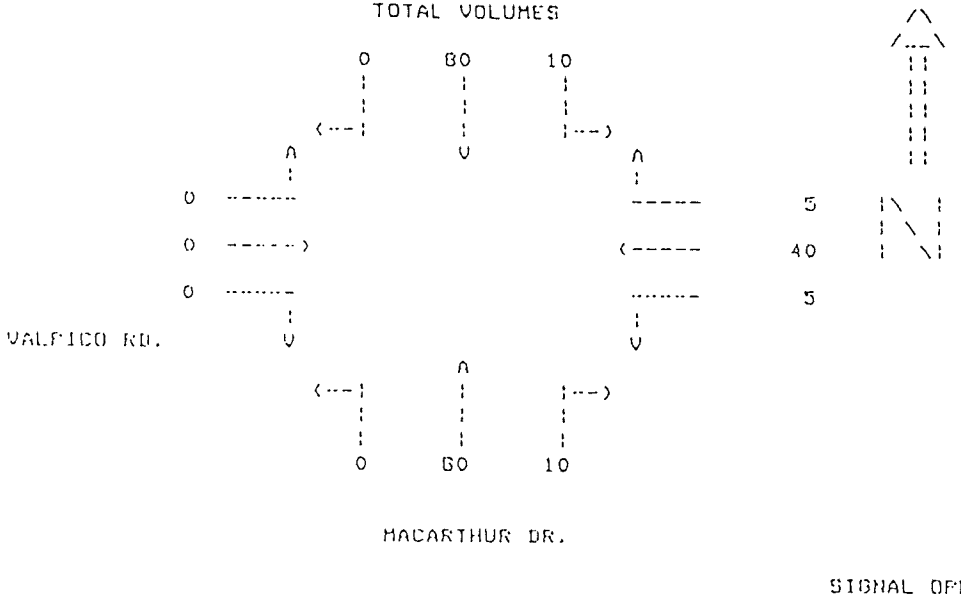
DKS ASSOCIATES
TRACS 4.2
10/9/87 10:47:30

INTERSECTION CAPACITY CALCULATION

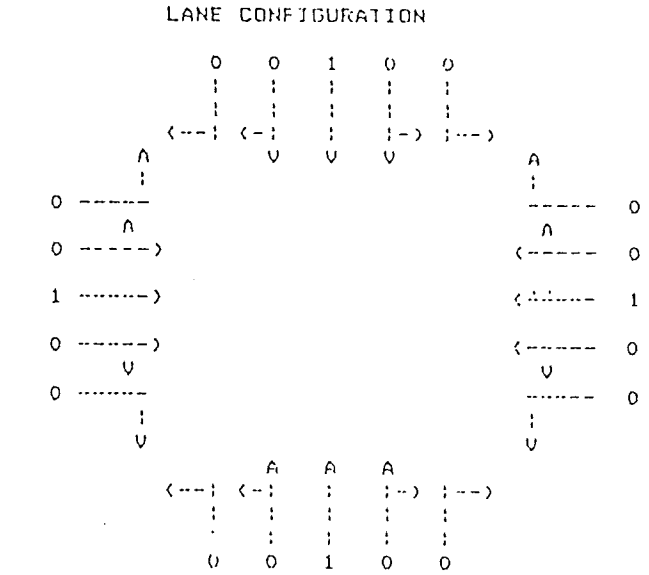
INTERSECTION

MACARTHUR DR.
& VALPICO RD.

TOTAL VOLUMES



LANE CONFIGURATION



SIGNAL OPERATION

	NORTH/SOUTH	EAST/WEST
SIGNAL CODE	1/1	1/1
SIGNAL TYPE	Single Phase	Single Phase
MINIMUM GREEN	0 Seconds	0 Seconds
CYCLE LENGTH	0 Seconds	

STREET	DIRECTION	CRITICAL MOVEMENT	TOTAL APPROACH VOLUME	CRITICAL VOLUME PER LANE	BASIC CAPACITY PER LANE	CAPACITY ADJUSTED FOR YELLOW TIME LOSS	TRAFFIC V/C RATIO	MINIMUM GREEN G/C RATIO	CRITICAL V/C RATIO	MINIMUM LEFT TURN LANE LENGTH (FT PER LANE)
MACARTHUR DR.	Northbound	Through	90	90	1500	1500	0.06			0
	Southbound	Left	90	10	1500	1500	0.01			0
	Subtotal	North-South					0.07	0.00	0.07	
VALPICO RD.	Eastbound	Left	0	0	1500	1500	0.00			0
	Westbound	Through	50	50	1500	1500	0.03			0
	Subtotal	East-West					0.03	0.00	0.03	
	TOTAL		230	150					0.10	
							SERVICE LEVEL		A	

TRACY SPECIFIC PLANS
PM PEAK HOUR BACKGROUND FACTOR = 1.00
1986 BASE VOLUMES - INTERSECTIONS NOT INCLUDED IN RESIDENTIAL PLAN MODEL

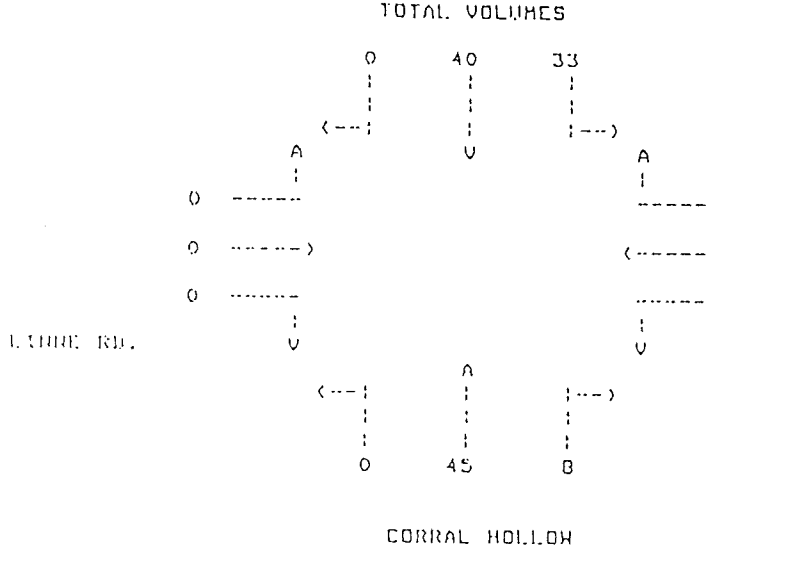
DKS ASSOCIATES
TRACS 4.2
10/9/87 10:47:30

INTERSECTION CAPACITY CALCULATION

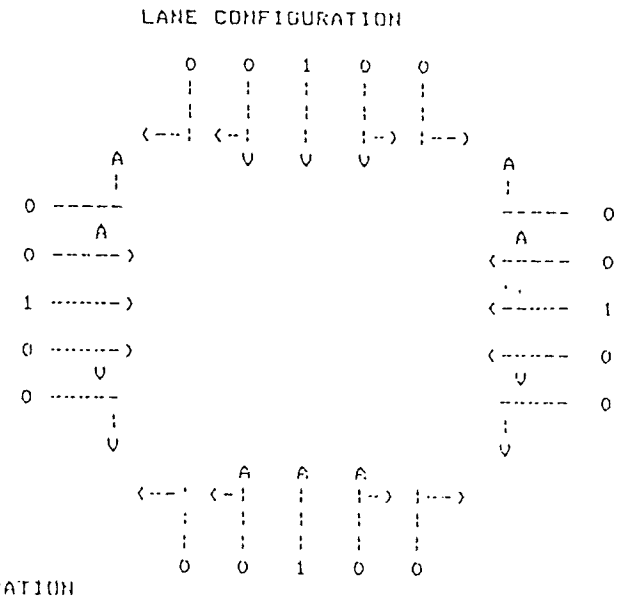
INTERSECTION

CORRAL HOLLOW
& LINNE RD.

TOTAL VOLUMES



LANE CONFIGURATION



SIGNAL OPERATION

	NORTH/SOUTH	EAST/WEST
SIGNAL CODE	1/1	1/1
SIGNAL TYPE	Single Phase	Single Phase
MINIMUM GREEN	0 Seconds	0 Seconds
CYCLE LENGTH	0 Seconds	

STREET	DIRECTION	CRITICAL MOVEMENT	TOTAL APPROACH VOLUME	CRITICAL VOLUME PER LANE	BASIC CAPACITY PER LANE	CAPACITY ADJUSTED FOR YELLOW TIME LOSS	TRAFFIC V/C RATIO	MINIMUM GREEN G/C RATIO	CRITICAL V/C RATIO	MINIMUM LEFT TURN LANE LENGTH (FT PER LANE)
CORRAL HOLLOW	Northbound	Through	53	53	1500	1500	0.04			0
	Southbound	Left	73	33	1500	1500	0.02			0
	Subtotal	North-South					0.06	0.00	0.06	
LINNE RD.	Eastbound	Left	0	0	1500	1500	0.00			0
	Westbound	Through	42	42	1500	1500	0.03			0
	Subtotal	East-West					0.03	0.00	0.03	
	TOTAL		168	128					0.09	
							SERVICE LEVEL		A	

TRACY SPECIFIC PLANS
PM PEAK HOUR BACKGROUND FACTOR = 1.00
1986 BASE VOLUMES - INTERSECTIONS NOT INCLUDED IN RESIDENTIAL PLAN MODEL

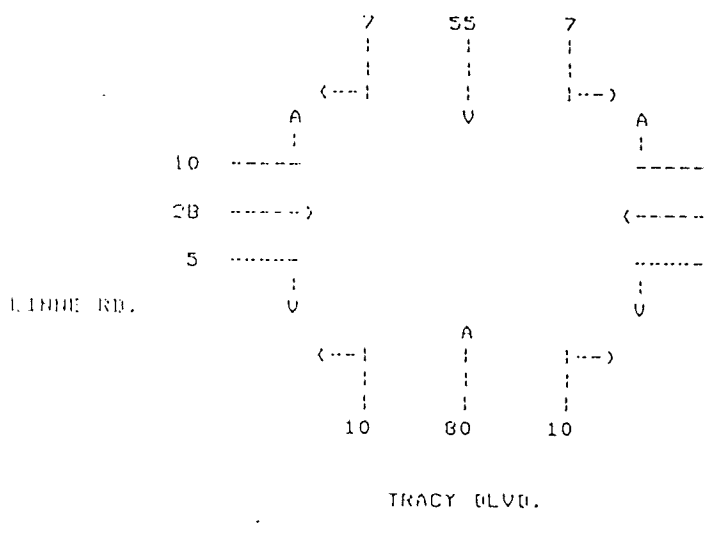
DKS ASSOCIATES
TRACS 4.2
10/9/87 10:47:30

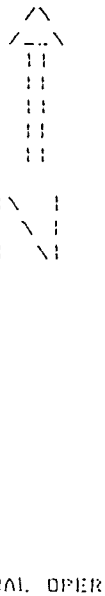
INTERSECTION CAPACITY CALCULATION

INTERSECTION

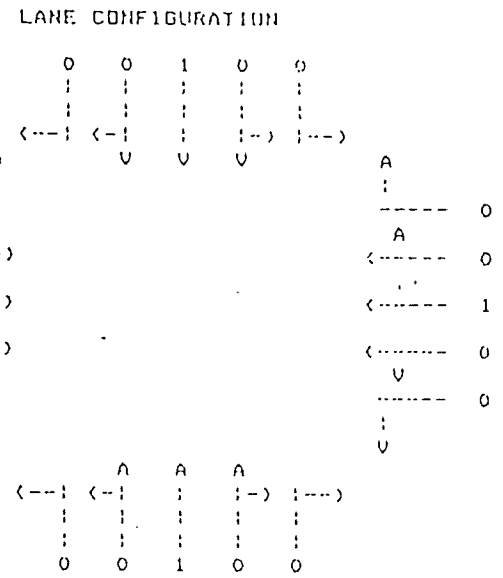
TRACY BLVD.
& LINNE RD.

TOTAL VOLUMES





LANE CONFIGURATION



SIGNAL OPERATION

	NORTH/SOUTH	EAST/WEST
SIGNAL CODE	1/1	1/1
SIGNAL TYPE	Single Phase	Single Phase
MINIMUM GREEN	0 Seconds	0 Seconds
CYCLE LENGTH	0 Seconds	

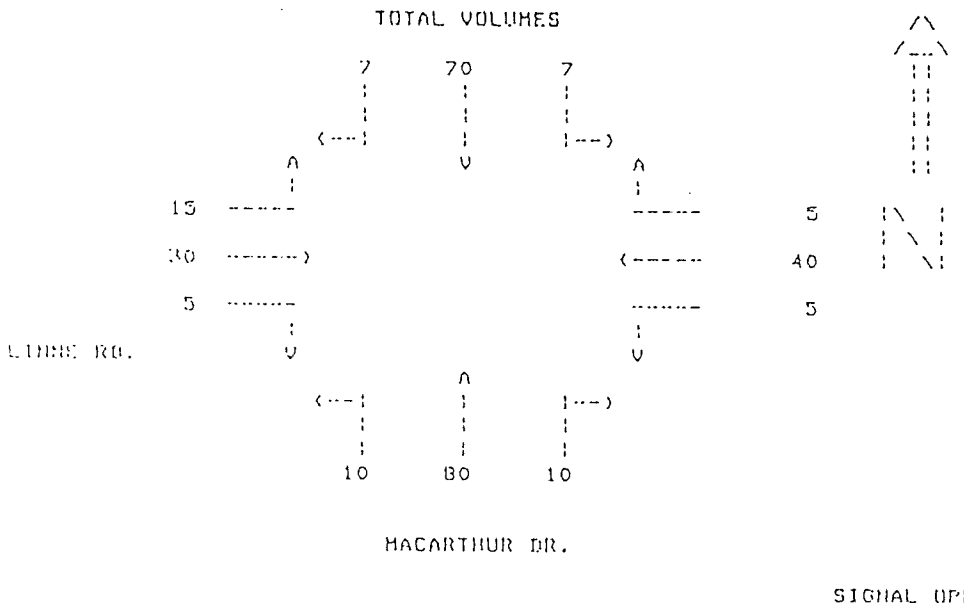
STREET	DIRECTION	CRITICAL MOVEMENT	TOTAL APPROACH VOLUME	CRITICAL VOLUME PER LANE	BASIC CAPACITY PER LANE	CAPACITY ADJUSTED FOR YELLOW TIME LOSS	TRAFFIC V/C RATIO	MINIMUM GREEN G/C RATIO	CRITICAL V/C RATIO	MINIMUM LEFT TURN LANE LENGTH (FT PER LANE)
TRACY BLVD.	Northbound	Through	100	100	1500	1500	0.07			0
	Southbound	Left	69	7	1500	1500	0.00			0
	Subtotal	North-South					0.07	0.00	0.07	
LINNE RD.	Eastbound	Left	43	10	1500	1500	0.01			0
	Westbound	Through	52	52	1500	1500	0.03			0
	Subtotal	East-West					0.04	0.00	0.04	
	TOTAL		264	169					0.11	
							SERVICE LEVEL		A	

INTERSECTION CAPACITY CALCULATION

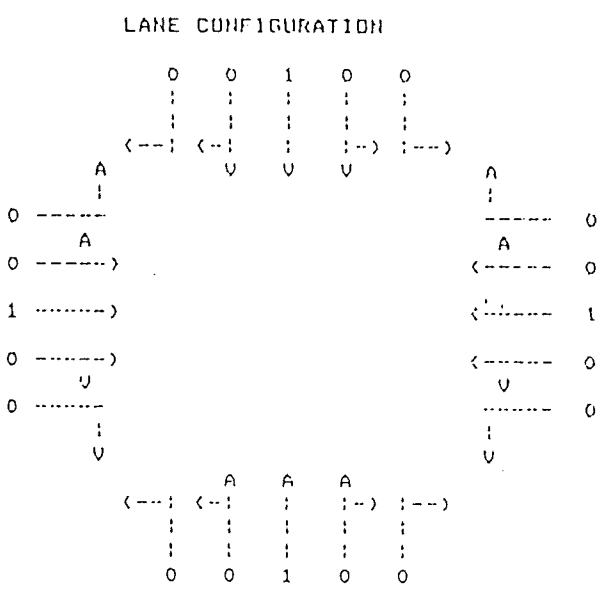
INTERSECTION

MACARTHUR DR.
& LINNE RD.

TOTAL VOLUMES



LANE CONFIGURATION



SIGNAL OPERATION

	NORTH/SOUTH	EAST/WEST
SIGNAL CODE	1/1	1/1
SIGNAL TYPE	Single Phase	Single Phase
MINIMUM GREEN	0 Seconds	0 Seconds
CYCLE LENGTH	0 Seconds	

STREET	DIRECTION	CRITICAL MOVEMENT	TOTAL APPROACH VOLUME	CRITICAL VOLUME PER LANE	BASIC CAPACITY PER LANE	CAPACITY ADJUSTED FOR YELLOW TIME LOSS	TRAFFIC V/C RATIO	MINIMUM GREEN G/C RATIO	CRITICAL V/C RATIO	MINIMUM LEFT TURN LANE LENGTH (FT PER LANE)
MACARTHUR DR.	Northbound	Through	100	100	1500	1500	0.07			0
	Southbound	Left	84	7	1500	1500	0.00			0
	Subtotal	North-South					0.07	0.00	0.07	
LINNE RD.	Eastbound	Left	50	15	1500	1500	0.01			0
	Westbound	Through	50	50	1500	1500	0.03			0
	Subtotal	East-West					0.04	0.00	0.04	
	TOTAL		284	172					0.11	
							SERVICE LEVEL		A	

DUMMY SPECIFIC PLANS
PM PEAK HOUR, BACKGROUND FACTOR = 1.07, (INCLUDES ALL DEVELOPMENT)
50% PEAK HOUR TRIP RATES FOR WAREHOUSE & LT. INDUSTRIAL

DKS ASSOCIATES
TRACS 4.2
8/17/87 16:37:05

BASE VOLUMES BY TURNING MOVEMENT

INTERSECTION		V/C	NORTHBOUND LEFT	NORTHBOUND THRU	NORTHBOUND RIGHT	SOUTHBOUND LEFT	SOUTHBOUND THRU	SOUTHBOUND RIGHT	EASTBOUND LEFT	EASTBOUND THRU	EASTBOUND RIGHT	WESTBOUND LEFT	WESTBOUND THRU	WESTBOUND RIGHT	BKGD FACTR
1 Corral Hollow	& Grant Line	0.15 A	13	17	15	24	11	12	14	301	45	15	101	14	1.07
2 Lincoln Blvd	& Grant Line	0.35 A	26	16	143	11	10	1	21	304	62	143	141	17	1.07
3 Tracy Blvd	& Grant Line	0.50 A	173	175	137	94	258	74	71	387	240	149	331	79	1.07
4 Corral Hollow	& Lowell Ave.	0.02 A	0	43	0	0	68	0	0	0	0	0	0	0	1.07
5 Lincoln Blvd.	& Lowell Ave.	0.10 A	0	147	30	28	102	0	0	0	0	27	0	32	1.07
6 Tracy Blvd.	& Lowell Ave.	0.27 A	78	158	31	6	309	95	27	20	45	5	25	16	1.07
7 Byron Rd.	& Eleventh St.	0.19 A	0	0	0	0	0	0	0	575	0	0	167	0	1.07
8 Corral Hollow	& Eleventh	0.26 A	10	30	88	17	15	3	5	545	25	58	154	7	1.07
9 Lincoln Blvd.	& Eleventh St.	0.31 A	39	41	52	75	37	25	87	476	53	58	298	142	1.07
10 Tracy Blvd	& Eleventh St.	0.52 A	129	301	93	183	280	80	91	379	116	85	289	210	1.07
11 Holly-Central	& Eleventh St.	0.53 A	120	180	118	60	175	58	84	349	127	84	537	85	1.07
12 Corral Hollow	& Cypress Dr.	0.04 A	0	127	0	0	87	0	0	0	0	0	0	0	1.07
13 Tracy Blvd.	& Centre Court	0.21 A	43	321	0	0	428	53	43	0	5	0	0	0	1.07
14 MacArthur Dr.	& Grd/Mt. Diablo	0.05 A	33	66	0	0	98	2	4	0	28	0	0	0	1.07
15 Corral Hollow	& Shulte	0.09 A	0	127	0	0	87	0	0	0	0	0	0	0	1.07
16 Sycamore	& Shulte	0.00 A	0	0	0	0	0	0	0	0	0	0	0	0	1.07
17 Tracy Blvd	& Schulte	0.19 A	0	171	42	173	229	0	0	0	0	14	0	89	1.07
18 Central	& Schulte	0.12 A	0	0	0	73	0	39	36	193	0	0	94	56	1.07
19 MacArthur	& Schulte	0.08 A	34	68	4	9	94	34	4	51	13	13	17	17	1.07
20 Tracy Blvd.	& Central	0.16 A	0	180	6	128	106	0	0	0	0	10	0	39	1.07
21 Tracy Blvd	& Valpico Rd	0.07 A	6	106	6	10	83	10	22	1	6	6	16	42	1.07
22 I-205	& Eleventh St.	0.36 A	0	0	267	0	0	0	0	0	0	267	0	0	1.07
23 I-205	& Grant Line	0.25 A	0	0	86	0	0	107	0	0	0	107	0	160	1.07
24 Tracy Bl.	& I-205	0.84 D	235	0	396	0	0	0	0	0	235	396	0	0	1.07
25 INTERNAL 1	&	0.00 A	0	0	0	0	0	0	0	0	0	0	0	0	1.07
26 INTERNAL 2	&	0.00 A	0	0	0	0	0	0	0	0	0	0	0	0	1.07
27 EAST ST.	& GRANT LINE RD.	0.33 A	170	52	77	21	44	17	59	296	89	83	258	89	1.07
28 EAST ST.	& 11TH ST.	0.34 A	18	147	49	31	72	110	35	367	43	78	299	194	1.07
29 MACARTHUR DR.	& I-205	0.40 A	71	0	232	0	0	0	0	0	71	225	0	0	1.07
30 MACARTHUR DR.	& GRANT LINE RD.	0.38 A	0	0	0	32	0	233	239	158	0	0	174	20	1.07
31 MACARTHUR DR.	& 11TH STREET	0.20 A	72	0	84	0	0	0	0	321	32	44	267	0	1.07
32 CORRAL HOLLOW	& VALPICO RD.	0.09 A	5	70	11	13	70	3	1	6	1	11	5	16	1.07
33 MACARTHUR DR.	& VALPICO RD.	0.11 A	0	86	11	11	86	0	0	0	0	5	43	5	1.07
34 CORRAL HOLLOW	& LINNE RD.	0.09 A	0	48	9	35	43	0	0	0	0	14	0	31	1.07
35 TRACY BLVD.	& LINNE RD.	0.12 A	11	86	11	7	59	7	11	30	5	13	27	16	1.07
36 MACARTHUR DR.	& LINNE RD.	0.12 A	11	86	11	7	75	7	16	32	5	5	43	5	1.07
37 CORRAL HOLLOW	& I-580	0.07 A	0	0	0	32	0	21	21	0	0	0	0	32	1.07
38 CHRISMAN RD.	& I-580	0.10 A	0	0	0	53	0	0	0	0	0	0	0	91	1.07
39 SPECIFIC PLAN	& DUMMY	0.00 A	0	0	0	0	0	0	0	0	0	0	0	0	1.07

TRACY SPECIFIC PLANS
PM PEAK HOUR, BACKGROUND FACTOR = 1.07, (INCLUDES INFILL DEVELOPMENT)
PM PEAK HOUR TRIP RATES FOR WAREHOUSE & LT. INDUSTRIAL

DKS ASSOCIATES
TRACS 4.2
8/17/87 16:37:25

BASE VOLUMES - APPROACH AND DEPARTURE

	INTERSECTION		NORTHBOUND LEG			SOUTHBOUND LEG			EASTBOUND LEG			WESTBOUND LEG		
			ENTER	LEAVE	TOTAL	ENTER	LEAVE	TOTAL	ENTER	LEAVE	TOTAL	ENTER	LEAVE	TOTAL
1	Corral Hollow	& Grant Line	43	68	111	44	43	87	357	123	480	127	337	464
2	Lincoln Blvd	& Grant Line	184	214	398	20	54	74	386	167	553	301	456	757
3	Tracy Blvd	& Grant Line	404	644	1128	424	324	748	696	576	1272	557	617	1174
4	Corral Hollow	& Lowell Ave.	42	68	110	68	42	110	0	0	0	0	0	0
5	Lincoln Blvd.	& Lowell Ave.	177	127	304	128	100	308	0	0	0	58	56	114
6	Tracy Blvd.	& Lowell Ave.	267	358	625	410	200	610	90	197	287	45	57	102
7	Byron Rd.	& Eleventh St.	0	0	0	0	0	0	574	166	740	166	574	740
8	Corral Hollow	& Eleventh	125	95	220	34	41	75	573	166	739	218	648	866
9	Lincoln Blvd.	& Eleventh St.	130	147	277	135	268	403	615	358	973	495	602	1097
10	Tracy Blvd	& Eleventh St.	522	479	1001	542	599	1141	503	497	1080	581	653	1234
11	Holly-Central	& Eleventh St.	413	366	779	291	327	618	560	713	1273	685	543	1228
12	Corral Hollow	& Cypress Dr.	127	86	213	86	127	213	0	0	0	0	0	0
13	Tracy Blvd.	& Centre Court	362	432	794	480	362	842	47	95	142	0	0	0
14	MacArthur Dr.	& 3rd/Mt. Diablo	99	125	224	100	70	170	31	35	66	0	0	0
15	Corral Hollow	& Shulte	127	86	213	86	127	213	0	0	0	0	0	0
16	Sycamore	& Shulte	0	0	0	0	0	0	0	0	0	0	0	0
17	Tracy Blvd	& Schulte	212	241	453	401	251	652	0	0	0	93	214	307
18	Central	& Schulte	0	0	0	110	84	194	221	132	353	149	264	413
19	MacArthur	& Schulte	106	118	224	136	89	225	67	85	152	46	63	109
20	Tracy Blvd.	& Central	185	114	299	233	217	450	0	0	0	47	134	181
21	Tracy Blvd	& Valpico Rd	117	95	212	101	168	269	29	31	60	63	16	79
22	I-205	& Eleventh St.	267	267	534	0	0	0	0	0	0	267	267	534
23	I-205	& Grant Line	85	106	191	106	160	266	0	106	106	266	85	351
24	Tracy Bl.	& I-205	630	630	1260	0	0	0	235	235	470	395	395	790
25	INTERNAL 1	&	0	0	0	0	0	0	0	0	0	0	0	0
26	INTERNAL 2	&	0	0	0	0	0	0	0	0	0	0	0	0
27	EAST ST.	& GRANT LINE RD.	299	194	493	81	198	279	442	444	886	408	394	802
28	EAST ST.	& 11TH ST.	213	191	404	219	374	593	444	433	877	569	447	1016
29	MACARTHUR DR.	& I-205	302	294	596	0	0	0	70	70	140	224	232	456
30	MACARTHUR DR.	& GRANT LINE RD.	0	0	0	265	258	523	396	407	803	194	190	384
31	MACARTHUR DR.	& 11TH STREET	135	75	210	0	0	0	352	338	690	310	364	674
32	CORRAL HOLLOW	& VALPICO RD.	84	80	164	84	86	170	8	13	21	31	28	59
33	MACARTHUR DR.	& VALPICO RD.	95	90	185	95	90	185	0	42	42	52	20	72
34	CORRAL HOLLOW	& LINNE RD.	56	55	111	77	79	156	0	0	0	44	43	87
35	TRACY BLVD.	& LINNE RD.	105	75	180	72	111	183	44	43	87	54	46	100
36	MACARTHUR DR.	& LINNE RD.	105	84	189	88	106	194	53	59	112	52	49	101
37	CORRAL HOLLOW	& I-580	0	0	0	53	53	106	21	21	42	32	32	64
38	CHRISMAN RD.	& I-580	0	0	0	53	90	143	0	0	0	90	53	143
39	SPECIFIC PLAN	& DUMMY	0	0	0	0	0	0	0	0	0	0	0	0

TRACY SPECIFIC PLANS - PREFERRED RESIDENTIAL ALTERNATIVE PLUS 50% IND. ALT D
PM PEAK HOUR, BACKGROUND FACTOR = 1.02, (INCLUDES INFILL DEVELOPMENT)
15% PEAK HOUR TRIP RATES FOR WAREHOUSE & LT. INDUSTRIAL

DKS ASSOCIATES
TRACS 4.2
8/17/87 16:37:25

MODIFIED VOLUMES BY TURNING MOVEMENT

INTERSECTION		NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND		
		LEFT	THRU	RIGHT	LEFT	THRU	RIGHT	LEFT	THRU	RIGHT	LEFT	THRU	RIGHT
1 Corral Hollow	& Grant Line	0	22	85	0	11	0	0	197	0	185	98	0
2 Lincoln Blvd	& Grant Line	0	111	0	44	55	22	45	170	0	0	228	89
3 Tracy Blvd	& Grant Line	89	28	0	0	62	32	14	211	44	0	308	0
4 Corral Hollow	& Lowell Ave.	79	70	23	0	120	9	3	25	58	46	50	0
5 Lincoln Blvd.	& Lowell Ave.	18	0	0	33	0	22	45	45	37	0	48	67
6 Tracy Blvd.	& Lowell Ave.	0	78	34	0	158	0	0	78	0	70	115	0
7 Byron Rd.	& Eleventh St.	0	0	0	59	0	20	40	794	0	0	393	119
8 Corral Hollow	& Eleventh	398	348	0	33	341	24	12	72	769	0	90	67
9 Lincoln Blvd.	& Eleventh St.	0	0	0	37	0	8	4	153	9	0	269	18
10 Tracy Blvd	& Eleventh St.	44	110	155	0	228	8	4	108	77	313	235	0
11 Holly-Central	& Eleventh St.	82	125	18	0	117	88	32	141	41	37	302	0
12 Corral Hollow	& Cypress Dr.	0	614	0	196	914	0	0	0	0	0	0	132
13 Tracy Blvd.	& Centre Court	0	185	0	59	367	193	95	15	0	0	7	29
14 MacArthur Dr.	& 3rd/Mt. Diablo	0	653	0	0	704	200	100	0	0	0	0	0
15 Corral Hollow	& Schulte	33	137	50	639	232	43	18	122	17	25	268	459
16 Sycamore	& Schulte	436	0	42	0	0	0	0	496	400	71	642	0
17 Tracy Blvd	& Schulte	45	60	72	32	90	128	82	383	22	145	506	27
18 Central	& Schulte	137	208	106	0	335	198	98	223	133	222	337	0
19 MacArthur	& Schulte	0	490	0	0	350	400	186	47	0	0	96	0
20 Tracy Blvd.	& Central	48	81	136	0	64	24	12	76	24	212	194	0
21 Tracy Blvd	& Valpico Rd	212	210	348	0	184	116	56	145	107	201	324	0
22 I-205	& Eleventh St.	0	354	833	0	311	0	0	0	0	412	0	0
23 I-205	& Grant Line	0	73	281	41	172	0	0	0	0	139	0	20
24 Tracy Bl.	& I-205	0	10	29	0	28	9	3	90	0	58	204	0
25 INTERNAL 1	&	0	0	0	103	0	12	25	0	0	0	0	51
26 INTERNAL 2	&	0	0	40	256	0	0	0	97	0	20	48	128
27 EAST ST.	& GRANT LINE RD.	0	0	0	0	0	0	0	38	0	0	85	0
28 EAST ST.	& 11TH ST.	0	0	0	0	0	0	0	52	0	0	120	0
29 MACARTHUR DR.	& I-205	183	5	836	23	14	0	0	0	70	383	0	8
30 MACARTHUR DR.	& GRANT LINE RD.	0	859	0	78	410	85	36	0	0	0	0	32
31 MACARTHUR DR.	& 11TH STREET	0	567	0	180	530	120	52	0	0	0	0	77
32 CORRAL HOLLOW	& VALPICO RD.	33	66	0	0	33	43	18	65	17	0	133	9
33 MACARTHUR DR.	& VALPICO RD.	20	83	0	0	42	287	398	0	49	0	0	0
34 CORRAL HOLLOW	& LINNE RD.	0	0	83	50	0	0	0	0	0	172	0	99
35 TRACY BLVD.	& LINNE RD.	0	0	0	159	0	147	83	132	0	0	67	80
36 MACARTHUR DR.	& LINNE RD.	0	0	0	49	0	42	83	209	0	0	105	20
37 CORRAL HOLLOW	& I-580	0	0	0	0	0	172	83	0	0	0	0	0
38 CHRISMAN RD.	& I-580	0	0	0	257	0	0	0	0	0	0	0	125
39 SPECIFIC PLAN	& DUMMY	0	32	202	0	78	0	0	0	0	430	0	0

TRACY SPECIFIC PLANS - PREFERRED RESIDENTIAL ALTERNATIVE PLUS 50% IND. ALT D
PM PEAK HOUR, BACKGROUND FACTOR = 1.07, (INCLUDES INFILL DEVELOPMENT)
50% PEAK HOUR TRIP RATES FOR WAREHOUSE & LT. INDUSTRIAL

DKS ASSOCIATES
TRACS 4.2
8/17/87 16:37:25

ADDED VOLUMES - APPROACH AND DEPARTURE

INTERSECTION		NORTHBOUND LEG ENTER	LEAVE	TOTAL	SOUTHBOUND LEG ENTER	LEAVE	TOTAL	EASTBOUND LEG ENTER	LEAVE	TOTAL	WESTBOUND LEG ENTER	LEAVE	TOTAL
1 Corral Hollow	& Grant Line	107	196	303	11	22	33	197	98	295	283	282	565
2 Lincoln Blvd	& Grant Line	111	55	166	121	245	366	215	250	465	317	214	531
3 Tracy Blvd	& Grant Line	117	106	223	94	42	136	269	429	698	308	211	519
4 Corral Hollow	& Lowell Ave.	172	224	396	129	73	202	86	138	224	96	48	144
5 Lincoln Blvd.	& Lowell Ave.	18	37	55	55	112	167	127	88	215	115	78	193
6 Tracy Blvd.	& Lowell Ave.	110	228	338	158	76	234	78	115	193	185	112	297
7 Byron Rd.	& Eleventh St.	0	0	0	79	159	238	834	413	1247	512	853	1365
8 Corral Hollow	& Eleventh	746	1110	1856	378	427	805	853	512	1365	157	105	262
9 Lincoln Blvd.	& Eleventh St.	0	0	0	45	22	67	157	277	434	287	190	477
10 Tracy Blvd	& Eleventh St.	309	618	927	236	114	350	189	287	476	548	263	811
11 Holly-Central	& Eleventh St.	225	195	420	183	157	340	214	450	664	339	159	498
12 Corral Hollow	& Cypress Dr.	814	914	1528	1110	746	1856	0	0	0	132	196	328
13 Tracy Blvd.	& Centre Court	185	367	552	617	309	926	110	200	310	36	74	110
14 MacArthur Dr.	& 3rd/Mt. Diablo	653	704	1357	904	753	1657	100	200	300	0	0	0
15 Corral Hollow	& Shulte	220	274	494	914	614	1528	157	344	501	752	811	1563
16 Sycamore	& Shulte	478	471	949	0	0	0	894	1078	1974	713	538	1251
17 Tracy Blvd	& Schulte	177	257	434	250	149	399	447	677	1124	678	467	1145
18 Central	& Schulte	451	690	1141	533	306	839	454	672	1126	559	329	888
19 MacArthur	& Schulte	490	350	840	750	676	1426	233	496	729	96	47	143
20 Tracy Blvd.	& Central	265	300	565	88	93	181	132	266	398	406	232	638
21 Tracy Blvd	& Valpico Rd	770	492	1262	300	266	566	308	652	960	525	493	1018
22 I-205	& Eleventh St.	1187	723	1910	311	354	665	0	0	0	412	833	1245
23 I-205	& Grant Line	354	311	665	213	93	306	0	0	0	159	322	481
24 Tracy Bl.	& I-205	39	86	125	37	13	50	93	213	306	282	117	381
25 INTERNAL 1	&	0	0	0	115	76	191	25	12	37	51	103	154
26 INTERNAL 2	&	40	20	60	256	128	384	97	48	145	196	393	589
27 EAST ST.	& GRANT LINE RD.	0	0	0	0	0	0	36	85	121	85	36	121
28 EAST ST.	& 11TH ST.	0	0	0	0	0	0	52	120	172	120	52	172
29 MACARTHUR DR.	& I-205	1004	467	1471	37	13	50	70	163	233	391	859	1250
30 MACARTHUR DR.	& GRANT LINE RD.	859	410	1269	573	927	1500	36	85	121	32	78	110
31 MACARTHUR DR.	& 11TH STREET	567	530	1097	830	696	1526	52	120	172	77	180	257
32 CORRAL HOLLOW	& VALPICO RD.	99	50	149	76	84	160	100	207	307	133	65	198
33 MACARTHUR DR.	& VALPICO RD.	103	91	194	329	481	810	447	307	754	0	0	0
34 CORRAL HOLLOW	& LINNE RD.	83	172	255	50	99	149	0	0	0	271	133	404
35 TRACY BLVD.	& LINNE RD.	0	0	0	306	163	469	215	214	429	147	291	438
36 MACARTHUR DR.	& LINNE RD.	0	0	0	91	103	194	292	147	439	125	258	383
37 CORRAL HOLLOW	& I-580	0	0	0	172	83	255	83	172	255	0	0	0
38 CHRISMAN RD.	& I-580	0	0	0	257	125	382	0	0	0	125	257	382
39 SPECIFIC PLAN	& DUMMY	234	516	750	78	32	110	0	0	0	430	202	640

TRACY SPECIFIC PLANS - PREFERRED RESIDENTIAL ALTER IVE PLUS 50% IND. ALT B
PM PEAK HOUR, BACKGROUND FACTOR = 1.07, (INCLUDES ...ILL DEVELOPMENT)
15% PEAK HOUR TRIP RATES FOR WAREHOUSE & LT. INDUSTRIAL

DKS ASSOCIATES
TRACS 4.2
8/17/87 14:37:25

TOTAL VOLUMES BY TURNING MOVEMENT

INTERSECTION		V/C	NORTHBOUND LEFT	NORTHBOUND THRU	NORTHBOUND RIGHT	SOUTHBOUND LEFT	SOUTHBOUND THRU	SOUTHBOUND RIGHT	EASTBOUND LEFT	EASTBOUND THRU	EASTBOUND RIGHT	WESTBOUND LEFT	WESTBOUND THRU	WESTBOUND RIGHT
1 Corral Hollow	& Grant Line	0.36 A	12	37	99	23	21	11	13	497	44	177	198	13
2 Lincoln Blvd	& Grant Line	0.45 A	25	127	143	54	64	23	66	473	62	143	369	106
3 Tracy Blvd	& Grant Line	0.67 D	282	203	136	74	319	105	84	598	283	148	638	77
4 Corral Hollow	& Lowell Ave.	0.18 A	79	112	23	0	188	9	3	25	58	46	50	0
5 Lincoln Blvd.	& Lowell Ave.	0.20 A	18	148	29	60	101	22	45	45	37	26	48	99
6 Tracy Blvd.	& Lowell Ave.	0.51 A	78	234	65	6	467	95	26	90	44	75	139	16
7 Byron Rd.	& Eleventh St.	0.50 A	0	0	0	57	0	20	40	1388	0	0	559	119
8 Corral Hollow	& Eleventh	0.69 B	407	377	87	50	355	27	17	616	793	57	244	74
9 Lincoln Blvd.	& Eleventh St.	0.42 A	38	40	52	111	37	32	90	629	53	57	565	160
10 Tracy Blvd	& Eleventh St.	0.91 E	173	410	248	102	500	90	94	486	192	397	523	209
11 Holly-Central	& Eleventh St.	0.86 D	201	304	133	57	272	123	96	510	188	101	839	84
12 Corral Hollow	& Cypress Dr.	0.40 A	0	741	0	196	1000	0	0	0	0	0	0	132
13 Tracy Blvd.	& Centre Court	0.44 A	42	505	0	59	774	248	137	15	5	0	7	29
14 MacArthur Dr.	& 3rd/Mt. Diablo	0.37 A	33	719	0	0	802	202	104	0	27	0	0	0
15 Corral Hollow	& Shulte	0.79 C	33	264	50	639	318	43	18	122	17	25	268	459
16 Sycamore	& Shulte	0.53 A	436	0	42	0	0	0	0	496	400	71	642	0
17 Tracy Blvd	& Schulte	0.54 A	45	231	113	205	318	128	62	363	22	158	506	107
18 Central	& Schulte	0.71 C	137	208	106	72	335	236	127	415	133	222	431	55
19 MacArthur	& Schulte	0.43 A	34	558	4	8	444	434	190	98	12	12	113	17
20 Tracy Blvd.	& Central	0.38 A	48	240	142	128	169	24	12	96	24	221	194	38
21 Tracy Blvd	& Valpico Rd	0.65 B	218	315	354	9	267	125	78	146	113	207	340	41
22 I-205	& Eleventh St.	1.42 F	0	354	1100	0	311	0	0	0	0	677	0	0
23 I-205	& Grant Line	0.60 B	0	73	368	41	172	108	0	0	0	245	0	180
24 Tracy Bl.	& I-205	0.97 E	235	10	424	0	28	9	3	90	235	453	204	0
25 INTERNAL 1	&	0.13 A	0	0	0	103	0	12	25	0	0	0	0	51
26 INTERNAL 2	&	0.33 A	0	0	40	256	0	9	0	99	0	20	48	129
27 EAST ST.	& GRANT LINE RD.	0.34 A	170	52	77	21	43	17	58	332	88	63	342	88
28 EAST ST.	& 11TH ST.	0.37 A	18	146	49	31	71	117	35	419	42	78	418	193
29 MACARTHUR DR.	& I-205	1.38 F	233	5	1068	23	14	0	0	0	140	607	0	8
30 MACARTHUR DR.	& GRANT LINE RD.	0.62 B	0	859	0	110	410	318	274	158	0	0	174	52
31 MACARTHUR DR.	& 11TH STREET	0.47 A	71	587	84	180	530	120	52	320	32	43	267	77
32 CORRAL HOLLOW	& VALPICO RD.	0.26 A	38	135	10	12	102	46	19	71	18	10	138	16
33 MACARTHUR DR.	& VALPICO RD.	0.60 B	20	138	10	10	127	287	398	0	49	5	42	5
34 CORRAL HOLLOW	& LINNE RD.	0.36 A	0	48	91	85	42	0	0	0	0	185	0	130
35 TRACY BLVD.	& LINNE RD.	0.45 A	10	85	10	164	58	154	93	161	5	12	93	98
36 MACARTHUR DR.	& LINNE RD.	0.36 A	10	85	10	56	74	49	99	241	5	5	147	25
37 CORRAL HOLLOW	& I-580	0.24 A	0	0	0	32	0	193	104	0	0	0	0	32
38 CHRISMAN RD.	& I-580	0.35 A	0	0	0	310	0	0	0	0	0	0	0	215
39 SPECIFIC PLAN	& DUMMY	0.45 A	0	32	202	0	78	0	0	0	0	438	0	0

TRACY SPECIFIC PLANS - PREFERRED RESIDENTIAL ALTERNATIVE PLUS 50% IND. ALT 3
PM PEAK HOUR, BACKGROUND FACTOR = 1.07, (INCLUDES INFILL DEVELOPMENT)
50% PEAK HOUR TRIP RATES FOR WAREHOUSE & LT. INDUSTRIAL

DKS ASSOCIATES
TRACS 4.2
8/17/07 16:37:03

TOTAL VOLUMES - APPROACH AND DEPARTURE

INTERSECTION		NORTHBOUND LEG ENTER	NORTHBOUND LEG LEAVE	NORTHBOUND LEG TOTAL	SOUTHBOUND LEG ENTER	SOUTHBOUND LEG LEAVE	SOUTHBOUND LEG TOTAL	EASTBOUND LEG ENTER	EASTBOUND LEG LEAVE	EASTBOUND LEG TOTAL	WESTBOUND LEG ENTER	WESTBOUND LEG LEAVE	WESTBOUND LEG TOTAL
1 Corral Hollow	& Grant Line	150	264	414	55	65	120	554	221	775	410	619	1029
2 Lincoln Blvd	& Grant Line	295	269	564	141	297	440	601	417	1018	618	670	1288
3 Tracy Blvd	& Grant Line	601	750	1351	518	366	884	965	1005	1970	865	828	1693
4 Corral Hollow	& Lowell Ave.	214	292	506	197	115	312	88	136	224	96	48	144
5 Lincoln Blvd.	& Lowell Ave.	195	164	359	183	292	475	127	88	215	173	134	307
6 Tracy Blvd.	& Lowell Ave.	377	586	963	568	276	844	168	312	480	230	169	399
7 Byron Rd.	& Eleventh St.	0	0	0	79	159	238	1408	579	1987	678	1427	2105
8 Corral Hollow	& Eleventh	871	1205	2076	432	468	900	1428	678	2104	375	753	1128
9 Lincoln Blvd.	& Eleventh St.	130	147	277	180	290	470	772	635	1407	782	792	1574
10 Tracy Blvd	& Eleventh St.	831	1097	1928	778	713	1491	772	784	1556	1129	916	2045
11 Holly-Central	& Eleventh St.	638	561	1199	474	484	958	774	1163	1937	1024	702	1726
12 Corral Hollow	& Cypress Dr.	741	1000	1741	1196	873	2069	0	0	0	132	196	328
13 Tracy Blvd.	& Centre Court	547	799	1346	1099	671	1770	157	295	452	36	74	110
14 MacArthur Dr.	& 3rd/Mt. Diablo	752	829	1581	1004	823	1827	131	235	366	0	0	0
15 Corral Hollow	& Shulte	347	360	707	1000	741	1741	157	344	501	752	811	1563
16 Sycamore	& Shulte	478	471	949	0	0	0	898	1078	1976	713	538	1251
17 Tracy Blvd	& Schulte	389	498	887	651	400	1051	447	679	1126	771	681	1452
18 Central	& Schulte	451	690	1141	643	390	1033	675	804	1479	708	593	1301
19 MacArthur	& Schulte	596	468	1064	886	765	1651	300	581	881	142	110	252
20 Tracy Blvd.	& Central	450	414	864	321	310	631	132	266	398	453	366	819
21 Tracy Blvd	& Valrico Rd	987	587	1474	401	434	835	337	683	1020	588	509	1097
22 I-205	& Eleventh St.	1454	990	2444	311	354	665	0	0	0	679	1100	1779
23 I-205	& Grant Line	439	417	856	319	253	572	0	106	106	425	407	832
24 Tracy Bl.	& I-205	669	716	1385	37	13	50	328	448	776	657	514	1171
25 INTERNAL 1	&	0	0	0	115	76	191	25	12	37	51	103	154
26 INTERNAL 2	&	40	20	60	256	128	384	77	48	145	196	393	589
27 EAST ST.	& GRANT LINE RD.	299	194	493	81	198	279	478	529	1007	493	430	923
28 EAST ST.	& 11TH ST.	213	191	404	219	374	593	496	553	1049	689	499	1188
29 MACARTHUR DR.	& I-205	1306	761	2067	37	13	50	140	233	373	615	1091	1706
30 MACARTHUR DR.	& GRANT LINE RD.	859	410	1269	838	1185	2023	432	492	924	226	268	494
31 MACARTHUR DR.	& 11TH STREET	702	605	1307	830	696	1526	404	458	862	387	564	951
32 CORRAL HOLLOW	& VALRICO RD.	183	130	313	160	170	330	108	222	330	164	93	257
33 MACARTHUR DR.	& VALRICO RD.	178	101	279	424	571	995	447	349	796	52	20	72
34 CORRAL HOLLOW	& LINNE RD.	139	227	366	127	178	305	0	0	0	315	176	491
35 TRACY BLVD.	& LINNE RD.	105	75	180	378	274	652	259	257	516	201	337	538
36 MACARTHUR DR.	& LINNE RD.	105	84	189	179	209	388	345	206	551	177	307	484
37 CORRAL HOLLOW	& I-580	0	0	0	225	136	361	104	193	297	32	32	64
38 CHRISMAN RD.	& I-580	0	0	0	310	215	525	0	0	0	215	310	525
39 SPECIFIC PLAN	& DUMMY	234	516	750	78	32	110	0	0	0	438	202	640

TRACY SPECIFIC PLANS - PREFERRED RESIDENTIAL ALTERNATIVE PLUS 70% IND. ALT. B
PM PEAK HOUR, BACKGROUND FACTOR = 1.07, (INCLUDES INFILL DEVELOPMENT)
15% PEAK HOUR TRIP RATES FOR WAREHOUSE & LT. INDUSTRIAL

DKS ASSOCIATES
TRACS 4.2
8/18/87 7:39:44

ADDED VOLUMES BY TURNING MOVEMENT

INTERSECTION		NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND		
		LEFT	THRU	RIGHT	LEFT	THRU	RIGHT	LEFT	THRU	RIGHT	LEFT	THRU	RIGHT
1 Corral Hollow	& Grant Line	0	22	101	0	11	0	0	197	0	224	98	0
2 Lincoln Blvd	& Grant Line	0	111	0	44	55	22	45	186	0	0	267	89
3 Tracy Blvd	& Grant Line	89	31	0	0	89	35	16	226	44	0	343	0
4 Corral Hollow	& Lowell Ave.	79	85	23	0	155	13	5	25	58	46	50	0
5 Lincoln Blvd.	& Lowell Ave.	18	0	0	33	0	22	45	45	37	0	48	67
6 Tracy Blvd.	& Lowell Ave.	0	79	34	0	166	0	0	78	0	70	115	0
7 Byron Rd.	& Eleventh St.	0	0	0	59	0	20	40	794	0	0	393	119
8 Corral Hollow	& Eleventh	398	431	0	33	409	24	12	72	769	0	90	67
9 Lincoln Blvd.	& Eleventh St.	0	0	0	37	0	8	4	173	0	0	317	18
10 Tracy Blvd	& Eleventh St.	44	113	155	0	235	8	4	129	77	313	283	0
11 Holly-Central	& Eleventh St.	82	125	18	0	119	66	32	162	41	37	350	0
12 Corral Hollow	& Cypress Dr.	0	697	0	196	982	0	0	0	0	0	0	132
13 Tracy Blvd.	& Centre Court	0	187	0	59	374	193	95	15	0	0	7	29
14 MacArthur Dr.	& 3rd/Mt. Diablo	0	880	0	0	916	200	100	0	0	0	0	0
15 Corral Hollow	& Shulte	46	157	50	666	256	60	26	170	23	25	375	514
16 Sycamore	& Shulte	547	0	42	0	0	0	0	518	453	71	694	0
17 Tracy Blvd.	& Schulte	45	62	72	32	94	132	63	383	22	145	554	27
18 Central	& Schulte	137	209	116	0	337	198	98	244	133	246	385	0
19 MacArthur	& Schulte	0	686	0	0	490	472	217	47	0	0	96	0
20 Tracy Blvd.	& Central	48	83	136	0	68	24	12	96	24	212	194	0
21 Tracy Blvd	& Valpico Rd	297	210	487	0	184	119	57	203	150	281	453	0
22 I-205	& Eleventh St.	0	303	833	0	380	0	0	0	0	412	0	0
23 I-205	& Grant Line	0	102	281	41	241	0	0	0	0	139	0	20
24 Tracy Bl.	& I-205	0	14	29	0	39	13	5	118	0	58	270	0
25 INTERNAL 1	&	0	0	0	103	0	12	25	0	0	0	0	51
26 INTERNAL 2	&	0	0	40	256	0	0	0	97	0	20	48	128
27 EAST ST.	& GRANT LINE RD.	0	0	0	0	0	0	0	51	0	0	120	0
28 EAST ST.	& 11TH ST.	0	0	0	0	0	0	0	72	0	0	168	0
29 MACARTHUR DR.	& I-205	228	7	1171	32	19	0	0	0	98	536	0	12
30 MACARTHUR DR.	& GRANT LINE RD.	0	1202	0	110	574	120	51	0	0	0	0	45
31 MACARTHUR DR.	& 11TH STREET	0	794	0	252	742	168	72	0	0	0	0	108
32 CORRAL HOLLOW	& VALPICO RD.	46	93	0	0	47	60	26	91	23	0	186	0
33 MACARTHUR DR.	& VALPICO RD.	26	116	0	0	58	402	557	0	68	0	0	0
34 CORRAL HOLLOW	& LINNE RD.	0	0	117	70	0	0	0	0	0	240	0	139
35 TRACY BLVD.	& LINNE RD.	0	0	0	223	0	206	117	185	0	0	93	112
36 MACARTHUR DR.	& LINNE RD.	0	0	0	68	0	58	116	292	0	0	147	28
37 CORRAL HOLLOW	& I-580	0	0	0	0	0	240	117	0	0	0	0	0
38 CHRISMAN RD.	& I-580	0	0	0	360	0	0	0	0	0	0	0	175
39 SPECIFIC PLAN	& DUMMY	0	45	283	0	110	0	0	0	0	613	0	0

SPECIFIC PLANS   PREFERRED RESIDENTIAL ALTERNATIVE PLUS 20% IND. ALT. B
PM PEAK HOUR, BACKGROUND FACTOR = 1.07, (INCLUDES INFILL DEVELOPMENT)
PM PEAK HOUR TRIP RATES FOR WAREHOUSE & LT. INDUSTRIAL

DKS ASSOCIATES
TRACS 4.2
7:39:44

ADDED VOLUMES - APPROACH AND DEPARTURE

INTERSECTION		NORTHBOUND LEG ENTER	NORTHBOUND LEG LEAVE	NORTHBOUND LEG TOTAL	SOUTHBOUND LEG ENTER	SOUTHBOUND LEG LEAVE	SOUTHBOUND LEG TOTAL	EASTBOUND LEG ENTER	EASTBOUND LEG LEAVE	EASTBOUND LEG TOTAL	WESTBOUND LEG ENTER	WESTBOUND LEG LEAVE	WESTBOUND LEG TOTAL
1 Corral Hollow	& Grant Line	123	235	358	11	22	33	197	98	295	322	298	620
2 Lincoln Blvd	& Grant Line	111	55	166	121	245	366	231	289	520	356	230	586
3 Tracy Blvd	& Grant Line	120	113	233	104	47	151	286	467	753	343	226	569
4 Corral Hollow	& Lowell Ave.	187	259	446	188	70	258	88	142	230	96	48	144
5 Lincoln Blvd.	& Lowell Ave.	18	37	55	55	112	167	127	88	215	115	78	193
6 Tracy Blvd.	& Lowell Ave.	112	236	348	166	78	244	78	115	193	185	112	297
7 Byron Rd.	& Eleventh St.	0	0	0	79	159	238	834	413	1247	512	853	1365
8 Corral Hollow	& Eleventh	829	1178	2007	466	510	976	853	512	1365	157	105	262
9 Lincoln Blvd.	& Eleventh St.	0	0	0	45	22	67	177	325	502	335	210	545
10 Tracy Blvd	& Eleventh St.	312	625	937	243	117	360	210	335	545	596	284	880
11 Holly-Central	& Eleventh St.	225	197	422	185	157	342	235	498	733	387	180	567
12 Corral Hollow	& Cypress Dr.	677	982	1679	1178	829	2007	0	0	0	132	196	328
13 Tracy Blvd.	& Centre Court	187	374	561	626	311	937	110	200	310	36	74	110
14 MacArthur Dr.	& 3rd/Mt. Diablo	880	916	1796	1116	980	2096	100	200	300	0	0	0
15 Corral Hollow	& Shulte	253	304	557	982	697	1679	219	481	700	914	886	1800
16 Sycamore	& Shulte	589	524	1113	0	0	0	971	1241	2212	765	560	1325
17 Tracy Blvd	& Schulte	179	261	440	258	152	410	468	731	1199	726	487	1213
18 Central	& Schulte	462	716	1178	535	307	842	475	720	1195	631	360	991
19 MacArthur	& Schulte	686	490	1176	962	903	1865	264	568	832	96	47	143
20 Tracy Blvd.	& Central	267	304	571	92	95	187	132	266	398	406	232	638
21 Tracy Blvd	& Valpico Rd	994	615	1609	303	267	570	410	869	1279	734	690	1424
22 I-205	& Eleventh St.	1216	792	2008	380	383	763	0	0	0	412	833	1245
23 I-205	& Grant Line	383	380	763	282	122	404	0	0	0	159	322	481
24 Tracy Bl.	& I-205	43	97	140	52	19	71	123	283	406	328	147	475
25 INTERNAL 1	&	0	0	0	115	76	191	25	12	37	51	103	154
26 INTERNAL 2	&	40	20	60	256	128	384	97	48	145	196	393	589
27 EAST ST.	& GRANT LINE RD.	0	0	0	0	0	0	51	120	171	120	51	171
28 EAST ST.	& 11TH ST.	0	0	0	0	0	0	72	168	240	168	72	240
29 MACARTHUR DR.	& I-205	1406	653	2059	51	19	70	98	228	326	548	1203	1751
30 MACARTHUR DR.	& GRANT LINE RD.	1202	574	1776	804	1278	2102	51	120	171	45	110	155
31 MACARTHUR DR.	& 11TH STREET	794	742	1536	1162	974	2136	72	168	240	108	252	360
32 CORRAL HOLLOW	& VALPICO RD.	139	70	209	107	119	226	140	292	432	186	91	277
33 MACARTHUR DR.	& VALPICO RD.	144	126	270	460	673	1133	625	430	1055	0	0	0
34 CORRAL HOLLOW	& LINNE RD.	117	240	357	70	139	209	0	0	0	379	187	566
35 TRACY BLVD.	& LINNE RD.	0	0	0	429	229	658	302	299	601	205	408	613
36 MACARTHUR DR.	& LINNE RD.	0	0	0	126	144	270	408	205	613	175	360	535
37 CORRAL HOLLOW	& I-580	0	0	0	240	117	357	117	240	357	0	0	0
38 CHRISMAN RD.	& I-580	0	0	0	360	175	535	0	0	0	175	360	535
39 SPECIFIC PLAN	& DUMMY	328	723	1051	110	45	155	0	0	0	613	283	896

TRACY SPECIFIC PLANS - PREFERRED RESIDENTIAL ALTERNATIVE PLUS 70% IND. ALT. B
PM PEAK HOUR, BACKGROUND FACTOR = 1.07, (INCLUDES INFILL DEVELOPMENT)
15% PEAK HOUR TRIP RATES FOR WAREHOUSE & LT. INDUSTRIAL

DKS ASSOCIATES
TRACS 4.2
8/18/87 7:39:44

TOTAL VOLUMES BY TURNING MOVEMENT

INTERSECTION		V/C	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND		
			LEFT	THRU	RIGHT	LEFT	THRU	RIGHT	LEFT	THRU	RIGHT	LEFT	THRU	RIGHT
1 Corral Hollow	& Grant Line	0.39 A	12	39	115	23	21	11	13	497	44	238	198	13
2 Lincoln Blvd	& Grant Line	0.46 A	25	127	143	54	64	23	66	489	52	143	408	106
3 Tracy Blvd	& Grant Line	0.68 B	282	205	136	94	326	108	85	613	283	148	673	79
4 Corral Hollow	& Lowell Ave.	0.19 A	27	127	23	0	223	13	5	25	58	46	50	0
5 Lincoln Blvd.	& Lowell Ave.	0.20 A	18	148	29	60	101	22	43	45	37	28	48	5
6 Tracy Blvd.	& Lowell Ave.	0.51 A	78	236	65	6	475	95	26	98	44	75	139	16
7 Byron Rd.	& Eleventh St.	0.30 A	0	0	0	59	0	20	40	1368	0	0	559	339
8 Corral Hollow	& Eleventh	0.71 C	407	460	87	50	423	27	17	616	793	57	244	14
9 Lincoln Blvd.	& Eleventh St.	0.44 A	38	40	52	111	37	32	90	649	53	57	613	456
10 Tracy Blvd	& Eleventh St.	0.91 E	173	413	248	102	515	88	94	907	192	397	571	269
11 Holly-Central	& Eleventh St.	0.88 D	201	304	133	59	294	123	98	531	168	101	887	84
12 Corral Hollow	& Cypress Dr.	0.43 A	0	824	0	196	1068	0	0	0	0	0	0	132
13 Tracy Blvd.	& Centre Court	0.44 A	42	507	0	59	801	248	137	13	5	0	7	27
14 MacArthur Dr.	& 3rd/Mt. Diablo	0.45 A	33	946	0	0	1011	202	104	0	27	0	0	0
15 Corral Hollow	& Shulte	0.87 D	48	284	50	666	342	80	24	170	23	25	375	514
16 Sycamore	& Shulte	0.61 B	547	0	42	0	0	0	0	518	453	71	694	0
17 Tracy Blvd	& Schulte	0.55 A	45	233	113	205	322	132	63	383	22	158	554	107
18 Central	& Schulte	0.75 C	137	209	116	72	337	236	127	436	133	246	479	55
19 MacArthur	& Schulte	0.52 A	34	754	4	8	584	508	221	98	12	12	113	17
20 Tracy Blvd.	& Central	0.38 A	48	262	142	128	173	24	12	96	24	221	194	38
21 Tracy Blvd	& Valpico Rd	0.85 D	303	315	493	9	267	128	79	204	158	267	489	41
22 I-205	& Eleventh St.	1.44 F	0	383	1100	0	380	0	0	0	0	679	0	0
23 I-205	& Grant Line	0.62 B	0	102	368	41	241	106	0	0	0	245	0	190
24 Tracy Bl.	& I-205	1.00 F	235	14	424	0	39	13	5	118	235	453	270	0
25 INTERNAL 1	&	0.13 A	0	0	0	103	0	12	25	0	0	0	0	53
26 INTERNAL 2	&	0.33 A	0	0	40	256	0	0	0	97	0	20	40	123
27 EAST ST.	& GRANT LINE RD.	0.35 A	170	52	77	21	43	17	58	347	88	83	377	88
28 EAST ST.	& 11TH ST.	0.39 A	18	146	49	31	71	117	35	439	42	70	466	173
29 MACARTHUR DR.	& I-205	1.78 F	298	7	1403	32	19	0	0	0	168	766	0	12
30 MACARTHUR DR.	& GRANT LINE RD.	0.96 E	0	1202	0	142	574	393	289	150	0	0	174	65
31 MACARTHUR DR.	& 11TH STREET	0.63 B	71	794	84	252	742	168	72	320	32	43	257	39
32 CORRAL HOLLOW	& VALPICO RD.	0.32 A	51	162	10	12	116	63	27	92	24	10	191	11
33 MACARTHUR DR.	& VALPICO RD.	0.81 D	28	201	10	10	143	402	557	0	68	5	42	4
34 CORRAL HOLLOW	& LINNE RD.	0.47 A	0	40	125	105	42	0	0	0	0	253	0	170
35 TRACY BLVD.	& LINNE RD.	0.60 B	10	85	10	230	58	213	127	214	5	12	119	129
36 MACARTHUR DR.	& LINNE RD.	0.46 A	10	85	10	75	74	65	132	324	5	5	185	53
37 CORRAL HOLLOW	& I-580	0.31 A	0	0	0	32	0	241	138	0	0	0	0	32
38 CHRISMAN RD.	& I-580	0.44 A	0	0	0	413	0	0	0	0	0	0	0	240
39 SPECIFIC PLAN	& DUMMY	0.63 B	0	45	283	0	110	0	0	0	0	613	0	2

TRACY SPECIFIC PLANS - PREFERRED RESIDENTIAL ALTERNATIVE PLUS 70% 2ND. ALT. E
PM PEAK HOUR, BACKGROUND FACTOR = 1.07, (INCLUDES INFILL DEVELOPMENT)
PM PEAK HOUR TRIP RATES FOR WAREHOUSE & LT. INDUSTRIAL

DKS ASSOCIATES
TRACS 4.2
9/18/87 7:39:44

TOTAL VOLUMES - APPROACH AND DEPARTURE

INTERSECTION		NORTHBOUND LEG			SOUTHBOUND LEG			EASTBOUND LEG			WESTBOUND LEG		
		ENTER	LEAVE	TOTAL	ENTER	LEAVE	TOTAL	ENTER	LEAVE	TOTAL	ENTER	LEAVE	TOTAL
1 Corral Hollow	& Grant Line	166	303	469	55	65	120	554	221	775	449	635	1084
2 Lincoln Blvd	& Grant Line	295	269	564	141	299	440	617	456	1073	657	686	1343
3 Tracy Blvd	& Grant Line	604	757	1361	528	371	899	982	1043	2025	900	843	1743
4 Corral Hollow	& Lowell Ave.	229	327	556	236	132	368	88	142	230	96	48	144
5 Lincoln Blvd.	& Lowell Ave.	195	164	359	183	292	475	127	88	215	173	134	307
6 Tracy Blvd.	& Lowell Ave.	379	594	973	576	278	854	168	312	480	230	169	399
7 Byron Rd.	& Eleventh St.	0	0	0	79	159	238	1408	599	1997	678	1427	2105
8 Corral Hollow	& Eleventh	954	1273	2227	500	551	1051	1426	678	2104	375	753	1128
9 Lincoln Blvd.	& Eleventh St.	130	147	277	180	290	470	992	683	1675	930	812	1642
10 Tracy Blvd	& Eleventh St.	834	1104	1938	785	716	1501	793	832	1625	1177	937	2114
11 Holly-Central	& Eleventh St.	630	563	1201	476	484	960	995	1011	2006	1072	723	1795
12 Corral Hollow	& Cypress Dr.	824	1068	1892	1264	956	2220	0	0	0	132	196	328
13 Tracy Blvd.	& Centre Court	549	806	1355	1106	673	1779	152	299	452	36	74	110
14 MacArthur Dr.	& 3rd/Mt. Diablo	979	1041	2020	1218	1050	2268	131	235	366	0	0	0
15 Corral Hollow	& Shulte	380	390	770	1068	824	1892	219	481	700	914	886	1800
16 Sycamore	& Shulte	589	524	1113	0	0	0	971	1241	2212	785	540	1325
17 Tracy Blvd	& Schulte	391	502	893	659	403	1062	469	731	1199	819	701	1520
18 Central	& Schulte	462	716	1178	845	391	1036	894	852	1548	780	624	1404
19 MacArthur	& Schulte	992	608	1400	1090	992	2090	331	453	784	142	110	252
20 Tracy Blvd.	& Central	452	418	870	325	312	637	132	266	398	453	366	819
21 Tracy Blvd	& Valpico Rd	1111	710	1821	404	435	839	439	900	1339	797	706	1503
22 I-205	& Eleventh St.	1483	1059	2542	380	383	763	0	0	0	679	1100	1779
23 I-205	& Grant Line	460	406	954	498	282	870	0	106	106	425	407	832
24 Tracy Bl.	& I-205	673	727	1400	52	19	71	358	518	876	725	542	1265
25 INTERNAL 1	&	0	0	0	110	76	193	25	12	37	51	103	154
26 INTERNAL 2	&	40	20	60	258	128	386	97	48	145	196	393	589
27 EAST ST.	& GRANT LINE RD.	299	194	493	81	198	279	493	564	1057	528	445	973
28 EAST ST.	& 11TH ST.	213	191	404	219	374	593	518	601	1119	737	519	1256
29 MACARTHUR DR.	& I-205	1708	947	2655	51	19	70	160	298	458	779	1435	2207
30 MACARTHUR DR.	& GRANT LINE RD.	1252	574	1776	1069	1556	2625	447	527	974	239	300	539
31 MACARTHUR DR.	& 11TH STREET	929	817	1746	1162	974	2136	424	506	930	418	636	1054
32 CORRAL HOLLOW	& VALPICO RD.	223	150	373	191	205	396	148	305	453	217	119	336
33 MACARTHUR DR.	& VALPICO RD.	239	216	455	555	763	1318	629	472	1097	52	20	72
34 CORRAL HOLLOW	& LINNE RD.	173	295	468	147	218	365	0	0	0	423	230	653
35 TRACY BLVD.	& LINNE RD.	105	75	180	501	340	841	346	342	688	259	454	713
36 MACARTHUR DR.	& LINNE RD.	105	84	189	214	250	464	481	244	725	227	409	636
37 CORRAL HOLLOW	& I-580	0	0	0	293	170	463	138	261	399	32	32	64
38 CHRISMAN RD.	& I-580	0	0	0	413	265	678	0	0	0	265	413	678
39 SPECIFIC PLAN	& DUMMY	329	723	1051	110	45	155	0	0	0	613	283	896

TRACY SPECIFIC PLANS - PREFERRED RESIDENTIAL ALTERNATIVE PLUS 100% IND. ALT. B
PM PEAK HOUR, BACKGROUND FACTOR = 1.07, (INCLUDES ALL DEVELOPMENT)
15% PEAK HOUR TRIP RATES FOR WAREHOUSE & LT. INDUSTRIAL

DKS ASSOCIATES
TRACS 4.2
8/17/87 14130146

ADDED VOLUMES BY TURNING MOVEMENT

INTERSECTION		NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND		
		LEFT	THRU	RIGHT	LEFT	THRU	RIGHT	LEFT	THRU	RIGHT	LEFT	THRU	RIGHT
1 Corral Hollow	& Grant Line	0	22	125	0	11	0	0	197	0	281	98	0
2 Lincoln Blvd	& Grant Line	0	111	0	44	55	22	45	210	0	0	324	89
3 Tracy Blvd	& Grant Line	89	35	0	0	80	41	18	248	44	0	395	0
4 Corral Hollow	& Lowell Ave.	79	107	23	0	207	19	7	25	58	46	50	0
5 Lincoln Blvd.	& Lowell Ave.	18	0	0	33	0	22	45	45	37	0	48	67
6 Tracy Blvd.	& Lowell Ave.	0	82	34	0	177	0	0	78	0	70	115	0
7 Byron Rd.	& Eleventh St.	0	0	0	59	0	20	40	794	0	0	393	119
8 Corral Hollow	& Eleventh	398	556	0	33	511	24	12	72	769	0	90	67
9 Lincoln Blvd.	& Eleventh St.	0	0	0	37	0	8	4	204	0	0	389	18
10 Tracy Blvd	& Eleventh St.	44	117	155	0	246	8	4	160	77	313	355	0
11 Holly-Central	& Eleventh St.	82	126	18	0	122	66	32	193	41	37	422	0
12 Corral Hollow	& Cypress Dr.	0	822	0	196	1084	0	0	0	0	0	0	132
13 Tracy Blvd.	& Centre Court	0	191	0	59	385	193	95	15	0	0	7	29
14 MacArthur Dr.	& 3rd/Mt. Diablo	0	1220	0	0	1234	200	100	0	0	0	0	0
15 Corral Hollow	& Shulte	66	188	50	706	292	86	37	243	33	25	536	598
16 Sycamore	& Shulte	713	0	42	0	0	0	0	551	533	71	771	0
17 Tracy Blvd	& Schulte	45	64	72	32	100	137	65	414	22	145	626	27
18 Central	& Schulte	137	210	132	0	339	198	98	275	133	282	457	0
19 MacArthur	& Schulte	0	979	0	0	700	580	263	47	0	0	96	0
20 Tracy Blvd.	& Central	48	85	136	0	73	24	12	96	24	212	194	0
21 Tracy Blvd	& Valpico Rd	424	210	696	0	184	125	59	290	214	402	647	0
22 I-205	& Eleventh St.	0	427	833	0	484	0	0	0	0	412	0	0
23 I-205	& Grant Line	0	146	281	41	345	0	0	0	0	139	0	20
24 Tracy Bl.	& I-205	0	20	29	0	56	19	7	160	0	58	368	0
25 INTERNAL 1	&	0	0	0	103	0	12	25	0	0	0	0	51
26 INTERNAL 2	&	0	0	40	256	0	0	0	97	0	20	48	128
27 EAST ST.	& GRANT LINE RD.	0	0	0	0	0	0	0	73	0	0	172	0
28 EAST ST.	& 11TH ST.	0	0	0	0	0	0	0	103	0	0	240	0
29 MACARTHUR DR.	& I-205	326	10	1674	46	28	0	0	0	140	766	0	16
30 MACARTHUR DR.	& GRANT LINE RD.	0	1717	0	157	821	172	73	0	0	0	0	65
31 MACARTHUR DR.	& 11TH STREET	0	1134	0	360	1060	240	103	0	0	0	0	155
32 CORRAL HOLLOW	& VALPICO RD.	66	132	0	0	67	86	37	129	33	0	265	0
33 MACARTHUR DR.	& VALPICO RD.	40	166	0	0	83	574	796	0	97	0	0	0
34 CORRAL HOLLOW	& LINNE RD.	0	0	167	100	0	0	0	0	0	343	0	199
35 TRACY BLVD.	& LINNE RD.	0	0	0	318	0	294	166	265	0	0	133	160
36 MACARTHUR DR.	& LINNE RD.	0	0	0	97	0	83	166	417	0	0	210	40
37 CORRAL HOLLOW	& I-580	0	0	0	0	0	343	167	0	0	0	0	0
38 CHRISMAN RD.	& I-580	0	0	0	515	0	0	0	0	0	0	0	250
39 SPECIFIC PLAN	& DUMMY	0	65	405	0	157	0	0	0	0	875	0	0

TRACY SPECIFIC PLANS - PREFERRED RESIDENTIAL ALTERNATIVE PLUS 100% IND. ALT. D
PM PEAK HOUR, BACKGROUND FACTOR = 1.07, (INCLUDES INFILL DEVELOPMENT)
15% PEAK HOUR TRIP RATES FOR WAREHOUSE & LT. INDUSTRIAL

DKS ASSOCIATES
TRACS 4.2
8/17/87 14130146

ADDED VOLUMES - APPROACH AND DEPARTURE

INTERSECTION		NORTHBOUND LEG ENTER	NORTHBOUND LEG LEAVE	NORTHBOUND LEG TOTAL	SOUTHBOUND LEG ENTER	SOUTHBOUND LEG LEAVE	SOUTHBOUND LEG TOTAL	EASTBOUND LEG ENTER	EASTBOUND LEG LEAVE	EASTBOUND LEG TOTAL	WESTBOUND LEG ENTER	WESTBOUND LEG LEAVE	WESTBOUND LEG TOTAL
1 Corral Hollow	& Grant Line	147	292	439	11	22	33	197	98	295	379	322	701
2 Lincoln Blvd	& Grant Line	111	55	166	121	245	366	255	346	601	413	254	667
3 Tracy Blvd	& Grant Line	124	124	248	121	53	174	310	525	835	395	248	643
4 Corral Hollow	& Lowell Ave.	209	311	520	226	114	340	90	148	238	96	48	144
5 Lincoln Blvd.	& Lowell Ave.	18	37	55	55	112	167	127	88	215	115	78	193
6 Tracy Blvd.	& Lowell Ave.	116	247	363	177	82	259	78	115	193	185	112	297
7 Byron Rd.	& Eleventh St.	0	0	0	79	159	238	834	413	1247	512	853	1365
8 Corral Hollow	& Eleventh	954	1280	2234	568	635	1203	853	512	1365	157	105	262
9 Lincoln Blvd.	& Eleventh St.	0	0	0	45	22	67	208	397	605	407	241	648
10 Tracy Blvd	& Eleventh St.	316	636	952	254	121	375	241	407	648	668	315	983
11 Holly-Central	& Eleventh St.	226	200	426	188	158	346	266	570	836	459	211	670
12 Corral Hollow	& Cypress Dr.	822	1084	1906	1280	954	2234	0	0	0	132	196	328
13 Tracy Blvd.	& Centre Court	191	385	576	637	315	952	110	200	310	36	74	110
14 MacArthur Dr.	& 3rd/Mt. Diablo	1220	1234	2454	1434	1320	2754	100	200	300	0	0	0
15 Corral Hollow	& Shulte	304	350	654	1084	823	1907	313	688	1001	1159	999	2158
16 Sycamore	& Shulte	755	604	1359	0	0	0	1084	1484	2568	842	593	1435
17 Tracy Blvd	& Schulte	181	267	448	269	156	425	501	808	1309	798	518	1316
18 Central	& Schulte	479	754	1233	537	308	845	506	792	1298	739	407	1146
19 MacArthur	& Schulte	979	700	1679	1280	1242	2522	310	676	986	96	47	143
20 Tracy Blvd.	& Central	269	309	578	97	97	194	132	266	398	406	232	638
21 Tracy Blvd	& Valpico Rd	1330	800	2130	309	269	578	563	1196	1759	1049	986	2035
22 I-205	& Eleventh St.	1260	896	2156	484	427	911	0	0	0	412	833	1245
23 I-205	& Grant Line	427	484	911	386	166	552	0	0	0	159	322	481
24 Tracy Bl.	& I-205	49	114	163	75	27	102	167	387	554	426	189	615
25 INTERNAL 1	&	0	0	0	115	76	191	25	12	37	51	103	154
26 INTERNAL 2	&	40	20	60	256	128	384	97	48	145	196	393	589
27 EAST ST.	& GRANT LINE RD.	0	0	0	0	0	0	73	172	245	172	73	245
28 EAST ST.	& 11TH ST.	0	0	0	0	0	0	103	240	343	240	103	343
29 MACARTHUR DR.	& I-205	2010	934	2944	74	26	100	140	326	466	782	1720	2502
30 MACARTHUR DR.	& GRANT LINE RD.	1717	821	2538	1150	1855	3005	73	172	245	65	157	222
31 MACARTHUR DR.	& 11TH STREET	1134	1060	2194	1660	1392	3052	103	240	343	155	360	515
32 CORRAL HOLLOW	& VALPICO RD.	198	100	298	153	169	322	199	417	616	265	129	394
33 MACARTHUR DR.	& VALPICO RD.	206	180	386	657	962	1619	893	614	1507	0	0	0
34 CORRAL HOLLOW	& LINNE RD.	167	343	510	100	199	299	0	0	0	542	267	809
35 TRACY BLVD.	& LINNE RD.	0	0	0	612	326	938	431	427	858	293	583	876
36 MACARTHUR DR.	& LINNE RD.	0	0	0	180	206	386	583	293	876	250	514	764
37 CORRAL HOLLOW	& I-580	0	0	0	343	167	510	167	343	510	0	0	0
38 CHRISMAN RD.	& I-580	0	0	0	515	250	765	0	0	0	250	515	765
39 SPECIFIC PLAN	& DUMMY	470	1032	1502	157	65	222	0	0	0	875	405	1280

TRACY SPECIFIC PLANS - PREFERRED RESIDENTIAL ALTERNATIVE PLUS 100% IND. ALT. B
PM PEAK HOUR, BACKGROUND FACTOR = 1.07, (INCLUDES INFILL DEVELOPMENT)
15% PEAK HOUR TRIP RATES FOR WAREHOUSE & LT. INDUSTRIAL

DKS ASSOCIATES
TRACS 4.2-
8/17/87 14:30:46

TOTAL VOLUMES BY TURNING MOVEMENT

INTERSECTION		V/C		NORTHBOUND LEFT	NORTHBOUND THRU	NORTHBOUND RIGHT	SOUTHBOUND LEFT	SOUTHBOUND THRU	SOUTHBOUND RIGHT	EASTBOUND LEFT	EASTBOUND THRU	EASTBOUND RIGHT	WESTBOUND LEFT	WESTBOUND THRU	WESTBOUND RIGHT
1 Corral Hollow	& Grant Line	0.43	A	12	39	139	23	21	11	13	497	44	295	198	13
2 Lincoln Blvd	& Grant Line	0.52	A	25	127	143	54	64	23	66	513	62	143	465	106
3 Tracy Blvd	& Grant Line	0.69	B	262	210	136	94	337	114	88	635	283	148	725	79
4 Corral Hollow	& Lowell Ave.	0.21	A	79	149	23	0	275	19	7	25	58	46	50	0
5 Lincoln Blvd.	& Lowell Ave.	0.20	A	18	148	29	60	101	22	45	45	37	26	48	99
6 Tracy Blvd.	& Lowell Ave.	0.52	A	78	240	65	6	486	95	26	98	44	75	139	16
7 Byron Rd.	& Eleventh St.	0.50	A	0	0	0	59	0	20	40	1368	0	0	559	119
8 Corral Hollow	& Eleventh	0.75	C	407	585	87	50	525	27	17	616	793	57	244	74
9 Lincoln Blvd.	& Eleventh St.	0.47	A	38	40	52	111	37	32	90	680	53	57	685	160
10 Tracy Blvd	& Eleventh St.	0.93	E	173	417	248	182	526	88	94	538	192	397	643	209
11 Holly-Central	& Eleventh St.	0.91	E	201	305	133	59	297	123	96	562	168	101	959	84
12 Corral Hollow	& Cypress Dr.	0.47	A	0	949	0	196	1170	0	0	0	0	0	0	132
13 Tracy Blvd.	& Centre Court	0.45	A	42	511	0	59	812	246	137	15	5	0	7	29
14 MacArthur Dr.	& 3rd/Mt. Diablo	0.56	A	33	1286	0	0	1332	202	104	0	27	0	0	0
15 Corral Hollow	& Shulte	1.01	F	66	315	50	706	378	86	37	243	33	25	536	598
16 Sycamore	& Shulte	0.76	C	713	0	42	0	0	0	0	551	533	71	771	0
17 Tracy Blvd	& Schulte	0.57	A	45	235	113	205	328	137	65	414	22	158	626	107
18 Central	& Schulte	0.82	D	137	210	132	72	339	236	127	467	133	282	551	55
19 MacArthur	& Schulte	0.66	B	34	1047	4	8	794	614	267	98	12	12	113	17
20 Tracy Blvd.	& Central	0.38	A	48	264	142	128	178	24	12	96	24	221	194	38
21 Tracy Blvd	& Valpico Rd	1.29	F	430	315	702	9	267	134	81	291	220	408	663	41
22 I-205	& Eleventh St.	1.47	F	0	427	1100	0	484	0	0	0	0	679	0	0
23 I-205	& Grant Line	0.65	D	0	146	366	41	345	106	0	0	0	245	0	180
24 Tracy Bl.	& I-205	1.04	F	235	20	424	0	56	19	7	160	235	453	368	0
25 INTERNAL 1	&	0.13	A	0	0	0	103	0	12	25	0	0	0	0	51
26 INTERNAL 2	&	0.33	A	0	0	40	256	0	0	0	97	0	20	48	128
27 EAST ST.	& GRANT LINE RD.	0.37	A	170	52	77	21	43	17	58	369	88	63	429	88
28 EAST ST.	& 11TH ST.	0.41	A	18	146	49	31	71	117	35	470	42	78	538	193
29 MACARTHUR DR.	& I-205	2.37	F	396	10	1906	46	28	0	0	0	210	990	0	16
30 MACARTHUR DR.	& GRANT LINE RD.	1.00	F	0	1717	0	189	821	405	311	158	0	0	174	85
31 MACARTHUR DR.	& 11TH STREET	0.85	D	71	1134	64	360	1060	240	103	320	32	43	267	155
32 CORRAL HOLLOW	& VALPICO RD.	0.44	A	71	201	10	12	136	89	38	135	34	10	270	16
33 MACARTHUR DR.	& VALPICO RD.	1.13	F	40	251	10	10	168	574	796	0	97	5	42	5
34 CORRAL HOLLOW	& LINNE RD.	0.63	B	0	48	175	135	42	0	0	0	0	356	0	230
35 TRACY BLVD.	& LINNE RD.	0.83	D	10	85	10	325	58	301	176	294	5	12	159	176
36 MACARTHUR DR.	& LINNE RD.	0.61	B	10	85	10	104	74	90	182	449	5	5	252	45
37 CORRAL HOLLOW	& I-580	0.41	A	0	0	0	32	0	364	188	0	0	0	0	32
38 CHRISMAN RD.	& I-580	0.61	B	0	0	0	568	0	0	0	0	0	0	0	340
39 SPECIFIC PLAN	& DUMMY	0.89	D	0	65	405	0	157	0	0	0	0	875	0	0

TRACY SPECIFIC PLANS - PREFERRED RESIDENTIAL ALTERNATIVE PLUS 100% IND. ALT. D
PM PEAK HOUR, BACKGROUND FACTOR = 1.07, (INCLUDES INFILL DEVELOPMENT)
.5% PEAK HOUR TRIP RATES FOR WAREHOUSE & LT. INDUSTRIAL

DKS ASSOCIATES
TRACS 4.2
8/17/87 14:30:46

TOTAL VOLUMES - APPROACH AND DEPARTURE

INTERSECTION	NORTHBOUND LEG ENTER	NORTHBOUND LEG LEAVE	NORTHBOUND LEG TOTAL	SOUTHBOUND LEG ENTER	SOUTHBOUND LEG LEAVE	SOUTHBOUND LEG TOTAL	EASTBOUND LEG ENTER	EASTBOUND LEG LEAVE	EASTBOUND LEG TOTAL	WESTBOUND LEG ENTER	WESTBOUND LEG LEAVE	WESTBOUND LEG TOTAL
1 Corral Hollow & Grant Line	190	360	550	55	65	120	554	221	775	506	659	1165
2 Lincoln Blvd & Grant Line	295	269	564	141	299	440	641	513	1154	714	710	1424
3 Tracy Blvd & Grant Line	608	768	1376	545	377	922	1006	1101	2107	952	865	1817
4 Corral Hollow & Lowell Ave.	251	379	630	294	156	450	90	148	238	96	48	144
5 Lincoln Blvd. & Lowell Ave.	195	164	359	183	292	475	127	88	215	173	134	307
6 Tracy Blvd. & Lowell Ave.	383	605	988	587	282	869	168	312	480	230	169	399
7 Byron Rd. & Eleventh St.	0	0	0	79	159	238	1408	579	1987	678	1427	2105
8 Corral Hollow & Eleventh	1079	1375	2454	602	676	1278	1426	678	2104	375	753	1128
9 Lincoln Blvd. & Eleventh St.	130	147	277	180	290	470	823	755	1578	902	843	1745
10 Tracy Blvd & Eleventh St.	838	1115	1953	796	720	1516	824	904	1728	1249	968	2217
11 Holly-Central & Eleventh St.	639	566	1205	479	485	964	826	1283	2109	1144	754	1898
12 Corral Hollow & Cypress Dr.	949	1170	2119	1366	1081	2447	0	0	0	132	196	328
13 Tracy Blvd. & Centre Court	553	817	1370	1117	677	1794	157	295	452	36	74	110
14 MacArthur Dr. & 3rd/Mt. Diablo	1319	1359	2678	1534	1390	2924	131	235	366	0	0	0
15 Corral Hollow & Shulte	431	436	867	1170	950	2120	313	688	1001	1159	999	2158
16 Sycamore & Shulte	755	604	1359	0	0	0	1084	1484	2568	842	593	1435
17 Tracy Blvd & Schulte	393	508	901	670	407	1077	501	808	1309	891	732	1623
18 Central & Schulte	479	754	1233	647	392	1039	727	924	1651	888	671	1559
19 MacArthur & Schulte	1085	818	1903	1416	1331	2747	377	761	1138	142	110	252
20 Tracy Blvd. & Central	454	423	877	330	314	644	132	266	398	453	366	819
21 Tracy Blvd & Valpico Rd	1447	895	2342	410	437	847	592	1227	1819	1112	1002	2114
22 I-205 & Eleventh St.	1527	1163	2690	484	427	911	0	0	0	679	1100	1779
23 I-205 & Grant Line	512	590	1102	492	326	818	0	106	106	425	407	832
24 Tracy Bl. & I-205	679	744	1423	75	27	102	402	622	1024	821	584	1405
25 INTERNAL 1 &	0	0	0	115	76	191	25	12	37	51	103	154
26 INTERNAL 2 &	40	20	60	256	128	384	97	48	145	196	393	589
27 EAST ST. & GRANT LINE RD.	299	194	493	81	198	279	515	616	1131	580	467	1047
28 EAST ST. & 11TH ST.	213	191	404	219	374	593	547	673	1220	809	550	1359
29 MACARTHUR DR. & I-205	2312	1228	3540	74	26	100	210	396	606	1006	1952	2958
30 MACARTHUR DR. & GRANT LINE RD.	1717	821	2538	1415	2113	3528	469	579	1048	259	347	606
31 MACARTHUR DR. & 11TH STREET	1269	1135	2404	1660	1392	3052	455	578	1033	465	744	1209
32 CORRAL HOLLOW & VALPICO RD.	282	180	462	237	255	492	207	430	637	296	157	453
33 MACARTHUR DR. & VALPICO RD.	301	270	571	752	1052	1804	893	656	1549	52	20	72
34 CORRAL HOLLOW & LINNE RD.	223	398	621	177	278	455	0	0	0	586	310	896
35 TRACY BLVD. & LINNE RD.	105	75	180	684	437	1121	475	470	945	347	629	976
36 MACARTHUR DR. & LINNE RD.	105	84	189	268	312	580	636	352	988	302	563	865
37 CORRAL HOLLOW & I-580	0	0	0	396	220	616	188	364	552	32	32	64
38 CHRISMAN RD. & I-580	0	0	0	568	340	908	0	0	0	340	568	908
39 SPECIFIC PLAN & DUMMY	470	1032	1502	157	65	222	0	0	0	875	405	1280