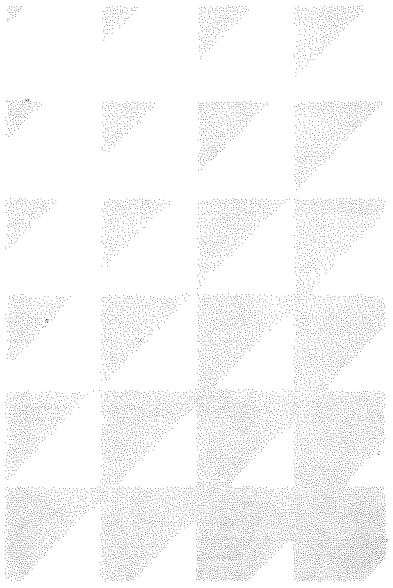

APPENDIX

APPENDIX 6.1

LEGAL DESCRIPTION

H. M. SCOTT & ASSOCIATES, INC.

LEGAL DESCRIPTION

Tentative Parcel Map No. 15247
Dominguez Technology Centre - Phase One Specific Plan

That portion of the 611.05 acre tract of land in Rancho San Pedro, in the City of Carson, County of Los Angeles, State of California, allotted to Maria De Los Reyes Dominguez by Decree of Partition of a portion of said Rancho, entered in Case No. 3284 of the Superior Court of said County, described as follows:

Commencing at a point on the southerly line of said 611.05 acre tract, said point being distant along said southerly line North 87°58'51" East 2370.00 feet from the intersection of said southerly line with the centerline of Central Avenue, as said centerline is shown on County Surveyor's Map No. 8588, on file in the office of the County Engineer of said County; thence North 4°03'09" West 40.00 feet to the True Point of Beginning of this description; thence North 2°01'09" West 600.00 feet; thence North 49°49'44" West 175.46 feet; thence North 2°01'09" West 480.00 feet; thence North 87°58'51" East 274.53 feet; thence South 49°49'44" East 42.04 feet to the beginning of a tangent curve concave northerly and have a radius of 310 feet; thence southeasterly and easterly along said curve through a central angle of 40°16'16" an arc distance of 217.89 feet; thence North 89°54'00" East 954.53 feet; thence North 87°59'27" East 180.10 feet; thence North 89°54'00" East 177.91 feet to the beginning of a tangent curve concave northwesterly and having a radius of 27 feet, said curve being tangent at its northerly terminus with a line which is parallel with and 17.00 feet westerly, measured at right angles, from the easterly line of Parcel 5, as shown on map filed in Book 53, pages 37 and 38 of Record of Surveys, in the office of the County Recorder of said County; thence northeasterly along said curve through a central angle of 93°57'09" an arc distance of 44.27 feet to said northerly terminus; thence North 85°56'51" East 17.00 feet to said easterly line; thence along said easterly line South 4°03'09" East 820.76 feet to a point on said line which is North 4°03'09" West 300 feet from the said southerly line of said 611.05 acre tract; thence South 85°56'51" West 17.00 feet; thence South 4°03'09" East 242.37 feet to a point which is North 4°03'09" West 17.00 feet from a line which is parallel with 40.00 feet northerly, measured at right angles, from said southerly line; thence South 41°57'56" West 23.61 feet to a point on said last mentioned parallel line, said point being distant along said parallel line South 87°58'51" West 17.00 feet from said line which is parallel with and 17.00 feet westerly of said easterly line of Parcel 5; thence along aforementioned parallel line South 87°58'51" West 1734.60 feet to the True Point of Beginning of this description.

May 7, 1986
RC/ckd/RD
J.N. 2610-19

APPENDIX 6.2

ENVIRONMENTAL INFORMATION AND CHECKLIST FORM

CITY OF CARSON

DEPARTMENT OF COMMUNITY DEVELOPMENT

ENVIRONMENTAL INFORMATION AND CHECKLIST FORM
(INITIAL STUDY)

Not all projects or actions will necessitate the preparation of an Environmental Impact Report (EIR). In order to determine whether any significant environmental effects could result from the proposed project/action, the following information and checklist form must be completed by the applicant and submitted to the City's Department of Community Development for review.

As soon as possible, the Department will determine whether the proposal will require an EIR and will notify the applicant accordingly.

CHECK APPROPRIATE BOXES

☐ Conditional Use Permit No. _____

☐ Variance No. _____

☐ Zone Change No. _____

☐ General Plan Amendment No. _____

☐ Tentative Tract Map No. _____

XXX Parcel Map No. 15247

XXX Other (specify) Specific Plan

PLEASE TYPE

Date Submitted May 9, 1986

Project/Action Requested Specific Plan & Subdivision Map

Project Address: (If vacant site, include tract, block, and lot number(s) and nearest street intersection):

Northwest corner of University and Wilmington Avenues

County Assessor's Map Book 7319 Page 5 & 6 Parcel(s) _____

Project Area (in acres) 42.5 acres (approx.)

Applicant's Name Dominguez Properties Telephone (213) 537-0957

Address 17420 South Avalon City Carson Zip 90746

Legal Owner (if different from above):

Name (same as above) Telephone _____

Address _____ City _____ Zip _____

Report Prepared by John McKenna & Associates Telephone (714) 661-0639

Address 18021-J Skypark Circle #165 City Irvine Zip 92714

1. List and describe any other related permits and other public approvals required for this project including those required by city, regional, state or federal agencies.

Federal Communications Commission (FCC) license for microwave communications.

2. What is the relationship between this project and a larger project or series of projects, if any? This project represents the first increment of the 300-acre Dominguez Technology Centre presently within the jurisdiction of the City of Carson. The subsequent development of later stages of this master-planned business park (presently zoned ML-Manufacturing Light) will also be subject to the requirement of a Specific Plan.

3. **TYPE OF PROJECT.** Briefly describe the project; then fill in the appropriate sections A through D below, as applicable.
The project consists of a Specific Plan and a subdivision map to permit the development of office, research & development and certain other related "hi-tech" light industrial uses in a carefully designed 42-acre business park with a campus-like setting. The development will be implemented over a period of several years in accordance with the plans, guidelines and regulations established through the Specific Plan process.

A. N/A **Residential;** Zone _____ (Attach plans, if applicable)

1. ____ Single Family Dwellings

a. Number of dwelling units
b. Acreage or square footage of site
c. Density (dwelling units per acre)
d. Average size of lots (in sq. ft.)
e. Average lot coverage (in sq. ft.)
f. Total open space (in sq. ft.)
g. Height and number of stories
h. Off-street parking:
Number of spaces
Average size of stall
____ Carport, ____ Open, or ____ Garage
____ Above Grade, ____ At Grade, or ____ Below Grade
i. Recreational areas (types and square feet in each)
j. Demographics:
Approximate total number of adults
Approximate total number of children
Population density (population per acre)
k. List available utilities to the site:

2. ____ Multiple family dwellings, including duplexes (number)

a. Number of dwelling units
b. Acreage or square footage of site
c. Density (dwelling units per acre)
d. Average size of lots (in sq. ft.)
e. Average lot coverage (in sq. ft.)
f. Total open space (in sq. ft.)
g. Height and number of stories
h. Off-street parking:
Number of spaces
Average size of stall
____ Carport, ____ Open, or ____ Garage
____ Above Grade, ____ At Grade, or ____ Below Grade
i. Recreational areas (types and square feet in each)
j. Demographics:
Approximate total number of adults
Approximate total number of children
Population density (population per acre)
k. List available utilities to the site:

B. N/A **Commercial;** Zone _____ (Attach plans, if applicable)

1. Acreage or square footage of site _____
2. Type (office, retail stores, etc.), number of establishments and square footage in each _____
3. Lot coverage (in sq. ft.) _____
4. Height and number of stories _____
5. Off-street parking:
   Number of spaces _____
   Average size of stall _____
   ____ Carport, ____ Open, or ____ Garage
   ____ Above Grade, ____ At Grade, or ____ Below Grade
6. List available utilities to the site _____

C. XX **Industrial;** Zone ML (Attach plans, if applicable)

1. Acreage or square footage of site 42.5 acres (approx.)
2. Type (manufacturing, refining, etc.), number of establishments and square footage in each
   a. office: 712,000 SF (total); 6 bldgs. @ 100,000 SF each, 1 bldg. @ 112,000 SF
   b. office/research & development: 70,000 SF (total); 1 bldg.
   c. receiving & storage: 10,000 SF (total); 1 bldg.
3. Lot coverage (in sq. ft.) 400,000 SF
4. Height and number of stories 2 story/35ft.; 3 story/50feet
5. Number of employees on the largest shift 3,860
6. Off-street parking:
   Number of spaces 3,190
   Average size of stall 8.5 x 18 (std.); 8 x 15 (compact); 14 x 19 (handicaped)
   X Carport, X Open, or ____ Garage
   X Above Grade, X At Grade, or ____ Below Grade
7. List available utilities to the site water, sewer, electrical, natural gas, telephone, storm drain

D. N/A **Public, Institutional, Quasi-Public;** Zone _____ (Attach plans if applicable)

1. Acreage or square footage of site _____
2. Type (e.g. hospital, rest home, utility company, etc.), number of establishments, and square footage in each _____
3. Lot coverage (in sq. ft.) _____
4. Height and number of stories _____
5. Off-street parking:
   Number of spaces _____
   Average size of stall _____
   ____ Carport, ____ Open, or ____ Garage
   ____ Above Grade, ____ At Grade, or ____ Below Grade
6. List available utilities to the site _____

4. What is the proposed scheduling for this project? Upon project approval, tenant improvements in the existing structure (Bldg. A), and site work and construction of Bldgs. B&D will be started. Bldgs. A&D are expected to be ready for occupancy by Jan., 1987 and Bldg. B by July, 1987. Bldg. C will be constructed and ready for occupancy by Jan., 1988. The remainder of the project will be developed over a two-to-seven year period, in incremental stages as outlined below.

5. What is the anticipated incremental development for this project?
Phase A: 312,000 SF of office (3 bldgs.); 10,000 SF of receiving & storage (1 bldg.)
Phase B: 200,000 SF of office (2 bldgs.); timeframe: 2-5 years
Phase C: 200,000 SF of office (2 bldgs.); 70,000 SF of office/R&D (1 bldg.); timeframe: 3-7 years

6. If the project involves a variance, conditional use, or rezoning application, state this and indicate clearly why the application is required. N/A

ENVIRONMENTAL SETTING (Note: Questions 7 and 8 *must* be answered)

7. On a separate page, describe the project site as it exists before the project, including information on topography, soil stability, plants and animals, and any cultural, historical or scenic aspects. Describe any existing structures on the site, and the use of the structures. Attach photographs of the site. Snapshots or polaroid photos will be accepted. (Please refer to Chapter 2.0-Setting of the Specific Plan.)

8. On a separate page, describe the surrounding properties, including information on plants and animals and any cultural, historical or scenic aspects. Indicate the type of land use (residential, commercial, etc.), intensity of land use (one-family, apartment houses, shops, frontage, set-back, rear yard, etc.) and scale of development (height, frontage, set-back, rear yard, etc.). Attach photographs of the vicinity. Snapshots or polaroid photos will be accepted. (Please refer to Chapter 2.0-Setting of the Specific Plan.)

9. **GENERAL:** (For each "yes" and "maybe" response please attach an additional sheet explaining your response.)

	YES	MAYBE	NO
a. Will the proposal result in public controversy or objection?			X
b. Has an environmental impact report already been prepared or is one under preparation for any portion or phase of the project?	X		
c. Other than no project at all, are there any less environmentally offensive alternatives to the project?			X
d. Would the project have a significantly beneficial effect upon the environment?			X

	YES	MAYBE	NO
e. Could existing environmental conditions (social, economic or physical) subject the project to any potentially adverse effects?			X
10. **EARTH.** Will the proposal result in:			
a. unstable earth conditions or in changes in geologic substructures?			X
b. disruptions, displacements, compaction or overcovering of the soil?	X		
c. change in topography or ground surface relief features?	X		
d. grading, blasting, excavating or drilling of more than 5,000 cubic yards of earth?	X		
e. the destruction, covering or modification of any unique geologic or physical features?			X
f. any increase in wind or water erosion of soils, either on or off the site?			X
g. changes in deposition or erosion which may modify the channel of a river or stream?			X
h. exposure of people or property to geologic hazards such as earthquakes, landslides, mudslides, ground failure, or similar hazards?			X
11. **ATMOSPHERE.** Will the proposal result in:			
a. substantial air emissions or deterioration of ambient air quality?			X
b. the creation of objectionable odors?			X
c. alteration of air movement, moisture or temperature, or any change in climate, either locally or regionally?			X
d. the emission of radiation, electronic transmission, vibration into the atmosphere?	X		
12. **WATER.** Will the proposal result in:			
a. changes in currents, or the course or direction of water movements, in either marine or fresh waters?			X
b. changes in absorption rates, drainage patterns, or the rate and amount of surface water runoff?	X		
c. alterations to the course of flow of flood waters?			X

	YES	MAYBE	NO
d. change in the amount of surface water in any water body?			X
e. discharge into surface waters, or in any alteration of surface water quality, including but not limited to temperature, dissolved oxygen or turbidity?			X
f. alteration of the direction or rate of flow of ground waters?			X
g. change in the quantity of ground waters, either through direct additions or withdrawals, or through interception of an aquifer by cuts or excavations?			X
h. substantial reduction in the amount of water otherwise available for public water supplies?			X
i. exposure of people or property to water-related hazards such as flooding?			X
j. significant changes in the temperature, flow, or chemical content of surface thermal springs?			X
13. **PLANT LIFE.** Will the proposal result in:			
a. change in the diversity of species, or number of any species of plants (including trees, shrubs, grass, crops, microflora and aquatic plants)?	X		
b. reduction of the numbers of any unique, rare or endangered species of plants?			X
c. introduction of new species of plants into an area, or in a barrier to the normal replenishment of existing species?	X		
d. reduction in acreage of any agricultural crop?			X
14. **ANIMAL LIFE.** Will the proposal result in:			
a. change in the diversity of species, or numbers of any species of animals (birds, land animals including reptiles, fish and shellfish, benthic organisms, insects or microfauna)?		X	
b. reduction of the numbers of any unique, rare or endangerd species of animals?			X
c. introduction of new species of animals into an area, or result in a barrier to the migration or movement of animals?			X
d. deterioration to existing fish or wildlife habitat?			X

	YES	MAYBE	NO
15. **NOISE.** Will the proposal result in:			
a. increases in existing noise levels?	X		
b. exposure of people to severe noise levels?			X
16. **LIGHT AND GLARE.** Will the proposal produce new light or glare?	X		
17. **LAND USE.** Will the proposal result in a substantial alteration of the present or planned land use of an area?			X
18. **RESOURCES.** Will the proposal result in:			
a. increase in the rate of use of any natural resources?			X
b. substantial depletion of any non-renewable natural resource?			X
c. change in natural or man-made features unique to the project area?			X
19. **RISK OF UPSET.** Does the proposal involve:			
a. a risk of an explosion or the release of hazardous substances (including, but not limited to, oil, pesticides, chemicals or radiation) in the event of an accident or upset conditions?			X
b. use of disposal of potentially hazardous materials, such as toxic substances, flammables, or explosives?			X
c. possible interference with an emergency response plan or an emergency evacuation plan?			X
20. **POPULATION.** Will the proposal alter the location, distribution, displacement, density, or growth rate of the human population of an area?		X	
21. **HOUSING.** Will the proposal affect existing housing, or create a demand for additional housing?		X	
22. **TRANSPORTATION/CIRCULATION.** Will the proposal result in:			
a. generation of substantial additional vehicular movement?	X		
b. effects on existing parking facilities, or demand for new parking?			X
c. substantial impact upon existing transportation systems?		X	
d. alterations to present patterns of circulation or movement of people and/or goods?			X
e. alterations to waterborne, rail or air traffic?			X
f. other governmental services?			X

	YES	MAYBE	NO
23. **PUBLIC SERVICES.** Will the proposal have an effect upon, or result in a need for new or altered governmental services in any of the following:			
a. fire protection?		X	
b. police protection?			X
c. schools?			X
d. parks or other recreational facilities?			X
e. maintenance of public facilities, including roads?		X	
f. other governmental services?			X
24. **ENERGY.** Will the proposal result in:			
a. use of substantial amounts of fuel or energy?			X
b. substantial increase in demand upon exisiting sources of energy, or require the development of new sources of energy?			X
25. **UTILITIES.** Will the proposal result in a need for new systems, or substantial alterations to the following utilities:			
a. power or natural gas?			X
b. communications systems?			X
c. water?			X
d. sewer or septic tanks?	X		
e. storm water drainage?			X
f. solid waste and disposal?			X
26. **HUMAN HEALTH.** Will the proposal result in:			
a. creation of any health hazard or potential health hazards?			X
b. exposure of people to potential health hazards?			X
27. **AESTHETICS.** Will the proposal result in the obstruction of any scenic view or vista open to the public, or will the proposal result in the creation of an aesthetically offensive site open to public view?			X
28. **RECREATION.** Will the proposal result in an impact upon the quality or quantity of existing natural, ecological, scenic, or recreational opportunities or resources?			X

	YES	MAYBE	NO
29. CULTURAL RESOURCES.			
a. Will the proposal result in the alteration of or the destruction of a prehistoric or archeological site?	____	____	X
b. Will the proposal result in adverse physical or aesthetic effects on a prehistoric building, structure, or object?	____	____	X
c. Does the proposal have the potential to cause a physical change which would affect unique ethnic cultural values?	____	____	X
d. Will the proposal restrict existing religious or sacred uses within the potential impact area?	____	____	X
30. MANDATORY FINDINGS OF SIGNIFICANCE.			
a. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	____	____	X
b. Does the project have the potential to achieve short-term, to the disadvantage of long-term environmental goals? (A short-term impact on the environment is one which occurs in a relatively brief, definitive period of time while long-term impacts will endure well into the future.)	____	____	X
c. Does the project have impacts which are individually limited, but cumulatively considerable? (A project may impact on two or more separate sources where the impact on each resource is relatively small, but where the effect of the total of those impacts on the environment is significant.)	____	____	X
d. Does the project have environmental effect which will cause substantial adverse effect on human beings, either directly or indirectly?	____	____	X

CERTIFICATION: I hereby certify that the statements furnished above and in the attached exhibits present the data and information required for this initial evaluation to the best of my ability, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief.

5-9-86
DATE

Matthew J. Vanderhorst
SIGNATURE OF APPLICANT

Dominguez Properties
LEGAL OWNER

CITY OF CARSON

DEPARTMENT OF COMMUNITY DEVELOPMENT

LEAD AGENCY

ANALYSIS AND DETERMINATION
OF THE
ENVIRONMENTAL INFORMATION AND CHECKLIST FORM
(Initial Study)

ANALYSIS (see other side)

DETERMINATION

On the basis of this initial evaluation:

_____ I find the proposed project COULD NOT have a significant effect on the environment, is exempt from CEQA rquirements, and a CATEGORICAL EXEMPTION will be prepared.

_____ I find the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DELCARATION will be prepared.

_____ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because the mitigation measures described on the attached sheet have been added to the project. A NEGATIVE DECLARATION WILL BE PREPARED.

_____ I find the proposed project MAY have a signifcant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

Date _____ By _____
COMMUNITY DEVELOPMENT DEPARTMENT

Filing Fee: $50

Planning Division Use Only

Filed _____ 19, ___

Fee $ _____

Receipt No. _____

By _____

ANALYSIS (continued from front page)

CITY OF CARSON
INITIAL STUDY
Attachment 1

GENERAL

9.b An Environmental Impact Report (State Clearing House No. 80072309) was certified for the comprehensive update and amendment of the City of Carson General Plan in December 1981. That General Plan amendment action included a change in the Land Use Element designation for the subject site to the present Light Industrial classification.

EARTH

10.b Implementation of the proposed project will require onsite grading operations, involving excavation and fill, in order to create level surfaces for structures and acceptable gradients for streets, drives, parking areas, walkways, etc. Grading for site development will result in the alteration of the existing ground surface. Approximately 180,000 cubic yards of earth will be moved.

10.c See response to 10.b, above.

10.d See response to 10.b, above.

ATMOSPHERE

11.d The proposed project will involve the use of a roof-mounted antenna for microwave communication (reception and transmission). The microwave communications system will be subject to the licensing and operational regulations of the Federal Communications Commission.

WATER

12.b The proposed project will include the construction of buildings and impervious surfaces such as streets, parking lots, walkways, etc., which will result in an increase in the amount of surface water runoff. This increased runoff has been anticipated in the Los Angeles County Flood Control District's master planning for the area. The existing downstream facilities, which will receive the storm water runoff from the project, have been designed and constructed to accommodate adequately the increased flows at build-out of the development.

PLANT LIFE

13.a The proposed project, when implemented, will include extensive landscaping of all open, unpaved areas. The introduced landscape will be comprised of a

great number of ornamental plants (including trees, shrubs, vines and ground covers) enriching the diversity of existing plant species. Most of the plant materials will be new to the site itself, but are common to much of the suburban landscape palette of the surrounding area.

13.c See response to 13.a, above.

ANIMAL LIFE

14.a The introduction of a significant number of trees and shrubs in the project's landscape may result in an increase in the diversity of species and/or numbers of any species of animals (especially birds) due to a more diversified habitat which provides greater opportunity for nesting sites, cover and food.

NOISE

15.a The proposed project will result in an increase in both short-term and long-term noise levels. Short-term noise levels will be increased as a result of onsite grading and construction activities during the development phases of the project. These activities will be confined to the hours between 7:00 a.m. and 7:00 p.m. Long-term noise level increases will result from the increased volume of traffic in the area generated by the project's employees. A traffic analysis conducted for the project concludes that the distribution of the increased vehicle trips is such that the traffic impacts on University Avenue and Wilmington Avenue south of University Avenue are not significant. Therefore, the noise level impacts on the most noise-sensitive adjacent uses, the existing residential neighborhood south and west of the University Avenue/Wilmington Avenue intersection, are not considered significant. The existing block wall which currently separates the residential area from these two arterials provides an ideal sound barrier and serves to mitigate existing and future noise impacts.

LIGHT AND GLARE

16. The proposed project will include lighting for streets and parking areas for security and safety purposes. All lighting will be designed and placed so as to confine all direct rays to the premises.

POPULATION

20. The initial phase of the project will provide new facilities for the relocation of the future tenant's existing labor force from the current site within the South Bay area. The later phases may result in the creation of new jobs which might be filled by residents of the local Carson area. These potential new employment opportunities may result in an increase in the population and housing growth rates for the City of Carson.

HOUSING

21. The potential for employment growth in the later phases of the project may create a demand for additional housing in the local area.

TRANSPORTATION/CIRCULATION

22.a According to the traffic analysis conducted for the proposed project, the Average Daily Trips (ADT) of the surrounding roadway network are expected to be increased by 7.700 (±) ADT over existing volumes at the completion of the project. Please refer to the traffic study for a complete discussion of the project's impacts and the measures which have been incorporated in the project design to mitigate those impacts.

22.c The proposed project will have impacts on the existing transportation system which might be viewed as substantial. The traffic study has identified those potential impacts and recommended certain improvements as mitigation measures. Those improvements have been incorporated in the project design to ensure that the future transportation system is capable of handling the ultimate traffic from the project at build-out.

PUBLIC SERVICES

23.a The proposed project will place additional structures, equipment and people in the area. This will increase the demand for fire and paramedic services in the area and may result in the need for additional fire department personnel and/or equipment in order to maintain present levels of service.

23.e The possible addition of public streets in the future may increase the demand for maintenance.

UTILITIES

25.d The latter phases of the project will require the construction of a new sewer line to extend from the southwesterly portion of the site and connecting with a future trunk line lateral in Del Amo Boulevard. The future trunk line would be constructed by the Los Angeles County Sanitation District, while the sewer line connection to the site (to be located in Central Avenue and University Avenue) would be the responsibility of the developer.

APPENDIX 6.3

NOTICE OF DETERMINATION

(TO BE INCLUDED AT A I

APPENDIX 6.4

TRAFFIC STUDY

DRAFT

TRAFFIC IMPACT REPORT FOR THE DOMINGUEZ TECHNOLOGY CENTER SPECIFIC PLAN

Prepared for:

DOMINGUEZ PROPERTIES

Prepared by:

Crain & Associates
2007 Sawtelle Boulevard
Los Angeles, California 90025
(213) 473-6508

May 1986

EXECUTIVE SUMMARY

The proposed project under consideration will consist of a 40-acre industrial/R & D park with a total building floor area of approximately 770,000 gross square feet. Up to 2,500 workers may ultimately be employed at the project site. The development is planned for the northwest corner of Wilmington Avenue and University Drive in the City of Carson. When developed, the project is estimated to generate 924 vehicle trips during the AM and PM peak hours. Access to the project will be provided via Glenn Curtis Street, a private road which intersects Wilmington Avenue north of University Drive.

Analysis of the proposed industrial park development shows that the project will add incremental volumes of traffic to the existing street system serving the study area. This study shows that project traffic generation and impacts to the adjacent street system will be moderate, and require the implementation of the following project mitigation measures.

- The intersection of Glenn Curtiss Street and Wilmington Avenue should be signalized concurrently with the completion and occupation of the first buildings of the planned development. Based on estimated project traffic, signal warrants at this intersection will be satisfied. (See Appendix A).

- Glenn Curtiss Street should be designed and constructed to industrial collector specifications. In general, this requires a roadway width of 64 feet in an 80-foot right-of-way. This measure will provide for the eventual traffic volumes at the site as development continues.

- All interior streets should be designed to allow for future dedication to the City of Carson, if needed. This implies the reservation of a 64-foot minimum right-of-way and required setbacks along any such street.

- The developer will initiate and complete a long-range traffic study and plan for the remaining 260-acre parcel. This plan will address the impacts of the cumulative use of the site. The substantial traffic volumes expected to be generated by the development of the total project indicate that a thorough access and circulation plan will be necessary.

- Tranportation Action Program. As part of the project, a transportation action program should be developed to encourage building employees to participate in ride-sharing and other traffic reduction measures. The program could consist of, but not be limited to, the following:

  - Make carpool information available to employees and encourage formation of carpools/vanpools. In addition, carpool matching facilities of Commuter/Computer, Inc., the regional carpool matching agency, should be utilized.
  - A preferential parking program for carpool employees should be implemented as a part of the program, thereby encouraging carpooling among employees.
  - Transit schedules, maps and other transit information should be made available to employees and others who would be travelling to and from the proposed project.

- Flexible work schedules should be offered to employees at the project. Flexible scheduling allows employees to travel to and from the project during off-peak periods. The prospective tenant of the project currently encourages flex-time and offers it to their employees.

Implementation of the above measures will further reduce the projects' traffic impacts.

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INTRODUCTION

Dominguez Properties plans to develop an industrial/R & D park on the northwest corner of Wilmington Avenue and University Drive in the City of Carson (See Site Vicinity Map, Figure 1). As part of the Specific Plan for the property, Crain & Associates has been asked to conduct this traffic study to analyze the project and to assess the impact of the proposed project on the surrounding street system.

This report documents results of an analysis of existing conditions as well as projected traffic conditions after completion of the proposed project. At the request of the Carson Department of Public Works, particular attention has been given to studying the impact of project traffic at the intersections of:

- Central Avenue and Westbound Artesia Freeway Ramps
- Central Avenue and Eastbound Artesia Freeway Ramps
- Central Avenue and Victoria Street
- Central Avenue and University Drive
- Wilmington Avenue and Westbound Artesia Freeway Ramps
- Wilmington Avenue and Eastbound Artesia Freeway Ramps
- Wilmington Avenue and Victoria Street
- Wilmington Avenue and University Drive
- Wilmington Avenue and Del Amo Boulevard
- Wilmington Avenue and Glenn Curtiss Street
- Avalon Boulevard and University Drive

Cumulative traffic impacts have also been addressed, based on expected continued growth on the study area street systems.

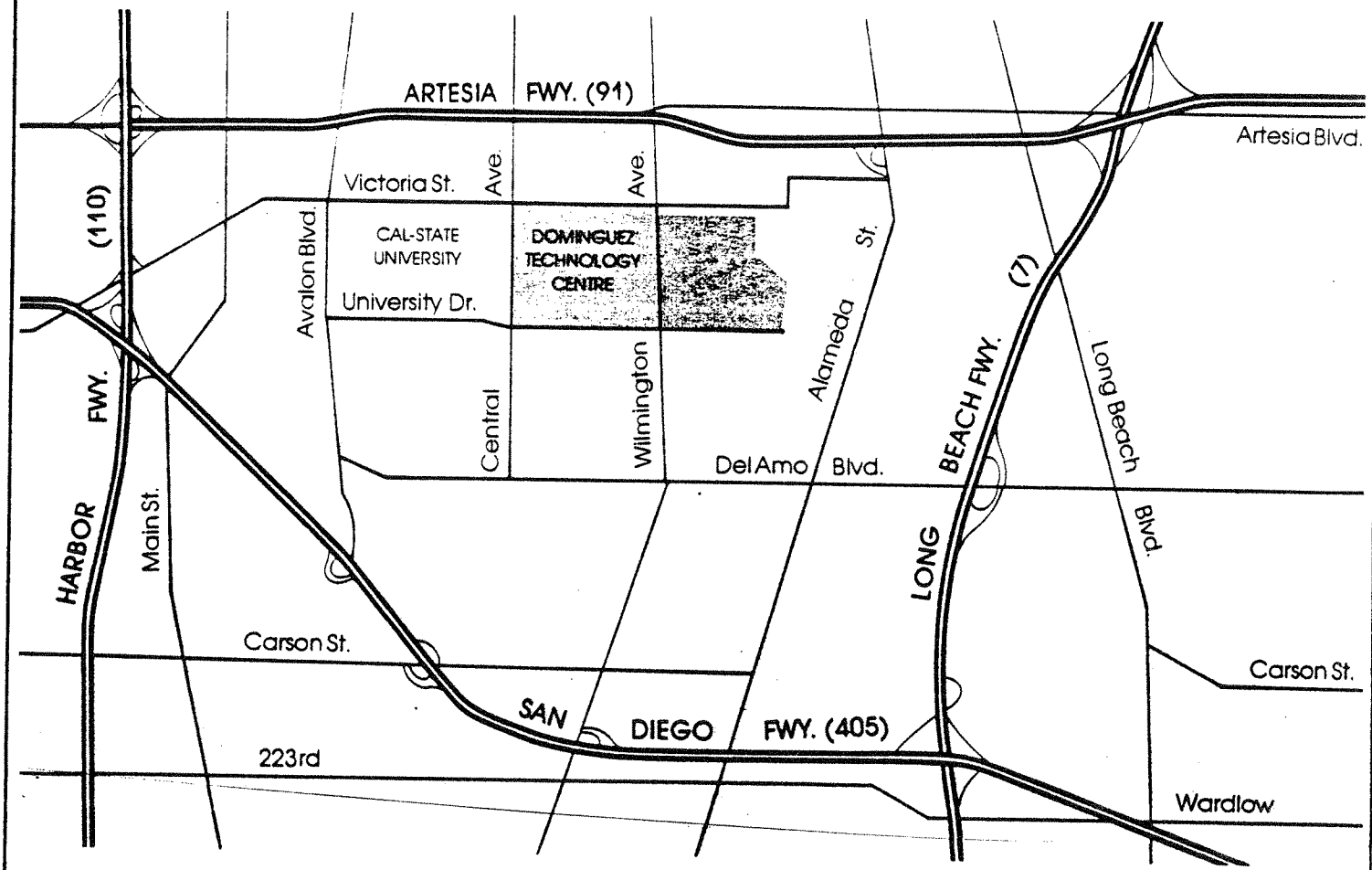

FIGURE 1

SITE VICINITY MAP

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PROJECT DESCRIPTION

The project under consideration consists of a 40-acre industrial park totalling 770,000 gross square feet of building area. The project is located on the northwest corner of Wilmington Avenue and University Drive in the City of Carson.

Parking for the proposed project will be located adjacent to the nine proposed buildings and will provide approximately 3,000 parking spaces.

Access to the project is to be provided via Glenn Curtiss Street, a private road which intersects Wilmington Avenue, north of University Drive. The proposed project is shown on the site plan (see Figure 2).

The 40-acre project under consideration is the first phase of development of a total program for 300 acres in the City of Carson. The remaining 260 acres are to be developed over a 10 to 12-year period, as market demand warrants. All of the eventual development on the Dominguez Properties parcels is expected to be industrial/R & D park use, although the total square footage of the buildings on the 260-acre parcel is not certain at this time. The phasing and description of the total Dominguez Properties program is summarized in Table 1.

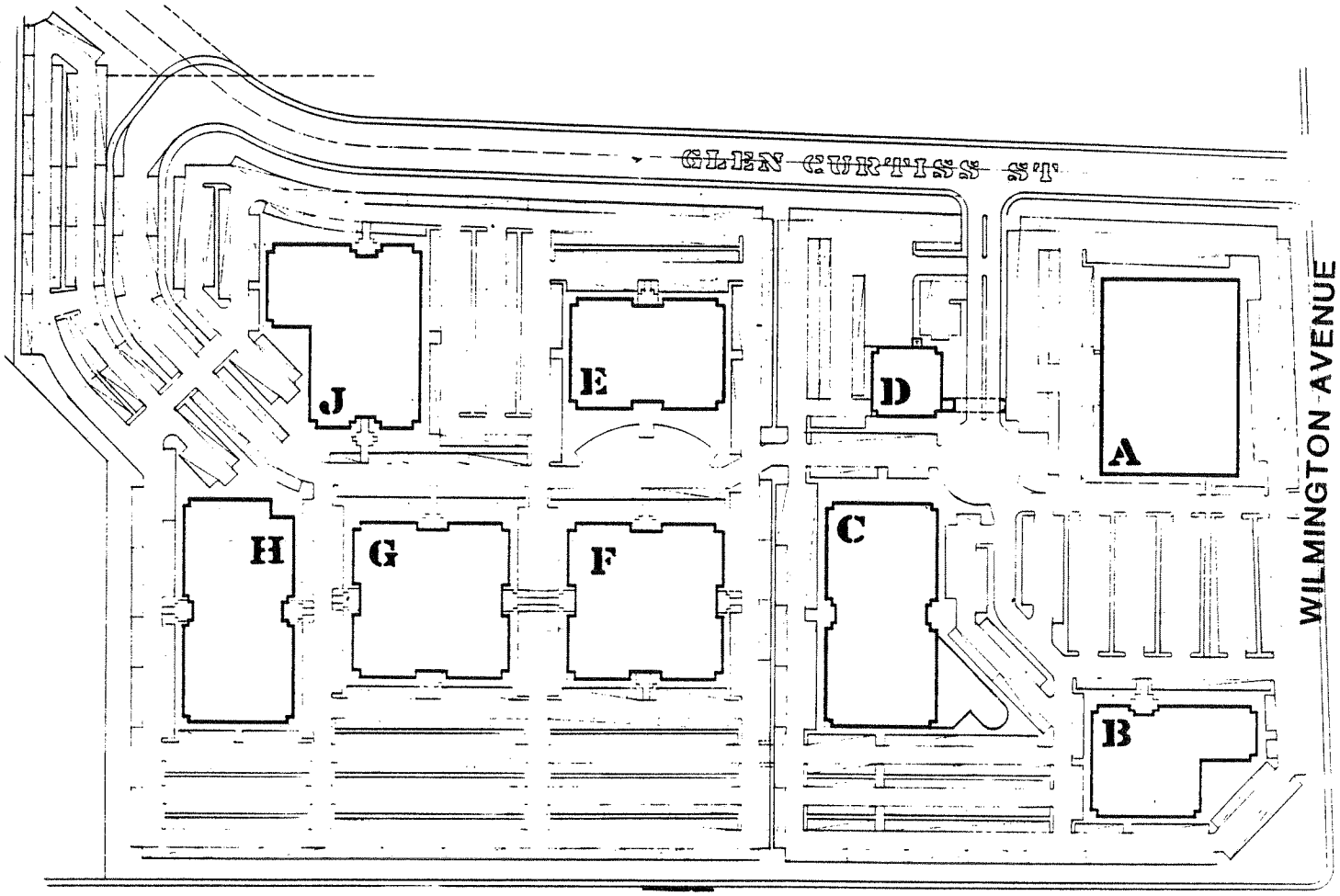

FIGURE 2

SITE PLAN

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Table 1
Project Description and Phasing

Development Phase	Description	Location
I.	40 acre Industrial Park 777,000 GSF building area	North side of University Drive, west of Wilmington Avenue
II.	260 acre Industrial Park	West side of Wilmington Avenue, between Victoria Street and University Drive

This traffic report primarily addresses the impacts of the first (40-acre) phase of development. The estimated traffic generation of the remaining 260-acre parcel is addressed in this report, and a detailed assessment of the long-range impacts of the total development is currently in preparation as a separate document.

ENVIRONMENTAL SETTING

The Carson street system is composed of a grid of major and secondary highways and local streets. This grid system is generally based on one-mile spacing between major highways.

The Artesia Freeway (State Route 91) runs in an east-west direction approximately one-and-one-half miles north of the project site. The San Diego and Harbor Freeways also provide regional access to the Carson area. Access to the Artesia Freeway from the local street system is provided at less than one mile spacing. In the vicinity of the proposed project, the closest access points to the Artesia Freeway are at Wilmington Avenue, Central Avenue and Avalon Boulevard.

Streets and Highways

One of the most important streets in this area, both in terms of existing traffic needs and in terms of access for the proposed project, is Wilmington Avenue. Wilmington Avenue is a north-south major highway in the Carson-Wilmington area. Near the proposed project, Wilmington Avenue provides for two lanes of traffic in each direction, with separate left-turn lanes at important intersections. Wilmington Avenue is improved to a 84-foot roadway in the vicinity of University Drive. North of the project site, Wilmington Avenue narrows to a width of approximately 60-65 feet.

University Drive is a four-lane secondary highway and is 64 feet wide, curb-to-curb, west of Wilmington Avenue. At its intersection with Wilmington Avenue, University Drive provides two through traffic lanes plus exclusive left and right-turn lanes.

Central Avenue is a north-south major highway in the vicinity of the proposed project. This roadway is 80 feet wide curb-to-curb south of University Drive and 84 feet wide north of Victoria Street. Central Avenue is not completed between University Drive and Victoria Street.

Avalon Boulevard is an important north-south major highway, with continuity from San Pedro to south-central Los Angeles. Avalon Boulevard provides for three lanes of traffic in each direction, with left-turn channelization at the more important intersections.

Victoria Street is a major highway in the vicinity of the proposed project. This east-west oriented street is developed to a width of 80-feet west of Central Avenue and approximately 60-feet east of Central Avenue. At its intersection with Wilmington Avenue, Victoria Street provides one through lane, one left-turn lane and one right-turn lane in each direction.

Glenn Curtiss Street is the project access road. This private street is to be constructed to secondary highway specification, and will provide two left-turn lanes and one right-turn lane at its "tee" intersection with Wilmington Avenue.

Existing Traffic Volumes

Existing traffic counts, provided by the City of Carson, along the local street system, were reviewed. These counts and counts conducted by Crain & Associates were used in the analysis of traffic conditions near the project site. These traffic counts also provide the basis for projections of future traffic discussed later in this report. Field surveys of the street system were made by Crain & Associates to obtain additional traffic system data. Existing 1986 AM and PM peak hour traffic patterns are summarized in Figure 4.

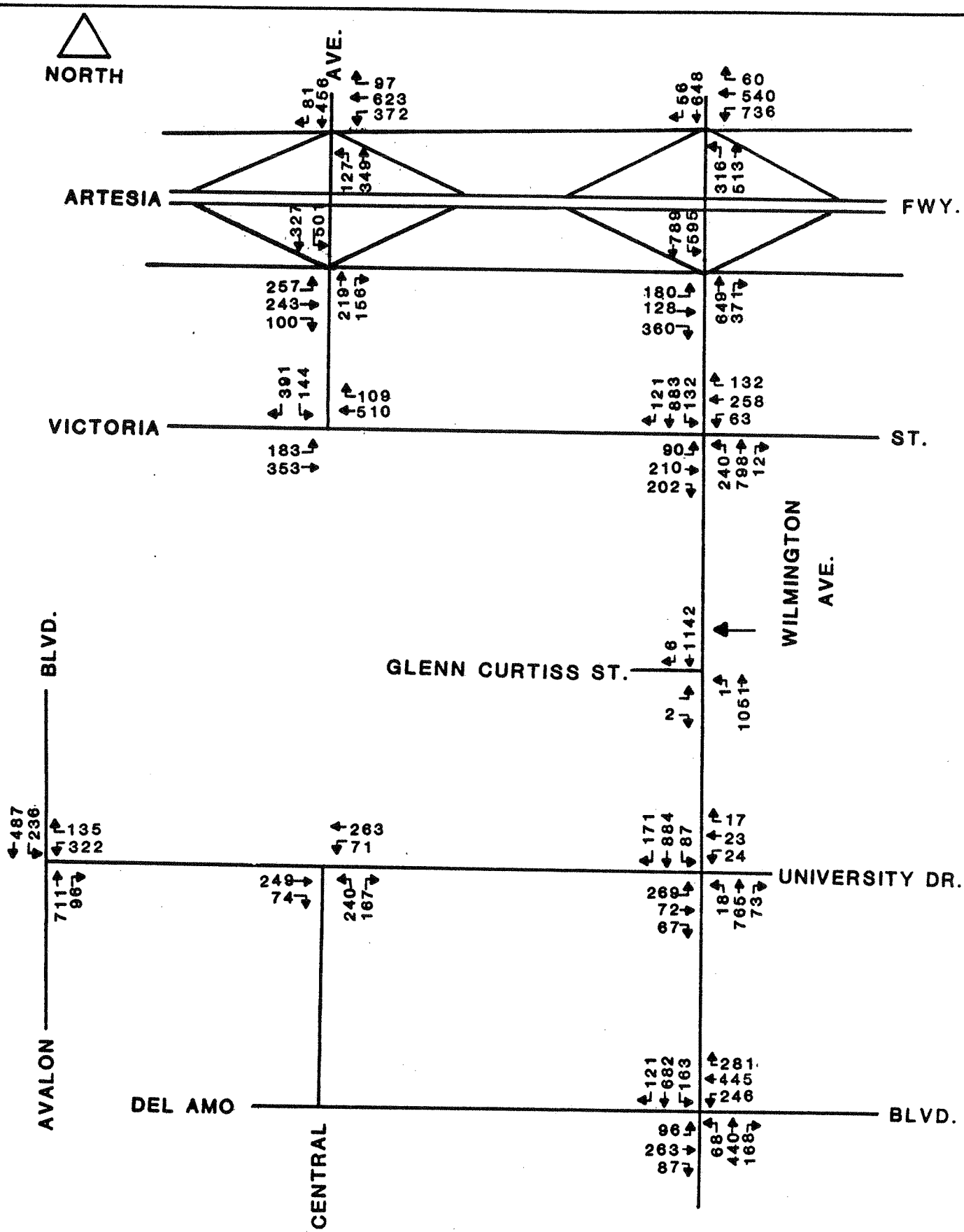

FIGURE 3(A)

EXISTING (1986) TRAFFIC VOLUMES
AM PEAK HOUR

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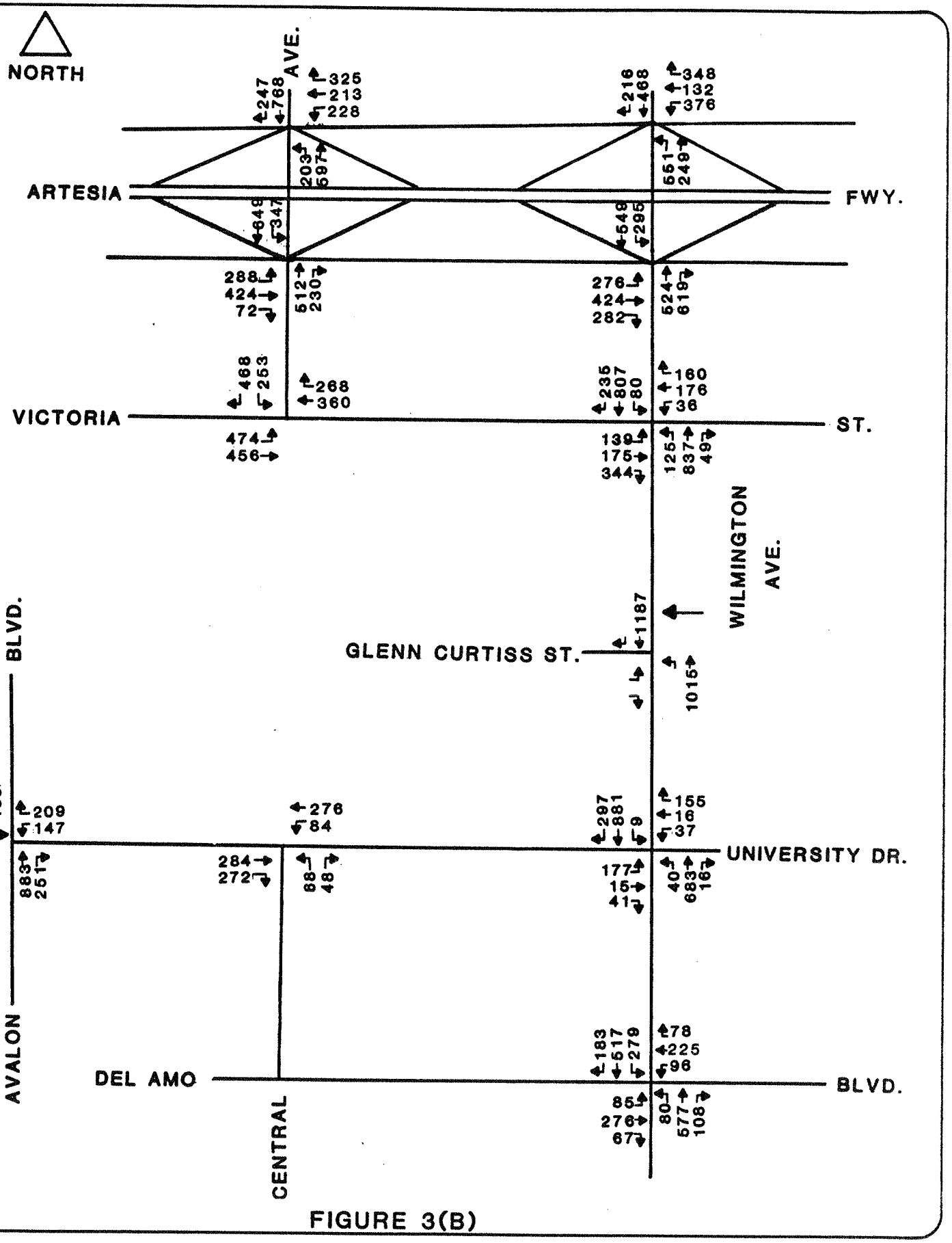

FIGURE 3(B)

EXISTING (1986) TRAFFIC VOLUMES
PM PEAK HOUR

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Analysis of Existing Conditions

Detailed analyses of existing traffic conditions were performed at the following eleven intersections:

- Central Avenue and Westbound Artesia Freeway Ramps
- Central Avenue and Eastbound Artesia Freeway Ramps
- Central Avenue and Victoria Street
- Central Avenue and University Drive
- Wilmington Avenue and Westbound Artesia Freeway Ramps
- Wilmington Avenue and Eastbound Artesia Freeway Ramps
- Wilmington Avenue and Victoria Street
- Wilmington Avenue and University Drive
- Wilmington Avenue and Del Amo Boulevard
- Wilmington Avenue and Glenn Curtiss Street
- Avalon Boulevard and University Drive

The traffic analysis was performed through the use of established traffic engineering techniques. The new traffic counts described earlier were utilized so as to reflect any recent changes in traffic demand patterns. Other data pertaining to intersection geometrics, parking related curb restrictions, and signal operations were obtained through field surveys of the study locations.

The methodology used in this study for the analysis and evaluation of the traffic operations at each of the study intersections is based on the procedures outlined in the Highway Capacity Manual. In the discussion of Critical Movement Analysis (CMA) for signalized intersections, procedures are

developed for determining operating characteristics of an intersection in terms of the "Level of Service" provided for different levels of traffic volume and other variables, such as the number of signal phases. The term "Level of Service" describes the quality of traffic flow. Levels of Service A to C operate quite well. Level C normally is taken as a design level in urban areas outside a regional core. Level D typically is the level for which a metropolitan area street system is designed. Level E represents volumes at or near the capacity of the highway which will result in possible stoppages of momentary duration and occassional unstable flow. Level F occurs when a facility is overloaded and is characterized by stop-and-go traffic, with possible stoppages of long duration.

A determination of the Level of Service at an intersection, where traffic volumes are known or have been projected, can be obtained through a summation of the critical lane volumes at that intersection. A critical lane volume is the highest hourly vehicular demand that must be accommodated in each lane during a given signal phase. Once the sum of critical lane volumes has been determined, the values indicated in Table 2 can be used to determine the applicable Level of Service.

Table 2
Critical Volume Ranges*
for Determining Levels of Service

Level of Service	Maximum Sum of Critical Volumes (VPH) Two Phase	Three Phase	Four or More Phases
A	900	855	825
B	1,050	1,000	965
C	1,200	1,140	1,100
D	1,350	1,275	1,225
E	1,500	1,425	1,375
F	- - - - - not applicable - - - - -		

* For planning applications only, i.e., not appropriate for operations and design applications.

Capacity is defined herein to represent the maximum total hourly volume of vehicles in the critical lanes which has a reasonable expectation of passing through an intersection under prevailing roadway and traffic conditions. For planning purposes, capacity equates to the maximum value for Level of Service E, as indicated in Table 2.

The Critical Movement Analysis values are determined by dividing the sum of critical lane volumes by the appropriate capacity value for the type of signal control present or proposed at the study locations. Thus, the Level of Service corresponding to a range of CMA values is shown in Table 3.

Table 3
Level of Service
As a Function of CMA Values

Level of Services	Range of CMA Values
A	< 0.60
B	0.60 - 0.70
C	0.70 - 0.80
D	0.80 - 0.90
E	0.90 - 1.00
F	> 1.00

By applying the above analysis procedure to the designated study intersections, the Critical Movement Analysis (CMA) value and the corresponding Levels of Service (LOS) can be determined.

The results of the critical lane analysis are shown in Table 4. These values indicate that most the streets in the vicinity of the proposed project are operating at acceptable Levels of Service. The most critical intersection is that of Wilmington Avenue and the eastbound Artesia Freeway ramps. During the AM and PM peak traffic periods, this intersection is currently operating at Level of Service E. The intersection of Central Avenue and Victoria Street is operating at Level of Service D during the PM peak hour. the intersection of Wilmington Avenue and the westbound Artesia Freeway ramps operates at Level of Service D during the AM peak hour. The other study intersections are operating at Level of Service C or better, during both the AM and PM peak hours.

Table 4
Existing 1986 Critical Movement Analysis Summary

Intersection	AM Peak Hour		PM Peak Hour	
	CMA	LOS	CMA	LOS
Central Avenue and Westbound Artesia Freeway Ramps	0.69	B	0.64	B
Central Avenue and Eastbound Artesia Freeway Ramps	0.64	B	0.63	B
Central Avenue and Victoria Street	0.72	C	0.87	D
Central Avenue and University Drive	0.29	A	0.28	A
Wilmington Avenue and Westbound Artesia Freeway Ramps	0.83	D	0.80	C
Wilmington Avenue and Eastbound Artesia Freeway Ramps	0.93	E	0.94	E
Wilmington Avenue and Victoria Street	0.69	B	0.61	B
Wilmington Avenue and University Drive	0.53	A	0.57	A
Wilmington Avenue and Del Amo Boulevard	0.52	A	0.53	A
Wilmington Avenue and Glenn Curtiss Street	0.38	A	0.40	A
Avalon Boulevard and University Drive	0.56	A	0.68	B

PROJECT TRAFFIC

The primary emphasis of this report is to determine and document traffic impacts of the proposed project on the adjacent street system. The following section describes the methodology used and the results of the calculations for the traffic expected to be generated by the proposed 770,000 GSF industrial park.

Traffic Generation

Traffic generating characteristics of industrial parks have been surveyed and documented in studies of actual past experience. The San Diego Association of Governments (SANDAG), in cooperation with Caltrans, has recently completed an extensive study of the trip generation characteristics of industrial/R & D parks in the Southern California context.

In terms of the mix of tenant firms, types of use and density of development, the SANDAG/Caltrans study sample is similar to the proposed Dominguez Properties development. The trip generation rates derived in the SANDAG study are somewhat higher than the nationwide rates recommended by the Institute of Transportation Engineers (ITE). The SANDAG trip generation rates were used in the analysis of the Dominguez Properties project, in order to provide a conservative, "worst-case" appraisal of potential project traffic generation. The trip generation rates which were used for the estimation of project-induced traffic are shown in Table 5.

Table 5
Trip Generation Rates

Description	Daily Trips	AM Peak Hour IN	AM Peak Hour OUT	PM Peak Hour IN	PM Peak Hour OUT
Industrial Park					
Trips per 1,000 GSF	10.00	0.96	0.24	0.24	0.96
Trips per acre	130.00	14.56	3.64	3.90	15.60

Applying these trip generation rates to the 770,000 GSF project under consideration, and the subsequent long-range development phases yields the following estimates of potential trip generation:

Table 6
Specific Plan Traffic Generation

Description	Daily Trips	AM Peak Hour IN	AM Peak Hour OUT	PM Peak Hour IN	PM Peak Hour OUT
770,000 GSF Industrial Park (40 acres)	7,700	739	185	185	739

Table 7
Estimated Traffic Generation for Subsequent Development Phases

Description	Daily Trips	AM Peak Hour IN	AM Peak Hour OUT	PM Peak Hour IN	PM Peak Hour OUT
260-acre Industrial Park	33,800	3,786	946	1,104	4,134

Trip Distribution

Determination of the geographic distribution of project generated trips was based on data provided by the City of Carson. The traffic directional distribution was developed as a part of the City's Amendment to its Redevelopment Plan. In addition, turning movement data was reviewed to determine the percentage trip distributions at intersections near the project site. From these combined sources, project trip distributions were developed. The percent split of trips, by direction, is summarized in Table 8.

Table 8
Directional Distribution

19.9%	To the north and west via the Harbor and San Diego Freeways and Artesia Boulevard.
21.3%	To the north and east via the Long Beach and Artesia Freeways.
19.3%	To the south and east via the San Diego and Long Beach Freeways and Pacific Coast Highway.
6.8%	To the south and west via the Harbor Freeway and Pacific Coast Highway.
5.5%	To arterial streets to the north.
12.9%	To arterial streets to the west.
5.4%	To arterial streets to the south.
5.2%	To arterial streets to the east.
3.7%	Internal to the City of Carson.

Traffic Assignment

The assignment of traffic to the street and highway system was accomplished in two steps. Using the project traffic generation values and directional distribution percentages discussed previously, the number of inbound and outbound trips in each direction was calculated for the AM and PM peak hours. These trips were assigned to specific routes serving the project area. The results of the traffic assignment provide the necessary level of detail to conduct the traffic analysis. Results of the AM and PM peak hour traffic assignments are shown in Figure 4.

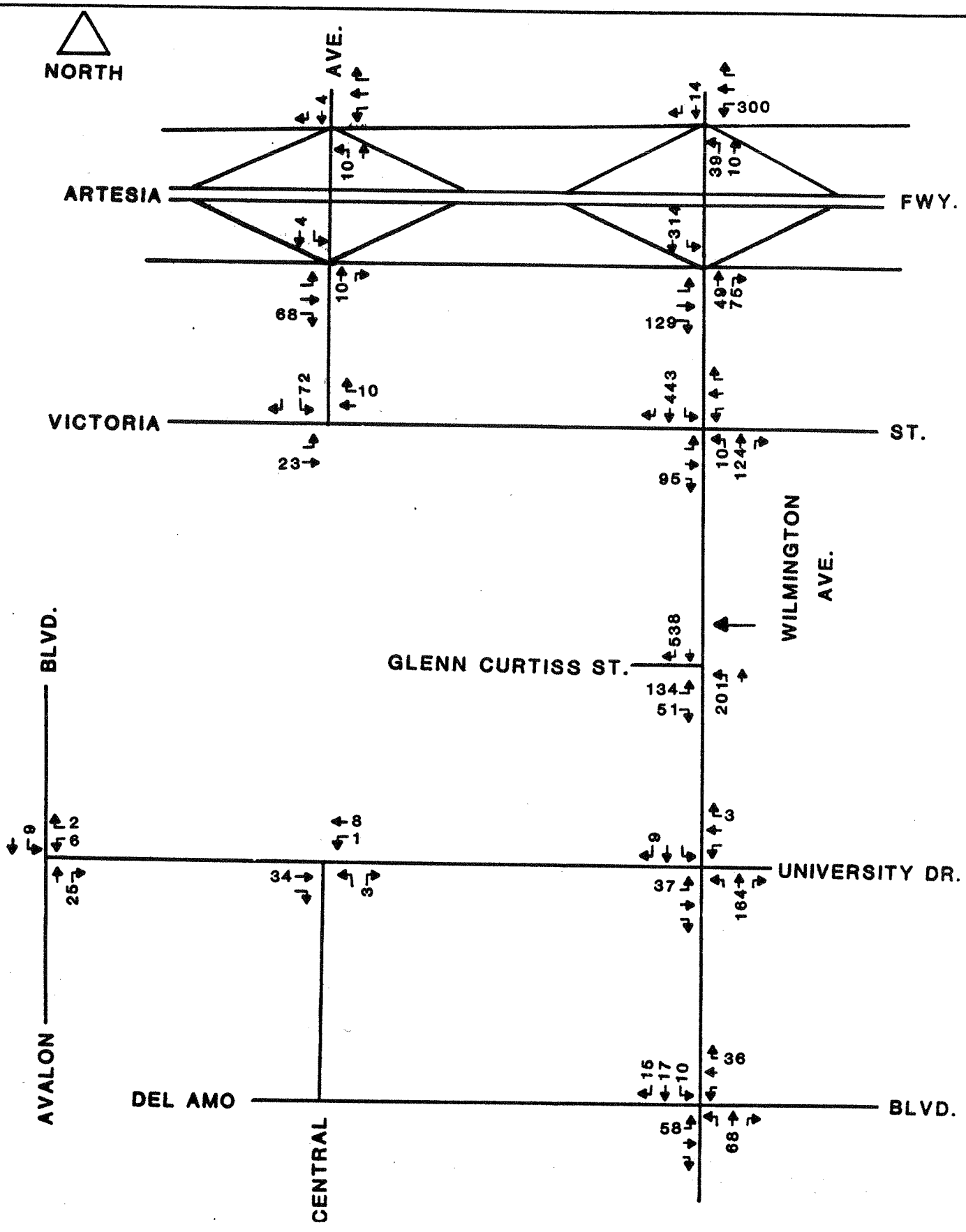

FIGURE 4(A)

PROJECT TRAFFIC VOLUMES
AM PEAK HOUR

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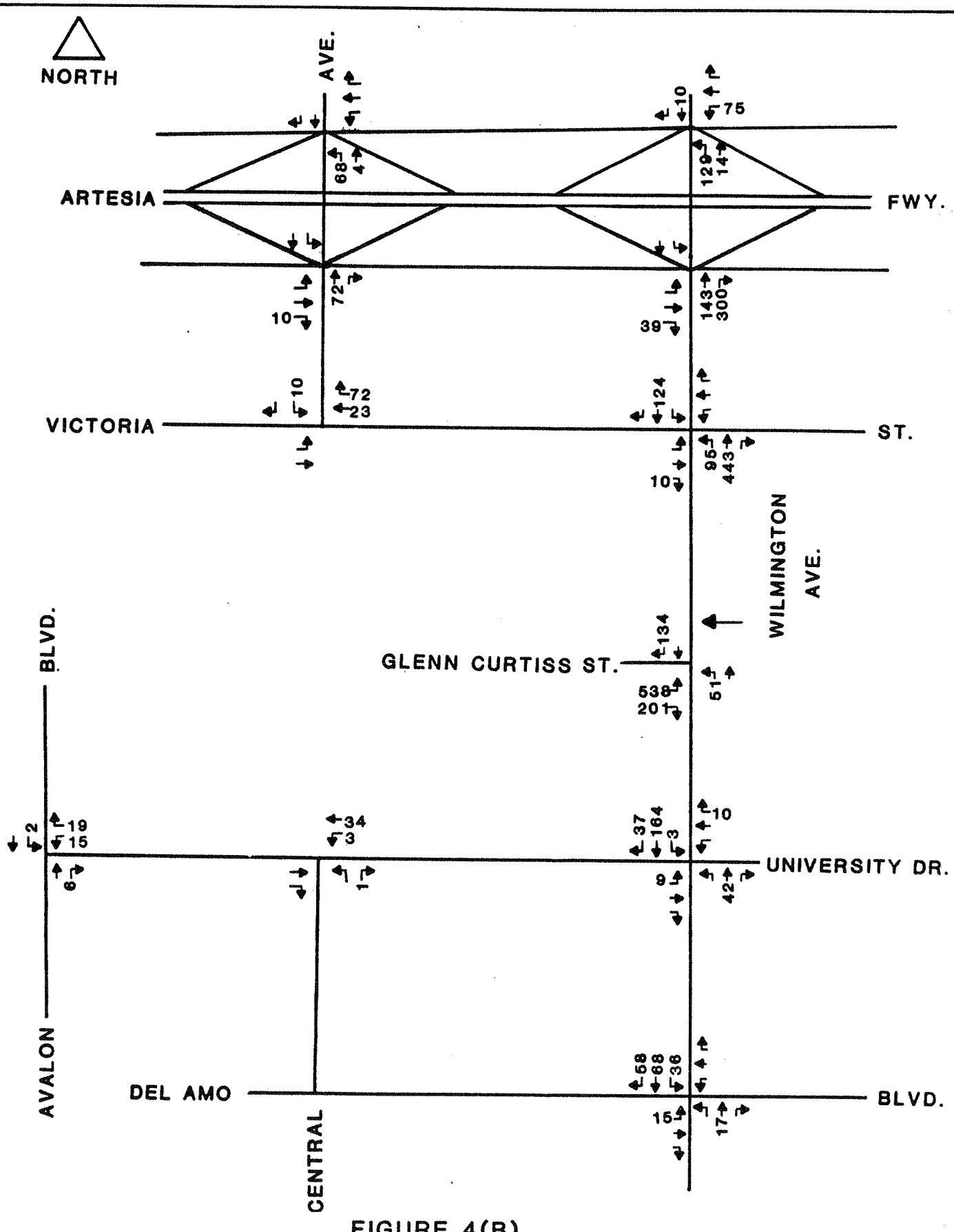

FIGURE 4(B)

PROJECT TRAFFIC VOLUMES
PM PEAK HOUR

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FUTURE TRAFFIC CONDITIONS

In order to approximate future (1991) traffic conditions in the project vicinity, an annual traffic growth rate of 2.0 percent was applied to the existing traffic volumes at the study intersections. 1991 was chosen as the planning horizon year because it is likely that all of the Specific Plan's 770,000 GSF of building area will be occupied at that time. Information supplied by the developer suggests that little, if any, of the remaining 260 acres of subsequent development will be occupied by 1991.

Based on the preceding assumptions, the AM and PM peak hour traffic volumes for the 1991 "no-project" condition are shown in Figure 5. The resulting peak hour traffic estimates form the basis for "benchmark" values for determining project traffic impacts on the street system.

Highway System Improvements

As development in the project vicinity continues, some highway system improvements will be needed. Victoria Street between Central Avenue and Wilmington Avenue should be completed to major highway specifications. Similarly, Wilmington Avenue to the north of the project should be improved to a full 84-foot width. Eventually, Central Avenue will be connected between University Drive and Victoria Street. All of these system improvements would substantially increase roadway capacity in the project vicinity.

The timing of the roadway improvements described above is closely tied to the on going development in the area, and should be phased in as needed. However, it has been assumed, for purposes of this study, that the study intersections will have capacity similar to today's street system.

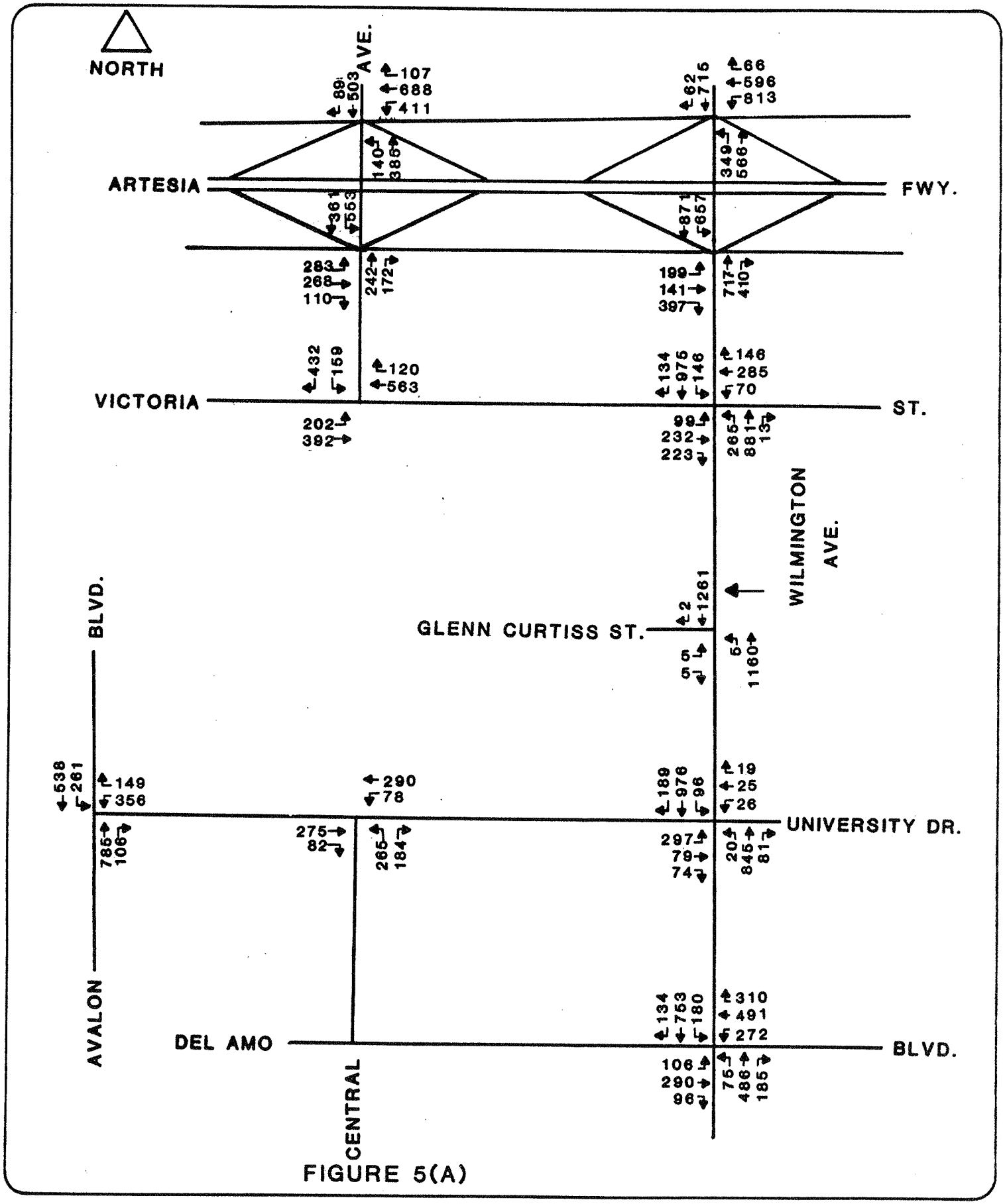

FIGURE 5(A)

FUTURE (1991) TRAFFIC VOLUMES

AM PEAK HOUR

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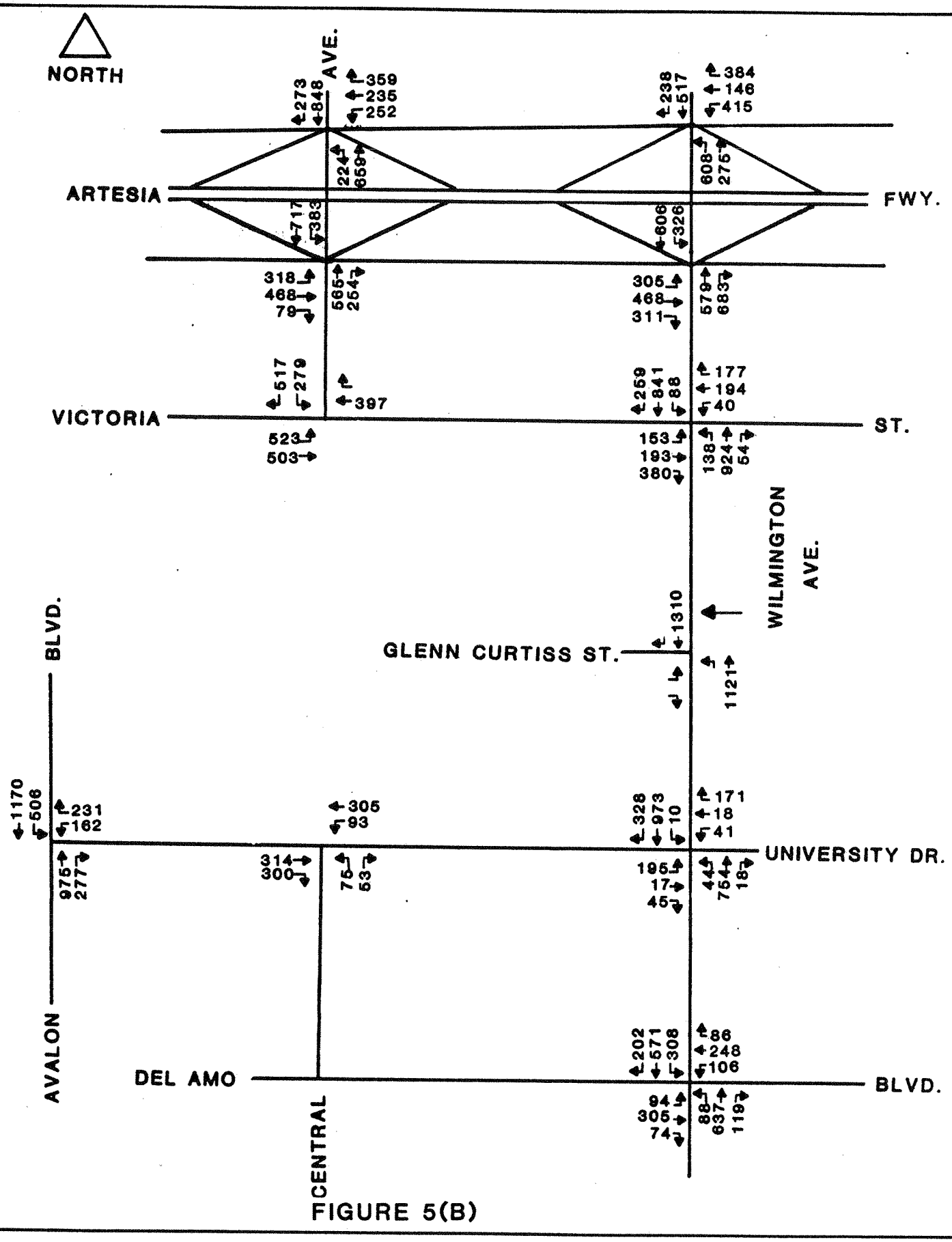

FIGURE 5(B)

FUTURE (1991) TRAFFIC VOLUMES

PM PEAK HOUR

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Analysis of Future Traffic Conditions (With and Without Project)

The analysis of future conditions in the project area was performed using the same critical lane analysis procedures described previously in this report. For the "no-project" condition, the future roadway system capacity was considered to be essentially the same as current roadway conditions.

Traffic volumes for the analysis were developed as follows:

- As described earlier in the report, future-year benchmark traffic volumes for the no-project condition were determined by combining the area traffic growth with new traffic generated by related projects.

- Traffic volumes generated by the project were then combined with these benchmark volumes to form the basis for the "project" traffic analysis and to determine traffic impacts directly attributable to the proposed development.

The results of the critical lane analysis of the future traffic conditions at the nine study intersections are summarized in Table 9. A review of the CMA values indicates that future (1991) traffic conditions at the major arterial intersections analyzed in this study are not expected to be critically impacted from new traffic generated by the proposed development. As this analysis indicates, the intersections of Wilmington Avenue and the Artesia Freeway ramps will continue to be the most critical intersections in this portion of the Carson-Wilmington area. The eastbound ramps at Wilmington Avenue are expected to operate at Level of Service E without project traffic and could operate at Level of Service F with project traffic. Wilmington

Avenue and Victoria Street will also be operating at Level of Service E in the future. The largest net impact (+0.17) due to project traffic will occur at the intersection of Wilmington Avenue and the eastbound Artesia Freeway ramps the PM peak hour.

Table 9
Future 1991 Critical Movement Analysis Summary
With and Without Project

	AM Peak Hour				
	Without Project		With Project		
Intersection	CMA	LOS	CMA	LOS	IMPACT
Central Avenue and Westbound Artesia Freeway Ramps	0.76	C	0.77	C	(+0.01)
Central Avenue and Eastbound Artesia Freeway Ramps	0.71	C	0.71	C	(N.C.)
Central Avenue and Victoria Street	0.80	C	0.80	C	(N.C.)
Central Avenue and University Drive	0.32	A	0.33	A	(+0.01)
Wilmington Avenue and Westbound Artesia Freeway Ramps	0.91	E	0.96	E	(+0.05)
Wilmington Avenue and Eastbound Artesia Freeway Ramps	0.91	E	1.03	F	(+0.12)
Wilmington Avenue and Victoria Street	0.76	C	0.91	E	(+0.15)
Wilmington Avenue and University Drive	0.59	A	0.67	B	(+0.08)
Wilmington Avenue and Del Amo Boulevard	0.58	A	0.65	B	(+0.07)
Wilmington Avenue and Glenn Curtiss Street	0.43	A	0.61	B	(+0.18)
Avalon Boulevard and University Drive	0.62	B	0.63	B	(+0.01)

Table 9 (continued)
Future 1991 Critical Movement Analysis Summary
With and Without Project

Intersection	PM Peak Hour				
	Without Project		With Project		
	CMA	LOS	CMA	LOS	IMPACT
Central Avenue and Westbound Artesia Freeway Ramps	0.71	C	0.75	C	(+0.04)
Central Avenue and Eastbound Artesia Freeway Ramps	0.69	B	0.72	C	(+0.03)
Central Avenue and Victoria Street	0.96	E	0.97	E	(+0.01)
Central Avenue and University Drive	0.31	A	0.31	A	(N.C.)
Wilmington Avenue and Westbound Artesia Freeway Ramps	0.88	D	0.97	E	(+0.09)
Wilmington Avenue and Eastbound Artesia Freeway Ramps	0.94	E	1.11	F	(+0.17)
Wilmington Avenue and Victoria Street	0.62	B	0.75	C	(+0.13)
Wilmington Avenue and University Drive	0.63	B	0.69	B	(+0.06)
Wilmington Avenue and Del Amo Boulevard	0.59	A	0.62	B	(+0.03)
Wilmington Avenue and Glenn Curtiss Street	0.44	A	0.67	B	(+0.23)
Avalon Boulevard and University Drive	0.75	C	0.76	C	(+0.01)

MITIGATION MEASURES

It is recommend that the following measures be considered for implementation as part of the Dominguez Properties Specific Plan, as a means of reducing project related traffic impacts:

- The intersection of Glenn Curtiss Street and Wilmington Avenue should be signalized concurrently with the completion and occupation of the first buildings of the planned development. Based on estimated project traffic, signal warrants at this intersection will be satisfied. (See Appendix A).

- Glenn Curtiss Street should be designed and constructed to industrial collector street specifications. In general, this requires a roadway width of 64 feet in an 80-foot right-of-way. This measure will provide for the eventual traffic volumes at the site as development continues.

- All interior streets should be designed to allow for future dedication to the City of Carson, if needed. This implies the reservation of a 64-foot minimum right-of-way and required setbacks along any such street.

- The developer will initiate and complete a long-range traffic study and plan for the remaining 260-acre parcel. This plan will address the impacts of the cumulative use of the site. The substantial traffic volumes expected to be generated by the development of the total project indicate that a thorough access and circulation plan will be necessary.

- o Tranportation Action Program. As part of the project, a transportation action program should be developed to encourage building employees to participate in ride-sharing and other traffic reduction measures. The program could consist of, but not be limited to, the following:

  - Make carpool information available to employees and encourage formation of carpools/vanpools. In addition, carpool matching facilities of Commuter/Computer, Inc., the regional carpool matching agency, should be utilized.

  - A preferential parking program for carpool employees should be implemented as a part of the program, thereby encouraging carpooling among employees.

  - Transit schedules, maps and other transit information should be made available to employees and others who would be travelling to and from the proposed project.

  - Flexible work schedules should be offered to employees at the project. Flexible scheduling allows employees to travel to and from the project during off-peak periods. The prospective tenant of the project currently encourages flex-time and offers it to their employees.

Implementation of the above measures will further reduce the projects traffic impacts.

Appendix A

Traffic Signal Warrants

Figure 9-1C

TRAFFIC SIGNAL WARRANTS

(Based on Estimated Average Daily Traffic – See Note 2)

URBAN ..... RURAL ✓

	Minimum Requirements EADT			
1. Minimum Vehicular Satisfied ✓ Not Satisfied	Vehicles per day on major street (total of both approaches)		Vehicles per day on higher-volume minor-street approach (one direction only)	
Number of lanes for moving traffic on each approach				
Major Street / Minor Street	Urban	Rural	Urban	Rural
1 / 1	8,000	5,600	2,400	1,680
2 or more / 1	9,600	6,720	2,400	1,680
(2 or more) / (2 or more)	9,600	6,720 ✓	3,200	2,240 ✓
1 / 2 or more	8,000	5,600	3,200	2,240
2. Interruption of Continuous Traffic Satisfied ✓ Not Satisfied	Vehicles per day on major street (total of both approaches)		Vehicles per day on higher-volume minor-street approach (one direction only)	
Number of lanes for moving traffic on each approach				
Major Street / Minor Street	Urban	Rural	Urban	Rural
1 / 1	12,000	8,400	1,200	850
2 or more / 1	14,400	10,080	1,200	850
(2 or more) / (2 or more)	14,400	10.080 ✓	1,600	1,120 ✓
1 / 2 or more	12,000	8,400	1,600	1,120
3. Combination Satisfied ____ Not Satisfied ____ No one warrant satisfied but following warrants fulfilled 80% or more ..... ____ (1) ____ (2)	2 Warrants		2 Warrants	

NOTE:

1. Left turn movements from the major street may be included with minor street volumes if a separate signal phase is to be provided for the left-turn movement.
2. To be used only for NEW INTERSECTIONS or other locations where actual traffic volumes cannot be counted.

TS-10-C

Appendix B

Critical Movement Analysis (CMA)
Calculation Sheets

CRAIN AND ASSOCIATES
CMA CALCULATIONS

INTERSECTION: W/B ARTESIA FWY. RAMPS AND CENTRAL AVE.
DATE: 05-08-1986 INITIALS: RRB PERIOD: AM PEAK HOUR
CASE: EXISTING (1985)

	INPUT VOLUMES			
APPROACH	LEFT	THROUGH	RIGHT	TOTAL
1-WESTBOUND	372	623	97	1092
2-EASTBOUND	0	0	0	0
3-NORTHBOUND	127	349	0	476
4-SOUTHBOUND	0	456	81	537

	NUMBER OF LANES			
APPROACH	LEFT ONLY	THROUGH	RIGHT ONLY	TOTAL
1-WESTBOUND	2	1	1	4
2-EASTBOUND	0	0	0	0
3-NORTHBOUND	1	2	0	3
4-SOUTHBOUND	0	2	1	3

	ASSIGNED LANE VOLUMES			
APPROACH	LEFT ONLY	THRU & LEFT	THRU(& RIGHT)	RIGHT ONLY
1-WESTBOUND	205	N/A	623	97
2-EASTBOUND	N/A	0	1 LANE	N/A
3-NORTHBOUND	127	N/A	175	N/A
4-SOUTHBOUND	N/A	228	228	81

EAST-WEST CRITICAL VOLUMES: 623
NORTH-SOUTH CRITICAL VOLUMES: 355

THE SUM OF CRITICAL VOLUMES: 978

NUMBER OF SIGNAL PHASES: 3

ICU VALUE: 0.686

INTERSECTION CAP. LEVEL OF SERVICE : B

CRAIN AND ASSOCIATES
CMA CALCULATIONS

INTERSECTION: W/B ARTESIA FWY. RAMPS AND CENTRAL AVE.
DATE: 05-08-1986 INITIALS: RRB PERIOD: AM PEAK HOUR
CASE: FUTURE (1991) WITHOUT PROJECT

INPUT VOLUMES

APPROACH	LEFT	THROUGH	RIGHT	TOTAL
1-WESTBOUND	411	688	107	1206
2-EASTBOUND	0	0	0	0
3-NORTHBOUND	140	385	0	525
4-SOUTHBOUND	0	503	89	592

NUMBER OF LANES

APPROACH	LEFT ONLY	THROUGH	RIGHT ONLY	TOTAL
1-WESTBOUND	2	1	1	4
2-EASTBOUND	0	0	0	0
3-NORTHBOUND	1	2	0	3
4-SOUTHBOUND	0	2	1	3

ASSIGNED LANE VOLUMES

APPROACH	LEFT ONLY	THRU & LEFT	THRU(& RIGHT)	RIGHT ONLY
1-WESTBOUND	226	N/A	688	107
2-EASTBOUND	N/A	0	1 LANE	N/A
3-NORTHBOUND	140	N/A	193	N/A
4-SOUTHBOUND	N/A	252	252	89

EAST-WEST CRITICAL VOLUMES: 688
NORTH-SOUTH CRITICAL VOLUMES: 392

THE SUM OF CRITICAL VOLUMES: 1080

NUMBER OF SIGNAL PHASES: 3

ICU VALUE: 0.758

INTERSECTION CAP. LEVEL OF SERVICE : C

CRAIN AND ASSOCIATES
CMA CALCULATIONS

INTERSECTION: W/B ARTESIA FWY. RAMPS AND CENTRAL AVE.
DATE: 05-08-1986 INITIALS: RRB PERIOD: AM PEAK HOUR
CASE: FUTURE (1991) WITH PROJECT

INPUT VOLUMES

APPROACH	LEFT	THROUGH	RIGHT	TOTAL
1-WESTBOUND	411	688	107	1206
2-EASTBOUND	0	0	0	0
3-NORTHBOUND	150	385	0	535
4-SOUTHBOUND	0	507	89	596

NUMBER OF LANES

APPROACH	LEFT ONLY	THROUGH	RIGHT ONLY	TOTAL
1-WESTBOUND	2	1	1	4
2-EASTBOUND	0	0	0	0
3-NORTHBOUND	1	2	0	3
4-SOUTHBOUND	0	2	1	3

ASSIGNED LANE VOLUMES

APPROACH	LEFT ONLY	THRU & LEFT	THRU(& RIGHT)	RIGHT ONLY
1-WESTBOUND	226	N/A	688	107
2-EASTBOUND	N/A	0	1 LANE	N/A
3-NORTHBOUND	150	N/A	193	N/A
4-SOUTHBOUND	N/A	254	254	89

EAST-WEST CRITICAL VOLUMES: 688
NORTH-SOUTH CRITICAL VOLUMES: 404

THE SUM OF CRITICAL VOLUMES: 1092

NUMBER OF SIGNAL PHASES: 3

ICU VALUE: 0.766

INTERSECTION CAP. LEVEL OF SERVICE : C

CRAIN AND ASSOCIATES
CMA CALCULATIONS

INTERSECTION: W/B ARTESIA FWY. RAMPS AND CENTRAL AVE.
DATE: 05-08-1986 INITIALS: RRB PERIOD: PM PEAK HOUR
CASE: EXISTING (1985)

INPUT VOLUMES

APPROACH	LEFT	THROUGH	RIGHT	TOTAL
1-WESTBOUND	228	213	325	766
2-EASTBOUND	0	0	0	0
3-NORTHBOUND	203	597	0	800
4-SOUTHBOUND	0	768	247	1015

NUMBER OF LANES

APPROACH	LEFT ONLY	THROUGH	RIGHT ONLY	TOTAL
1-WESTBOUND	2	1	1	4
2-EASTBOUND	0	0	0	0
3-NORTHBOUND	1	2	0	3
4-SOUTHBOUND	0	2	1	3

ASSIGNED LANE VOLUMES

APPROACH	LEFT ONLY	THRU & LEFT	THRU(& RIGHT)	RIGHT ONLY
1-WESTBOUND	125	N/A	213	325
2-EASTBOUND	N/A	0	1 LANE	N/A
3-NORTHBOUND	203	N/A	299	N/A
4-SOUTHBOUND	N/A	384	384	247

EAST-WEST CRITICAL VOLUMES: 325
NORTH-SOUTH CRITICAL VOLUMES: 587

THE SUM OF CRITICAL VOLUMES: 912

NUMBER OF SIGNAL PHASES: 3

ICU VALUE: 0.640

INTERSECTION CAP. LEVEL OF SERVICE : B

CRAIN AND ASSOCIATES
CMA CALCULATIONS

INTERSECTION: W/B ARTESIA FWY. RAMPS AND CENTRAL AVE.
DATE: 05-08-1986 INITIALS: RRB PERIOD: PM PEAK HOUR
CASE: FUTURE (1991) WITHOUT PROJECT

INPUT VOLUMES

APPROACH	LEFT	THROUGH	RIGHT	TOTAL
1-WESTBOUND	252	235	359	846
2-EASTBOUND	0	0	0	0
3-NORTHBOUND	224	659	0	883
4-SOUTHBOUND	0	848	273	1121

NUMBER OF LANES

APPROACH	LEFT ONLY	THROUGH	RIGHT ONLY	TOTAL
1-WESTBOUND	2	1	1	4
2-EASTBOUND	0	0	0	0
3-NORTHBOUND	1	2	0	3
4-SOUTHBOUND	0	2	1	3

ASSIGNED LANE VOLUMES

APPROACH	LEFT ONLY	THRU & LEFT	THRU(& RIGHT)	RIGHT ONLY
1-WESTBOUND	139	N/A	235	359
2-EASTBOUND	N/A	0	1 LANE	N/A
3-NORTHBOUND	224	N/A	330	N/A
4-SOUTHBOUND	N/A	424	424	273

EAST-WEST CRITICAL VOLUMES: 359
NORTH-SOUTH CRITICAL VOLUMES: 648

THE SUM OF CRITICAL VOLUMES: 1007

NUMBER OF SIGNAL PHASES: 3

ICU VALUE: 0.707

INTERSECTION CAP. LEVEL OF SERVICE : C

CRAIN AND ASSOCIATES
CMA CALCULATIONS

INTERSECTION: W/B ARTESIA FWY. RAMPS AND CENTRAL AVE.
DATE: 05-08-1986 INITIALS: RRB PERIOD: PM PEAK HOUR
CASE: FUTURE (1991) WITH PROJECT

	INPUT VOLUMES			
APPROACH	LEFT	THROUGH	RIGHT	TOTAL
1-WESTBOUND	252	235	359	846
2-EASTBOUND	0	0	0	0
3-NORTHBOUND	292	663	0	955
4-SOUTHBOUND	0	848	273	1121

	NUMBER OF LANES			
APPROACH	LEFT ONLY	THROUGH	RIGHT ONLY	TOTAL
1-WESTBOUND	2	1	1	4
2-EASTBOUND	0	0	0	0
3-NORTHBOUND	1	2	0	3
4-SOUTHBOUND	0	2	1	3

	ASSIGNED LANE VOLUMES			
APPROACH	LEFT ONLY	THRU & LEFT	THRU(& RIGHT)	RIGHT ONLY
1-WESTBOUND	139	N/A	235	359
2-EASTBOUND	N/A	0	1 LANE	N/A
3-NORTHBOUND	292	N/A	332	N/A
4-SOUTHBOUND	N/A	424	424	273

EAST-WEST CRITICAL VOLUMES: 359
NORTH-SOUTH CRITICAL VOLUMES: 716

THE SUM OF CRITICAL VOLUMES: 1075

NUMBER OF SIGNAL PHASES: 3

ICU VALUE: 0.754

INTERSECTION CAP. LEVEL OF SERVICE : C

CRAIN AND ASSOCIATES
CMA CALCULATIONS

INTERSECTION: E/B ARTESIA FWY. RAMPS AND CENTRAL AVE.
DATE: 05-08-1986 INITIALS: RRB PERIOD: AM PEAK HOUR
CASE: EXISTING (1985)

INPUT VOLUMES

APPROACH	LEFT	THROUGH	RIGHT	TOTAL
1-WESTBOUND	0	0	0	0
2-EASTBOUND	257	243	100	600
3-NORTHBOUND	0	219	156	375
4-SOUTHBOUND	501	327	0	828

NUMBER OF LANES

APPROACH	LEFT ONLY	THROUGH	RIGHT ONLY	TOTAL
1-WESTBOUND	0	0	0	0
2-EASTBOUND	1	2	0	3
3-NORTHBOUND	0	2	1	3
4-SOUTHBOUND	1	2	0	3

ASSIGNED LANE VOLUMES

APPROACH	LEFT ONLY	THRU & LEFT	THRU(& RIGHT)	RIGHT ONLY
1-WESTBOUND	N/A	0	1 LANE	N/A
2-EASTBOUND	257	N/A	172	N/A
3-NORTHBOUND	N/A	110	110	156
4-SOUTHBOUND	501	N/A	164	N/A

EAST-WEST CRITICAL VOLUMES: 257
NORTH-SOUTH CRITICAL VOLUMES: 657

THE SUM OF CRITICAL VOLUMES: 914

NUMBER OF SIGNAL PHASES: 3

ICU VALUE: 0.641

INTERSECTION CAP. LEVEL OF SERVICE : B

CRAIN AND ASSOCIATES
CMA CALCULATIONS

INTERSECTION: E/B ARTESIA FWY. RAMPS AND CENTRAL AVE.
DATE: 05-08-1986 INITIALS: RRB PERIOD: AM PEAK HOUR
CASE: FUTURE (1991) WITHOUT PROJECT

INPUT VOLUMES

APPROACH	LEFT	THROUGH	RIGHT	TOTAL
1-WESTBOUND	0	0	0	0
2-EASTBOUND	283	268	110	661
3-NORTHBOUND	0	242	172	414
4-SOUTHBOUND	553	361	0	914

NUMBER OF LANES

APPROACH	LEFT ONLY	THROUGH	RIGHT ONLY	TOTAL
1-WESTBOUND	0	0	0	0
2-EASTBOUND	1	2	0	3
3-NORTHBOUND	0	2	1	3
4-SOUTHBOUND	1	2	0	3

ASSIGNED LANE VOLUMES

APPROACH	LEFT ONLY	THRU & LEFT	THRU(& RIGHT)	RIGHT ONLY
1-WESTBOUND	N/A	0	1 LANE	N/A
2-EASTBOUND	283	N/A	189	N/A
3-NORTHBOUND	N/A	121	121	172
4-SOUTHBOUND	553	N/A	181	N/A

EAST-WEST CRITICAL VOLUMES: 283
NORTH-SOUTH CRITICAL VOLUMES: 725

THE SUM OF CRITICAL VOLUMES: 1008

NUMBER OF SIGNAL PHASES: 3

ICU VALUE: 0.707

INTERSECTION CAP. LEVEL OF SERVICE : C

CRAIN AND ASSOCIATES
CMA CALCULATIONS

INTERSECTION: E/B ARTESIA FWY. RAMPS AND CENTRAL AVE.
DATE: 05-08-1986 INITIALS: RRB PERIOD: AM PEAK HOUR
CASE: FUTURE (1991) WITH PROJECT

INPUT VOLUMES

APPROACH	LEFT	THROUGH	RIGHT	TOTAL
1-WESTBOUND	0	0	0	0
2-EASTBOUND	283	268	178	729
3-NORTHBOUND	0	252	172	424
4-SOUTHBOUND	553	365	0	918

NUMBER OF LANES

APPROACH	LEFT ONLY	THROUGH	RIGHT ONLY	TOTAL
1-WESTBOUND	0	0	0	0
2-EASTBOUND	1	2	0	3
3-NORTHBOUND	0	2	1	3
4-SOUTHBOUND	1	2	0	3

ASSIGNED LANE VOLUMES

APPROACH	LEFT ONLY	THRU & LEFT	THRU(& RIGHT)	RIGHT ONLY
1-WESTBOUND	N/A	0	1 LANE	N/A
2-EASTBOUND	283	N/A	223	N/A
3-NORTHBOUND	N/A	126	126	172
4-SOUTHBOUND	553	N/A	183	N/A

EAST-WEST CRITICAL VOLUMES: 283
NORTH-SOUTH CRITICAL VOLUMES: 725

THE SUM OF CRITICAL VOLUMES: 1008

NUMBER OF SIGNAL PHASES: 3

ICU VALUE: 0.707

INTERSECTION CAP. LEVEL OF SERVICE : C

CRAIN AND ASSOCIATES
CMA CALCULATIONS

INTERSECTION: E/B ARTESIA FWY. RAMPS AND CENTRAL AVE.
DATE: 05-08-1986 INITIALS: RRB PERIOD: PM PEAK HOUR
CASE: EXISTING (1985)

	INPUT VOLUMES			
APPROACH	LEFT	THROUGH	RIGHT	TOTAL
1-WESTBOUND	0	0	0	0
2-EASTBOUND	288	424	72	784
3-NORTHBOUND	0	512	230	742
4-SOUTHBOUND	347	649	0	996

	NUMBER OF LANES			
APPROACH	LEFT ONLY	THROUGH	RIGHT ONLY	TOTAL
1-WESTBOUND	0	0	0	0
2-EASTBOUND	1	2	0	3
3-NORTHBOUND	0	2	1	3
4-SOUTHBOUND	1	2	0	3

	ASSIGNED LANE VOLUMES			
APPROACH	LEFT ONLY	THRU & LEFT	THRU(& RIGHT)	RIGHT ONLY
1-WESTBOUND	N/A	0	1 LANE	N/A
2-EASTBOUND	288	N/A	248	N/A
3-NORTHBOUND	N/A	256	256	230
4-SOUTHBOUND	347	N/A	325	N/A

EAST-WEST CRITICAL VOLUMES: 288
NORTH-SOUTH CRITICAL VOLUMES: 603

THE SUM OF CRITICAL VOLUMES: 891

NUMBER OF SIGNAL PHASES: 3

ICU VALUE: 0.625

INTERSECTION CAP. LEVEL OF SERVICE : B

CRAIN AND ASSOCIATES
CMA CALCULATIONS

INTERSECTION: E/B ARTESIA FWY. RAMPS AND CENTRAL AVE.
DATE: 05-08-1986 INITIALS: RRB PERIOD: PM PEAK HOUR
CASE: FUTURE (1991) WITHOUT PROJECT

INPUT VOLUMES

APPROACH	LEFT	THROUGH	RIGHT	TOTAL
1-WESTBOUND	0	0	0	0
2-EASTBOUND	318	468	79	865
3-NORTHBOUND	0	565	254	819
4-SOUTHBOUND	383	717	0	1100

NUMBER OF LANES

APPROACH	LEFT ONLY	THROUGH	RIGHT ONLY	TOTAL
1-WESTBOUND	0	0	0	0
2-EASTBOUND	1	2	0	3
3-NORTHBOUND	0	2	1	3
4-SOUTHBOUND	1	2	0	3

ASSIGNED LANE VOLUMES

APPROACH	LEFT ONLY	THRU & LEFT	THRU(& RIGHT)	RIGHT ONLY
1-WESTBOUND	N/A	0	1 LANE	N/A
2-EASTBOUND	318	N/A	274	N/A
3-NORTHBOUND	N/A	283	283	254
4-SOUTHBOUND	383	N/A	359	N/A

EAST-WEST CRITICAL VOLUMES: 318
NORTH-SOUTH CRITICAL VOLUMES: 666

THE SUM OF CRITICAL VOLUMES: 984

NUMBER OF SIGNAL PHASES: 3

ICU VALUE: 0.690

INTERSECTION CAP. LEVEL OF SERVICE : B

CRAIN AND ASSOCIATES
CMA CALCULATIONS

INTERSECTION: E/B ARTESIA FWY. RAMPS AND CENTRAL AVE.
DATE: 05-08-1986 INITIALS: RRB PERIOD: PM PEAK HOUR
CASE: FUTURE (1991) WITH PROJECT

INPUT VOLUMES

APPROACH	LEFT	THROUGH	RIGHT	TOTAL
1-WESTBOUND	0	0	0	0
2-EASTBOUND	318	468	89	875
3-NORTHBOUND	0	637	254	891
4-SOUTHBOUND	383	717	0	1100

NUMBER OF LANES

APPROACH	LEFT ONLY	THROUGH	RIGHT ONLY	TOTAL
1-WESTBOUND	0	0	0	0
2-EASTBOUND	1	2	0	3
3-NORTHBOUND	0	2	1	3
4-SOUTHBOUND	1	2	0	3

ASSIGNED LANE VOLUMES

APPROACH	LEFT ONLY	THRU & LEFT	THRU(& RIGHT)	RIGHT ONLY
1-WESTBOUND	N/A	0	1 LANE	N/A
2-EASTBOUND	318	N/A	279	N/A
3-NORTHBOUND	N/A	319	319	254
4-SOUTHBOUND	383	N/A	359	N/A

EAST-WEST CRITICAL VOLUMES: 318
NORTH-SOUTH CRITICAL VOLUMES: 702

THE SUM OF CRITICAL VOLUMES: 1020

NUMBER OF SIGNAL PHASES: 3

ICU VALUE: 0.715

INTERSECTION CAP. LEVEL OF SERVICE : C

CRAIN AND ASSOCIATES
CMA CALCULATIONS

INTERSECTION: VICTORIA ST. AND CENTRAL AVE.
DATE: 05-08-1986 INITIALS: RRB PERIOD: AM PEAK HOUR
CASE: EXISTING (1985)

INPUT VOLUMES

APPROACH	LEFT	THROUGH	RIGHT	TOTAL
1-WESTBOUND	0	510	109	619
2-EASTBOUND	183	353	0	536
3-NORTHBOUND	0	0	0	0
4-SOUTHBOUND	144	0	391	535

NUMBER OF LANES

APPROACH	LEFT ONLY	THROUGH	RIGHT ONLY	TOTAL
1-WESTBOUND	0	1	1	2
2-EASTBOUND	1	1	0	2
3-NORTHBOUND	0	0	0	0
4-SOUTHBOUND	1	0	1	2

ASSIGNED LANE VOLUMES

APPROACH	LEFT ONLY	THRU & LEFT	THRU(& RIGHT)	RIGHT ONLY
1-WESTBOUND	N/A	510	1 LANE	109
2-EASTBOUND	183	N/A	353	N/A
3-NORTHBOUND	N/A	0	1 LANE	N/A
4-SOUTHBOUND	144	N/A	0	391

EAST-WEST CRITICAL VOLUMES: 693
NORTH-SOUTH CRITICAL VOLUMES: 391

THE SUM OF CRITICAL VOLUMES: 1084

NUMBER OF SIGNAL PHASES: 2

ICU VALUE: 0.723

INTERSECTION CAP. LEVEL OF SERVICE : C

CRAIN AND ASSOCIATES
CMA CALCULATIONS

INTERSECTION: VICTORIA ST. AND CENTRAL AVE.
DATE: 05-08-1986 INITIALS: RRB PERIOD: AM PEAK HOUR
CASE: FUTURE (1991) WITHOUT PROJECT

INPUT VOLUMES

APPROACH	LEFT	THROUGH	RIGHT	TOTAL
1-WESTBOUND	0	563	120	683
2-EASTBOUND	202	390	0	592
3-NORTHBOUND	0	0	0	0
4-SOUTHBOUND	159	0	432	591

NUMBER OF LANES

APPROACH	LEFT ONLY	THROUGH	RIGHT ONLY	TOTAL
1-WESTBOUND	0	1	1	2
2-EASTBOUND	1	1	0	2
3-NORTHBOUND	0	0	0	0
4-SOUTHBOUND	1	0	1	2

ASSIGNED LANE VOLUMES

APPROACH	LEFT ONLY	THRU & LEFT	THRU(& RIGHT)	RIGHT ONLY
1-WESTBOUND	N/A	563	1 LANE	120
2-EASTBOUND	202	N/A	390	N/A
3-NORTHBOUND	N/A	0	1 LANE	N/A
4-SOUTHBOUND	159	N/A	0	432

EAST-WEST CRITICAL VOLUMES: 765
NORTH-SOUTH CRITICAL VOLUMES: 432

THE SUM OF CRITICAL VOLUMES: 1197

NUMBER OF SIGNAL PHASES: 2

ICU VALUE: 0.798

INTERSECTION CAP. LEVEL OF SERVICE : C

CRAIN AND ASSOCIATES
CMA CALCULATIONS

INTERSECTION: VICTORIA ST. AND CENTRAL AVE.
DATE: 05-08-1986 INITIALS: RRB PERIOD: AM PEAK HOUR
CASE: FUTURE (1991) WITH PROJECT

INPUT VOLUMES

APPROACH	LEFT	THROUGH	RIGHT	TOTAL
1-WESTBOUND	0	563	130	693
2-EASTBOUND	202	413	0	615
3-NORTHBOUND	0	0	0	0
4-SOUTHBOUND	231	0	432	663

NUMBER OF LANES

APPROACH	LEFT ONLY	THROUGH	RIGHT ONLY	TOTAL
1-WESTBOUND	0	1	1	2
2-EASTBOUND	1	1	0	2
3-NORTHBOUND	0	0	0	0
4-SOUTHBOUND	1	0	1	2

ASSIGNED LANE VOLUMES

APPROACH	LEFT ONLY	THRU & LEFT	THRU(& RIGHT)	RIGHT ONLY
1-WESTBOUND	N/A	563	1 LANE	130
2-EASTBOUND	202	N/A	413	N/A
3-NORTHBOUND	N/A	0	1 LANE	N/A
4-SOUTHBOUND	231	N/A	0	432

EAST-WEST CRITICAL VOLUMES: 765
NORTH-SOUTH CRITICAL VOLUMES: 432

THE SUM OF CRITICAL VOLUMES: 1197

NUMBER OF SIGNAL PHASES: 2

ICU VALUE: 0.798

INTERSECTION CAP. LEVEL OF SERVICE : C

CRAIN AND ASSOCIATES
CMA CALCULATIONS

INTERSECTION: VICTORIA ST. AND CENTRAL AVE.
DATE: 05-08-1986 INITIALS: RRB PERIOD: PM PEAK HOUR
CASE: EXISTING (1985)

	INPUT VOLUMES			
APPROACH	LEFT	THROUGH	RIGHT	TOTAL
1-WESTBOUND	0	360	268	628
2-EASTBOUND	474	456	0	930
3-NORTHBOUND	0	0	0	0
4-SOUTHBOUND	253	0	468	721

	NUMBER OF LANES			
APPROACH	LEFT ONLY	THROUGH	RIGHT ONLY	TOTAL
1-WESTBOUND	0	1	1	2
2-EASTBOUND	1	1	0	2
3-NORTHBOUND	0	0	0	0
4-SOUTHBOUND	1	0	1	2

	ASSIGNED LANE VOLUMES			
APPROACH	LEFT ONLY	THRU & LEFT	THRU(& RIGHT)	RIGHT ONLY
1-WESTBOUND	N/A	360	1 LANE	268
2-EASTBOUND	474	N/A	456	N/A
3-NORTHBOUND	N/A	0	1 LANE	N/A
4-SOUTHBOUND	253	N/A	0	468

EAST-WEST CRITICAL VOLUMES: 834
NORTH-SOUTH CRITICAL VOLUMES: 468

THE SUM OF CRITICAL VOLUMES: 1302

NUMBER OF SIGNAL PHASES: 2

ICU VALUE: 0.868

INTERSECTION CAP. LEVEL OF SERVICE : D

CRAIN AND ASSOCIATES
CMA CALCULATIONS

INTERSECTION: VICTORIA ST. AND CENTRAL AVE.
DATE: 05-08-1986 INITIALS: RRB PERIOD: PM PEAK HOUR
CASE: FUTURE (1991) WITHOUT PROJECT

INPUT VOLUMES

APPROACH	LEFT	THROUGH	RIGHT	TOTAL
1-WESTBOUND	0	397	270	667
2-EASTBOUND	523	503	0	1026
3-NORTHBOUND	0	0	0	0
4-SOUTHBOUND	279	0	517	796

NUMBER OF LANES

APPROACH	LEFT ONLY	THROUGH	RIGHT ONLY	TOTAL
1-WESTBOUND	0	1	1	2
2-EASTBOUND	1	1	0	2
3-NORTHBOUND	0	0	0	0
4-SOUTHBOUND	1	0	1	2

ASSIGNED LANE VOLUMES

APPROACH	LEFT ONLY	THRU & LEFT	THRU(& RIGHT)	RIGHT ONLY
1-WESTBOUND	N/A	397	1 LANE	270
2-EASTBOUND	523	N/A	503	N/A
3-NORTHBOUND	N/A	0	1 LANE	N/A
4-SOUTHBOUND	279	N/A	0	517

EAST-WEST CRITICAL VOLUMES: 920
NORTH-SOUTH CRITICAL VOLUMES: 517

THE SUM OF CRITICAL VOLUMES: 1437

NUMBER OF SIGNAL PHASES: 2

ICU VALUE: 0.958

INTERSECTION CAP. LEVEL OF SERVICE : E

CRAIN AND ASSOCIATES
CMA CALCULATIONS

INTERSECTION: VICTORIA ST. AND CENTRAL AVE.
DATE: 05-08-1986 INITIALS: RRB PERIOD: PM PEAK HOUR
CASE: FUTURE (1991) WITH PROJECT

	INPUT VOLUMES			
APPROACH	LEFT	THROUGH	RIGHT	TOTAL
1-WESTBOUND	0	420	72	492
2-EASTBOUND	523	503	0	1026
3-NORTHBOUND	0	0	0	0
4-SOUTHBOUND	289	0	517	806

	NUMBER OF LANES			
APPROACH	LEFT ONLY	THROUGH	RIGHT ONLY	TOTAL
1-WESTBOUND	0	1	1	2
2-EASTBOUND	1	1	0	2
3-NORTHBOUND	0	0	0	0
4-SOUTHBOUND	1	0	1	2

	ASSIGNED LANE VOLUMES			
APPROACH	LEFT ONLY	THRU & LEFT	THRU(& RIGHT)	RIGHT ONLY
1-WESTBOUND	N/A	420	1 LANE	72
2-EASTBOUND	523	N/A	503	N/A
3-NORTHBOUND	N/A	0	1 LANE	N/A
4-SOUTHBOUND	289	N/A	0	517

EAST-WEST CRITICAL VOLUMES: 943
NORTH-SOUTH CRITICAL VOLUMES: 517

THE SUM OF CRITICAL VOLUMES: 1460

NUMBER OF SIGNAL PHASES: 2

ICU VALUE: 0.973

INTERSECTION CAP. LEVEL OF SERVICE : E

CRAIN AND ASSOCIATES
CMA CALCULATIONS

INTERSECTION: UNIVERSITY DR. AND CENTRAL AVE.
DATE: 05-08-1986 INITIALS: RRB PERIOD: AM PEAK HOUR
CASE: EXISTING (1985)

INPUT VOLUMES

APPROACH	LEFT	THROUGH	RIGHT	TOTAL
1-WESTBOUND	71	263	0	334
2-EASTBOUND	0	249	74	323
3-NORTHBOUND	240	0	167	407
4-SOUTHBOUND	0	0	0	0

NUMBER OF LANES

APPROACH	LEFT ONLY	THROUGH	RIGHT ONLY	TOTAL
1-WESTBOUND	1	2	0	3
2-EASTBOUND	0	2	1	3
3-NORTHBOUND	1	0	1	2
4-SOUTHBOUND	0	0	0	0

ASSIGNED LANE VOLUMES

APPROACH	LEFT ONLY	THRU & LEFT	THRU(& RIGHT)	RIGHT ONLY
1-WESTBOUND	71	N/A	132	N/A
2-EASTBOUND	N/A	125	125	74
3-NORTHBOUND	240	N/A	0	167
4-SOUTHBOUND	N/A	0	1 LANE	N/A

EAST-WEST CRITICAL VOLUMES: 196
NORTH-SOUTH CRITICAL VOLUMES: 240

THE SUM OF CRITICAL VOLUMES: 436

NUMBER OF SIGNAL PHASES: 2

ICU VALUE: 0.290

INTERSECTION CAP. LEVEL OF SERVICE : A

CRAIN AND ASSOCIATES
CMA CALCULATIONS

INTERSECTION: UNIVERSITY DR. AND CENTRAL AVE.
DATE: 05-08-1986 INITIALS: RRB PERIOD: AM PEAK HOUR
CASE: FUTURE (1991) WITHOUT PROJECT

INPUT VOLUMES

APPROACH	LEFT	THROUGH	RIGHT	TOTAL
1-WESTBOUND	78	290	0	368
2-EASTBOUND	0	275	82	357
3-NORTHBOUND	265	0	184	449
4-SOUTHBOUND	0	0	0	0

NUMBER OF LANES

APPROACH	LEFT ONLY	THROUGH	RIGHT ONLY	TOTAL
1-WESTBOUND	1	2	0	3
2-EASTBOUND	0	2	1	3
3-NORTHBOUND	1	0	1	2
4-SOUTHBOUND	0	0	0	0

ASSIGNED LANE VOLUMES

APPROACH	LEFT ONLY	THRU & LEFT	THRU(& RIGHT)	RIGHT ONLY
1-WESTBOUND	78	N/A	145	N/A
2-EASTBOUND	N/A	138	138	82
3-NORTHBOUND	265	N/A	0	184
4-SOUTHBOUND	N/A	0	1 LANE	N/A

EAST-WEST CRITICAL VOLUMES: 216
NORTH-SOUTH CRITICAL VOLUMES: 265

THE SUM OF CRITICAL VOLUMES: 481

NUMBER OF SIGNAL PHASES: 2

ICU VALUE: 0.320

INTERSECTION CAP. LEVEL OF SERVICE : A

CRAIN AND ASSOCIATES
CMA CALCULATIONS

INTERSECTION: UNIVERSITY DR. AND CENTRAL AVE.
DATE: 05-08-1986 INITIALS: RRB PERIOD: AM PEAK HOUR
CASE: FUTURE (1991) WITH PROJECT

INPUT VOLUMES

APPROACH	LEFT	THROUGH	RIGHT	TOTAL
1-WESTBOUND	79	298	0	377
2-EASTBOUND	0	309	82	391
3-NORTHBOUND	265	0	187	452
4-SOUTHBOUND	0	0	0	0

NUMBER OF LANES

APPROACH	LEFT ONLY	THROUGH	RIGHT ONLY	TOTAL
1-WESTBOUND	1	2	0	3
2-EASTBOUND	0	2	1	3
3-NORTHBOUND	1	0	1	2
4-SOUTHBOUND	0	0	0	0

ASSIGNED LANE VOLUMES

APPROACH	LEFT ONLY	THRU & LEFT	THRU(& RIGHT)	RIGHT ONLY
1-WESTBOUND	79	N/A	149	N/A
2-EASTBOUND	N/A	155	155	82
3-NORTHBOUND	265	N/A	0	187
4-SOUTHBOUND	N/A	0	1 LANE	N/A

EAST-WEST CRITICAL VOLUMES: 234
NORTH-SOUTH CRITICAL VOLUMES: 265

THE SUM OF CRITICAL VOLUMES: 499

NUMBER OF SIGNAL PHASES: 2

ICU VALUE: 0.332

INTERSECTION CAP. LEVEL OF SERVICE : A

CRAIN AND ASSOCIATES
CMA CALCULATIONS

INTERSECTION: UNIVERSITY DR. AND CENTRAL AVE.
DATE: 05-08-1986 INITIALS: RRB PERIOD: PM PEAK HOUR
CASE: EXISTING (1985)

INPUT VOLUMES

APPROACH	LEFT	THROUGH	RIGHT	TOTAL
1-WESTBOUND	84	276	0	360
2-EASTBOUND	0	284	272	556
3-NORTHBOUND	68	0	48	116
4-SOUTHBOUND	0	0	0	0

NUMBER OF LANES

APPROACH	LEFT ONLY	THROUGH	RIGHT ONLY	TOTAL
1-WESTBOUND	1	2	0	3
2-EASTBOUND	0	2	1	3
3-NORTHBOUND	1	0	1	2
4-SOUTHBOUND	0	0	0	0

ASSIGNED LANE VOLUMES

APPROACH	LEFT ONLY	THRU & LEFT	THRU(& RIGHT)	RIGHT ONLY
1-WESTBOUND	84	N/A	138	N/A
2-EASTBOUND	N/A	142	142	272
3-NORTHBOUND	68	N/A	0	48
4-SOUTHBOUND	N/A	0	1 LANE	N/A

EAST-WEST CRITICAL VOLUMES: 356
NORTH-SOUTH CRITICAL VOLUMES: 68

THE SUM OF CRITICAL VOLUMES: 424

NUMBER OF SIGNAL PHASES: 2

ICU VALUE: 0.283

INTERSECTION CAP. LEVEL OF SERVICE : A

CRAIN AND ASSOCIATES
CMA CALCULATIONS

INTERSECTION: UNIVERSITY DR. AND CENTRAL AVE.
DATE: 05-08-1986 INITIALS: RRB PERIOD: PM PEAK HOUR
CASE: FUTURE (1991) WITHOUT PROJECT

INPUT VOLUMES

APPROACH	LEFT	THROUGH	RIGHT	TOTAL
1-WESTBOUND	93	305	0	398
2-EASTBOUND	0	314	300	614
3-NORTHBOUND	75	0	53	128
4-SOUTHBOUND	0	0	0	0

NUMBER OF LANES

APPROACH	LEFT ONLY	THROUGH	RIGHT ONLY	TOTAL
1-WESTBOUND	1	2	0	3
2-EASTBOUND	0	2	1	3
3-NORTHBOUND	1	0	1	2
4-SOUTHBOUND	0	0	0	0

ASSIGNED LANE VOLUMES

APPROACH	LEFT ONLY	THRU & LEFT	THRU(& RIGHT)	RIGHT ONLY
1-WESTBOUND	93	N/A	153	N/A
2-EASTBOUND	N/A	157	157	300
3-NORTHBOUND	75	N/A	0	53
4-SOUTHBOUND	N/A	0	1 LANE	N/A

EAST-WEST CRITICAL VOLUMES: 393
NORTH-SOUTH CRITICAL VOLUMES: 75

THE SUM OF CRITICAL VOLUMES: 468

NUMBER OF SIGNAL PHASES: 2

ICU VALUE: 0.312

INTERSECTION CAP. LEVEL OF SERVICE : A

CRAIN AND ASSOCIATES
CMA CALCULATIONS

INTERSECTION: UNIVERSITY DR. AND CENTRAL AVE.
DATE: 05-08-1986 INITIALS: RRB PERIOD: PM PEAK HOUR
CASE: FUTURE (1991) WITH PROJECT

	INPUT VOLUMES			
APPROACH	LEFT	THROUGH	RIGHT	TOTAL
1-WESTBOUND	96	339	0	435
2-EASTBOUND	0	314	300	614
3-NORTHBOUND	75	0	54	129
4-SOUTHBOUND	0	0	0	0

	NUMBER OF LANES			
APPROACH	LEFT ONLY	THROUGH	RIGHT ONLY	TOTAL
1-WESTBOUND	1	2	0	3
2-EASTBOUND	0	2	1	3
3-NORTHBOUND	1	0	1	2
4-SOUTHBOUND	0	0	0	0

	ASSIGNED LANE VOLUMES			
APPROACH	LEFT ONLY	THRU & LEFT	THRU(& RIGHT)	RIGHT ONLY
1-WESTBOUND	96	N/A	170	N/A
2-EASTBOUND	N/A	157	157	300
3-NORTHBOUND	75	N/A	0	54
4-SOUTHBOUND	N/A	0	1 LANE	N/A

EAST-WEST CRITICAL VOLUMES: 396
NORTH-SOUTH CRITICAL VOLUMES: 75

THE SUM OF CRITICAL VOLUMES: 471

NUMBER OF SIGNAL PHASES: 2

ICU VALUE: 0.314

INTERSECTION CAP. LEVEL OF SERVICE : A

CRAIN AND ASSOCIATES
CMA CALCULATIONS

INTERSECTION: W/B ARTESIA FWY. RAMPS AND WILMINGTON AVE.
DATE: 05-08-1986 INITIALS: RRB PERIOD: AM PEAK HOUR
CASE: EXISTING (1986)

INPUT VOLUMES

APPROACH	LEFT	THROUGH	RIGHT	TOTAL
1-WESTBOUND	736	540	60	1336
2-EASTBOUND	0	0	0	0
3-NORTHBOUND	316	513	0	829
4-SOUTHBOUND	0	648	56	704

NUMBER OF LANES

APPROACH	LEFT ONLY	THROUGH	RIGHT ONLY	TOTAL
1-WESTBOUND	2	1	1	4
2-EASTBOUND	0	0	0	0
3-NORTHBOUND	1	2	0	3
4-SOUTHBOUND	0	2	1	3

ASSIGNED LANE VOLUMES

APPROACH	LEFT ONLY	THRU & LEFT	THRU(& RIGHT)	RIGHT ONLY
1-WESTBOUND	405	N/A	540	60
2-EASTBOUND	N/A	0	1 LANE	N/A
3-NORTHBOUND	316	N/A	257	N/A
4-SOUTHBOUND	N/A	324	324	56

EAST-WEST CRITICAL VOLUMES: 540
NORTH-SOUTH CRITICAL VOLUMES: 640

THE SUM OF CRITICAL VOLUMES: 1180

NUMBER OF SIGNAL PHASES: 3

ICU VALUE: 0.828

INTERSECTION CAP. LEVEL OF SERVICE : D

CRAIN AND ASSOCIATES
CMA CALCULATIONS

INTERSECTION: W/B ARTESIA FWY. RAMPS AND WILMINGTON AVE.
DATE: 05-08-1986 INITIALS: RRB PERIOD: AM PEAK HOUR
CASE: FUTURE (1991) WITHOUT PROJECT

	INPUT VOLUMES			
APPROACH	LEFT	THROUGH	RIGHT	TOTAL
1-WESTBOUND	813	596	66	1475
2-EASTBOUND	0	0	0	0
3-NORTHBOUND	349	566	0	915
4-SOUTHBOUND	0	715	62	777

	NUMBER OF LANES			
APPROACH	LEFT ONLY	THROUGH	RIGHT ONLY	TOTAL
1-WESTBOUND	2	1	1	4
2-EASTBOUND	0	0	0	0
3-NORTHBOUND	1	2	0	3
4-SOUTHBOUND	0	2	1	3

	ASSIGNED LANE VOLUMES			
APPROACH	LEFT ONLY	THRU & LEFT	THRU(& RIGHT)	RIGHT ONLY
1-WESTBOUND	447	N/A	596	66
2-EASTBOUND	N/A	0	1 LANE	N/A
3-NORTHBOUND	349	N/A	283	N/A
4-SOUTHBOUND	N/A	358	358	62

EAST-WEST CRITICAL VOLUMES: 596
NORTH-SOUTH CRITICAL VOLUMES: 707

THE SUM OF CRITICAL VOLUMES: 1303

NUMBER OF SIGNAL PHASES: 3

ICU VALUE: 0.914

INTERSECTION CAP. LEVEL OF SERVICE : E

CRAIN AND ASSOCIATES
CMA CALCULATIONS

INTERSECTION: W/B ARTESIA FWY. RAMPS AND WILMINGTON AVE.
DATE: 05-08-1986 INITIALS: RRB PERIOD: AM PEAK HOUR
CASE: FUTURE (1991) WITH PROJECT

	INPUT VOLUMES			
APPROACH	LEFT	THROUGH	RIGHT	TOTAL
1-WESTBOUND	1113	596	66	1775
2-EASTBOUND	0	0	0	0
3-NORTHBOUND	388	57	0	445
4-SOUTHBOUND	0	729	62	791

	NUMBER OF LANES			
APPROACH	LEFT ONLY	THROUGH	RIGHT ONLY	TOTAL
1-WESTBOUND	2	1	1	4
2-EASTBOUND	0	0	0	0
3-NORTHBOUND	1	2	0	3
4-SOUTHBOUND	0	2	1	3

	ASSIGNED LANE VOLUMES			
APPROACH	LEFT ONLY	THRU & LEFT	THRU(& RIGHT)	RIGHT ONLY
1-WESTBOUND	612	N/A	596	66
2-EASTBOUND	N/A	0	1 LANE	N/A
3-NORTHBOUND	388	N/A	29	N/A
4-SOUTHBOUND	N/A	365	365	62

EAST-WEST CRITICAL VOLUMES: 612
NORTH-SOUTH CRITICAL VOLUMES: 753

THE SUM OF CRITICAL VOLUMES: 1365

NUMBER OF SIGNAL PHASES: 3

ICU VALUE: 0.958

INTERSECTION CAP. LEVEL OF SERVICE : E

CRAIN AND ASSOCIATES
CMA CALCULATIONS

INTERSECTION: W/B ARTESIA FWY. RAMPS AND WILMINGTON AVE.
DATE: 05-08-1986 INITIALS: RRB PERIOD: PM PEAK HOUR
CASE: EXISTING (1985)

INPUT VOLUMES

APPROACH	LEFT	THROUGH	RIGHT	TOTAL
1-WESTBOUND	376	132	348	856
2-EASTBOUND	0	0	0	0
3-NORTHBOUND	551	249	0	800
4-SOUTHBOUND	0	468	216	684

NUMBER OF LANES

APPROACH	LEFT ONLY	THROUGH	RIGHT ONLY	TOTAL
1-WESTBOUND	2	1	1	4
2-EASTBOUND	0	0	0	0
3-NORTHBOUND	1	2	0	3
4-SOUTHBOUND	0	2	1	3

ASSIGNED LANE VOLUMES

APPROACH	LEFT ONLY	THRU & LEFT	THRU(& RIGHT)	RIGHT ONLY
1-WESTBOUND	207	N/A	132	348
2-EASTBOUND	N/A	0	1 LANE	N/A
3-NORTHBOUND	551	N/A	125	N/A
4-SOUTHBOUND	N/A	234	234	216

EAST-WEST CRITICAL VOLUMES: 348
NORTH-SOUTH CRITICAL VOLUMES: 785

THE SUM OF CRITICAL VOLUMES: 1133

NUMBER OF SIGNAL PHASES: 3

ICU VALUE: 0.795

INTERSECTION CAP. LEVEL OF SERVICE : C

CRAIN AND ASSOCIATES
CMA CALCULATIONS

INTERSECTION: W/B ARTESIA FWY. RAMPS AND WILMINGTON AVE.
DATE: 05-08-1986 INITIALS: RRB PERIOD: PM PEAK HOUR
CASE: FUTURE (1991) WITHOUT PROJECT

INPUT VOLUMES

APPROACH	LEFT	THROUGH	RIGHT	TOTAL
1-WESTBOUND	415	146	384	945
2-EASTBOUND	0	0	0	0
3-NORTHBOUND	608	275	0	883
4-SOUTHBOUND	0	517	238	755

NUMBER OF LANES

APPROACH	LEFT ONLY	THROUGH	RIGHT ONLY	TOTAL
1-WESTBOUND	2	1	1	4
2-EASTBOUND	0	0	0	0
3-NORTHBOUND	1	2	0	3
4-SOUTHBOUND	0	2	1	3

ASSIGNED LANE VOLUMES

APPROACH	LEFT ONLY	THRU & LEFT	THRU(& RIGHT)	RIGHT ONLY
1-WESTBOUND	228	N/A	146	384
2-EASTBOUND	N/A	0	1 LANE	N/A
3-NORTHBOUND	608	N/A	138	N/A
4-SOUTHBOUND	N/A	259	259	238

EAST-WEST CRITICAL VOLUMES: 384
NORTH-SOUTH CRITICAL VOLUMES: 867

THE SUM OF CRITICAL VOLUMES: 1251

NUMBER OF SIGNAL PHASES: 3

ICU VALUE: 0.878

INTERSECTION CAP. LEVEL OF SERVICE : D

CRAIN AND ASSOCIATES
CMA CALCULATIONS

INTERSECTION: W/B ARTESIA FWY. RAMPS AND WILMINGTON AVE.
DATE: 05-08-1986 INITIALS: RRB PERIOD: PM PEAK HOUR
CASE: FUTURE (1991) WITH PROJECT

	INPUT VOLUMES			
APPROACH	LEFT	THROUGH	RIGHT	TOTAL
1-WESTBOUND	490	146	384	1020
2-EASTBOUND	0	0	0	0
3-NORTHBOUND	737	289	0	1026
4-SOUTHBOUND	0	527	238	765

	NUMBER OF LANES			
APPROACH	LEFT ONLY	THROUGH	RIGHT ONLY	TOTAL
1-WESTBOUND	2	1	1	4
2-EASTBOUND	0	0	0	0
3-NORTHBOUND	1	2	0	3
4-SOUTHBOUND	0	2	1	3

	ASSIGNED LANE VOLUMES			
APPROACH	LEFT ONLY	THRU & LEFT	THRU(& RIGHT)	RIGHT ONLY
1-WESTBOUND	270	N/A	146	384
2-EASTBOUND	N/A	0	1 LANE	N/A
3-NORTHBOUND	737	N/A	145	N/A
4-SOUTHBOUND	N/A	264	264	238

EAST-WEST CRITICAL VOLUMES: 384
NORTH-SOUTH CRITICAL VOLUMES: 1001

THE SUM OF CRITICAL VOLUMES: 1385

NUMBER OF SIGNAL PHASES: 3

ICU VALUE: 0.972

INTERSECTION CAP. LEVEL OF SERVICE : E

CRAIN AND ASSOCIATES
CMA CALCULATIONS

INTERSECTION: E/B ARTESIA FWY. RAMPS AND WILMINGTON AVE.
DATE: 05-08-1986 INITIALS: RRB PERIOD: AM PEAK HOUR
CASE: EXISTING (1985)

INPUT VOLUMES

APPROACH	LEFT	THROUGH	RIGHT	TOTAL
1-WESTBOUND	0	0	0	0
2-EASTBOUND	180	128	360	668
3-NORTHBOUND	0	649	371	1020
4-SOUTHBOUND	595	789	0	1384

NUMBER OF LANES

APPROACH	LEFT ONLY	THROUGH	RIGHT ONLY	TOTAL
1-WESTBOUND	0	0	0	0
2-EASTBOUND	2	1	1	4
3-NORTHBOUND	0	2	1	3
4-SOUTHBOUND	1	2	0	3

ASSIGNED LANE VOLUMES

APPROACH	LEFT ONLY	THRU & LEFT	THRU(& RIGHT)	RIGHT ONLY
1-WESTBOUND	N/A	0	1 LANE	N/A
2-EASTBOUND	99	N/A	128	360
3-NORTHBOUND	N/A	325	325	371
4-SOUTHBOUND	595	N/A	395	N/A

EAST-WEST CRITICAL VOLUMES: 360
NORTH-SOUTH CRITICAL VOLUMES: 966

THE SUM OF CRITICAL VOLUMES: 1326

NUMBER OF SIGNAL PHASES: 3

ICU VALUE: 0.931

INTERSECTION CAP. LEVEL OF SERVICE : E

CRAIN AND ASSOCIATES
CMA CALCULATIONS

INTERSECTION: E/B ARTESIA FWY. RAMPS AND WILMINGTON AVE.
DATE: 05-09-1986 INITIALS: RRB PERIOD: AM PEAK HOUR
CASE: FUTURE (1991) WITHOUT PROJECT

INPUT VOLUMES

APPROACH	LEFT	THROUGH	RIGHT	TOTAL
1-WESTBOUND	0	0	0	0
2-EASTBOUND	199	141	397	737
3-NORTHBOUND	0	717	410	1127
4-SOUTHBOUND	657	871	0	1528

NUMBER OF LANES

APPROACH	LEFT ONLY	THROUGH	RIGHT ONLY	TOTAL
1-WESTBOUND	0	0	0	0
2-EASTBOUND	2	1	1	4
3-NORTHBOUND	0	2	1	3
4-SOUTHBOUND	1	2	0	3

ASSIGNED LANE VOLUMES

APPROACH	LEFT ONLY	THRU & LEFT	THRU(& RIGHT)	RIGHT ONLY
1-WESTBOUND	N/A	0	1 LANE	N/A
2-EASTBOUND	109	N/A	141	397
3-NORTHBOUND	N/A	359	359	410
4-SOUTHBOUND	657	N/A	436	N/A

EAST-WEST CRITICAL VOLUMES: 318
NORTH-SOUTH CRITICAL VOLUMES: 985

THE SUM OF CRITICAL VOLUMES: 1303

NUMBER OF SIGNAL PHASES: 3

ICU VALUE: 0.914

INTERSECTION CAP. LEVEL OF SERVICE : E

CRAIN AND ASSOCIATES
CMA CALCULATIONS

INTERSECTION: E/B ARTESIA FWY. RAMPS AND WILMINGTON AVE.
DATE: 05-09-1986 INITIALS: RRB PERIOD: AM PEAK HOUR
CASE: FUTURE (1991) WITH PROJECT

	INPUT VOLUMES			
APPROACH	LEFT	THROUGH	RIGHT	TOTAL
1-WESTBOUND	0	0	0	0
2-EASTBOUND	199	141	526	866
3-NORTHBOUND	0	766	485	1251
4-SOUTHBOUND	657	1185	0	1842

	NUMBER OF LANES			
APPROACH	LEFT ONLY	THROUGH	RIGHT ONLY	TOTAL
1-WESTBOUND	0	0	0	0
2-EASTBOUND	2	1	1	4
3-NORTHBOUND	0	2	1	3
4-SOUTHBOUND	1	2	0	3

	ASSIGNED LANE VOLUMES			
APPROACH	LEFT ONLY	THRU & LEFT	THRU(& RIGHT)	RIGHT ONLY
1-WESTBOUND	N/A	0	1 LANE	N/A
2-EASTBOUND	109	N/A	141	526
3-NORTHBOUND	N/A	383	383	485
4-SOUTHBOUND	657	N/A	593	N/A

EAST-WEST CRITICAL VOLUMES: 421
NORTH-SOUTH CRITICAL VOLUMES: 1045

THE SUM OF CRITICAL VOLUMES: 1466

NUMBER OF SIGNAL PHASES: 3

ICU VALUE: 1.029

INTERSECTION CAP. LEVEL OF SERVICE : F

CRAIN AND ASSOCIATES
CMA CALCULATIONS

INTERSECTION: E/B ARTESIA FWY. RAMPS AND WILMINGTON AVE.
DATE: 05-08-1986 INITIALS: RRB PERIOD: PM PEAK HOUR
CASE: EXISTING (1985)

	INPUT VOLUMES			
APPROACH	LEFT	THROUGH	RIGHT	TOTAL
1-WESTBOUND	0	0	0	0
2-EASTBOUND	276	424	282	982
3-NORTHBOUND	0	524	619	1143
4-SOUTHBOUND	295	549	0	844

	NUMBER OF LANES			
APPROACH	LEFT ONLY	THROUGH	RIGHT ONLY	TOTAL
1-WESTBOUND	0	0	0	0
2-EASTBOUND	2	1	1	4
3-NORTHBOUND	0	2	1	3
4-SOUTHBOUND	1	2	0	3

	ASSIGNED LANE VOLUMES			
APPROACH	LEFT ONLY	THRU & LEFT	THRU(& RIGHT)	RIGHT ONLY
1-WESTBOUND	N/A	0	1 LANE	N/A
2-EASTBOUND	152	N/A	424	282
3-NORTHBOUND	N/A	262	262	619
4-SOUTHBOUND	295	N/A	275	N/A

EAST-WEST CRITICAL VOLUMES: 424
NORTH-SOUTH CRITICAL VOLUMES: 914

THE SUM OF CRITICAL VOLUMES: 1338

NUMBER OF SIGNAL PHASES: 3

ICU VALUE: 0.939

INTERSECTION CAP. LEVEL OF SERVICE : E

CRAIN AND ASSOCIATES
CMA CALCULATIONS

INTERSECTION: E/B ARTESIA FWY. RAMPS AND WILMINGTON AVE.
DATE: 05-09-1986 INITIALS: RRB PERIOD: PM PEAK HOUR
CASE: FUTURE (1991) WITHOUT PROJECT

	INPUT VOLUMES			
APPROACH	LEFT	THROUGH	RIGHT	TOTAL
1-WESTBOUND	0	0	0	0
2-EASTBOUND	305	468	311	1084
3-NORTHBOUND	0	579	683	1262
4-SOUTHBOUND	326	606	0	932

	NUMBER OF LANES			
APPROACH	LEFT ONLY	THROUGH	RIGHT ONLY	TOTAL
1-WESTBOUND	0	0	0	0
2-EASTBOUND	2	1	1	4
3-NORTHBOUND	0	2	1	3
4-SOUTHBOUND	1	2	0	3

	ASSIGNED LANE VOLUMES			
APPROACH	LEFT ONLY	THRU & LEFT	THRU(& RIGHT)	RIGHT ONLY
1-WESTBOUND	N/A	0	1 LANE	N/A
2-EASTBOUND	168	N/A	468	311
3-NORTHBOUND	N/A	290	290	683
4-SOUTHBOUND	326	N/A	303	N/A

EAST-WEST CRITICAL VOLUMES: 468
NORTH-SOUTH CRITICAL VOLUMES: 872

THE SUM OF CRITICAL VOLUMES: 1340

NUMBER OF SIGNAL PHASES: 3

ICU VALUE: 0.940

INTERSECTION CAP. LEVEL OF SERVICE : E

CRAIN AND ASSOCIATES
CMA CALCULATIONS

INTERSECTION: E/B ARTESIA FWY. RAMPS AND WILMINGTON AVE.
DATE: 05-09-1986 INITIALS: RRB PERIOD: PM PEAK HOUR
CASE: FUTURE (1991) WITH PROJECT

	INPUT VOLUMES			
APPROACH	LEFT	THROUGH	RIGHT	TOTAL
1-WESTBOUND	0	0	0	0
2-EASTBOUND	305	468	350	1123
3-NORTHBOUND	0	722	983	1705
4-SOUTHBOUND	326	691	0	1017

	NUMBER OF LANES			
APPROACH	LEFT ONLY	THROUGH	RIGHT ONLY	TOTAL
1-WESTBOUND	0	0	0	0
2-EASTBOUND	2	1	1	4
3-NORTHBOUND	0	2	1	3
4-SOUTHBOUND	1	2	0	3

	ASSIGNED LANE VOLUMES			
APPROACH	LEFT ONLY	THRU & LEFT	THRU (& RIGHT)	RIGHT ONLY
1-WESTBOUND	N/A	0	1 LANE	N/A
2-EASTBOUND	168	N/A	468	350
3-NORTHBOUND	N/A	361	361	983
4-SOUTHBOUND	326	N/A	346	N/A

EAST-WEST CRITICAL VOLUMES: 468
NORTH-SOUTH CRITICAL VOLUMES: 1112

THE SUM OF CRITICAL VOLUMES: 1580

NUMBER OF SIGNAL PHASES: 3

ICU VALUE: 1.109

INTERSECTION CAP. LEVEL OF SERVICE : F

CRAIN AND ASSOCIATES
CMA CALCULATIONS

INTERSECTION: VICTORIA ST. AND WILMINGTON AVE.
DATE: 05-08-1986 INITIALS: RRB PERIOD: AM PEAK HOUR
CASE: EXISTING (1985)

INPUT VOLUMES

APPROACH	LEFT	THROUGH	RIGHT	TOTAL
1-WESTBOUND	63	258	132	453
2-EASTBOUND	90	210	202	502
3-NORTHBOUND	240	798	12	1050
4-SOUTHBOUND	132	883	121	1136

NUMBER OF LANES

APPROACH	LEFT ONLY	THROUGH	RIGHT ONLY	TOTAL
1-WESTBOUND	1	1	1	3
2-EASTBOUND	1	1	1	3
3-NORTHBOUND	1	2	1	4
4-SOUTHBOUND	1	2	1	4

ASSIGNED LANE VOLUMES

APPROACH	LEFT ONLY	THRU & LEFT	THRU(& RIGHT)	RIGHT ONLY
1-WESTBOUND	63	N/A	258	132
2-EASTBOUND	90	N/A	210	202
3-NORTHBOUND	240	N/A	399	12
4-SOUTHBOUND	132	N/A	442	121

EAST-WEST CRITICAL VOLUMES: 348
NORTH-SOUTH CRITICAL VOLUMES: 682

THE SUM OF CRITICAL VOLUMES: 1030

NUMBER OF SIGNAL PHASES: 2

ICU VALUE: 0.686

INTERSECTION CAP. LEVEL OF SERVICE : B

CRAIN AND ASSOCIATES
CMA CALCULATIONS

INTERSECTION: VICTORIA ST. AND WILMINGTON AVE.
DATE: 05-09-1986 INITIALS: RRB PERIOD: AM PEAK HOUR
CASE: FUTURE (1991) WITHOUT PROJECT

INPUT VOLUMES

APPROACH	LEFT	THROUGH	RIGHT	TOTAL
1-WESTBOUND	70	285	146	501
2-EASTBOUND	99	232	223	554
3-NORTHBOUND	265	881	13	1159
4-SOUTHBOUND	146	975	146	1267

NUMBER OF LANES

APPROACH	LEFT ONLY	THROUGH	RIGHT ONLY	TOTAL
1-WESTBOUND	1	1	1	3
2-EASTBOUND	1	1	1	3
3-NORTHBOUND	1	2	1	4
4-SOUTHBOUND	1	2	1	4

ASSIGNED LANE VOLUMES

APPROACH	LEFT ONLY	THRU & LEFT	THRU(& RIGHT)	RIGHT ONLY
1-WESTBOUND	70	N/A	285	146
2-EASTBOUND	99	N/A	232	223
3-NORTHBOUND	265	N/A	441	13
4-SOUTHBOUND	146	N/A	488	146

EAST-WEST CRITICAL VOLUMES: 384
NORTH-SOUTH CRITICAL VOLUMES: 753

THE SUM OF CRITICAL VOLUMES: 1137

NUMBER OF SIGNAL PHASES: 2

ICU VALUE: 0.758

INTERSECTION CAP. LEVEL OF SERVICE : C

CRAIN AND ASSOCIATES
CMA CALCULATIONS

INTERSECTION: VICTORIA ST. AND WILMINGTON AVE.
DATE: 05-09-1986 INITIALS: RRB PERIOD: AM PEAK HOUR
CASE: FUTURE (1991) WITH PROJECT

	INPUT VOLUMES			
APPROACH	LEFT	THROUGH	RIGHT	TOTAL
1-WESTBOUND	70	285	146	501
2-EASTBOUND	99	232	318	649
3-NORTHBOUND	275	1005	13	1293
4-SOUTHBOUND	146	1418	134	1698

	NUMBER OF LANES			
APPROACH	LEFT ONLY	THROUGH	RIGHT ONLY	TOTAL
1-WESTBOUND	1	1	1	3
2-EASTBOUND	1	1	1	3
3-NORTHBOUND	1	2	1	4
4-SOUTHBOUND	1	2	1	4

	ASSIGNED LANE VOLUMES			
APPROACH	LEFT ONLY	THRU & LEFT	THRU(& RIGHT)	RIGHT ONLY
1-WESTBOUND	70	N/A	285	146
2-EASTBOUND	99	N/A	232	318
3-NORTHBOUND	275	N/A	503	13
4-SOUTHBOUND	146	N/A	709	134

EAST-WEST CRITICAL VOLUMES: 384
NORTH-SOUTH CRITICAL VOLUMES: 984

THE SUM OF CRITICAL VOLUMES: 1368

NUMBER OF SIGNAL PHASES: 2

ICU VALUE: 0.912

INTERSECTION CAP. LEVEL OF SERVICE : E

CRAIN AND ASSOCIATES
CMA CALCULATIONS

INTERSECTION: VICTORIA ST. AND WILMINGTON AVE.
DATE: 05-08-1986 INITIALS: RRB PERIOD: PM PEAK HOUR
CASE: EXISTING (1985)

	INPUT VOLUMES			
APPROACH	LEFT	THROUGH	RIGHT	TOTAL
1-WESTBOUND	36	176	160	372
2-EASTBOUND	139	175	344	658
3-NORTHBOUND	125	837	49	1011
4-SOUTHBOUND	80	807	235	1122

	NUMBER OF LANES			
APPROACH	LEFT ONLY	THROUGH	RIGHT ONLY	TOTAL
1-WESTBOUND	1	1	1	3
2-EASTBOUND	1	1	1	3
3-NORTHBOUND	1	2	1	4
4-SOUTHBOUND	1	2	1	4

	ASSIGNED LANE VOLUMES			
APPROACH	LEFT ONLY	THRU & LEFT	THRU (& RIGHT)	RIGHT ONLY
1-WESTBOUND	36	N/A	176	160
2-EASTBOUND	139	N/A	175	344
3-NORTHBOUND	125	N/A	419	49
4-SOUTHBOUND	80	N/A	404	235

EAST-WEST CRITICAL VOLUMES: 380
NORTH-SOUTH CRITICAL VOLUMES: 529

THE SUM OF CRITICAL VOLUMES: 909

NUMBER OF SIGNAL PHASES: 2

ICU VALUE: 0.606

INTERSECTION CAP. LEVEL OF SERVICE : B

CRAIN AND ASSOCIATES
CMA CALCULATIONS

INTERSECTION: VICTORIA ST. AND WILMINGTON AVE.
DATE: 05-09-1986 INITIALS: RRB PERIOD: PM PEAK HOUR
CASE: FUTURE (1991) WITHOUT PROJECT

INPUT VOLUMES

APPROACH	LEFT	THROUGH	RIGHT	TOTAL
1-WESTBOUND	40	194	177	411
2-EASTBOUND	153	193	380	726
3-NORTHBOUND	138	924	54	1116
4-SOUTHBOUND	88	891	259	1238

NUMBER OF LANES

APPROACH	LEFT ONLY	THROUGH	RIGHT ONLY	TOTAL
1-WESTBOUND	1	1	1	3
2-EASTBOUND	1	1	1	3
3-NORTHBOUND	1	2	1	4
4-SOUTHBOUND	1	2	1	4

ASSIGNED LANE VOLUMES

APPROACH	LEFT ONLY	THRU & LEFT	THRU(& RIGHT)	RIGHT ONLY
1-WESTBOUND	40	N/A	194	177
2-EASTBOUND	153	N/A	193	380
3-NORTHBOUND	138	N/A	462	54
4-SOUTHBOUND	88	N/A	446	259

EAST-WEST CRITICAL VOLUMES: 347
NORTH-SOUTH CRITICAL VOLUMES: 584

THE SUM OF CRITICAL VOLUMES: 931

NUMBER OF SIGNAL PHASES: 2

ICU VALUE: 0.620

INTERSECTION CAP. LEVEL OF SERVICE : B

CRAIN AND ASSOCIATES
CMA CALCULATIONS

INTERSECTION: VICTORIA ST. AND WILMINGTON AVE.
DATE: 05-09-1986 INITIALS: RRB PERIOD: PM PEAK HOUR
CASE: FUTURE (1991) WITH PROJECT

	INPUT VOLUMES			
APPROACH	LEFT	THROUGH	RIGHT	TOTAL
1-WESTBOUND	40	194	177	411
2-EASTBOUND	153	193	390	736
3-NORTHBOUND	233	1367	54	1654
4-SOUTHBOUND	88	1015	259	1362

	NUMBER OF LANES			
APPROACH	LEFT ONLY	THROUGH	RIGHT ONLY	TOTAL
1-WESTBOUND	1	1	1	3
2-EASTBOUND	1	1	1	3
3-NORTHBOUND	1	2	1	4
4-SOUTHBOUND	1	2	1	4

	ASSIGNED LANE VOLUMES			
APPROACH	LEFT ONLY	THRU & LEFT	THRU(& RIGHT)	RIGHT ONLY
1-WESTBOUND	40	N/A	194	177
2-EASTBOUND	153	N/A	193	390
3-NORTHBOUND	233	N/A	684	54
4-SOUTHBOUND	88	N/A	508	259

EAST-WEST CRITICAL VOLUMES: 352
NORTH-SOUTH CRITICAL VOLUMES: 772

THE SUM OF CRITICAL VOLUMES: 1124

NUMBER OF SIGNAL PHASES: 2

ICU VALUE: 0.749

INTERSECTION CAP. LEVEL OF SERVICE : C

CRAIN AND ASSOCIATES
CMA CALCULATIONS

INTERSECTION: UNIVERSITY DR. AND WILMINGTON AVE.
DATE: 05-08-1986 INITIALS: RRB PERIOD: AM PEAK HOUR
CASE: EXISTING (1985)

INPUT VOLUMES

APPROACH	LEFT	THROUGH	RIGHT	TOTAL
1-WESTBOUND	24	23	17	64
2-EASTBOUND	269	72	67	408
3-NORTHBOUND	18	765	73	856
4-SOUTHBOUND	87	884	171	1142

NUMBER OF LANES

APPROACH	LEFT ONLY	THROUGH	RIGHT ONLY	TOTAL
1-WESTBOUND	1	2	1	4
2-EASTBOUND	1	2	1	4
3-NORTHBOUND	1	2	1	4
4-SOUTHBOUND	1	2	1	4

ASSIGNED LANE VOLUMES

APPROACH	LEFT ONLY	THRU & LEFT	THRU(& RIGHT)	RIGHT ONLY
1-WESTBOUND	24	N/A	12	17
2-EASTBOUND	269	N/A	36	67
3-NORTHBOUND	18	N/A	383	73
4-SOUTHBOUND	87	N/A	442	171

EAST-WEST CRITICAL VOLUMES: 286
NORTH-SOUTH CRITICAL VOLUMES: 470

THE SUM OF CRITICAL VOLUMES: 756

NUMBER OF SIGNAL PHASES: 3

ICU VALUE: 0.530

INTERSECTION CAP. LEVEL OF SERVICE : A

CRAIN AND ASSOCIATES
CMA CALCULATIONS

INTERSECTION: UNIVERSITY DR. AND WILMINGTON AVE.
DATE: 05-08-1986 INITIALS: RRB PERIOD: AM PEAK HOUR
CASE: FUTURE (1991) WITHOUT PROJECT

	INPUT VOLUMES			
APPROACH	LEFT	THROUGH	RIGHT	TOTAL
1-WESTBOUND	26	25	19	70
2-EASTBOUND	297	79	74	450
3-NORTHBOUND	20	845	81	946
4-SOUTHBOUND	96	976	189	1261

	NUMBER OF LANES			
APPROACH	LEFT ONLY	THROUGH	RIGHT ONLY	TOTAL
1-WESTBOUND	1	2	1	4
2-EASTBOUND	1	2	1	4
3-NORTHBOUND	1	2	1	4
4-SOUTHBOUND	1	2	1	4

	ASSIGNED LANE VOLUMES			
APPROACH	LEFT ONLY	THRU & LEFT	THRU(& RIGHT)	RIGHT ONLY
1-WESTBOUND	26	N/A	13	19
2-EASTBOUND	297	N/A	40	74
3-NORTHBOUND	20	N/A	423	81
4-SOUTHBOUND	96	N/A	488	189

EAST-WEST CRITICAL VOLUMES: 316
NORTH-SOUTH CRITICAL VOLUMES: 519

THE SUM OF CRITICAL VOLUMES: 835

NUMBER OF SIGNAL PHASES: 3

ICU VALUE: 0.586

INTERSECTION CAP. LEVEL OF SERVICE : A

CRAIN AND ASSOCIATES
CMA CALCULATIONS

INTERSECTION: UNIVERSITY DR. AND WILMINGTON AVE.
DATE: 05-08-1986 INITIALS: RRB PERIOD: AM PEAK HOUR
CASE: FUTURE (1991) WITH PROJECT

INPUT VOLUMES

APPROACH	LEFT	THROUGH	RIGHT	TOTAL
1-WESTBOUND	26	25	22	73
2-EASTBOUND	334	79	74	487
3-NORTHBOUND	20	1009	81	1110
4-SOUTHBOUND	96	979	198	1273

NUMBER OF LANES

APPROACH	LEFT ONLY	THROUGH	RIGHT ONLY	TOTAL
1-WESTBOUND	1	2	1	4
2-EASTBOUND	1	2	1	4
3-NORTHBOUND	1	2	1	4
4-SOUTHBOUND	1	2	1	4

ASSIGNED LANE VOLUMES

APPROACH	LEFT ONLY	THRU & LEFT	THRU(& RIGHT)	RIGHT ONLY
1-WESTBOUND	26	N/A	13	22
2-EASTBOUND	334	N/A	40	74
3-NORTHBOUND	20	N/A	505	81
4-SOUTHBOUND	96	N/A	490	198

EAST-WEST CRITICAL VOLUMES: 356
NORTH-SOUTH CRITICAL VOLUMES: 601

THE SUM OF CRITICAL VOLUMES: 957

NUMBER OF SIGNAL PHASES: 3

ICU VALUE: 0.671

INTERSECTION CAP. LEVEL OF SERVICE : B

CRAIN AND ASSOCIATES
CMA CALCULATIONS

INTERSECTION: UNIVERSITY DR. AND WILMINGTON AVE.
DATE: 05-08-1986 INITIALS: RRB PERIOD: PM PEAK HOUR
CASE: EXISTING (1985)

INPUT VOLUMES

APPROACH	LEFT	THROUGH	RIGHT	TOTAL
1-WESTBOUND	37	16	155	208
2-EASTBOUND	177	15	41	233
3-NORTHBOUND	40	683	16	739
4-SOUTHBOUND	9	881	297	1187

NUMBER OF LANES

APPROACH	LEFT ONLY	THROUGH	RIGHT ONLY	TOTAL
1-WESTBOUND	1	2	1	4
2-EASTBOUND	1	2	1	4
3-NORTHBOUND	1	2	1	4
4-SOUTHBOUND	1	2	1	4

ASSIGNED LANE VOLUMES

APPROACH	LEFT ONLY	THRU & LEFT	THRU(& RIGHT)	RIGHT ONLY
1-WESTBOUND	37	N/A	8	155
2-EASTBOUND	177	N/A	8	41
3-NORTHBOUND	40	N/A	342	16
4-SOUTHBOUND	9	N/A	441	297

EAST-WEST CRITICAL VOLUMES: 332
NORTH-SOUTH CRITICAL VOLUMES: 481

THE SUM OF CRITICAL VOLUMES: 813

NUMBER OF SIGNAL PHASES: 3

ICU VALUE: 0.570

INTERSECTION CAP. LEVEL OF SERVICE : A

CRAIN AND ASSOCIATES
CMA CALCULATIONS

INTERSECTION: UNIVERSITY DR. AND WILMINGTON AVE.
DATE: 05-08-1986 INITIALS: RRB PERIOD: PM PEAK HOUR
CASE: FUTURE (1991) WITHOUT PROJECT

INPUT VOLUMES

APPROACH	LEFT	THROUGH	RIGHT	TOTAL
1-WESTBOUND	41	18	171	230
2-EASTBOUND	195	17	45	257
3-NORTHBOUND	44	754	18	816
4-SOUTHBOUND	10	973	328	1311

NUMBER OF LANES

APPROACH	LEFT ONLY	THROUGH	RIGHT ONLY	TOTAL
1-WESTBOUND	1	2	1	4
2-EASTBOUND	1	2	1	4
3-NORTHBOUND	1	2	1	4
4-SOUTHBOUND	1	2	1	4

ASSIGNED LANE VOLUMES

APPROACH	LEFT ONLY	THRU & LEFT	THRU(& RIGHT)	RIGHT ONLY
1-WESTBOUND	41	N/A	9	171
2-EASTBOUND	195	N/A	9	45
3-NORTHBOUND	44	N/A	377	18
4-SOUTHBOUND	10	N/A	487	328

EAST-WEST CRITICAL VOLUMES: 366
NORTH-SOUTH CRITICAL VOLUMES: 531

THE SUM OF CRITICAL VOLUMES: 897

NUMBER OF SIGNAL PHASES: 3

ICU VALUE: 0.629

INTERSECTION CAP. LEVEL OF SERVICE : B

CRAIN AND ASSOCIATES
CMA CALCULATIONS

INTERSECTION: UNIVERSITY DR. AND WILMINGTON AVE.
DATE: 05-08-1986 INITIALS: RRB PERIOD: PM PEAK HOUR
CASE: FUTURE (1991) WITH PROJECT

INPUT VOLUMES

APPROACH	LEFT	THROUGH	RIGHT	TOTAL
1-WESTBOUND	41	18	171	230
2-EASTBOUND	204	17	45	266
3-NORTHBOUND	44	796	18	858
4-SOUTHBOUND	13	1137	365	1515

NUMBER OF LANES

APPROACH	LEFT ONLY	THROUGH	RIGHT ONLY	TOTAL
1-WESTBOUND	1	2	1	4
2-EASTBOUND	1	2	1	4
3-NORTHBOUND	1	2	1	4
4-SOUTHBOUND	1	2	1	4

ASSIGNED LANE VOLUMES

APPROACH	LEFT ONLY	THRU & LEFT	THRU(& RIGHT)	RIGHT ONLY
1-WESTBOUND	41	N/A	9	171
2-EASTBOUND	204	N/A	9	45
3-NORTHBOUND	44	N/A	398	18
4-SOUTHBOUND	13	N/A	569	365

EAST-WEST CRITICAL VOLUMES: 375
NORTH-SOUTH CRITICAL VOLUMES: 613

THE SUM OF CRITICAL VOLUMES: 988

NUMBER OF SIGNAL PHASES: 3

ICU VALUE: 0.693

INTERSECTION CAP. LEVEL OF SERVICE : B

CRAIN AND ASSOCIATES
CMA CALCULATIONS

INTERSECTION: DEL AMO BLVD. AND WILMINGTON AVE.
DATE: 05-08-1986 INITIALS: RRB PERIOD: AM PEAK HOUR
CASE: EXISTING (1985)

INPUT VOLUMES

APPROACH	LEFT	THROUGH	RIGHT	TOTAL
1-WESTBOUND	246	445	281	972
2-EASTBOUND	96	263	87	446
3-NORTHBOUND	68	440	168	676
4-SOUTHBOUND	163	682	121	966

NUMBER OF LANES

APPROACH	LEFT ONLY	THROUGH	RIGHT ONLY	TOTAL
1-WESTBOUND	1	2	1	4
2-EASTBOUND	1	2	1	4
3-NORTHBOUND	1	2	1	4
4-SOUTHBOUND	1	2	1	4

ASSIGNED LANE VOLUMES

APPROACH	LEFT ONLY	THRU & LEFT	THRU(& RIGHT)	RIGHT ONLY
1-WESTBOUND	246	N/A	223	281
2-EASTBOUND	96	N/A	132	87
3-NORTHBOUND	68	N/A	220	168
4-SOUTHBOUND	163	N/A	341	121

EAST-WEST CRITICAL VOLUMES: 378
NORTH-SOUTH CRITICAL VOLUMES: 409

THE SUM OF CRITICAL VOLUMES: 787

NUMBER OF SIGNAL PHASES: 2

ICU VALUE: 0.524

INTERSECTION CAP. LEVEL OF SERVICE : A

CRAIN AND ASSOCIATES
CMA CALCULATIONS

INTERSECTION: DEL AMO BLVD. AND WILMINGTON AVE.
DATE: 05-08-1986 INITIALS: RRB PERIOD: AM PEAK HOUR
CASE: FUTURE (1991) WITHOUT PROJECT

INPUT VOLUMES

APPROACH	LEFT	THROUGH	RIGHT	TOTAL
1-WESTBOUND	272	491	310	1073
2-EASTBOUND	106	290	96	492
3-NORTHBOUND	75	486	185	746
4-SOUTHBOUND	180	753	134	1067

NUMBER OF LANES

APPROACH	LEFT ONLY	THROUGH	RIGHT ONLY	TOTAL
1-WESTBOUND	1	2	1	4
2-EASTBOUND	1	2	1	4
3-NORTHBOUND	1	2	1	4
4-SOUTHBOUND	1	2	1	4

ASSIGNED LANE VOLUMES

APPROACH	LEFT ONLY	THRU & LEFT	THRU(& RIGHT)	RIGHT ONLY
1-WESTBOUND	272	N/A	246	310
2-EASTBOUND	106	N/A	145	96
3-NORTHBOUND	75	N/A	243	185
4-SOUTHBOUND	180	N/A	377	134

EAST-WEST CRITICAL VOLUMES: 417
NORTH-SOUTH CRITICAL VOLUMES: 452

THE SUM OF CRITICAL VOLUMES: 869

NUMBER OF SIGNAL PHASES: 2

ICU VALUE: 0.579

INTERSECTION CAP. LEVEL OF SERVICE : A

CRAIN AND ASSOCIATES
CMA CALCULATIONS

INTERSECTION: DEL AMO BLVD. AND WILMINGTON AVE.
DATE: 05-08-1986 INITIALS: RRB PERIOD: AM PEAK HOUR
CASE: FUTURE (1991) WITH PROJECT

INPUT VOLUMES

APPROACH	LEFT	THROUGH	RIGHT	TOTAL
1-WESTBOUND	272	491	346	1109
2-EASTBOUND	164	290	96	550
3-NORTHBOUND	75	554	185	814
4-SOUTHBOUND	190	770	149	1109

NUMBER OF LANES

APPROACH	LEFT ONLY	THROUGH	RIGHT ONLY	TOTAL
1-WESTBOUND	1	2	1	4
2-EASTBOUND	1	2	1	4
3-NORTHBOUND	1	2	1	4
4-SOUTHBOUND	1	2	1	4

ASSIGNED LANE VOLUMES

APPROACH	LEFT ONLY	THRU & LEFT	THRU(& RIGHT)	RIGHT ONLY
1-WESTBOUND	272	N/A	246	346
2-EASTBOUND	164	N/A	145	96
3-NORTHBOUND	75	N/A	277	185
4-SOUTHBOUND	190	N/A	385	149

EAST-WEST CRITICAL VOLUMES: 510
NORTH-SOUTH CRITICAL VOLUMES: 467

THE SUM OF CRITICAL VOLUMES: 977

NUMBER OF SIGNAL PHASES: 2

ICU VALUE: 0.651

INTERSECTION CAP. LEVEL OF SERVICE : B

CRAIN AND ASSOCIATES
CMA CALCULATIONS

INTERSECTION: DEL AMO BLVD. AND WILMINGTON AVE.
DATE: 05-08-1986 INITIALS: RRB PERIOD: PM PEAK HOUR
CASE: EXISTING (1985)

	INPUT VOLUMES			
APPROACH	LEFT	THROUGH	RIGHT	TOTAL
1-WESTBOUND	96	225	78	399
2-EASTBOUND	85	276	67	428
3-NORTHBOUND	80	577	108	765
4-SOUTHBOUND	279	517	183	979

	NUMBER OF LANES			
APPROACH	LEFT ONLY	THROUGH	RIGHT ONLY	TOTAL
1-WESTBOUND	1	2	1	4
2-EASTBOUND	1	2	1	4
3-NORTHBOUND	1	2	1	4
4-SOUTHBOUND	1	2	1	4

	ASSIGNED LANE VOLUMES			
APPROACH	LEFT ONLY	THRU & LEFT	THRU(& RIGHT)	RIGHT ONLY
1-WESTBOUND	96	N/A	113	78
2-EASTBOUND	85	N/A	138	67
3-NORTHBOUND	80	N/A	289	108
4-SOUTHBOUND	279	N/A	259	183

EAST-WEST CRITICAL VOLUMES: 234
NORTH-SOUTH CRITICAL VOLUMES: 568

THE SUM OF CRITICAL VOLUMES: 802

NUMBER OF SIGNAL PHASES: 2

ICU VALUE: 0.534

INTERSECTION CAP. LEVEL OF SERVICE : A

CRAIN AND ASSOCIATES
CMA CALCULATIONS

INTERSECTION: DEL AMO BLVD. AND WILMINGTON AVE.
DATE: 05-08-1986 INITIALS: RRB PERIOD: PM PEAK HOUR
CASE: FUTURE (1991) WITHOUT PROJECT

INPUT VOLUMES

APPROACH	LEFT	THROUGH	RIGHT	TOTAL
1-WESTBOUND	106	248	86	440
2-EASTBOUND	94	305	74	473
3-NORTHBOUND	88	637	119	844
4-SOUTHBOUND	308	571	202	1081

NUMBER OF LANES

APPROACH	LEFT ONLY	THROUGH	RIGHT ONLY	TOTAL
1-WESTBOUND	1	2	1	4
2-EASTBOUND	1	2	1	4
3-NORTHBOUND	1	2	1	4
4-SOUTHBOUND	1	2	1	4

ASSIGNED LANE VOLUMES

APPROACH	LEFT ONLY	THRU & LEFT	THRU(& RIGHT)	RIGHT ONLY
1-WESTBOUND	106	N/A	124	86
2-EASTBOUND	94	N/A	153	74
3-NORTHBOUND	88	N/A	319	119
4-SOUTHBOUND	308	N/A	286	202

EAST-WEST CRITICAL VOLUMES: 259
NORTH-SOUTH CRITICAL VOLUMES: 627

THE SUM OF CRITICAL VOLUMES: 885

NUMBER OF SIGNAL PHASES: 2

ICU VALUE: 0.590

INTERSECTION CAP. LEVEL OF SERVICE : A

CRAIN AND ASSOCIATES
CMA CALCULATIONS

INTERSECTION: DEL AMO BLVD. AND WILMINGTON AVE.
DATE: 05-08-1986 INITIALS: RRB PERIOD: PM PEAK HOUR
CASE: FUTURE (1991) WITH PROJECT

	INPUT VOLUMES			
APPROACH	LEFT	THROUGH	RIGHT	TOTAL
1-WESTBOUND	106	248	96	450
2-EASTBOUND	109	305	74	488
3-NORTHBOUND	88	654	119	861
4-SOUTHBOUND	344	639	260	1243

	NUMBER OF LANES			
APPROACH	LEFT ONLY	THROUGH	RIGHT ONLY	TOTAL
1-WESTBOUND	1	2	1	4
2-EASTBOUND	1	2	1	4
3-NORTHBOUND	1	2	1	4
4-SOUTHBOUND	1	2	1	4

	ASSIGNED LANE VOLUMES			
APPROACH	LEFT ONLY	THRU & LEFT	THRU(& RIGHT)	RIGHT ONLY
1-WESTBOUND	106	N/A	124	96
2-EASTBOUND	109	N/A	153	74
3-NORTHBOUND	88	N/A	327	119
4-SOUTHBOUND	344	N/A	320	260

EAST-WEST CRITICAL VOLUMES: 259
NORTH-SOUTH CRITICAL VOLUMES: 671

THE SUM OF CRITICAL VOLUMES: 930

NUMBER OF SIGNAL PHASES: 2

ICU VALUE: 0.620

INTERSECTION CAP. LEVEL OF SERVICE : B

CRAIN AND ASSOCIATES
CMA CALCULATIONS

INTERSECTION: GLENN CURTIS ST. AND WILMINGTON AVE.
DATE: 05-08-1986 INITIALS: RRB PERIOD: AM PEAK HOUR
CASE: EXISTING (1985)

INPUT VOLUMES

APPROACH	LEFT	THROUGH	RIGHT	TOTAL
1-WESTBOUND	0	0	0	0
2-EASTBOUND	0	0	2	2
3-NORTHBOUND	1	1051	0	1052
4-SOUTHBOUND	0	1142	6	1148

NUMBER OF LANES

APPROACH	LEFT ONLY	THROUGH	RIGHT ONLY	TOTAL
1-WESTBOUND	0	0	0	0
2-EASTBOUND	2	0	1	3
3-NORTHBOUND	1	2	1	4
4-SOUTHBOUND	1	2	1	4

ASSIGNED LANE VOLUMES

APPROACH	LEFT ONLY	THRU & LEFT	THRU(& RIGHT)	RIGHT ONLY
1-WESTBOUND	N/A	0	1 LANE	N/A
2-EASTBOUND	0	N/A	0	2
3-NORTHBOUND	1	N/A	526	0
4-SOUTHBOUND	0	N/A	571	6

EAST-WEST CRITICAL VOLUMES: 2
NORTH-SOUTH CRITICAL VOLUMES: 572

THE SUM OF CRITICAL VOLUMES: 574

NUMBER OF SIGNAL PHASES: 2

ICU VALUE: 0.383

INTERSECTION CAP. LEVEL OF SERVICE : A

CRAIN AND ASSOCIATES
CMA CALCULATIONS

INTERSECTION: GLENN CURTIS ST. AND WILMINGTON AVE.
DATE: 05-08-1986 INITIALS: RRB PERIOD: AM PEAK HOUR
CASE: FUTURE (1991) WITHOUT PROJECT

INPUT VOLUMES

APPROACH	LEFT	THROUGH	RIGHT	TOTAL
1-WESTBOUND	0	0	0	0
2-EASTBOUND	5	0	5	10
3-NORTHBOUND	5	1160	0	1165
4-SOUTHBOUND	0	1261	7	1268

NUMBER OF LANES

APPROACH	LEFT ONLY	THROUGH	RIGHT ONLY	TOTAL
1-WESTBOUND	0	0	0	0
2-EASTBOUND	2	0	1	3
3-NORTHBOUND	1	2	1	4
4-SOUTHBOUND	1	2	1	4

ASSIGNED LANE VOLUMES

APPROACH	LEFT ONLY	THRU & LEFT	THRU(& RIGHT)	RIGHT ONLY
1-WESTBOUND	N/A	0	1 LANE	N/A
2-EASTBOUND	3	N/A	0	5
3-NORTHBOUND	5	N/A	580	0
4-SOUTHBOUND	0	N/A	631	7

EAST-WEST CRITICAL VOLUMES: 5
NORTH-SOUTH CRITICAL VOLUMES: 636

THE SUM OF CRITICAL VOLUMES: 641

NUMBER OF SIGNAL PHASES: 2

ICU VALUE: 0.427

INTERSECTION CAP. LEVEL OF SERVICE : A

CRAIN AND ASSOCIATES
CMA CALCULATIONS

INTERSECTION: GLENN CURTIS ST. AND WILMINGTON AVE.
DATE: 05-08-1986 INITIALS: RRB PERIOD: AM PEAK HOUR
CASE: FUTURE (1991) WITH PROJECT

INPUT VOLUMES

APPROACH	LEFT	THROUGH	RIGHT	TOTAL
1-WESTBOUND	0	0	0	0
2-EASTBOUND	139	0	56	195
3-NORTHBOUND	206	1160	0	1366
4-SOUTHBOUND	0	1261	545	1806

NUMBER OF LANES

APPROACH	LEFT ONLY	THROUGH	RIGHT ONLY	TOTAL
1-WESTBOUND	0	0	0	0
2-EASTBOUND	2	0	1	3
3-NORTHBOUND	1	2	1	4
4-SOUTHBOUND	1	2	1	4

ASSIGNED LANE VOLUMES

APPROACH	LEFT ONLY	THRU & LEFT	THRU(& RIGHT)	RIGHT ONLY
1-WESTBOUND	N/A	0	1 LANE	N/A
2-EASTBOUND	76	N/A	0	56
3-NORTHBOUND	206	N/A	580	0
4-SOUTHBOUND	0	N/A	631	545

EAST-WEST CRITICAL VOLUMES: 76
NORTH-SOUTH CRITICAL VOLUMES: 837

THE SUM OF CRITICAL VOLUMES: 913

NUMBER OF SIGNAL PHASES: 2

ICU VALUE: 0.609

INTERSECTION CAP. LEVEL OF SERVICE : B

CRAIN AND ASSOCIATES
CMA CALCULATIONS

INTERSECTION: GLENN CURTIS ST. AND WILMINGTON AVE.
DATE: 05-08-1986 INITIALS: RRB PERIOD: PM PEAK HOUR
CASE: EXISTING (1985)

INPUT VOLUMES

APPROACH	LEFT	THROUGH	RIGHT	TOTAL
1-WESTBOUND	0	0	0	0
2-EASTBOUND	0	0	0	0
3-NORTHBOUND	0	1015	0	1015
4-SOUTHBOUND	0	1187	0	1187

NUMBER OF LANES

APPROACH	LEFT ONLY	THROUGH	RIGHT ONLY	TOTAL
1-WESTBOUND	0	0	0	0
2-EASTBOUND	2	0	1	3
3-NORTHBOUND	1	2	1	4
4-SOUTHBOUND	1	2	1	4

ASSIGNED LANE VOLUMES

APPROACH	LEFT ONLY	THRU & LEFT	THRU(& RIGHT)	RIGHT ONLY
1-WESTBOUND	N/A	0	1 LANE	N/A
2-EASTBOUND	0	N/A	0	0
3-NORTHBOUND	0	N/A	508	0
4-SOUTHBOUND	0	N/A	594	0

EAST-WEST CRITICAL VOLUMES: 0
NORTH-SOUTH CRITICAL VOLUMES: 594

THE SUM OF CRITICAL VOLUMES: 594

NUMBER OF SIGNAL PHASES: 2

ICU VALUE: 0.396

INTERSECTION CAP. LEVEL OF SERVICE : A

CRAIN AND ASSOCIATES
CMA CALCULATIONS

INTERSECTION: GLENN CURTIS ST. AND WILMINGTON AVE.
DATE: 05-08-1986 INITIALS: RRB PERIOD: PM PEAK HOUR
CASE: FUTURE (1991) WITHOUT PROJECT

INPUT VOLUMES

APPROACH	LEFT	THROUGH	RIGHT	TOTAL
1-WESTBOUND	0	0	0	0
2-EASTBOUND	0	0	0	0
3-NORTHBOUND	0	1121	0	1121
4-SOUTHBOUND	0	1310	0	1310

NUMBER OF LANES

APPROACH	LEFT ONLY	THROUGH	RIGHT ONLY	TOTAL
1-WESTBOUND	0	0	0	0
2-EASTBOUND	2	0	1	3
3-NORTHBOUND	1	2	1	4
4-SOUTHBOUND	1	2	1	4

ASSIGNED LANE VOLUMES

APPROACH	LEFT ONLY	THRU & LEFT	THRU(& RIGHT)	RIGHT ONLY
1-WESTBOUND	N/A	0	1 LANE	N/A
2-EASTBOUND	0	N/A	0	0
3-NORTHBOUND	0	N/A	561	0
4-SOUTHBOUND	0	N/A	655	0

EAST-WEST CRITICAL VOLUMES: 0
NORTH-SOUTH CRITICAL VOLUMES: 655

THE SUM OF CRITICAL VOLUMES: 655

NUMBER OF SIGNAL PHASES: 2

ICU VALUE: 0.437

INTERSECTION CAP. LEVEL OF SERVICE : A

CRAIN AND ASSOCIATES
CMA CALCULATIONS

INTERSECTION: GLENN CURTIS ST. AND WILMINGTON AVE.
DATE: 05-08-1986 INITIALS: RRB PERIOD: PM PEAK HOUR
CASE: FUTURE (1991) WITH PROJECT

INPUT VOLUMES

APPROACH	LEFT	THROUGH	RIGHT	TOTAL
1-WESTBOUND	0	0	0	0
2-EASTBOUND	538	0	201	739
3-NORTHBOUND	51	1121	0	1172
4-SOUTHBOUND	0	1310	134	1444

NUMBER OF LANES

APPROACH	LEFT ONLY	THROUGH	RIGHT ONLY	TOTAL
1-WESTBOUND	0	0	0	0
2-EASTBOUND	2	0	1	3
3-NORTHBOUND	1	2	1	4
4-SOUTHBOUND	1	2	1	4

ASSIGNED LANE VOLUMES

APPROACH	LEFT ONLY	THRU & LEFT	THRU(& RIGHT)	RIGHT ONLY
1-WESTBOUND	N/A	0	1 LANE	N/A
2-EASTBOUND	296	N/A	0	201
3-NORTHBOUND	51	N/A	561	0
4-SOUTHBOUND	0	N/A	655	134

EAST-WEST CRITICAL VOLUMES: 296
NORTH-SOUTH CRITICAL VOLUMES: 706

THE SUM OF CRITICAL VOLUMES: 1002

NUMBER OF SIGNAL PHASES: 2

ICU VALUE: 0.668

INTERSECTION CAP. LEVEL OF SERVICE : B

CRAIN AND ASSOCIATES
CMA CALCULATIONS

INTERSECTION: UNIVERSITY DR. AND AVALON BLVD.
DATE: 05-08-1986 INITIALS: RRB PERIOD: AM PEAK HOUR
CASE: EXISTING (1985)

INPUT VOLUMES

APPROACH	LEFT	THROUGH	RIGHT	TOTAL
1-WESTBOUND	322	0	135	457
2-EASTBOUND	0	0	0	0
3-NORTHBOUND	0	711	96	807
4-SOUTHBOUND	236	487	0	723

NUMBER OF LANES

APPROACH	LEFT ONLY	THROUGH	RIGHT ONLY	TOTAL
1-WESTBOUND	1	0	1	2
2-EASTBOUND	0	0	0	0
3-NORTHBOUND	0	3	1	4
4-SOUTHBOUND	1	3	0	4

ASSIGNED LANE VOLUMES

APPROACH	LEFT ONLY	THRU & LEFT	THRU(& RIGHT)	RIGHT ONLY
1-WESTBOUND	322	N/A	0	135
2-EASTBOUND	N/A	0	1 LANE	N/A
3-NORTHBOUND	N/A	237	237	96
4-SOUTHBOUND	236	N/A	162	N/A

EAST-WEST CRITICAL VOLUMES: 322
NORTH-SOUTH CRITICAL VOLUMES: 473

THE SUM OF CRITICAL VOLUMES: 795

NUMBER OF SIGNAL PHASES: 3

ICU VALUE: 0.558

INTERSECTION CAP. LEVEL OF SERVICE : A

CRAIN AND ASSOCIATES
CMA CALCULATIONS

INTERSECTION: UNIVERSITY DR. AND AVALON BLVD.
DATE: 05-08-1986 INITIALS: RRB PERIOD: AM PEAK HOUR
CASE: FUTURE (1991) WITHOUT PROJECT

	INPUT VOLUMES			
APPROACH	LEFT	THROUGH	RIGHT	TOTAL
1-WESTBOUND	356	0	149	505
2-EASTBOUND	0	0	0	0
3-NORTHBOUND	0	785	106	891
4-SOUTHBOUND	261	538	0	799

	NUMBER OF LANES			
APPROACH	LEFT ONLY	THROUGH	RIGHT ONLY	TOTAL
1-WESTBOUND	1	0	1	2
2-EASTBOUND	0	0	0	0
3-NORTHBOUND	0	3	1	4
4-SOUTHBOUND	1	3	0	4

	ASSIGNED LANE VOLUMES			
APPROACH	LEFT ONLY	THRU & LEFT	THRU(& RIGHT)	RIGHT ONLY
1-WESTBOUND	356	N/A	0	149
2-EASTBOUND	N/A	0	1 LANE	N/A
3-NORTHBOUND	N/A	262	262	106
4-SOUTHBOUND	261	N/A	179	N/A

EAST-WEST CRITICAL VOLUMES: 356
NORTH-SOUTH CRITICAL VOLUMES: 523

THE SUM OF CRITICAL VOLUMES: 879

NUMBER OF SIGNAL PHASES: 3

ICU VALUE: 0.617

INTERSECTION CAP. LEVEL OF SERVICE : B

CRAIN AND ASSOCIATES
CMA CALCULATIONS

INTERSECTION: UNIVERSITY DR. AND AVALON BLVD.
DATE: 05-08-1986 INITIALS: RRB PERIOD: AM PEAK HOUR
CASE: FUTURE (1991) WITH PROJECT

INPUT VOLUMES

APPROACH	LEFT	THROUGH	RIGHT	TOTAL
1-WESTBOUND	362	0	151	513
2-EASTBOUND	0	0	0	0
3-NORTHBOUND	0	785	131	916
4-SOUTHBOUND	270	538	0	808

NUMBER OF LANES

APPROACH	LEFT ONLY	THROUGH	RIGHT ONLY	TOTAL
1-WESTBOUND	1	0	1	2
2-EASTBOUND	0	0	0	0
3-NORTHBOUND	0	3	1	4
4-SOUTHBOUND	1	3	0	4

ASSIGNED LANE VOLUMES

APPROACH	LEFT ONLY	THRU & LEFT	THRU(& RIGHT)	RIGHT ONLY
1-WESTBOUND	362	N/A	0	151
2-EASTBOUND	N/A	0	1 LANE	N/A
3-NORTHBOUND	N/A	262	262	131
4-SOUTHBOUND	270	N/A	179	N/A

EAST-WEST CRITICAL VOLUMES: 362
NORTH-SOUTH CRITICAL VOLUMES: 532

THE SUM OF CRITICAL VOLUMES: 894

NUMBER OF SIGNAL PHASES: 3

ICU VALUE: 0.627

INTERSECTION CAP. LEVEL OF SERVICE : B

CRAIN AND ASSOCIATES
CMA CALCULATIONS

INTERSECTION: UNIVERSITY DR. AND AVALON BLVD.
DATE: 05-08-1986 INITIALS: RRB PERIOD: PM PEAK HOUR
CASE: EXISTING (1985)

INPUT VOLUMES

APPROACH	LEFT	THROUGH	RIGHT	TOTAL
1-WESTBOUND	147	0	209	356
2-EASTBOUND	0	0	0	0
3-NORTHBOUND	0	883	251	1134
4-SOUTHBOUND	458	1000	0	1458

NUMBER OF LANES

APPROACH	LEFT ONLY	THROUGH	RIGHT ONLY	TOTAL
1-WESTBOUND	1	0	1	2
2-EASTBOUND	0	0	0	0
3-NORTHBOUND	0	3	1	4
4-SOUTHBOUND	1	3	0	4

ASSIGNED LANE VOLUMES

APPROACH	LEFT ONLY	THRU & LEFT	THRU(& RIGHT)	RIGHT ONLY
1-WESTBOUND	147	N/A	0	209
2-EASTBOUND	N/A	0	1 LANE	N/A
3-NORTHBOUND	N/A	294	294	251
4-SOUTHBOUND	458	N/A	333	N/A

EAST-WEST CRITICAL VOLUMES: 209
NORTH-SOUTH CRITICAL VOLUMES: 752

THE SUM OF CRITICAL VOLUMES: 961

NUMBER OF SIGNAL PHASES: 3

ICU VALUE: 0.675

INTERSECTION CAP. LEVEL OF SERVICE : B

CRAIN AND ASSOCIATES
CMA CALCULATIONS

INTERSECTION: UNIVERSITY DR. AND AVALON BLVD.
DATE: 05-08-1986 INITIALS: RRB PERIOD: PM PEAK HOUR
CASE: FUTURE (1991) WITHOUT PROJECT

INPUT VOLUMES

APPROACH	LEFT	THROUGH	RIGHT	TOTAL
1-WESTBOUND	162	0	231	393
2-EASTBOUND	0	0	0	0
3-NORTHBOUND	0	975	277	1252
4-SOUTHBOUND	506	1170	0	1676

NUMBER OF LANES

APPROACH	LEFT ONLY	THROUGH	RIGHT ONLY	TOTAL
1-WESTBOUND	1	0	1	2
2-EASTBOUND	0	0	0	0
3-NORTHBOUND	0	3	1	4
4-SOUTHBOUND	1	3	0	4

ASSIGNED LANE VOLUMES

APPROACH	LEFT ONLY	THRU & LEFT	THRU(& RIGHT)	RIGHT ONLY
1-WESTBOUND	162	N/A	0	231
2-EASTBOUND	N/A	0	1 LANE	N/A
3-NORTHBOUND	N/A	325	325	277
4-SOUTHBOUND	506	N/A	390	N/A

EAST-WEST CRITICAL VOLUMES: 231
NORTH-SOUTH CRITICAL VOLUMES: 831

THE SUM OF CRITICAL VOLUMES: 1062

NUMBER OF SIGNAL PHASES: 3

ICU VALUE: 0.745

INTERSECTION CAP. LEVEL OF SERVICE : C

CRAIN AND ASSOCIATES
CMA CALCULATIONS

INTERSECTION: UNIVERSITY DR. AND AVALON BLVD.
DATE: 05-08-1986 INITIALS: RRB PERIOD: PM PEAK HOUR
CASE: FUTURE (1991) WITH PROJECT

	INPUT VOLUMES			
APPROACH	LEFT	THROUGH	RIGHT	TOTAL
1-WESTBOUND	177	0	250	427
2-EASTBOUND	0	0	0	0
3-NORTHBOUND	0	975	283	1258
4-SOUTHBOUND	508	1170	0	1678

	NUMBER OF LANES			
APPROACH	LEFT ONLY	THROUGH	RIGHT ONLY	TOTAL
1-WESTBOUND	1	0	1	2
2-EASTBOUND	0	0	0	0
3-NORTHBOUND	0	3	1	4
4-SOUTHBOUND	1	3	0	4

	ASSIGNED LANE VOLUMES			
APPROACH	LEFT ONLY	THRU & LEFT	THRU(& RIGHT)	RIGHT ONLY
1-WESTBOUND	177	N/A	0	250
2-EASTBOUND	N/A	0	1 LANE	N/A
3-NORTHBOUND	N/A	325	325	283
4-SOUTHBOUND	508	N/A	390	N/A

EAST-WEST CRITICAL VOLUMES: 250
NORTH-SOUTH CRITICAL VOLUMES: 833

THE SUM OF CRITICAL VOLUMES: 1083

NUMBER OF SIGNAL PHASES: 3

ICU VALUE: 0.760

INTERSECTION CAP. LEVEL OF SERVICE : C

APPENDIX 6.5

CC&R'S

DECLARATION OF COVENANTS, CONDITIONS AND RESTRICTIONS FOR

DOMINGUEZ TECHNOLOGY CENTRE - PHASE 1

THIS DECLARATION is made this _____ day of _____, 1986, by DOMINGUEZ PROPERTIES, A California limited partnership (hereinafter referred to as "Developer").

Article I
RECITALS

1.01 Developer is the owner of certain real property in the County of Los Angeles, State of California, more particularly described in Exhibit A attached hereto (the "Land").

1.02 In order to establish a Unified plan for the improvement and development of the "Property" (as defined in Section 2.03(c) below), Developer desires to subject the Property to certain conditions, covenants and restrictions, upon and subject to which all the Property shall be held, improved and conveyed.

Article II
GENERAL PROVISIONS

2.01 Establishment of Restrictions

Developer hereby declares that the Property is now held and shall hereafter be held, transferred, sold, leased, conveyed, maintained, and occupied subject to the restrictions herein set forth, each and all of which is and are for, and shall inure to, the benefit of and pass with the Property and each and every part or parcel thereof, and shall apply to and bind any owner, lessee or other occupier or user of the Property or any portion thereof, and the heirs, assignees and successors in interest of

any such owner, lessee, occupier or user.

2.02 Purpose of Restrictions

The purpose of these restrictions is to insure proper development and use of the Property, to protect the owner of each parcel of the Property against such improper development and use of surrounding parcels as will depreciate the value of his parcel, to prevent the erection on the Property of structures built of improper design or materials, to encourage the erection of attactive improvements at appropriate locations, to prevent haphazard and inharmonious improvements, to secure and maintain proper setbacks from streets and adequate free spaces between structures, and in general to provide adequately for a high type and quality of improvement of the Property in accordance with a general plan.

2.03 Definitions

(a) "Developer" shall mean DOMINGUEZ PROPERTIES, a California limited partnership.

(b) "Improvements" shall mean and include buildings, outbuildings, parking areas, loading areas, storage areas, trackage, fences, walls, walkways, hedges, landscaping, mass plantings, poles, signs, and any structures of any type or kind.

(c) "Property" shall mean the Land, together with any and all Improvements which are now or may hereafter be located on said Land.

(d) "Site" shall mean a portion of the Land suitable for development and includes all continguous Land under one ownership.

(e) "Successors or assigns" of Developer shall mean an entity with which Developer shall merge or consolidate, or an entity which acquires the rights, powers and reservations

of Developer pursuant to Section 7.03 of Article VII hereof. "Successors or assigns" of Developer shall not mean an entity which becomes an owner, lessee, or occupant of the Property, or any portion thereof, by virtue of acquiring title or possesory interest in the Property from Developer or its successors in interest.

(f) Buildable Area: The entire legal lot area within the property lines, excluding those portions of the lot which must be reserved for yard spaces and building line setback space. For the purpose of computing the density limitations on total floor area in buildings of any height, the buildable area that would apply to a one-story building on the lot shall be used.

Article III
REGULATIONS OF IMPROVEMENTS

3.01 Minimum Setback Lines

No building shall be located nearer to any public street right of way line than twenty-five (25) feet therefrom. No uses shall be made of said setback area except for access driveways, steps and walkways, bikeways, landscaping, and planters, unless specifically approved by Developer in writing. Side and rear setbacks shall be in accordance with applicable zoning and building ordinances. In addition, no building shall be located nearer to the University Drive right of way line than one hundred (100) feet therefrom.

3.02 Completion of Construction

After commencement of construction of any Improvement, the owner thereof shall diligently prosecute the work thereon, to the end that the Improvement shall not remain in a partly finished condition any longer than reasonably necessary for completion thereof, and in no case longer than nine (9) months without prior written approval of Developer.

3.03 Landscaping

(a) Every Site on which a building shall have been placed and every Site to be occupied without placing a building thereon ("Land Site"), including unpaved areas between the curb lines and the building set back lines adjacent thereto, even if such areas are within public rights of way, shall be landscaped with lawn, shrubbery, trees, bushes, or other suitable ground cover according to plans approved as specified herein and maintained thereafter in a clean and well kept condition by all owners, lessees, tenants, or other occupants of the Site or Land Site as provided in Section 10.04 below. Such landscaping shall cover an area of not less than 10% of the total lot area.

(b) After a building has been placed on a Site or after a Land Site is occupied, the property owner, lessee or occupant shall provide hose bibs, underground sprinkler systems, and automatic water delivery systems to all ground cover, trees, and shrubbery.

(c) Landscaping shall be installed within thirty (30) days of occupancy or completion of the building, whichever occurs first, and within thirty (30) days of occupancy of Land Site, weather permitting.

3.04 Signs

(a) All signs which shall be erected shall be for purposes of identification only and not advertising, except as specified in paragraph 3.04(b), and shall have the prior written approval of Developer as to size, location, construction, color and content. No wall painted signs will be permitted.

(b) No billboards or outdoor advertising signs or leases shall be permitted on the Property; however, Developer may erect a sign or signs on the Property identifying or describing Dominguez Technology Centre,

and/or indicating the availability for sale or lease of any of Developer's buildings or Sites.

(c) Single identification or logo signs shall be permitted on one side of one building on a Site or on one side of a Land Site, showing only the name and/or product or service of the owner, lessee, or occupant of such Site, except as otherwise permitted with the prior written approval of Developer.

(d) Products and service signs shall be single faced and confined to the walls of the larger buildings or to secondary structures which are lower than the main building. No part of any such sign shall extend above the roofline of any building. A symbol or device grouped with the sign may be illuminated. No flashing or moving signs are permitted.

(e) Signs located other than on the main building on a Site shall be subject to the approval of Developer. Employment signs will not be permitted.

(f) Real estate broker signs advertising any building or Land Site or portion thereof for sublease shall not be permitted.

(g) A sign or signs, subject to developer's approval of size, location, construction, color, content, and timing for placement and removal, may be erected on the Property on or near a construction site whereon contractors, sub-contractors, architects, financing institutions or others related to the specific project may be identified. Such sign or signs shall be freshly painted when first erected and shall be maintained until removal in an as-new condition.

(h) All signs shall also meet requirements of the governing building code.

3.05 Parking Areas

(a) Adequate offstreet parking shall be provided to accommodate all parking needs for employees, visitors and company vehicles on a Site, so as to eliminate the need for any onstreet parking.

(b) Parking shall not be permitted between the public street pavement (or curb line) and the building setback line.

(c) The parking requirements may be modified by Developer as to any particular Site.

3.06 Storage and Loading Areas; Communications Equipment

(a) No materials, supplies, or equipment shall be stored in any area on a Site except inside an enclosed building, or behind a visual barrier screening such storage to its full height from the view of any street and any side neighbor.

(b) Front-facing truck loading docks shall not be allowed without the specific approval in writing by Developer in accordance with Article IV.

(c) Side-facing truck loading docks shall be set back and screened to minimize the view from the street.

(d) All communications equipment, including but not limited to antennas and similar or related equipment, located at or near ground level shall be screened by a visual barrier from the view of any street or side neighbor, and any such roof-mounted equipment shall be screened to the extent feasible, all as approved by Developer.

3.07 Building Regulations

Any building erected on a Site shall conform to the following construction practices:

(a) Exterior walls shall be of concrete, brick, masonry, tile, glass or decorative metal construction subject to approval of Developer.

(b) Exterior walls shall be painted or suitably treated initially in a manner acceptable to Developer and if such treatment is not permanent, repainted or retreated in like manner as often as necessary in order to maintain a clean and well kept appearance.

3.08 Height & Density of Buildings

(a) No building shall be erected, structurally altered or enlarged so as to occupy more than 60 percent of a lot.

Subterranean parking buildings or sturctures, which may extend not higher than 6 feet above Curb Level, may occupy more than 60 percent of a lot.

(b) No building shall be erected or enlarged so as to exceed a floor area ratio of three to one (3:1) nor exceed 50' in height.

Article IV
APPROVAL OF PLANS

4.01 Developer Approval Required

No improvement shall be erected, placed, altered, maintained or permitted to remain on the Property or any protion thereof until plans and specifications showing plot layout, all exterior elevations, structural design, materials and colors, parking, signs, and landscaping, and, as applicable, all change orders shall have been submitted to and approved in writing by Developer. Such plans,

specifications and change orders shall be submitted in writing over the signature of the owner or lessee of the Site. If Developer fails either to approve or disapprove such plans, specifications and change orders within thirty (30) days after the same have been submitted in writing to him, it shall be conclusively presumed that Developer has disapproved said plans, specifications and change orders. Upon approval by Developer of plans, specifications and change orders for construction or alteration of any Improvement, a copy of such plans, specifications and change orders as so approved shall be deposited for permanent record with Developer, and a copy of such plans, specifications and change orders bearing the written approval of Developer shall be returned to the owner or lessee making application for approvals.

4.02 Standards For Approval

Approval shall be based, among other things, on adequacy of Site dimensions; soundness and attractiveness of structural and aesthetic design; suitablility of materials to be employed in construction; conformity and harmony of external design with neighboring structures; effect of location and use on Improvements, operations and uses on neighboring Sites; relation of topography, grade and finished ground elevation of the Site being improved to that of neighboring Sites; proper facing of main elevation with respect to nearby streets; and conformity of the plans and specifications to the purpose and general plan and intent of these restrictions. Developer shall not arbitrarily or unreasonably withhold its approval of such plans and specifications.

4.03 Developer Not Liable For Damages

Neither Developer nor its successors or assigns shall be liable in damages to anyone submitting plans to

them for approval, or to any owner or lessee of the Property or any portion thereof, for any reason other than fraud arising out of or in connection with the approval or disapproval or failure to approve any such plans. Every person who submits plans to Developer for approval agrees, by submission of such plans, and every owner or lessee of any of the Property agrees, by acquiring title thereto or interest therin, that he will not bring any action or suit against Developer to recover any such damages.

4.04 Architectural Review

All plans submitted for review by Developer must be prepared by an architect or registered engineer licensed to practice in the State of California.

Article V
ENFORCEMENT

5.01 Abatement and Suit

Violation or breach of any restriction herein contained shall give to Developer or any owner of the Property or any portion thereof the right to enter upon the Site on which said violation or breach exists and to summarily abate and remove, at the expense of the owner or lessee thereof, any structure, thing, or condition that may be or exist thereon contrary to the intent and meaning of the provisions hereof, and/or to prosecute a proceeding at law or in equity against the person or persons who have violated or are attempting to violate any of these restrictions to enjoin or prevent them from doing so, to cause said violation to be remedied or to recover damages for said violations.

5.02 Deemed to Constitute a Nuisance

The result of every action or omission whereby any restriction herein contained is violated in whole or in part, except for variances from such restriction approved by Developer, is hereby declared to be and to constitute a nuisance, and every remedy allowed at law or equity against every such result may be exercised by Developer or by any owner of the Property or any portion thereof.

5.03 Attorney's Fees

In any legal or equitable proceeding for the enforcement or to restrain the violation of this Declaration or any provision hereof, if Developer receives any relief what soever the opposing party or parties shall pay all attorney's fees of and costs incurred by Developer in such proceeding. All remedies provided herein or at law or in equity shall be cumulative and not exclusive.

5.04 Inspection

Developer may from time to time at any reasonable hour or hours enter and inspect the Property or any portion thereof to ascertain compliance herewith.

5.05 Failure to Enforce Not a Waiver of Rights

The failure of Developer or any property owner to enforce any restriction herein contained shall in no event be deemed to be a waiver of the right to do so thereafter nor of the right to enforce any other restriction.

Article VI
REGULATION OF OPERATIONS AND USES

6.01 Permitted Operations and Uses

(a) Unless otherwise specifically prohibited herein, or by applicable zoning ordinances, any industrial or office operation and use will be permitted if it is performed or carried out entirely within a building

that is so designed and constructed that the enclosed operations and uses do not cause or produce a nuisance to adjacent Sites, such as but not limited to vibration, sound, electro-mechanical disturbances and radiation, electro-magnetic disturbance, air or water pollution, dust, or the emission of odorus, toxic or non-toxic matter. An exception shall be made during periods when breakdown in equipment occurs in such a manner as to make it evident that the effect was not reasonably preventable. All direct lighting is to be shielded and confined within property lines.

(b) "Industrial or office operations and use" shall include, but not be limited to, the following uses:

(i) General manufacturing or assembly;

(ii) Manufacture, research, assembly, testing, maintenance and repair of components, devices, equipment, parts and systems;

(iii) Businesses engaged in research and development activities;

(iv) Industries engaged in storage or warehousing;

(v) Accessory uses and industrial support activities when part of, and related and incidental to, a permitted industrial use;

(vi) Headquarters or regional offices;

(vii) General administrative, professional and business and offices.

(viii) Commercial-retail acitivities

(c) Principally Permitted Uses refers to the predominant acitivity on a site. The fact that a minor operation on a site is one normally considered, properly

located in a district having less restrictive performance requirements, does not preclude its inclusion among the operations of a permitted use on a site requiring more restrictive levels of performance, provided such latter levels of performance are met.

6.02 Prohibited Operations and Uses

In addition to those operations prohibited by applicable zoning ordinances, the following operations and uses shall not be permitted on the Property or any portion thereof: residential; trailer courts; labor camps; junk yards; commercial excavation of building or construction materials; distillation of bones; dumping, disposal, incineration or reduction of garbage, sewage, offal, dead animals or refuse, or trash transfer stations; fat rendering; stockyard or slaughter of animals; refining of petroleum or of its products; keeping or raising animals, livestock or poultry.

6.03 Other Operations and Uses

(a) Operations and uses which are neither specifically prohibited nor specifically authorized by these restrictions may be permitted in a specific case if written detailed operational plans and specifications therefor are submitted to and approved in writing by Developer. Approval or disapproval of such plans and specifications shall be based upon the effect of such operations or uses on other portions of the Property or upon the occupants thereof. If Developer fails either to approve or to disapprove such plans and specifications within thirty (30) days after the same have been submitted to it, it shall be conclusively presumed that Developer has disapproved said plans and specifications.

(b) Neither Developer, nor its successors or assigns, shall be liable in damages to anyone submitting operational plans and specifications to them for approval, or to any owner or lessee of the Property or any portion thereof, by reason of mistake in judgment, negligence or nonfeasance arising out of or in connection with the approval or disapproval or failure to approve any such plans and specifications. Every person who submits operational plans and specifications to Developer for approval agrees, by submission of such plans and specifications, and every owner and lessee of any of the Property agrees, by acquiring title thereto or interest therein, that he will not bring any action or suit against Developer to recover any such damages.

Article VII
TERM, TERMINATION, MODIFICATION AND ASSIGNMENTS OF DEVELOPER'S RIGHTS AND DUTIES

7.01 Term

This Declaration, every provision hereof and every covenant, condition and restriction contained herein shall continue in full force and effect until December 31, 2040.

7.02 Termination and Modification

This Declaration or any provision hereof, or any covenant, condition or restriction contained herein, may be terminated, extended, modified or amended, as to the whole of the Property or any portion thereof, with the written consent of the owners of eighty-five percent (85%) of the Property, based on the number of gross square feet of the Land owned as compared to the total number of gross square feet of the Land subject to these restrictions; provided, however, that so long as Developer is owner or lessee of at

least ten percent (10%) of the Land, no such termination, extension, modification or amendment shall be effective without the written approval of Developer thereto. No such termination, extension, modification or amendment shall be effective until a proper instrument in writing has been executed and acknowledged and recorded in the office of the County Recorder, Los Angeles County, California.

7.03 Assignments of Developer's Rights and Duties

Any and all of the rights, powers and reservations of Developer herein contained may be assigned to any person, corporation, partnership, association or other entity which will assume the duties of Developer pertaining to the particular rights, powers, and reservations assigned, and upon any such person, corporation, partnership, association, or entity evidencing its consent in writing to accept such assignment and assume such duties, he, she or it shall, to the extent of such assignent, have the same rights and powers and be subject to the same obligations and duties as are given to and assumed by Developer herein. The term "Developer" as used herein includes all such assignees and their heirs, successors and assigns. If at any time Developer ceases to exist and has not made such an assignment, a successor Developer may be appointed in the same manner as these restrictions may be terminated, extended, modified or amended under Section 7.02 of this Article VII.

Article VIII
REPURCHASE OPTIONS

If, after the expiration of twenty-four (24) months from the date of transfer of title and delivery of a grant deed from Developer to a purchaser for a specific Site within the Property, the purchaser shall not have begun in

good faith the construction of an acceptable building upon said Site, Developer, its successors or assigns, upon thirty (30) days' prior written notice, shall have the option to repurchase the Site from the owner at the original purchase price, receive a grant deed therefor, and enter into possession of said Site. In the event any owner of a Site or Sites lying within the Property shall desire to sell all or any part of any such Site which at the time is less than fifty percent (50%) improved, meaning that Improvements occupy not more than fifty percent (50%) of the gross square footage of such Site, then Developer, its successors or assigns, shall have the prior right and option to purchase the unimproved premises proposed to be sold at the same price per acre paid by the owner for said Site when originally acquired from Developer, its successors or assigns, or at its proposed selling price, whichever is lower, and prior to any sale of such Site, the owner thereof shall notify Developer, its successors or assigns, of his intention to sell, describing the Site or Sites or portion thereof to be sold. Developer, its successors or assigns, shall then have thirty (30) days from the date of receipt of such notice to exercise its option. In the absence of written notification sent by Developer, its successors or assigns, of its election to exercise said option, such owner shall be free to sell such Site or Sites or portion thereof to any person and at any price deemed desirable by such owner, subject however to Section 11.07 of Article XI hereof.

Article IX
EASEMENTS

Easements and rights of way are hereby reserved as publicly recorded. Developer, its successors or asigns, retains such further rights of way and easements as may be

necessary or convenient for the purpose of erecting, constructing, maintaining and operating utility services over, across, under and through the Property within the designated setback areas, including wires, poles, pipes and conduits for lighting, power, television, telephone and other communication facilities, gas, water, storm sewers, sanitary sewers, and other utility lines. Easements for railroad tracks and drainage ditches, if required, shall be limited to the rear and side boundaries of a Site only. Developer shall have the right to grant rights of way or easements to others to carry out the foregoing purposes. Upon the laying, repair, maintenance or replacement of any such lines, wires, pipes, conduits or sewers, the Property shall be restored to the same condition it was in prior to the doing of such work.

Article X
MAINTENANCE

10.01 All owners, lessees, tenants, or other occupants of buildings or Sites within the Property shall maintain all buildings, fences, driveways, parking lots or other structures located upon said Site in good and sufficient repair and shall keep such premises painted, windows glazed, and otherwise maintain the Site in an aesthetically pleasing manner and in a condition approved by Developer, reasonable wear and tear excepted.

10.02 Any structures, driveway or parking lot damaged by the elements, casualty, or any other cause shall be repaired as promptly as possible.

10.03 Any buildings which become vacant for any reason shall be kept locked and all windows glazed to prevent illegal entry and vandalism.

10.04 At the option of Developer, the landscaped areas on each Site and Land Site may be maintained by a service provided by Developer at each owners', lessees', tenants', or other occupants' sole cost and expense. Such maintenance service shall function under the jurisdiction and supervision of Devoloper and shall include: lawn mowing; weeding; trimming of ground cover, shubbery and trees; fertilization; irrigation; and replacement of components of landscaping and irrigation systems where necessary. The maintenance charge for such service shall be determined by adding to the actual cost of the service applicable to each Site or Land Site an administrative and contingency fee not to exceed ten percent (10%) of the cost of said service. In the event Developer does not elect to provide such service, each owner, lessee, tenant, or other occupant shall maintain all landscaping within the areas on or adjacent to a Site or Land Site required to be landscaped pursuant to paragraph 3.03(a) above, keep lawns cut, shrubbery trimmed and replace damaged plantings, all at his or its own expense, in a condition approved by Developer.

10.05 In the event of the violation of or delinquency of payment relating to any of the provisions of this Article X, Developer, its successors or assigns, upon prior notification to the owner, shall have the right to enter any Site to eliminate any adverse conditions, or to do anything else necessary to maintain the aesthetic standard of the Property for the common benefit of other property owners therein and the applicable cost, plus collection costs and legals fees, if any, shall be assessed to the owner and shall become a lien upon the property involved, which lien shall be enforceable in the usual manner provided by law.

Article XI

MISCELLANEOUS PROVISIONS

11.01 Constructive Notice and Acceptance

Every person who now or hereafter owns or acquires any right, title or interest in or to any portion of the Property is and shall be conclusively deemed to have consented and agreed to every covenant, condition and restriction contained herein, whether or not any reference to this Declaration is contained in the instrument by which such person acquired an interest in said Property.

11.02 Rights of Mortgagees

All restrictions and other provisions herein contained shall be deemed subject and subordinate to all mortgages and deeds of trust now or hereafter placed upon the Property subject to these restrictions or any portion thereof, and none of said restrictions shall supersede or in any way reduce the security of any such mortage or deed of trust; provided, however, that if any portion of the Property is sold through the foreclosure of any mortgage or under the provisions of any deed of trust, any purchaser at such sale and his successors and assigns shall hold any and all Property so purchased subject to all of the restrictions and other provisions of this Declaration.

11.03 Mutuality, Reciprocity, Runs with Land

All restrictions, conditions, covenants and agreements contained herein are made for the direct, mutual and reciprocal benefit of each and every part, parcel and Site of the Property; shall create mutual, equitable servitudes upon each Site in favor of every other Site; shall create reciprocal rights and obligations among the respective owners of all Sites and privity of contract and estate among all grantees of said Sites, their heirs,

successors and assigns; and shall, as to the owner of each Site, his heirs, successors and assigns, operate as covenants running with the land, for the benefit of all other Sites.

11.04 Paragraph Headings

Paragraph headings, where used herein, are inserted for convenience only and are not intended to be a part of this Declaration or in any way to define, limit or describe the scope and intent of the particular paragraphs to which they refer.

11.05 Effect of Invalidation

If any provision of this Declaration is held to be invalid by any court, the invalidity of such provision shall not affect the validity of the remaining provisions hereof.

11.06 Addition of Territory

Developer may at any time or from time to time during the pendency of these restrictions add additional contiguous improved or unimproved land to the Property which is covered by this Declaration, and the covenants contained in this Declaration shall apply to the added land in the same manner as if it were originally covered by this Declaration; and thereafter the rights, powers and responsibilities of the parties to this Declaration with respect to the added land shall be the same as with respect the original Property, and the rights, privileges, duties and liabilities of the owners, lessees and occupants of parcels within the added land shall be the same as in the case of the original Property.

11.07 Lot Splits or Resubdivision of Sites

(a) In the event that a portion of a Site or of two or more contiguous Sites is subdivided or severed in ownership from the remainder of such Site or contiguous Sites, such portion so subdivided or severed, and the

remaining portion of such Site, shall each thereafter be treated for all purposes hereunder as separate Sites for the express purpose of imposing upon and subjecting each of such newly formed Sites to all of these restrictions.

(b) Any such subdivision or severance of any Site or Sites shall be accomplished substantially in accordance with a Parcel Map, Tract Map or similar map or plot plan which, prior to such subdivision or severance, shall be submitted to and approved in writing by Developer as well as local governmental agency having jurisdiction over such matters.

IN WITNESS WHEREOF, the undersigned have executed this Declaration on the date first hereinabove written.

DOMINGUEZ PROPERTIES, a
California limited partnership