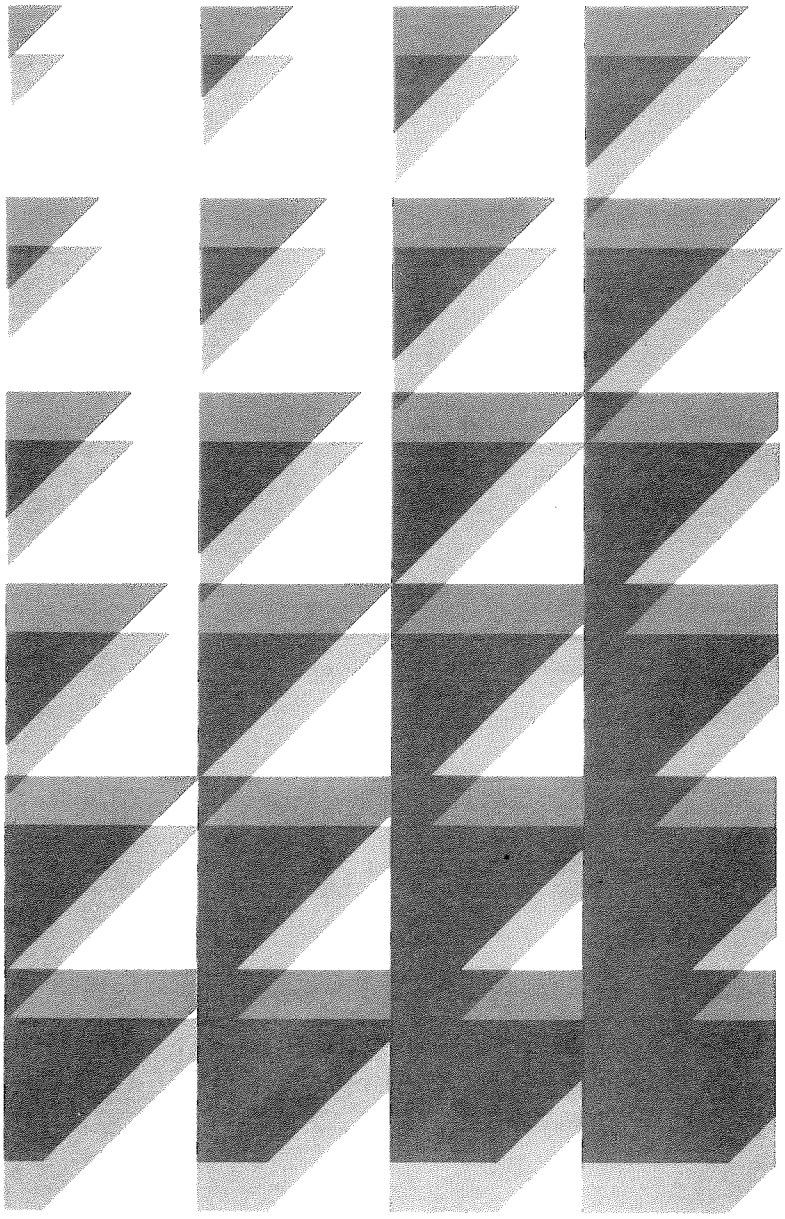
Dominguez

TECHNOLOGY CENTRE



PHASE ONE

SPECIFIC PLAN

© Dominguez Properties

PROJECT TEAM

Developer:	Dominguez Properties
Architect:	Kowalski-Harding & Associates, Inc.
Civil Engineer:	H. M. Scott & Associates, Inc.
Landscape Architect:	Kobata Associates, Inc.
Planner:	John McKenna & Associates
Traffic Engineer:	Crain & Associates

DOMINGUEZ TECHNOLOGY CENTRE

PHASE ONE SPECIFIC PLAN

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INTRODUCTION

1.1 PURPOSE

The purpose of this document is to ensure the responsible and orderly development of the Dominguez Technology Centre West - Phase One. This specific plan establishes the necessary standards, guidelines and implementation measures to carry out the policies and programs of the City of Carson General Plan. The specific plan, when adopted by city legislative action, serves both a planning function and a regulatory function.

1.2 AUTHORITY

California Government Code Section 65507 establishes the authority for a legislative body to adopt an ordinance or resolution requiring that a specific plan be prepared when it is in the public interest to do so. As with general plans, the Planning Commission must hold a public hearing before the planning agency can recommend the adoption of a specific plan. The City Council may then adopt a specific plan by ordinance or resolution.

After it is adopted, a specific plan has an effect similar to the local general plan. The Subdivision Map Act requires the legislative body to deny approval of a final or tentative subdivision map if it is not consistent with applicable specific plans. In addition, a development agreement cannot be approved unless the legislative body finds the agreement is consistent with the general plan and any applicable specific plan.

The California Government Code provides that a specific plan may include the following:

Land Use: The location of housing, business, industry, open space, recreation facilities, educational facilities, churches and related religious facilities, public buildings and grounds, solid and liquid waste disposal facilities, together with regulations establishing height, bulk and setback lines.

Circulation: The plan may include the location of streets, road standards, maintenance provisions and other transportation needs. This plan may include standards for both private and public facilities.

Density: Standards for population density and building density may be included. This may include lot size, permissible types of construction, provisions for water supply, sewage disposal, storm water drainage and the disposal of solid waste.

Design: The City, through the specific plan process, may provide basic design criteria for the study area.

The Dominguez Technology Centre West - Phase One Specific Plan is established through the authority granted to the City of Carson through the California Government Code.

1.3 LOCATION

The Dominguez Technology Centre West - Phase One planning area encompasses approximately forty-five acres of land at the northeastern limits of the City of Carson at the northwest corner of Wilmington Avenue and

University Drive (190th Street). The site is a portion of the 400-acre master-planned Dominguez Technology Centre.

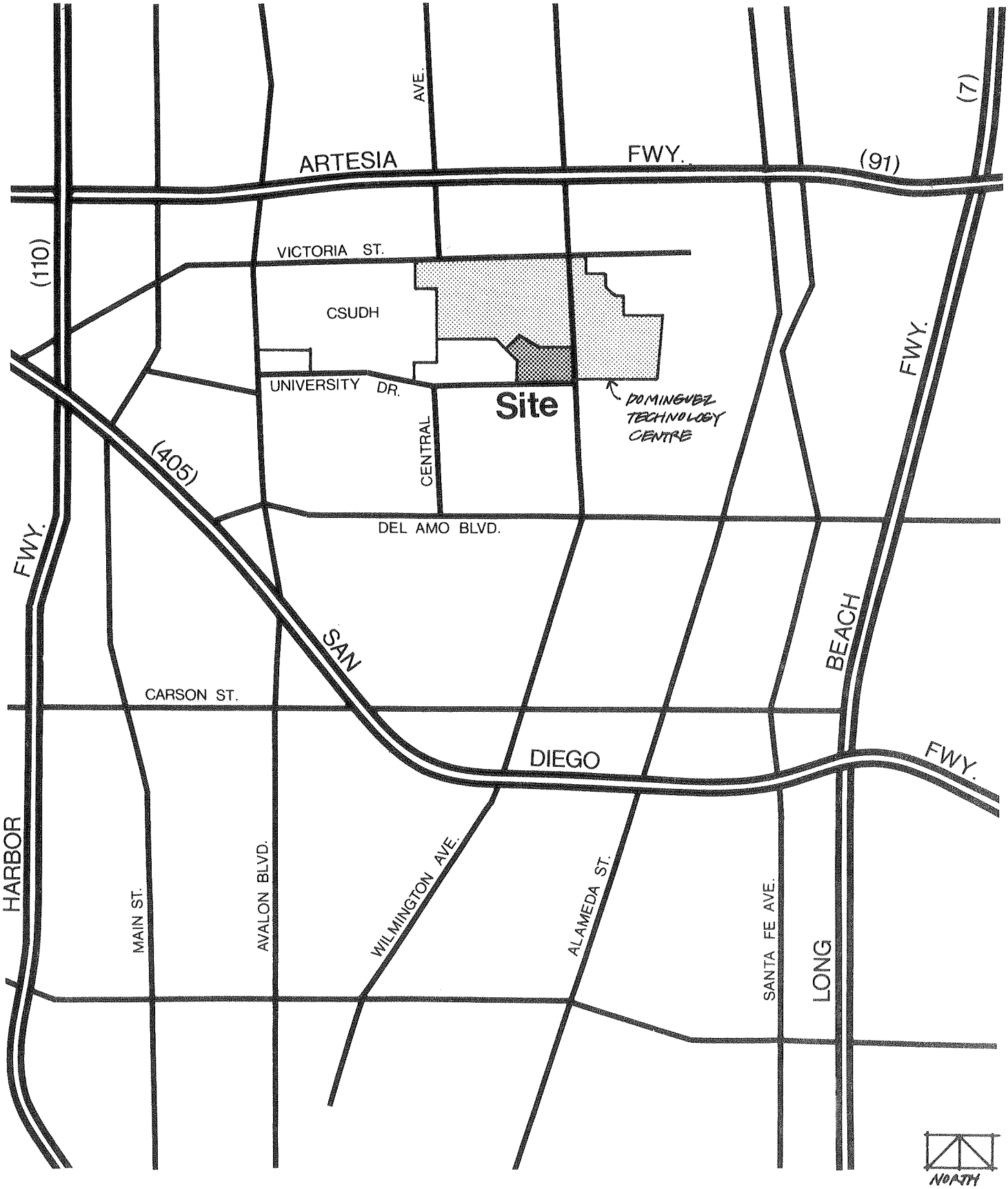
Access to the project site from the greater Los Angeles area is provided by the Artesia Freeway to the north, the Harbor Freeway to the west, the San Diego Freeway to the south and the Long Beach Freeway to the east. (See Exhibit 1.)

1.4 BACKGROUND

Dominguez Technology Centre's legacy dates back to the year of 1794 when King Carlos III of Spain deeded 75,000 acres of land - a large section of the South Bay area - to Juan Jose Dominguez. Grazing of livestock, primarily cattle and horses, occupied much of the land. In later years the land was used for dairy farms and small ranchos, until the discovery of oil brought industry and development to the area.

In the late nineteenth century Rancho Dominguez was divided into six parts and distributed to the daughters of Manuel Dominguez, grandnephew of Juan Jose. Dominguez Properties was established in 1967 as an outgrowth of this individual ownership, to provide the leadership in the effective, planned utilization of the land.

The following year, 1968, saw the incorporation of the City of Carson, which included approximately 330 acres of the 400-acre Dominguez Properties land holdings. In December of 1981 the City's General Plan was amended to change the land use designations for the property to Light Industrial



LOCATION MAP

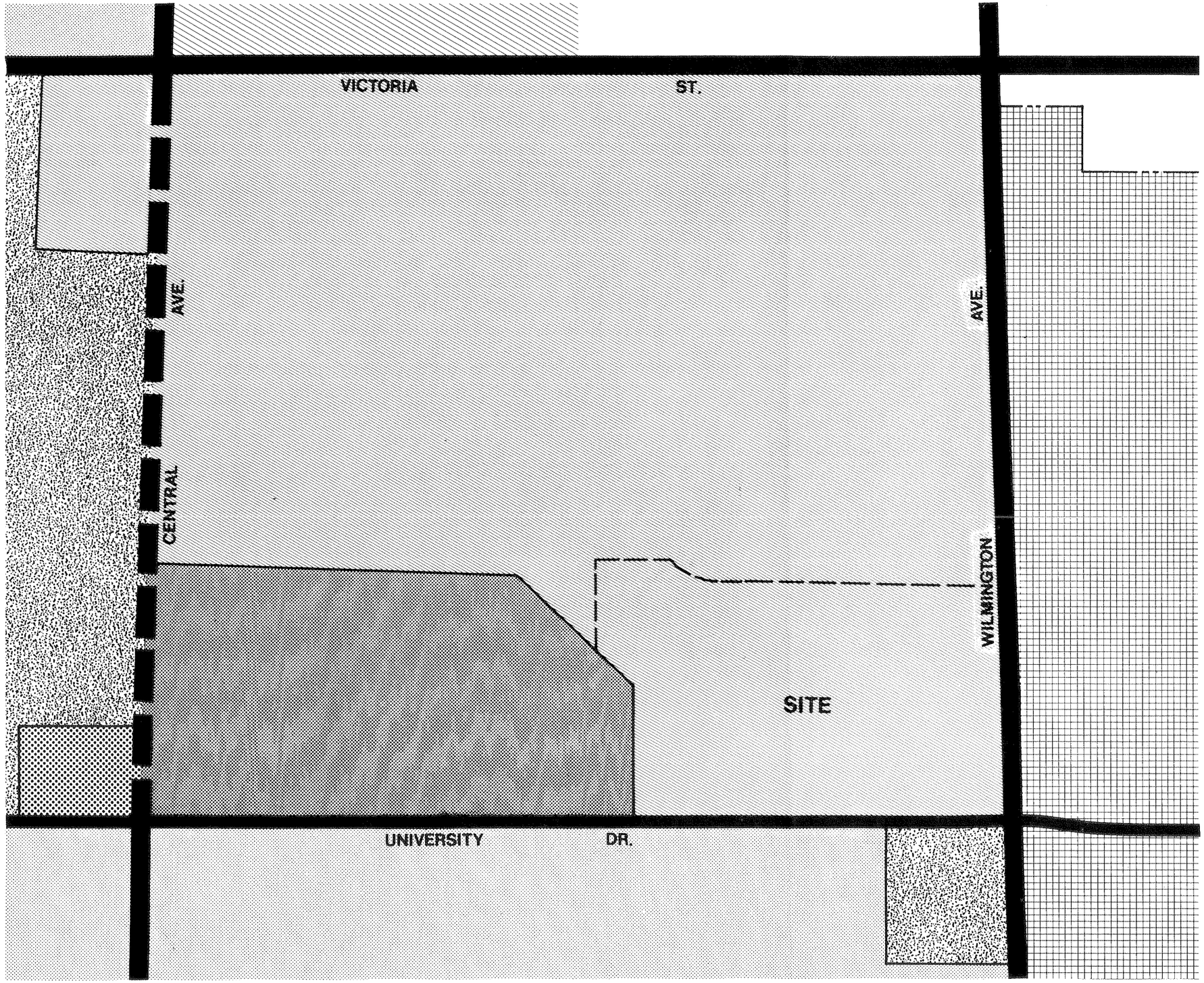
EXHIBIT 1

(approximately 260 acres), Medium Density Residential (approximately 60 acres) and General Commercial (approximately 10 acres). (See Exhibit 2.)

Since the entire property had been zoned previously as MH (Manufacturing, Heavy), a zone change was required to make the zoning consistent with the new General Plan designations. In April of 1982 the zoning was changed from MH to ML (Manufacturing, Light), RM-12 (Residential, Multiple Dwelling - 12 Units Per Acre Maximum) and CN (Commercial, Neighborhood Center). (See Exhibit 3.)

1.5 OWNERSHIP

The Dominguez Technology Centre West - Phase One planning area is presently owned, in fee, by Dominguez Properties, a California limited partnership.



LOW DENSITY RESIDENTIAL

MEDIUM DENSITY RESIDENTIAL

GENERAL COMMERCIAL

LIGHT INDUSTRIAL

HEAVY INDUSTRIAL

PUBLIC

MAJOR HIGHWAY

FUTURE MAJOR HIGHWAY

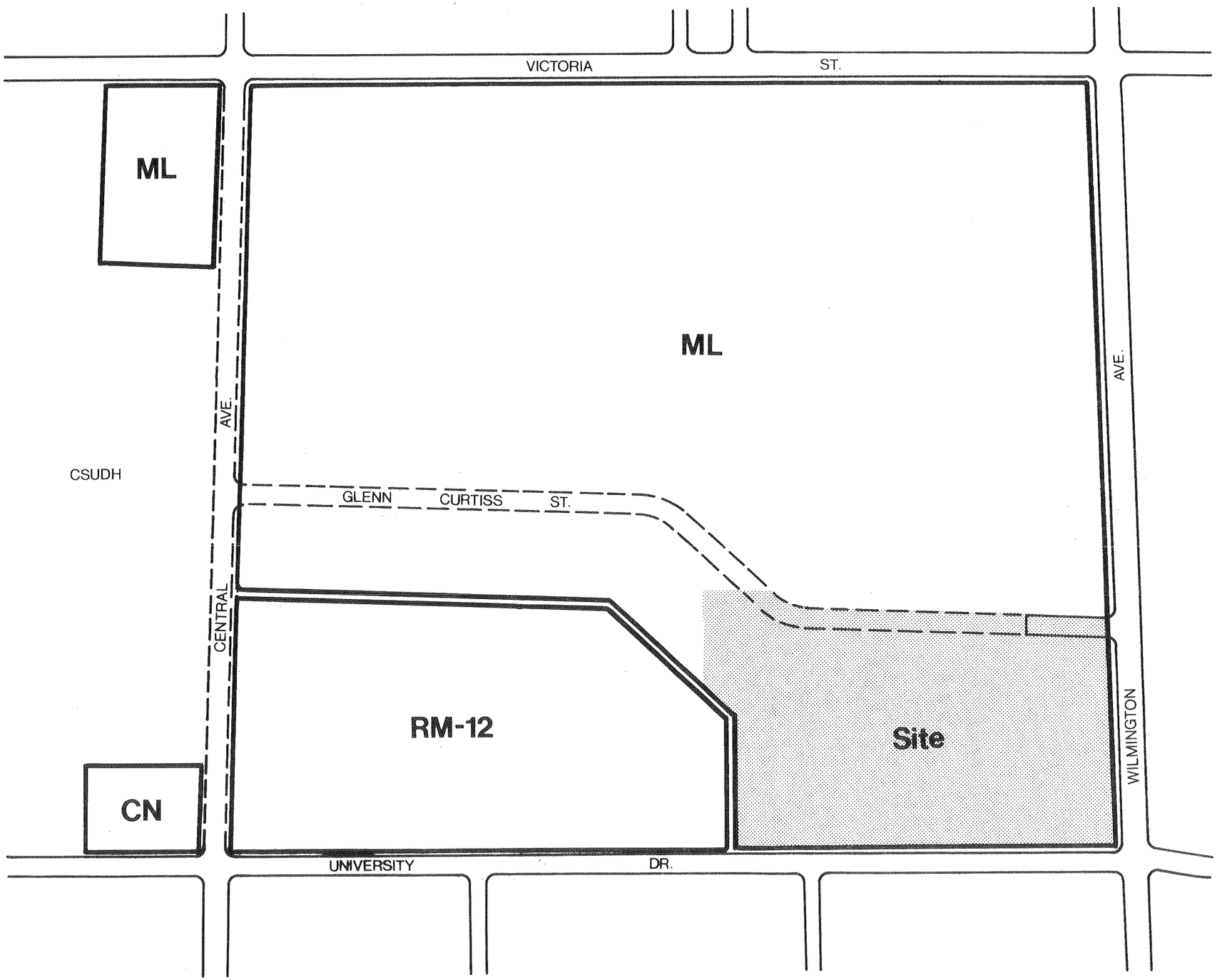
SECONDARY HIGHWAY

HEAVY MANUFACTURING (COUNTY)

0' 250' 500' 1000' NORTH

GENERAL PLAN

EXHIBIT 2

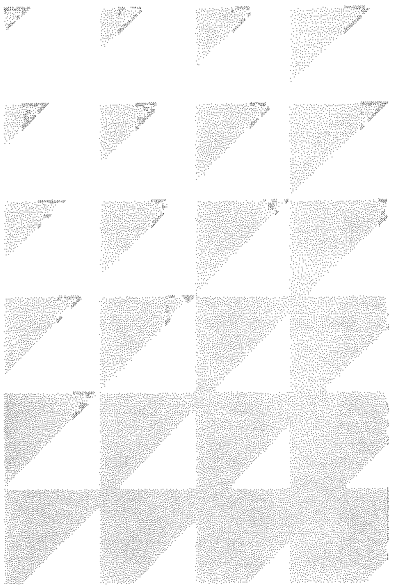


ML	MANUFACTURING, LIGHT
RM-12	RESIDENTIAL MULTIPLE DWELLING 12 UNITS PER ACRE MAXIMUM
CN	COMMERCIAL, NEIGHBORHOOD CENTER

0' 250' 500' 1000' NORTH

EXISTING ZONING

EXHIBIT 3



SETTING

2.1 COMMUNITY SETTING

The project area is located within the urban community of Carson in the South Bay area of Los Angeles. Urban uses ranging from residential to commercial and industrial are found throughout the region surrounding the planning area. The City of Carson enjoys a dynamic industrial/business sector, balanced by well-established residential neighborhoods.

2.2 SURROUNDING LAND USES

The land immediately to the north and west of the project area is currently undeveloped. Approximately 150 acres are leased to Grand View Growers and used for raising geraniums. Producing oil wells are located throughout the remainder of the property north of the project area.

To the east, across Wilmington Avenue, is the portion of Dominguez Technology Centre which is partially developed with a number of light industrial buildings. Construction activity is presently underway on several more buildings. This portion of the Dominguez Technology Centre is presently within the unincorporated area of Los Angeles County, but is under consideration for annexation to the City of Carson along with numerous other properties in the city's northeast sector.

Pfc. James Anderson, Jr. Memorial Park is located at the Southwest corner of University Drive and Wilmington Avenue, south of the project area. Also located south of University Drive, across from the project area, is a residential neighborhood of attractive, well-kept homes. The residents of

this area take great pride in their neighborhood and the community at large. The Homeowner's Association remains active, meeting on a regular monthly basis, more than sixteen years after the first neighborhood subdivision was constructed. (See Exhibit 4.)

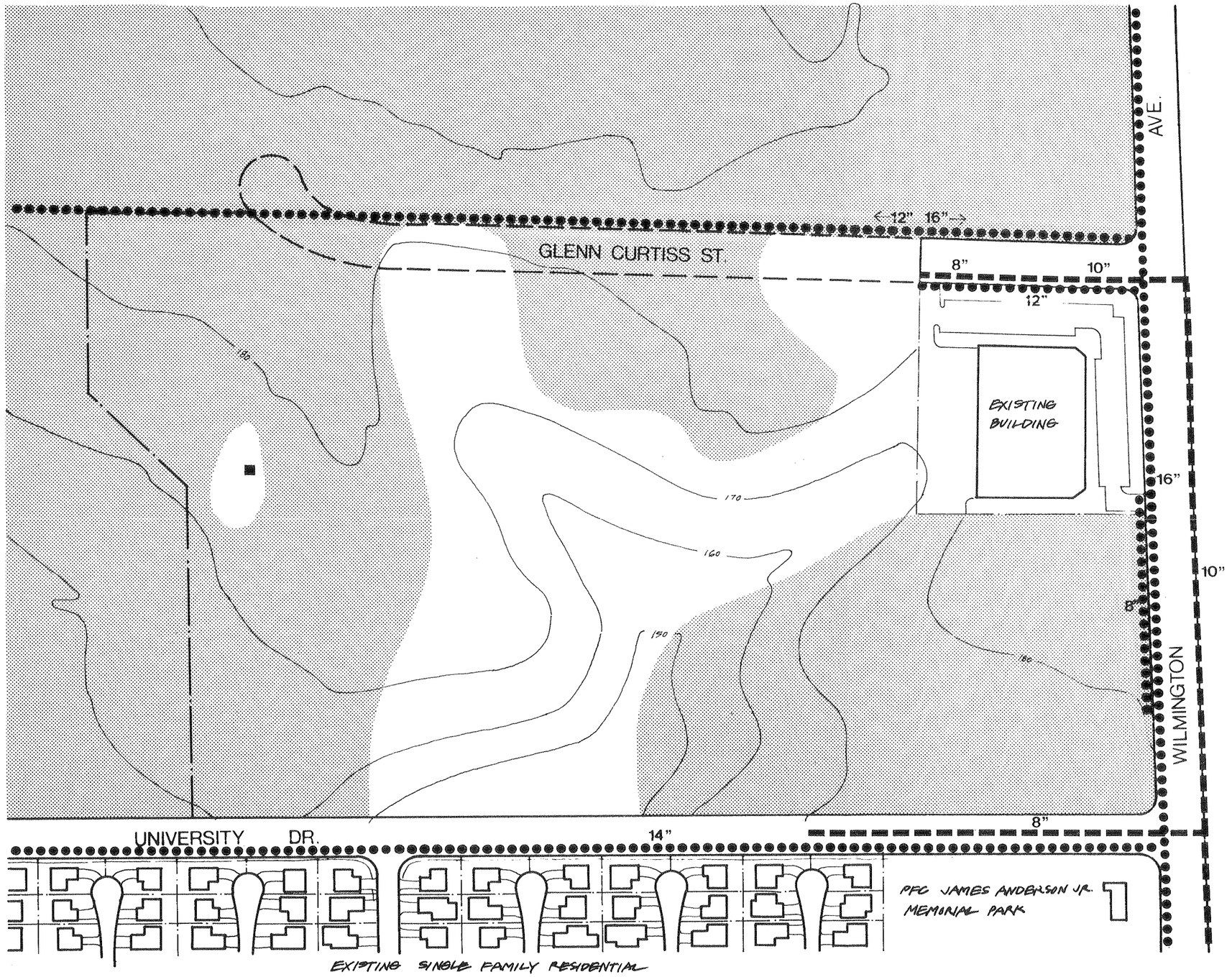
2.3 EXISTING SITE CONDITIONS

Natural Features - The undulating character of the site's terrain is unique to the area. The site's high areas (reaching 190 feet above sea level) along the west, north and east perimeters slope toward a broad, gentle swale in the central area of the site, draining to the south to a low point of approximately 145 feet above sea level. The natural onsite slopes range from one to sixteen percent.

The undulating terrain of the site and the relatively flat surrounding land affords both a unique view opportunity from onsite (including distant vistas of Long Beach Harbor) as well as a design challenge to ensure visual compatibility with existing and planned residential areas.

The underlying geology consists of old alluvium or terrace deposits of Upper Pleistocene age. According to published data, alluvium from 600 to 700 feet thick overlies bedrock beneath the site.

The site is located within the Newport-Inglewood structural zone, which consists of a series of parallel northwest-southeast trending faults and folds extending from the Santa Monica Mountains southeast to Newport Beach. Although faults within the zone are considered active, no surface rupture is



GRANOVIEW GERANIUM GROWERS

12" WATER LINE (12 INCH)

8" SEWER LINE (8 INCH)

ABANDONED 'REYES' #129 OIL WELL

0' 100' 200' 400' NORTH

SITE CONTEXT

EXHIBIT 4

known to have occurred at the site during the last 10,000 years. Dominguez Hills, upon which the site is located, is believed to be a topographic expression of tectonic movements occurring along the zone. The existence of major faults in the immediate site vicinity is uncertain, and no known fault projects toward or traverses the site, according to currently available published information. The closest known active fault within the zone is the Cherry Hills fault segment, located about a mile southeast of the site. The site is currently outside the State of California Special Studies Zones, as delineated in compliance with the Alquist-Priolo Special Studies Zones Act (1972).[1]

The site's natural vegetation was disturbed long ago with the introduction of cattle grazing and dairy farming in the eighteenth and nineteenth centuries. The disturbed grassland contains no unique nor rare and endangered species. The introduced geraniums, while providing a colorful display, do not represent an environmentally significant species.

The lack of diversity of plant material and the project area's location in an urban environment result in limited habitat for wildlife species. The introduction of a variety of tree and shrub species in the development's landscaping is expected to provide nesting areas, cover and food for a number of local bird species and small mammals.

Land Use - The majority of the project area is vacant, except for approximately four acres in the northeast corner which contain a newly-

[1] Converse Consultants, Soil and Foundation Investigation, Proposed Commercial Building - University Drive and "A" Street, Carson, California, August 29, 1983.

constructed 56,000 square foot research and development building, approximately 350 lineal feet of improved street, paved parking area and landscaped setbacks. The building is presently vacant. Geraniums are cultivated on approximately 25 acres of the site.

A former producing oil well, Reyes No. 129, is located on the project site. This well was abandoned in 1972 in accordance with applicable state regulations. Soils investigations conducted in 1983 confirmed that there are no oil sumps within the planning area.

Drainage - Storm water runoff from most of the project site currently runs to the central swale, draining south. This runoff is collected by a 48-inch storm drain facility in Grandee Avenue, which eventually outlets into the Dominguez Channel.

Water - Water service to the site is provided by the Dominguez Water Corporation via a 16-inch water main in Wilmington Avenue, a 14-inch main in University Drive, and a 12-inch main in Glenn Curtiss.

Sewer - Sewer service is provided to the City by the Los Angeles County Sanitation District. The District is responsible for construction, operation and maintenance of facilities to collect and treat domestic and industrial waste. The construction of local sewers and their connection to the District's system will be the responsibility of the developer.

Collected wastewater from the project area will be transported to the Joint Water Pollution Control Plant, via an existing 8-inch line in University and a

10-inch line in Wilmington Avenue to the existing 24-inch trunk sewer line in Del Amo Boulevard. A portion of the last stage of the project's development will require the construction of an offsite sewer line in University Drive, extending west to Central Avenue and thence south to Del Amo Boulevard, where it will connect to the Los Angeles County Sanitation District's trunk sewer.

Fire Protection - Fire protection service for the project area is provided by the Los Angeles County Fire Department under contract to the City of Carson. Table 1 lists the fire stations currently serving the area, their equipment and estimated response times.[1]

Table 1
EXISTING FIRE PROTECTION SERVICES

Station #10:	1860 Del Amo Boulevard, Carson
Equipment:	One (1) engine company
	One (1) foam unit
Response Time:	2-3 minutes
Station #116:	755 East Victoria Street, Carson
Equipment:	One (1) engine company
	One (1) truck company
	One (1) rescue squad
Response Time:	2-3 minutes
Station #105:	18915 Santa Fe Avenue, Rancho Dominguez
Equipment:	One (1) engine company
	One (1) deluge unit
Response Time:	3-5 minutes

1 Telephone conversation with Inspector Cobleigh, Los Angeles County Fire Department, April 28, 1986.

TABLE 1 (Cont'd)

Station #127:	2049 East 223rd Street, Carson
Equipment:	One (1) engine company One (1) truck company Battalion Chief
Response Time:	3-5 minutes

Police Protection - Police protection service for the project area is provided by the Los Angeles County Sheriff Department under contract to the City of Carson. The Carson Sheriff Station is located at 21356 South Avalon Boulevard, Carson, approximately three miles south and west of the project site. The Carson Station is currently staffed with 207 deputies and approximately 40 non-sworn support personnel. The project site is located within Reporting District No. 1613. Police protection response is assigned according to the nature and urgency of the call.[1]

Electrical Service - Electrical service is provided by the Southern California Edison Company via buried cable to an existing underground vault located on the north side of Glenn Curtiss Street. All new electrical lines to service the development will be underground.

Natural Gas Service - The project area is located within the service area of the Southern California Gas Company. A six-inch gas distribution line is located in Wilmington Avenue.

Telephone Service - Pacific Bell provides telephone service to the area. An underground cable located in Wilmington Avenue will provide the primary

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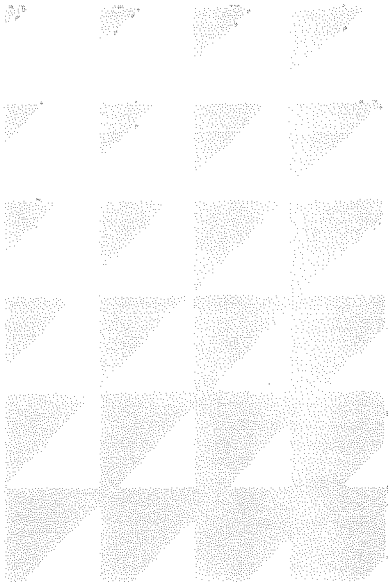
1 Telephone conversation with Deputy Jaen, Los Angeles County Sheriff Department, Carson Station, April 28, 1986.

source of telephone service for the project. All new lines will be underground.

Solid Waste Service - Solid waste disposal for the project area is provided by numerous private contractors in the area. Currently, solid wastes are trucked to any one of several Class II sanitary landfills located in the City of Carson environs, within three to five miles of the project site.

Park and Recreational Services - Pfc. James Anderson Jr. Memorial Park is located across University Drive from the project site. This nine-acre park is fully developed with a community building, parking lot, lighted tennis courts, tot-lot and children's play area and picnic tables.



SPECIFIC PLAN ELEMENTS

3.1 INTRODUCTION

This chapter of the specific plan includes the summary project description as well as the master plans, concept plans and design guidelines which define the overall framework for the development of the Dominguez Technology Centre - Phase One. Major plan elements include:

- Land Use Master Plan
- Circulation Master Plan
- Infrastructure Concept Plans
- Phasing Concept Plan
- Design Guidelines

The Land Use and Circulation Master Plans establish definitive standards and requirements to which individual development projects within the specific plan area must conform. Precise site plans, plot plans and improvement plans can be implemented only if they are consistent with the mandatory requirements of these plan elements.

The Infrastructure (drainage, water and wastewater) and Phasing Concept Plans and the Design Guidelines describe programs for the implementation of public facilities, identify the stages and timing of development, and recommend measures to promote a consistent visual quality and aesthetic character of the project. These concept plans and design guidelines are not mandatory master plans and may be revised without formal amendment of the specific plan.

3.2 SUMMARY PROJECT DESCRIPTION

The Dominguez Technology Centre - Phase One project is a specific plan for high-tech office and research and development facilities in a carefully designed, campus-like setting. The proposed development consists of eight two- and three-story buildings devoted primarily to office uses and one one-story building combining security control with receiving and storage.

The recently constructed building located at the northeast corner of the site will be included as part of the initial stage of project development. Interior tenant improvements will convert the existing open-bay shell to two levels of office space use. Additional landscaping, consistent with the overall specific plan landscape concept, will augment the existing plant material.

As presently envisioned, the completed project will contain slightly less than 800,000 square feet of building area. Approximately 90 to 95 percent of this space will be devoted to office uses, while the remaining space will be used for research and development activities, security, and receiving and storage. Adequate off-street parking, a secured perimeter with controlled access, an extensive pedestrian circulation system (including an onsite jogging path for employee use), a safe and convenient vehicular circulation system and extensively landscaped setbacks and open spaces complete the major project improvements.

The specific plan has been designed to address, in a comprehensive manner, the various elements, concepts and features which constitute a complete program for the orderly incremental development of the project over a

period of several years. The degree of precision of the plan, as related to actual building footprints, configurations, locations and height, is greatest for the initial stage of the project, Phase A (as described in later sections of this chapter). The definition of the site plan elements (buildings, parking, drives, etc.) is less precise and subject to modification at the time of actual site plan/plot plan review, for the latter stages (Phases B and C).

In addition to the specific plan component, the proposed project includes a subdivision map, Parcel Map No. 15247, which is being processed concurrently as an integral element of the planning, development and implementation program.

3.3 LAND USE MASTER PLAN

Intent

This section of the specific plan describes the size, composition, arrangement and relationships of the proposed facilities which will be constructed on the site. These descriptions are intended to portray the ultimate build-out of the project (perhaps some five to seven years in the future) as presently planned. This plan is based upon both the immediate needs and the mid- to long-term projections of the prospective tenant. Unforeseen changes in the economy or numerous other factors may result in modifications to the plan.

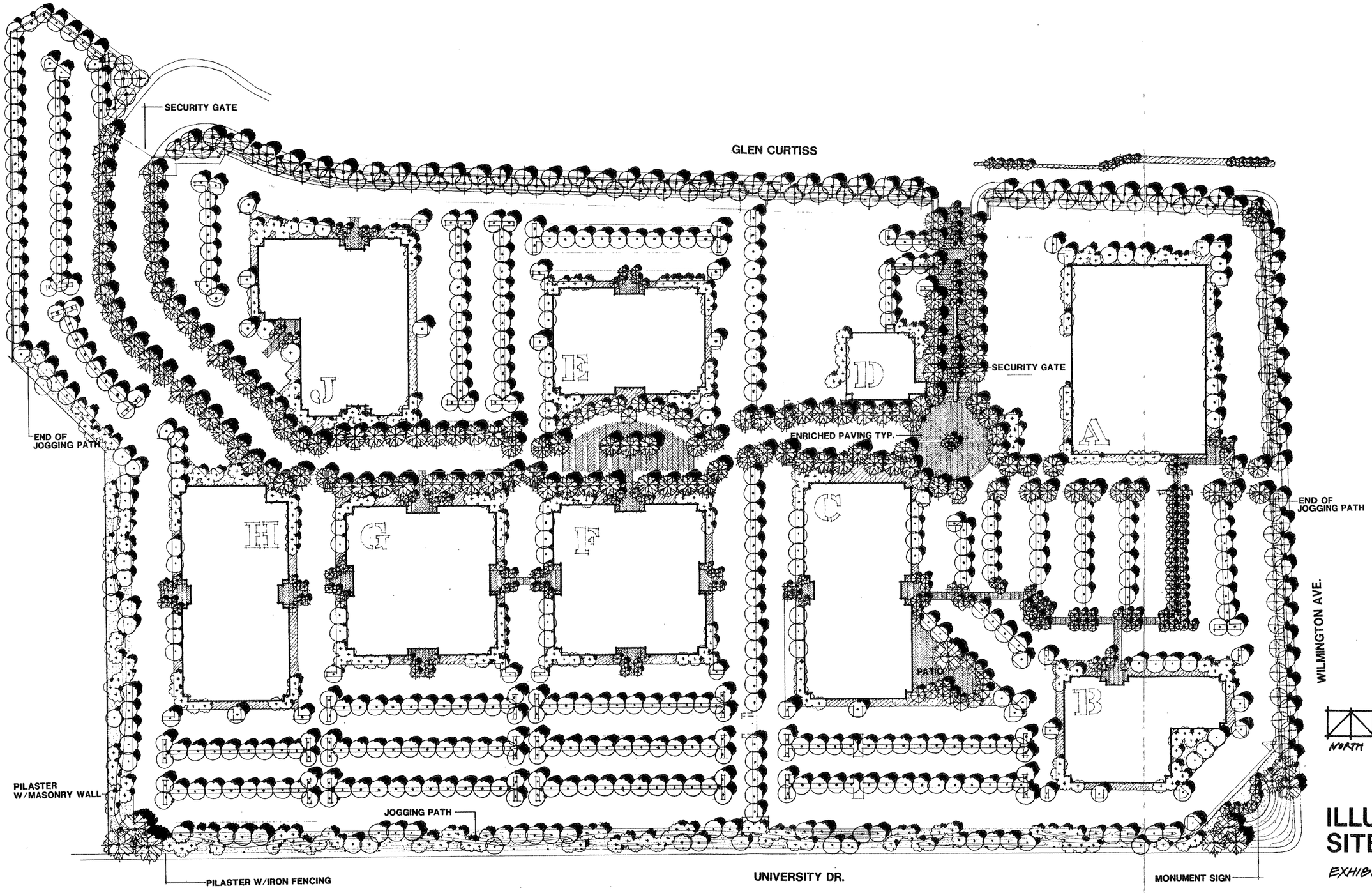
It is the intent of the Land Use Master Plan to establish, with a considerable degree of certainty, the site design for Phase A. As depicted on the

Illustrative Site Plan (Exhibit 5) the number, size, shape, height and location of buildings; the arrangement, size and number of parking spaces; and the points of access and circulation system plan are all definitively established. Modifications to any of these elements, other than as provided for in Section 4.8 of this specific plan, can be accomplished only through an amendment of the specific plan.

The descriptions of the project's features proposed for Phases B and C, as contained in this Land Use Master Plan are more suggestive. It is the intent of the Land Use Master Plan to describe a possible site plan scenario for these latter stages of development. It presents the current idea of the manner in which they may be developed, not necessarily the manner in which they must be developed.

Proposed Land Uses

The land uses proposed for Phase A consist of offices, a security guard station, plus a receiving and storage area. The office use will be developed in three buildings with a combined gross floor area of 312,000 square feet. Building A, the existing onsite structure, will contain 112,000 square feet on two levels. Building B will contain 100,000 square feet of office in a three-story structure designed to be the focal landmark at the primary entry to the entire Dominguez Technology Centre complex. Building B will also contain the visitor's reception area for all buildings within the facility. The third office building of Phase A, Building C, is designed as a 100,000 square foot, two-story structure which will also contain the cafeteria and dining facilities (including an outdoor dining patio) for the project's employees.



ILLUSTRATIVE SITE PLAN

EXHIBIT 5

Building D is designed as a single story, 10,000 square foot facility which will be located on the entrance drive and contains the security guard station as well as the receiving and storage area for the entire project.

Phase A will include parking for approximately 1,258 cars, more than required by the city's code. Eleven handicapped spaces will be provided. Standard size parking spaces will total 880 to 950, or approximately 70 to 75 percent. The balance, 315 to 380 spaces (25 to 30 percent) will be designed as compact spaces.

Phases B and C are projected to be developed with approximately 450,000 to 500,000 square feet of additional office uses. A small portion of that footage, less than 50,000 square feet, is planned for research and development facilities. These future buildings will be two- and three-story. Current plans indicate that these phases will contain four two-story buildings and one three-story structure. Parking spaces for some 1,900 to 2,000 cars will be provided, above the minimum number required by city code. Adequate handicapped parking spaces will be provided. Standard and compact parking spaces will be provided in proportions similar to those designed for Phase A.

Statistical Summary

Information regarding the buildings, uses, footprint sizes, number of stories, square footage, employees and parking is presented in Table 2. The information presented for Phases B and C are estimates only and subject to change.

Table 2
STATISTICAL SUMMARY

Building - Use	Building Footprint (SF)	Number of Stories	Total Building Area (SF)	Number of Employees/SF	Number of Employees /Building	Number of Parking Spaces	Parking Ratio (Spaces/SF)
PHASE A							
Building A - office	56,000	2	112,000	1/200	560	448	1/250
Building B - office	33,000	3	100,000	1/200	500	400	1/250
Building C - office	50,000	2	100,000	1/200	500	400	1/250
Building D - security/rec. & storage	10,000	1	10,000	1/1000	10	10	1/1000
Phase A Total	149,000		322,000		1,570	1,258	1/258
PHASE B							
Building E - office	33,000	3	100,000	1/200	500	400	1/250
Building F - office	50,000	2	100,000	1/200	500	400	1/250
Phase B Total	83,000		200,000		1,000	800	1/250
PHASE C							
Building G - office	50,000	2	100,000	1/200	500	400	1/250
Building H - office	50,000	2	100,000	1/200	500	400	1/250
Building J - office/R&D	50,000	2	70,000	1/240	290	240	1/290
Phase C Total	150,000		270,000		1,290	1,040	1/260
Project Total	382,000		792,000		3,860	3,098	1/256

Implementation

The Land Use Master Plan will be implemented in stages through the City of Carson's established Site Plan and Design Review processes. The concurrent subdivision map approval process will create legal building sites for incremental development, construction and occupancy of the project.

Upon approval of the specific plan and subdivision map, site plan, building permit and grading permit applications can be filed for processing without further discretionary approvals. Improvement plans for any public facilities will be submitted for standard plan check.

Implementation of Phase A of the Land Use Master Plan can be accomplished without the need for expansion or installation of any new public improvements other than those identified in Section 3.6.

3.4 CIRCULATION MASTER PLAN

Intent

The Circulation Master Plan establishes the requirements related to both offsite and onsite improvements to the vehicular circulation system necessary to accommodate the increased local area traffic to be generated by the proposed project. The plan addresses the following individual components:

- Vehicular Access and Onsite Circulation
- Street Improvements (Public/Private)
- Street Sections
- Traffic Controls (Onsite/Offsite)
- Pedestrian Circulation
- Implementation

The Circulation Master Plan is based upon the results of a traffic analysis conducted by Crain and Associates to evaluate the traffic impacts of the proposed project. That traffic study analyzed the following:

- The current volumes and capacities of the area's existing roadway network;
- the volume of traffic expected to be generated by the project (for average daily trips and peak hour trips);
- the probable distribution of the project-related trips;
- estimated future traffic volumes for the surrounding roadway system based on the specific plan uses and considering the planned development of the remaining area of the Dominguez Technology Centre;
- estimated future volume to capacity ratios and intersection capacity utilization rates for streets and intersections;
- recommended street classifications, rights-of-way widths and cross-sections; and
- recommended traffic controls for signing and signalization.

Vehicular Access and Onsite Circulation

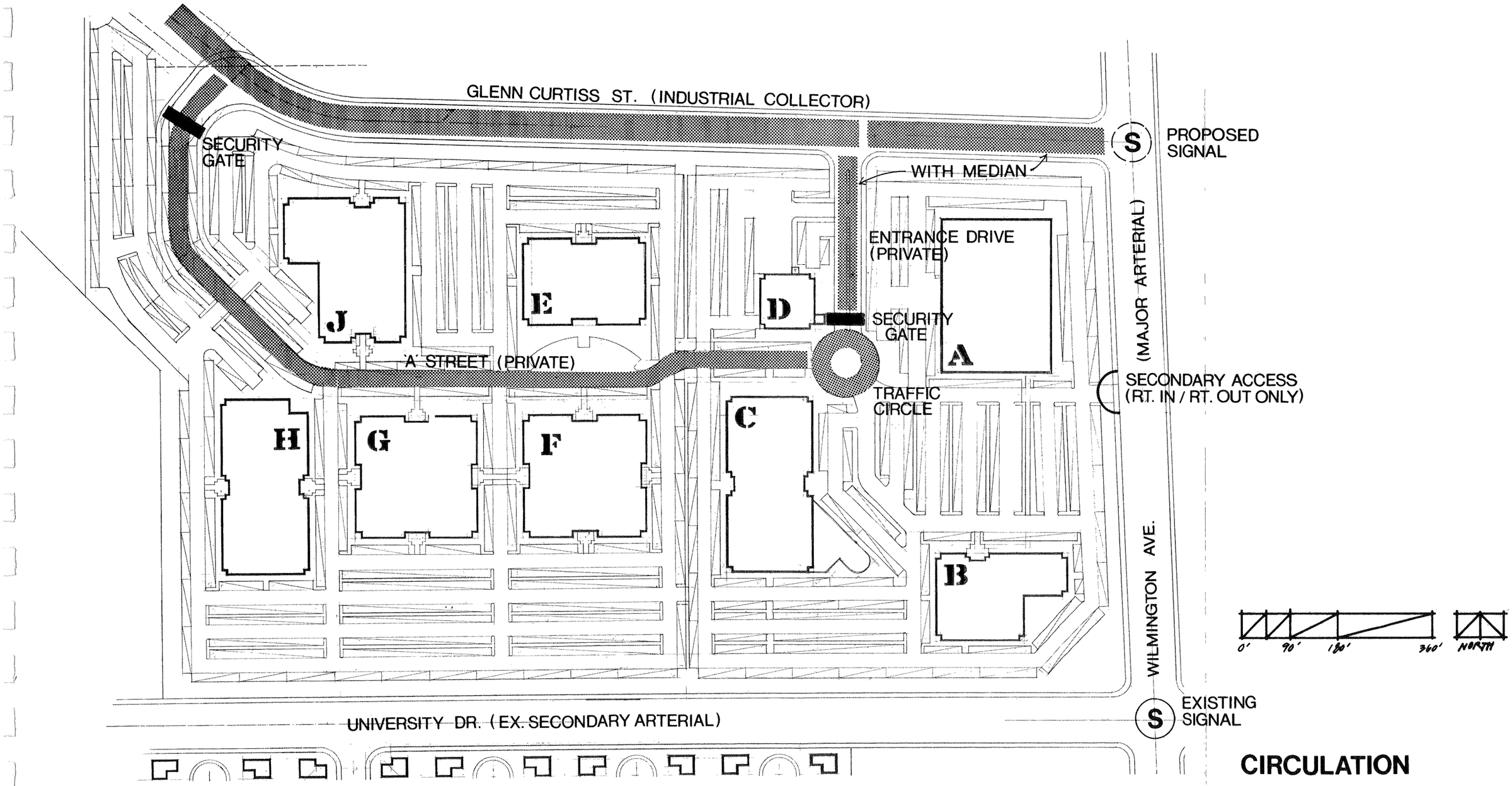
The Circulation Master Plan for the Dominguez Technology Centre - Phase One Specific Plan is shown on Exhibit 6. The circulation system identified on this plan is described below.

Primary project access, both initially and in the longer term, will be provided by a single entrance drive from Glenn Curtiss Street. This entrance drive is designed with two in-bound and two out-bound travel lanes, separated by a landscaped median. A manned security check-point will be located 300 feet from Glenn Curtiss Street to provide ample staging for cars entering the facility.

A secondary access, with right-in/right-out only turning movements, is located on Wilmington Avenue approximately 600 feet north of the University Drive intersection. This access will be used only during the morning and evening peak hours.

"A" Street provides the primary onsite circulation element, looping westerly from the entrance drive to connect with Glenn Curtiss Street. This loop feeds the offstreet parking areas for Phases B and C.

Glenn Curtiss Street forms the north boundary of the planning area. It provides the only connection to the surrounding arterial system. Although it is not currently designated as an Industrial Collector street on the Circulation Element of the City of Carson's General Plan, it will be improved to collector standards (modified to include three east-bound lanes



CIRCULATION

EXHIBIT G

- two left-turns plus one right-turn - at the Wilmington Avenue intersection) to accommodate the projected ultimate traffic volumes. Glenn Curtiss Street will be extended ultimately, in subsequent phases of development of the Dominguez Technology Centre complex, to connect from Wilmington Avenue to the future Central Avenue extension between University drive and Victoria Street.

Wilmington Avenue, a major arterial, and University Drive, a secondary arterial, are adjacent to the specific plan area, bordering the east and south boundaries of the site. These facilities are currently improved to their ultimate widths.

Street Improvements

Public street improvements will include the extension of Glenn Curtiss Street along the north boundary of the site. The existing section of Glenn Curtiss, presently improved as an 80-foot right-of-way with a landscaped median, will be redesigned to accommodate an additional left-turn lane at Wilmington. West of the entrance drive intersection Glenn Curtiss will be improved as an Industrial Collector, connecting with "A" Street.

Private street improvements will include the entrance drive and "A" Street. The entrance drive will have four lanes, plus a median. "A" Street will have a 30-foot drive with ninety degree parking on both sides. Although both facilities are intended to function initially as private streets, they have been designed to permit possible future dedication as public streets. This conversion can be accomplished with only minor modifications (such as

removing parking from "A" Street, relocation of some parking area access drives and removal of the security guard check-point) which would be the responsibility of the developer and subject to the approval of the Director of Public Works, at the time of dedication.

Street Sections

The proposed street section improvements for the project are described in Table 3, below and shown on Exhibits 7 and 8. Both private and public street sections are identified for the entrance drive and "A" Street.

Table 3
STREET SECTIONS

Glenn Curtiss Street

- Segment - from Wilmington Avenue to entrance drive
- Designation - Industrial Collector
- Design - 4 - 5 travel lanes with 4' - 10' raised median
- C-C Width - 64' - 70' (tapered)
- R/W Width - 80' - 86' (tapered)

Glenn Curtiss Street

- Segment - from entrance drive to west boundary
- Designation - Industrial Collector
- Design - 4 travel lanes with left-turn lane
- C-C Width - 64'
- R/W Width - 80'

Entrance Drive (Private)

- Segment - entire
- Designation - private
- Design - 4 travel lanes with 8' raised median
- C-C Width - 56'
- R/W Width - 72' (easement reservation)

Table 3 (Cont'd)

Entrance Drive (Public, future option)

- Segment - entire
- Designation - Industrial Local (modified)
- Design - 4 travel lanes with 8' raised median
- C-C Width - 56'
- R/W Width - 72'

"A" Street (Private)

- Segment - entire
- Designation - private
- Design - 2 travel lanes with 90° parking
- C-C Width - 64'
- R/W Width - 64' (easement reservation)

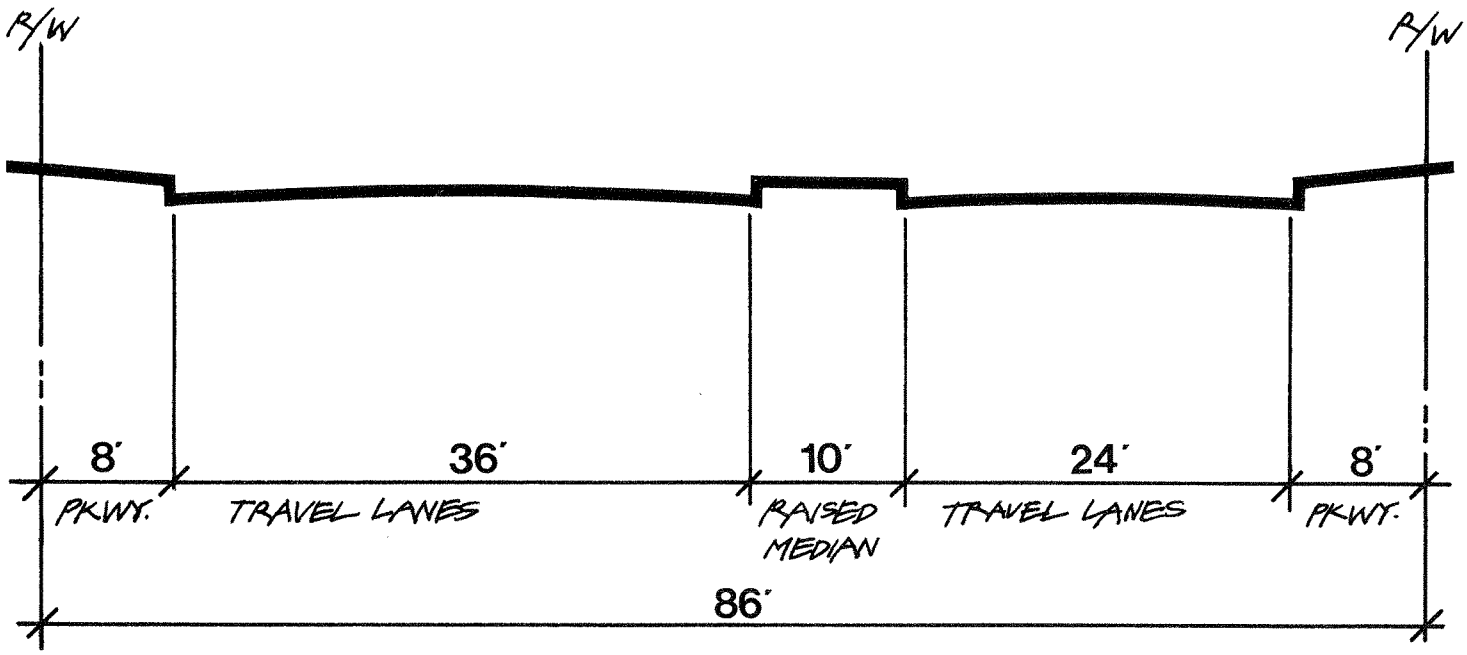
"A" Street (Public, future option)

- Segment - entire
- Designation - Industrial Local
- Design - 4 travel lanes
- C-C Width - 48'
- R/W Width - 64'

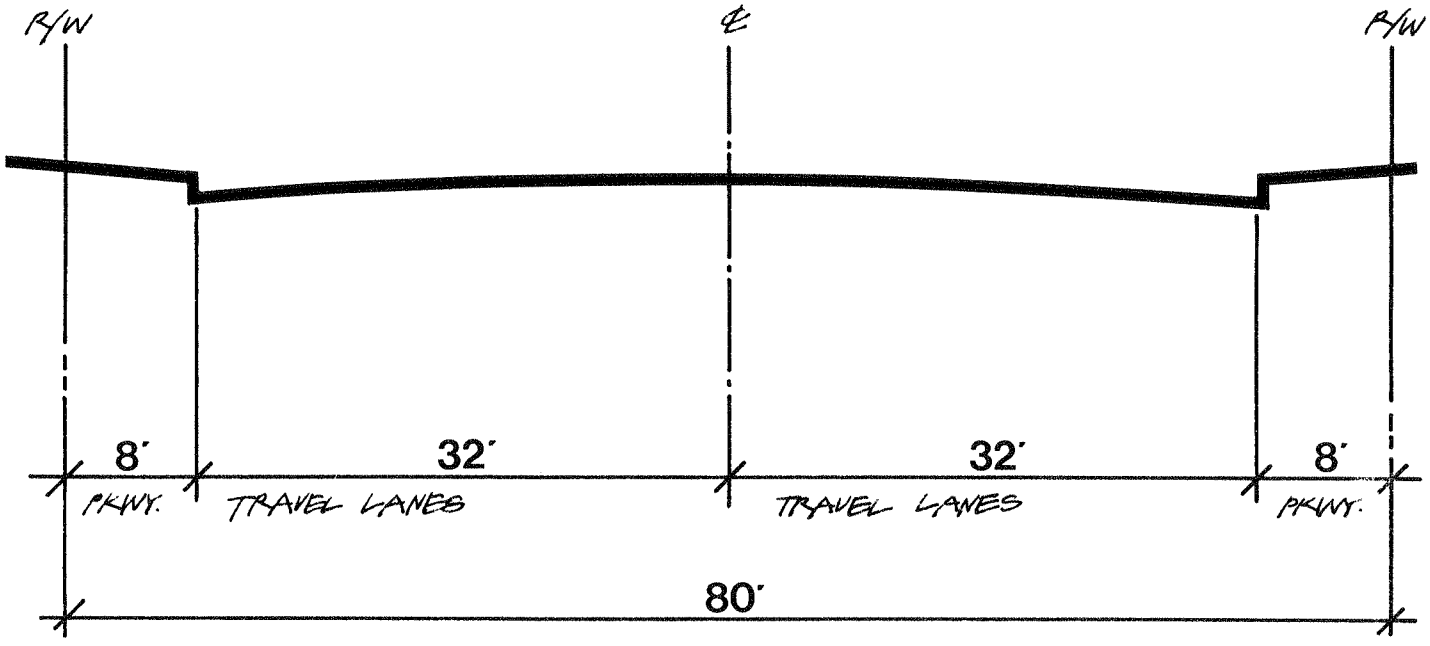
Traffic Controls

In addition to the street improvements described previously, traffic control measures have been identified to accommodate the future traffic volumes for the three phases of the project and for other surrounding development. For existing area traffic plus Phase A project development traffic conditions, a traffic signal may be warranted at the intersection of Glenn Curtiss Street and Wilmington Avenue.

For full development of the project (Phases B and C), plus existing traffic and other estimated future development traffic volumes, additional improvements may be necessary.



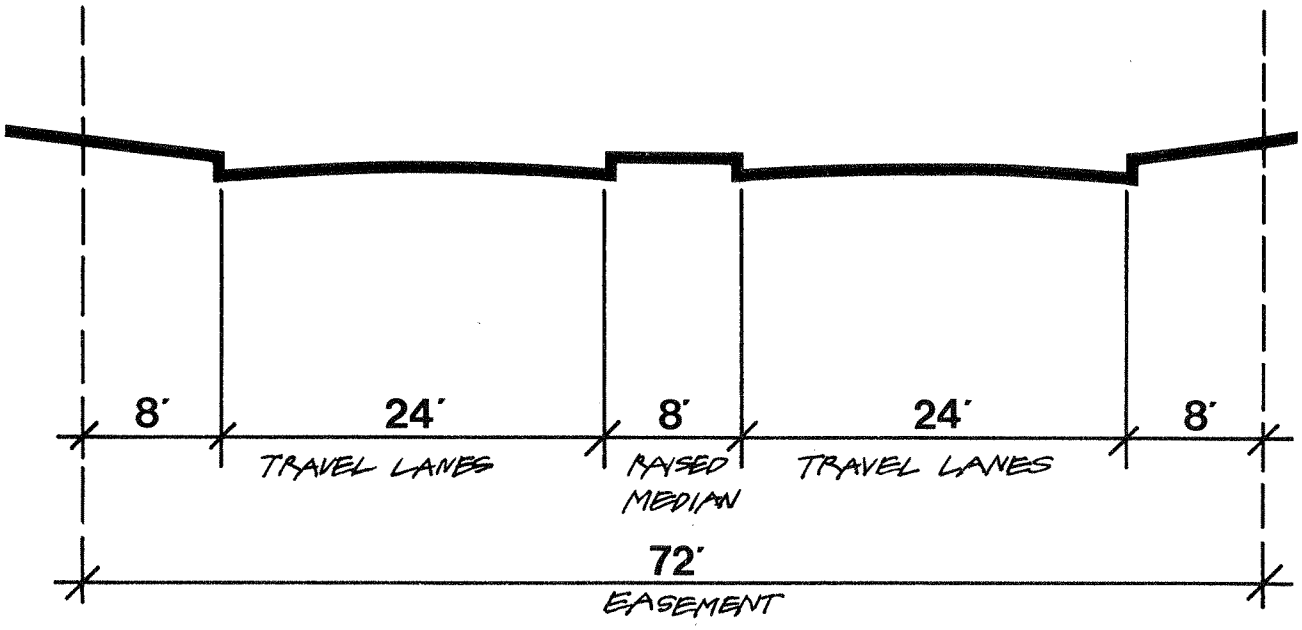
GLENN CURTISS @ WILMINGTON
(INDUSTRIAL COLLECTOR W/ RAISED MEDIAN)



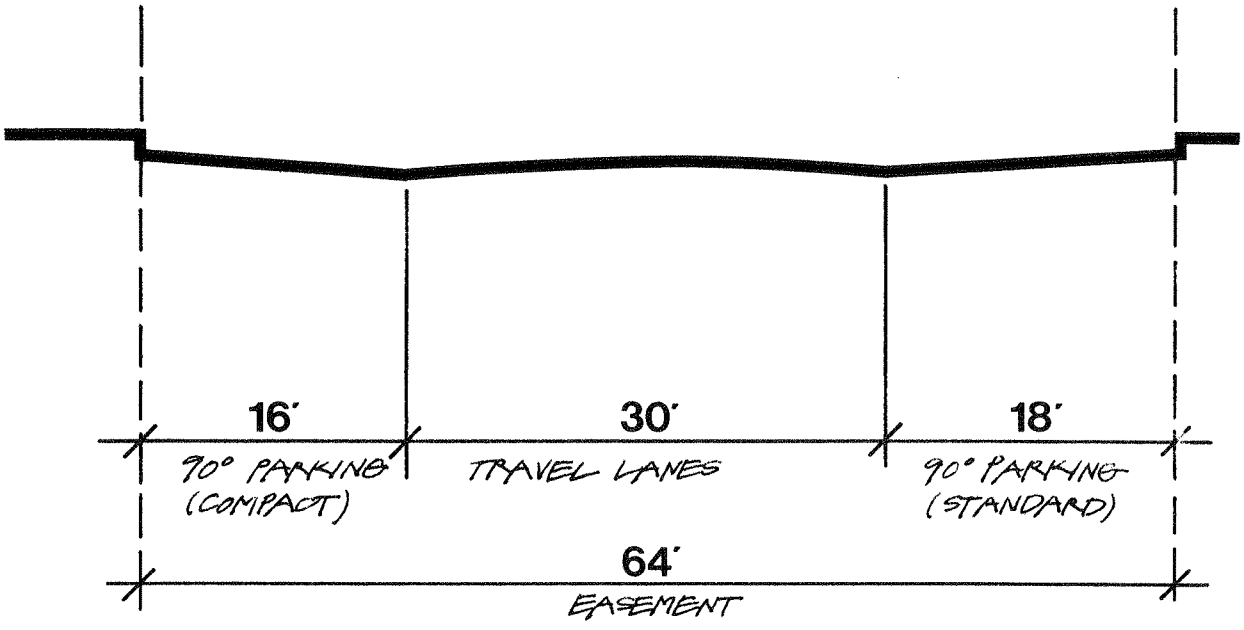
GLENN CURTISS, WEST OF ENTRANCE DRIVE
(INDUSTRIAL COLLECTOR)

PUBLIC STREET SECTIONS

EXHIBIT 7



ENTRANCE DRIVE



"A" STREET

PRIVATE STREET SECTIONS

EXHIBIT B

Traffic signals should be installed when warranted as determined by the warrants established by the State of California Department of Transportation (CALTRANS) Traffic Manual, Chapter 9.

Pedestrian Circulation

Onsite pedestrian circulation will be provided by a system of walkways connecting all office buildings. In addition to the internal pedestrian walkways, a jogging path will be installed around the perimeter of the project site. This path will be within the secured area of the project and will provide exercise and recreational opportunities for the development's employees.

The public right-of-way of University Drive contains a sidewalk on the south side of the street. The city-sponsored improvements to University Drive prior to the 1984 Los Angeles Olympics did not include the installation of the north sidewalk within the graded right-of-way section. Construction of this sidewalk will complete the public responsibility for the improvements to this dedicated arterial street.

Implementation

Implementation of the Dominguez Technology Centre - Phase One Specific Plan will require the construction of all the onsite streets shown on the Circulation Master Plan. Construction of these onsite street improvements will be accomplished by the project developer. The developer will also be responsible for those modifications to the onsite private streets necessary to

bring them into full compliance with public street standards should the developer elect to offer those streets for public dedication at some future date.

Traffic generated as a result of the development of the Dominguez Technology Centre - Phase One project will require the phased installation of offsite traffic improvements. The Glenn Curtiss traffic signal will be installed during the initial stage of development.

3.5 INFRASTRUCTURE CONCEPT PLAN

Intent

The Infrastructure Concept Plan describes the manner in which drainage, water and wastewater facilities will be provided for the Dominguez Technology Centre - Phase One Specific Plan. Private utility systems providing telephone, electricity, natural gas and solid waste collection are also mentioned. The networks for these private systems are not delineated in this plan; these will be installed during the phased site construction operation.

The proposed drainage, water and wastewater facilities have been designed to provide an adequate level of service for the maximum intensity of planned development of the specific plan area and to allow for the future development of the surrounding area.

Drainage Concept Plan

Drainage Master Planning -

Drainage Master Planning of the entire 400-acre Dominguez Technology Centre has been completed and hydrology studies have been approved by the Los Angeles County Engineer's Office. The Phase One Specific Plan area lies entirely within one drainage area of about 52 acres encompassing Phase One and a few acres up-stream to the north. This drainage area drains generally southerly and westerly to a county-constructed and maintained inlet structure at University Drive and Grandee Avenue. At the inlet structure run-off enters an underground storm drain system, maintained by the Los Angeles County Flood Control District, and flows generally southerly.

Proposed Drainage Facilities -

Proposed Drainage Facilities will consist of removing the existing inlet structure at University and Grandee and constructing an underground storm drain extension easterly along University, northerly through the specific plan area to Glenn Curtiss Street and westerly on Glenn Curtiss Street to a point near the northwesterly corner of the site. Surface run-off from areas northerly of Glenn Curtiss Street will enter the street and travel westerly to be picked up in catch basins at the up-stream terminus of the proposed storm drain. Run-off from the interior of the project area will be conducted southeasterly and southwesterly in the paved driveways to points to where the run-off can be intercepted by the underground storm drain systems. The up-stream end of the proposed storm drain will consist of 18-inch reinforced concrete pipe (RCP) laterals in Glenn Curtiss Street connected to a 24-inch

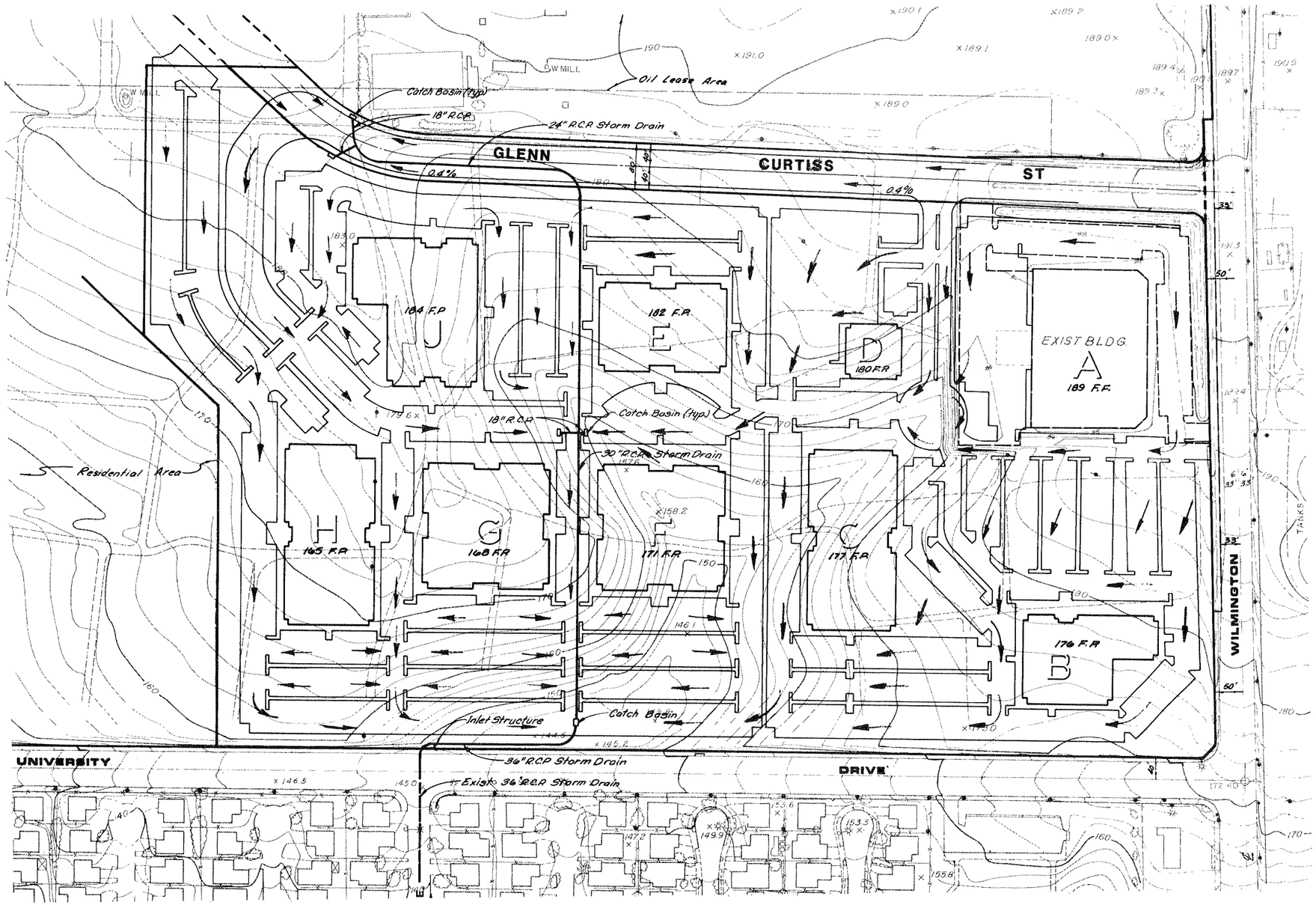
RCP main line. As the storm drain continues downstream it will increase in diameter to 36 inches to account for the additional run-off collected. All storm drain systems are to be designed to the standards of the Los Angeles Flood Control District so that the system could later be turned over to the District for maintenance.

During the first phase of development (Phase A) it is anticipated that this storm drain described above will not be constructed, but rather that the first phase of street and site improvement will sheet-flow westerly to the existing swale in the property and southerly to the County inlet structure. The onsite portions of the storm drain described above will be constructed during the second phase of development with permanent inlet structures constructed in the Phase B area and temporary inlet structures constructed to accommodate Phase C and the run-off from Glenn Curtiss Street. During the third phase of development, when Glenn Curtiss Street is extended to its immediate planned terminus, the in-street portion of the storm drain system will be completed.

Water System Concept Plan

Water System Master Planning -

The entire Dominguez Technology Centre area is surrounded by 12-inch to 24-inch water mains owned and operated by Dominguez Water Corporation. These mains are fed by a storage tank complex and booster station on the east side of Wilmington Avenue directly across from the specific plan area in the storage tanks, and, in turn, fed by a connection to a 72-inch main owned and operated by the Metropolitan Water District at Wilmington Avenue and Victoria Street.



DRAINAGE

EXHIBIT 9

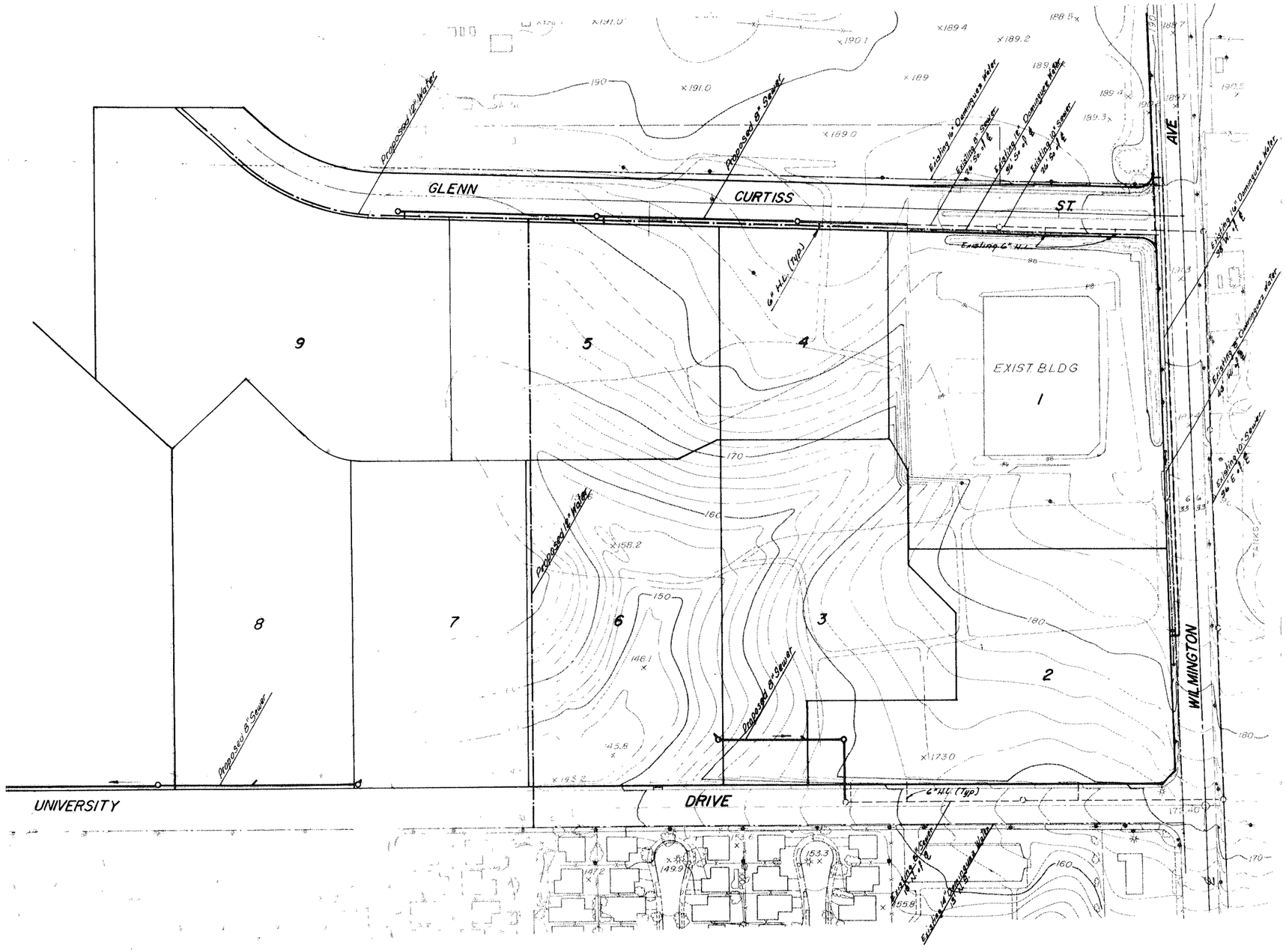
Immediately abutting the project area are a 14-inch main in University Drive, a 16-inch main in Wilmington Avenue, and a 12-inch main in Glenn Curtiss Street from Wilmington Avenue to approximately 400 feet westerly.

Proposed Water Facilities -

Proposed Water Facilities will consist of a westerly extension of the existing 12-inch main in Glenn Curtiss and a southerly interconnection between this main and the 14-inch main in University Drive. Fire hydrants will be installed at approximately 300-foot intervals along Glenn Curtiss and the above described facilities will be turned over to Dominguez Water Corporation for operation and maintenance. These systems will be designed to deliver a fire flow of 5,000 gpm at 20 psi residual pressure.

Additional onsite fire protection systems, with fire hydrants, will be designed to the standards of the Los Angeles County Fire Department. The onsite fire protection and domestic water systems will be owned and maintained privately.

During the Phase A development no new offsite water main installations are anticipated. During the second phase of development, the main in Glenn Curtiss Street will be extended westerly and the north-south connection to University Drive will be made. During the third phase of development, the main in Glenn Curtiss will again be extended westerly to the northwesterly terminus of the immediately planned street.



WATER & WASTEWATER

EXHIBIT 10

Wastewater Concept Plan

Wastewater Master Planning -

Existing sanitary sewer systems in the planning area consist of 8-inch and 10-inch mains in Glenn Curtiss Street and University Drive which flow easterly to 10-inch and 12-inch mains in Wilmington Avenue. The Wilmington Avenue system flows southerly to Del Amo Boulevard where effluent is picked up by a 24-inch trunk main which is owned and operated by the Sanitation District of Los Angeles County. The Wilmington Avenue sewer main is owned and maintained by the County of Los Angeles and the mains extending westerly on Glenn Curtiss Street and University Drive are owned by the City of Carson but maintained by the County. The City-owned system in this area is capable of accommodating effluent from approximately 670,000 square feet of office buildings, based on County design criteria of 200 gallons per day per 1,000 square feet of office space. Since the ultimate build-out is planned to include approximately 770,000 square feet of office space, additional systems will need to be constructed as the development proceeds.

The existing system on University Drive is planned to accommodate a substantial portion of the proposed project and only onsite lateral connections have yet to be installed. The existing building at the southwest corner of Glenn Curtiss Street and Wilmington Avenue is already connected to the main in Glenn Curtiss.

Proposed Wastewater Facilities -

The completion of the Phase A development will necessitate only a short (200± foot) westerly extension of the Glenn Curtiss Street sewer and the construction of an onsite lateral. Phase B, likewise, will again necessitate a westerly extension of the Glenn Curtiss sewer and the construction of an onsite lateral. Building J in Phase C will again be handled by westerly extension of the Glenn Curtiss sewer but the development of Buildings G and H in Phase C will necessitate construction of substantial amounts of offsite sewer main. This offsite sewer for Phase C will begin as an 8-inch main flowing westerly along University Drive and then southerly in Central Avenue to a connection to the same Sanitation District trunk main in Del Amo Boulevard which has been described above. This offsite main will increase in size from 8-inch to 12-inch as it proceeds westerly on University Drive and picks up the design contributions from additional areas of the Dominguez Technology Centre.

Utilities

Telephone Service -

Telephone service will be provided by Pacific Bell. All telephone cables will be buried underground.

Electrical Service -

Electrical service will be provided by Southern California Edison. All power lines will be subsurface.

Natural Gas Service -

Natural gas service will be provided by Southern California Gas Company.

Solid Waste Disposal Service -

Solid waste collection and disposal service will be provided by a private contractor under individual agreements with the building tenants.

Implementation

Drainage Facilities -

The onsite storm drain systems will be designed and constructed by the developer in a phased sequence tied to the project development. Ultimately the system will be turned over to the Los Angeles County Flood Control District for maintenance.

Water Facilities -

The proposed water facilities for the project will be implemented by the developer in a phased sequence tied to the project build-out. Water system facilities in Glenn Curtiss Street (main and fire hydrants) will be operated and maintained by the Dominguez Water Corporation. Fire protection and domestic water systems for the individual lots will be owned and maintained privately.

Wastewater Facilities -

Implementation of the sewer system necessary to service the majority of the project will require only minor extension of the Glenn Curtiss sewer and construction of the onsite laterals. These improvements will be phased to

coincide with the progress of project development and will be funded by the developer. Ownership of the Glenn Curtiss sewer extension will be transferred to the City of Carson, and maintenance will be performed by the County Sanitation District.

The offsite sewer improvements necessary to service the final development of Phase C (the 8-inch and 12-inch lines to be placed in University Drive and Central Avenue) will also be the responsibility of the developer. These lines will ultimately be owned by the City of Carson and maintained by the County Sanitation District. The Sanitation District will be responsible for providing adequate capacity in the trunk sewer to accept discharges from the final phase of this specific plan as well as the future development of the remaining Dominguez Technology Centre.

3.6 PHASING CONCEPT PLAN

Intent

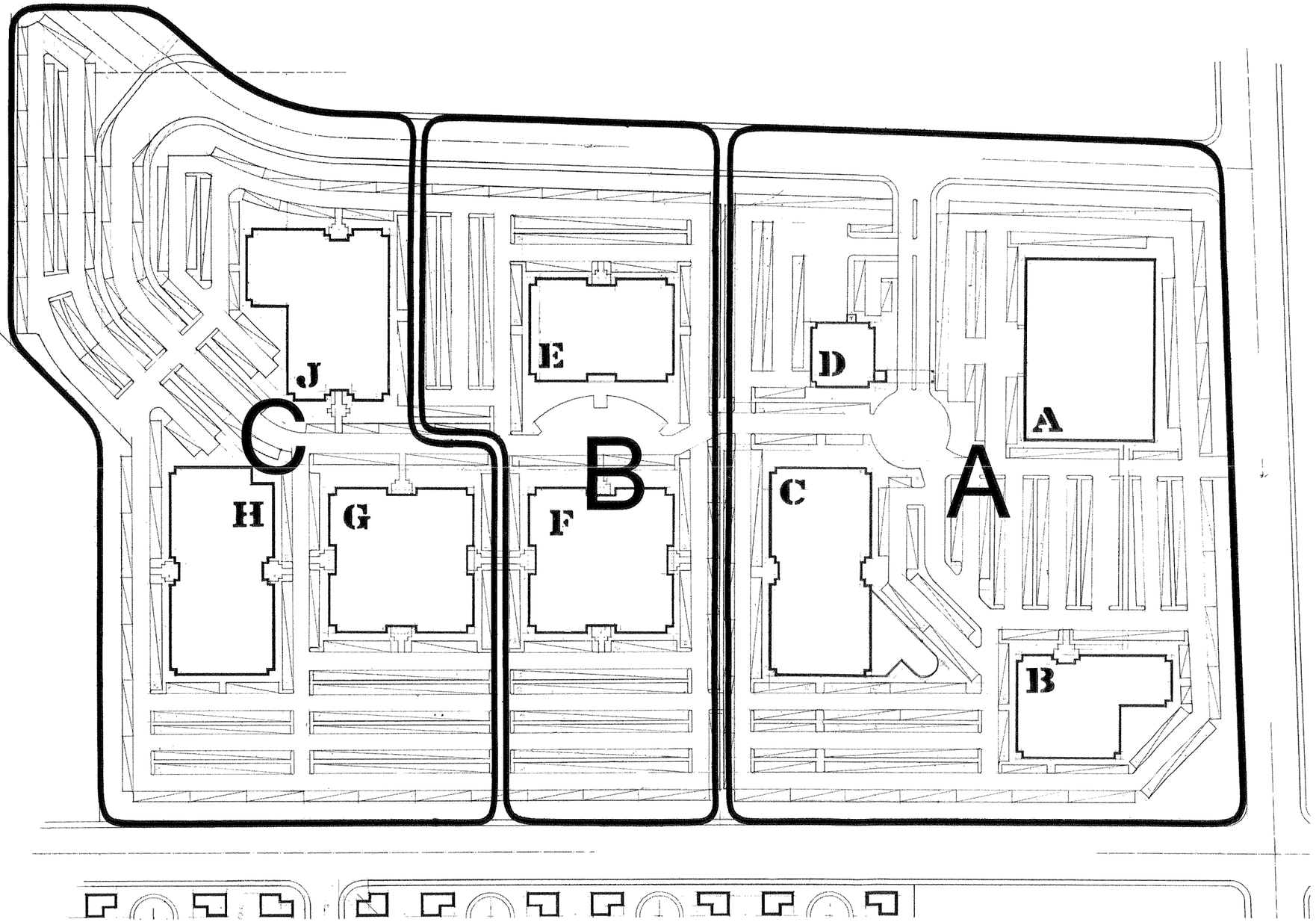
The Phasing Concept Plan describes the incremental development of the Dominguez Technology Centre - Phase One Specific Plan which will be implemented over a period of several years. The extension of public facilities, services and utilities will be programmed to support the sequential stages of office development. The overall phasing for the project, consisting of three major development stages, is shown on Exhibit 11 and is summarized below.

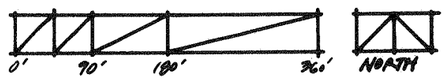
Development Stages

Phase A - The development area for Phase A includes the eastern 19± acres of the site. This initial development stage will consist of a total of 322,000 square feet of floor area in four buildings, a security guard entrance way, parking for approximately 1,250 cars, perimeter fencing and landscaped open space/setback areas. In addition, Glenn Curtiss Street will be extended to the western limits of Phase A (a distance of 800± feet from the centerline of Wilmington Avenue) and improved to provide for a third outbound lane. A secondary access to Wilmington Avenue will also be constructed to allow for right-in/right-out only turning movements to facilitate ingress and egress during peak hours.

The perimeter fence will be constructed of decorative wrought iron 8 feet high with 2-foot square pilasters spaced 20 - 30 feet apart. The west boundary of Phase A will be secured with an 8-foot high temporary fence which will be relocated as successive stages are developed. The jogging path will be constructed within the secured perimeter of the first phase and be extended as the latter stages are developed.

Major infrastructure improvements include the extension of the Grandee storm drain into the site; the extension of the Glenn Curtiss sewer line and construction of onsite laterals; and the extension of the Dominguez Water Corporation water main in Glenn Curtiss along with the onsite fire protection and domestic water system facilities.





PHASING

EXHIBIT 11

Offsite improvements to be installed during this phase include the installation of a traffic signal at Glenn Curtiss and Wilmington.

The currently anticipated time frame for Phase A will span approximately eighteen months. Occupancy of the first buildings (Buildings A and D) is targetted for January 1987, followed by Building B in July 1987. January 1988 is forecast as the occupancy for the last building (Building C) of Phase A.

Phase B - The second stage of development encompasses approximately 10± acres and includes plans for approximately 200,000 square feet of additional office space and parking for 800± cars. Glenn Curtiss and "A" Streets will be extended during this phase, as will the permanent perimeter fencing and the jogging path. The temporary fence will be relocated to the west boundary of Phase B. The sewer and water systems in Glenn Curtiss will be extended at the time of street construction.

The time frame for the second phase of development is more difficult to predict. Present forecasts anticipate the completion of improvements and occupancy of buildings between 1989 and 1992.

Phase C - The last development stage of the Dominguez Technology Centre - Phase One Specific Plan (16± acres) consists of approximately 270,000 square feet of office and R&D space. parking for approximately 1,100 cars and completion of the circulation system, infrastructure facilities and permanent security fencing.

Additional sewer capacity necessary to service Buildings G and H of Phase C will require the construction of a new 8 - 12-inch offsite sewer line in University Drive, west from the site to Central Avenue and then south to Del Amo Boulevard. At this point it will connect to the trunk sewer in Del Amo Boulevard. The new University/Central sewer line will be the responsibility of the project developer.

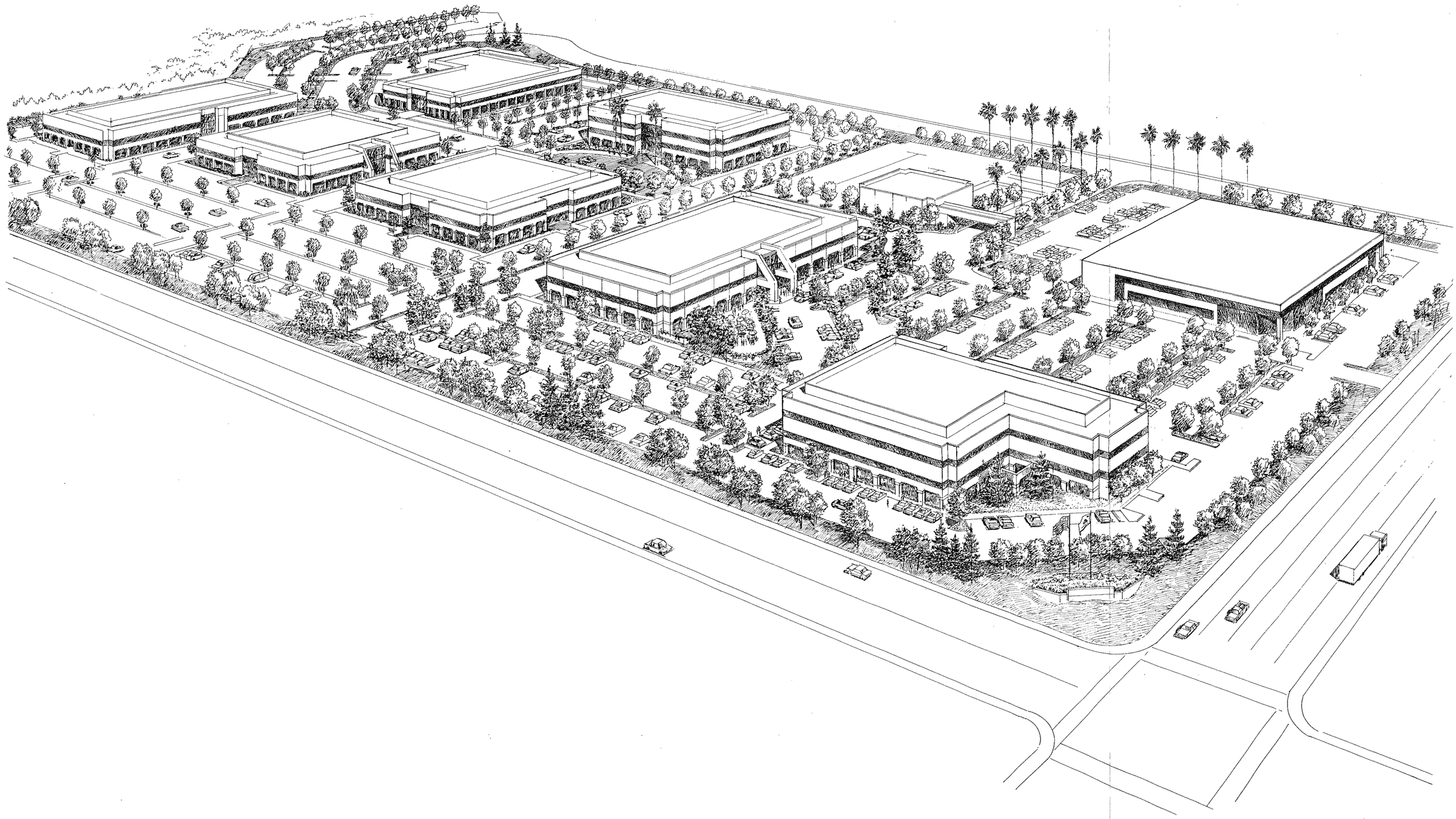
The completion dates for this phase are estimated to fall in the years between 1990 and 1994.

3.7 DESIGN GUIDELINES

Intent

The design guidelines set forth in this section of the Dominguez Technology Centre - Phase One Specific Plan are established to guide subsequent detailed planning and design at the Site Plan/Design Review level. These concepts and guidelines are intended to promote a consistency of character and theme in the built environment which enhances the visual and aesthetic quality of the planning area. Guidelines for architectural elements and landscape treatment are established to ensure a unified appearance of the individual staged developments within the specific plan and to set the theme for the future development of the entire Dominguez Technology Centre complex.

The design concepts and guidelines are organized into three topical areas:



PERSPECTIVE RENDERING

EXHIBIT 12

- Architecture
- Landscape
- Grading

a. Architectural Guidelines

The theme for the specific plan is expressed as contemporary architecture with an introduction of early California building materials and colors to link the development to the area's heritage.

The following guidelines are established to create that theme for the physical design of the Dominguez Technology Centre - Phase One. It is intended that architectural and landscape consistency be maintained throughout the specific plan.

1. Building Form

- Special consideration shall be given to architectural emphasis of pedestrian areas such as entryways, walkways and courtyards (e.g., concrete trellis, low parapet walls).

- Building facades abutting streets shall not have the appearance of excessive massing or shading.

- Buildings clustered around a pedestrian area, such as a courtyard/plaza, shall be designed to minimize excessive shading and maximize light exposure.

- The juxtaposition and configuration of building form shall be given careful attention so as not to create a venturi or wind tunnel effect.

- Orientation, configuration and location of building masses shall emphasize visual corridors from Wilmington Avenue to courtyards or plaza areas.

- Long, uninterrupted exterior walls shall be avoided on all structures. Walls shall incorporate relief features to create an interesting blend with the landscaping, other buildings and the casting of shadows.

- Architectural design shall take full advantage of energy-efficiency concepts, such as natural heating and/or cooling.

- Due to the visibility from within the complex, special consideration should be given to rooftop design and screening of rooftop mechanical equipment. Such equipment shall be fully enclosed where required by code.

- Roof flashing, rain gutters and downspouts, vents and other roof protrusions shall be screened from view or finished to match adjacent materials and/or colors.

- The utilization of glass areas shall be encouraged in order to extend interior space to the outside, and to create a visual link with the exterior setting of courtyards.

- Walls and/or fences shall be used to screen utility and trash enclosures and outdoor storage. These surfaces shall match the exterior finish of any structure with which they are in contact. Trash enclosures shall also have decorative wood roof grill.
  (See Exhibit 13).

2. Exterior Building Materials

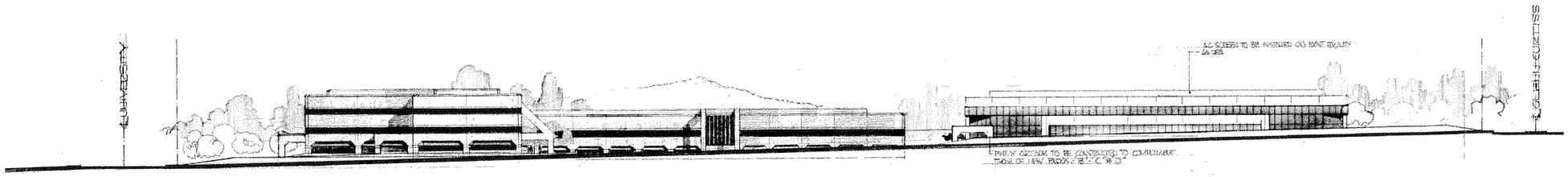
The following materials are encouraged to be used as the predominant exterior wall materials throughout:

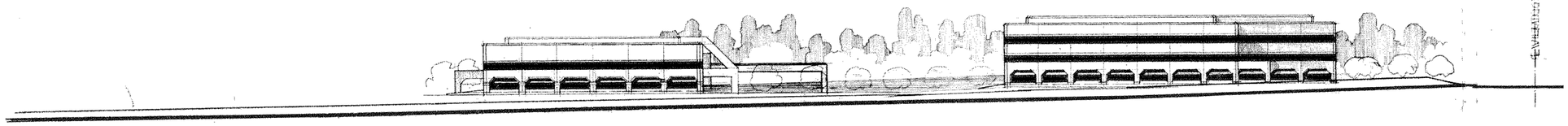
- Concrete, concrete masonry, block, glass block and brick: these shall be used in a manner which will express its natural color and characteristics, painted or an integral color ranging from off-whites through earth tones.

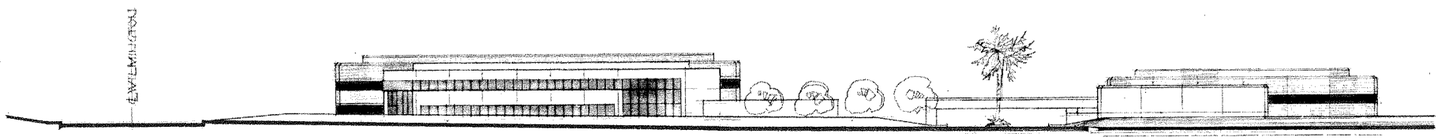
- Stucco: smooth finish in a color ranging from off-whites through earth tones may be used.

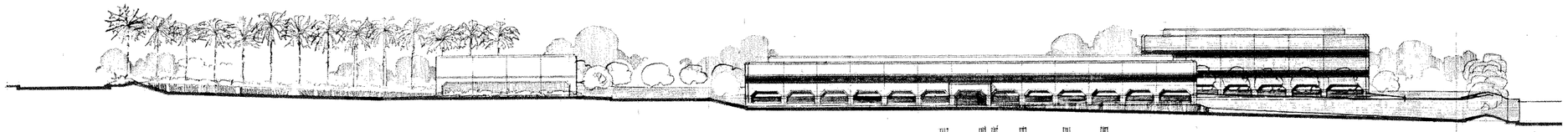
The following materials are all encouraged:

- Hand-made terra cotta pavers
- Wall accent tile

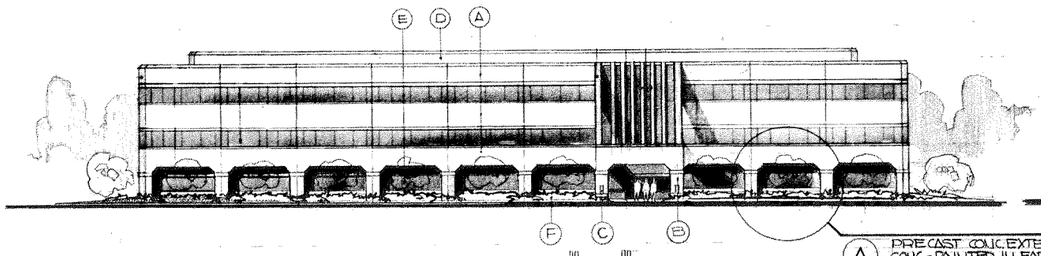




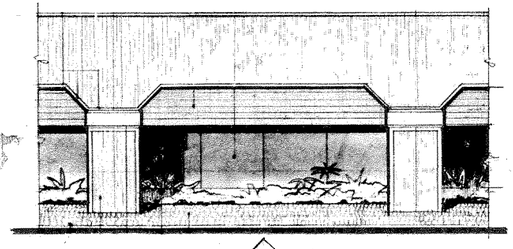


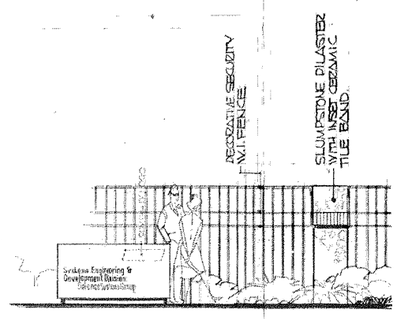


N-S SECTION THRU SITE VIEWING "D","C"&"B"



N. ELEV. BLDG. "B"
SCALE: 1/8"=1'-0"





(A) PRECAST CONC. EXTERIOR WALL CONC.- PAINTED IN EARTH TONES
(B) CONCRETE ENTRY ARBOR
(C) BOLLARD LIGHTING
(D) ROOF MOUNTED EQUIPMENT ENCLOSURE
(E) 1/4" TINTED PLATE GLASS GLAZING SYSTEM
(F) MOUNDED LANDSCAPING

TYPICAL BUILDING IDENTIFICATION GROUND SIGN
PILASTER DETAIL - PERIMITER SECURITY FENCE

ARCHITECTURAL ELEVATIONS & DETAILS

EXHIBIT 13

- Glass cadding
- Wood wall forms as an accent material

The use of other consistent exterior materials is also encouraged, provided that there is consistency in the use and expression of materials.

b. Landscape Guidelines

The landscape concept for the Dominguez Technology Centre - Phase One addresses four major design elements to assure a complementary relationship to the architectural theme of the specific plan as well as the surrounding areas. These elements are described in the following section, along with appropriate guidelines, and consist of:

- General Design Guidelines
- Landscape Zones
- Plant Materials and Application
- Hardscape Elements

The Landscape Concept Plan for the specific plan area is shown on Exhibit 14.

1. General Design Guidelines

- The selection, placement and arrangement of plant materials and other landscape design elements should reflect and enhance the theme of the Dominguez Technology Centre.

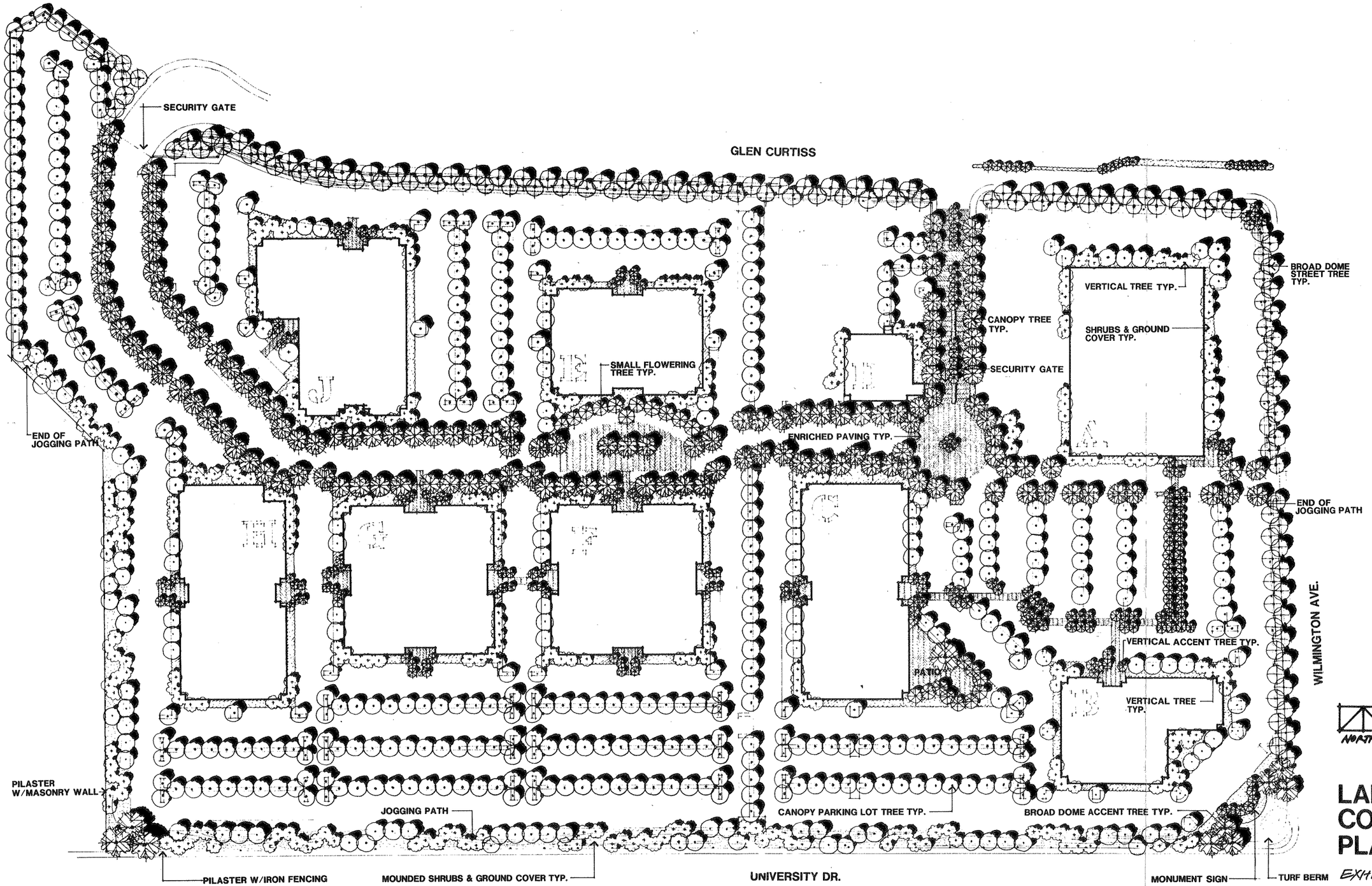
- Landscape features should be used to articulate and reinforce the significant project elements including entries, arrival zones, street corridors and pedestrian areas. Distinctive or colorful accent trees should be the primary design element.

- The recent heritage of the site's former use should be reflected through the use of brightly colored ground covers in appropriate locations.

- Deciduous canopy trees should be used in pedestrian courtyards or patios to mitigate the local microclimate year-round.

- Canopy shade trees should be used in parking areas to provide relief from heat and glare and to offer visual relief.

- All landscaped areas should be equipped with permanent automatic irrigation systems and maintained in a healthy, vigorous condition.



LANDSCAPE CONCEPT PLAN

EXHIBIT 19

- Landscaping should complement architectural elements. Building masses should be softened by the judicious placement of foliage masses, sufficient in scale to modulate the expansive wall plane.

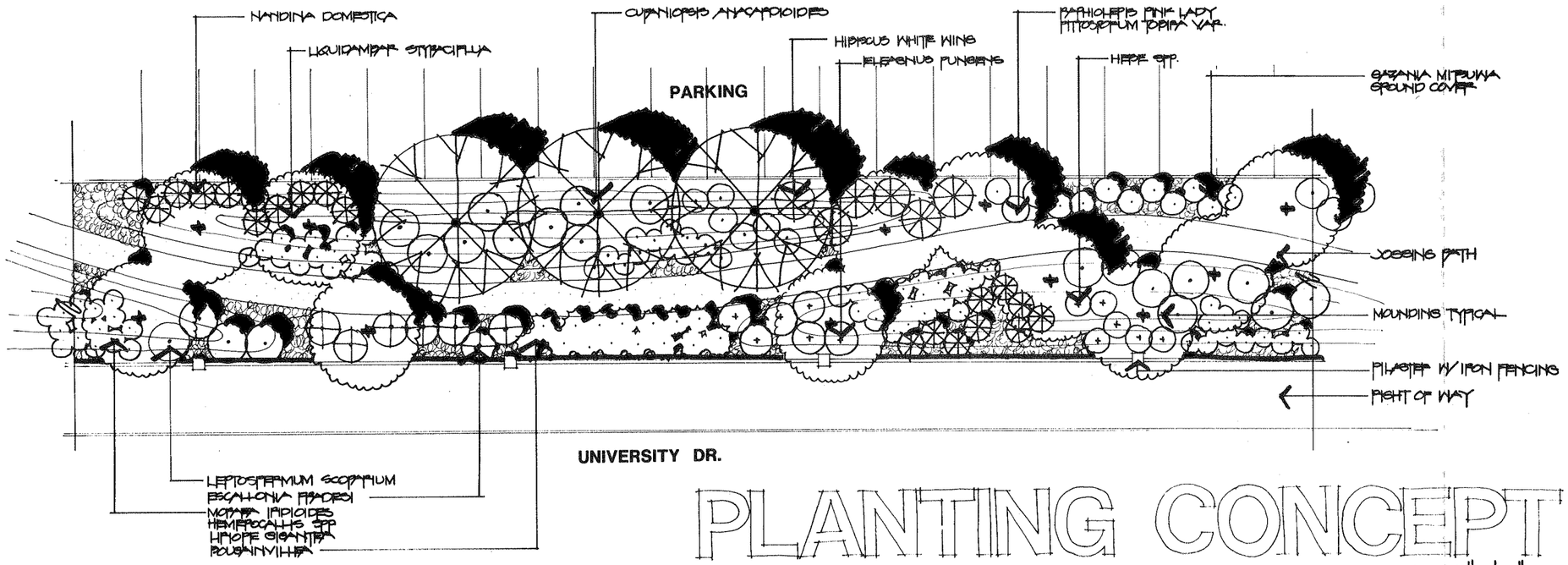
- Street tree planting should be integrated with the landscape treatment of setback areas. Mounded earth forms with shrubs and ground cover or turf are encouraged in the setback areas to provide a natural screen of parking areas. Where turf is used, mounded earth forms should not exceed a 3:1 slope condition to facilitate maintenance.

- The urban character of the site should be reflected in the "structured" or formal spatial arrangement of the predominant landscape elements.

2. Landscape Zones

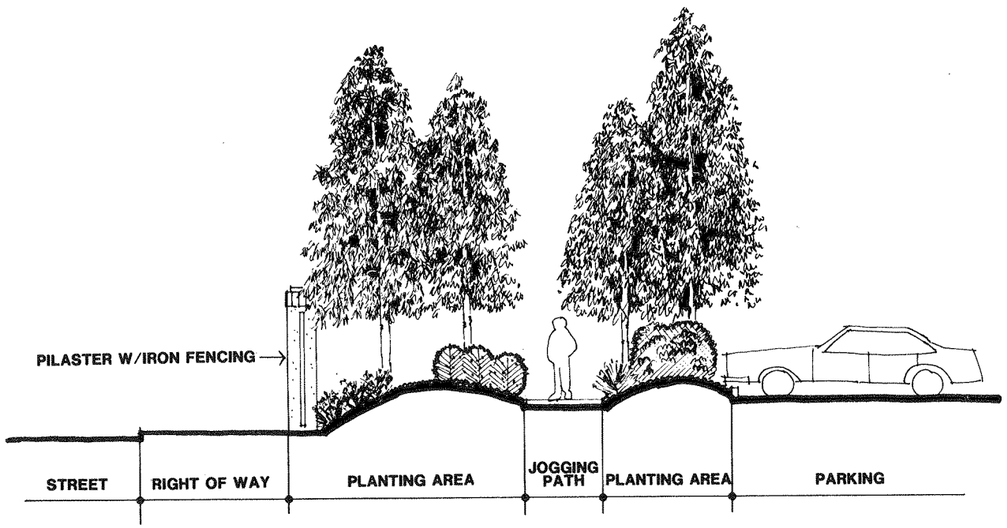
University Drive

The landscape along University Drive will provide an aesthetic visual buffer from the residential area to the south. The landscape will be natural in concept with sweeps of various flowering shrubs and ground cover, deciduous and evergreen trees (pyramidal, canopy type) reinforced by undulating mounds. (See Exhibit 15.)



PLANTING CONCEPT

SCALE: 1/8" = 1'-0"



SECTION

SCALE:

UNIVERSITY DRIVE CONCEPT

EXHIBIT 13

Wilmington Avenue and Glenn Curtiss Street

The streetscape along these two streets will be architectonic in concept with the use of a formal tree pattern and an architectural mounding system with turf. The tree will be a deciduous type with a conical form. (See Exhibit 16.)

Interior Streets

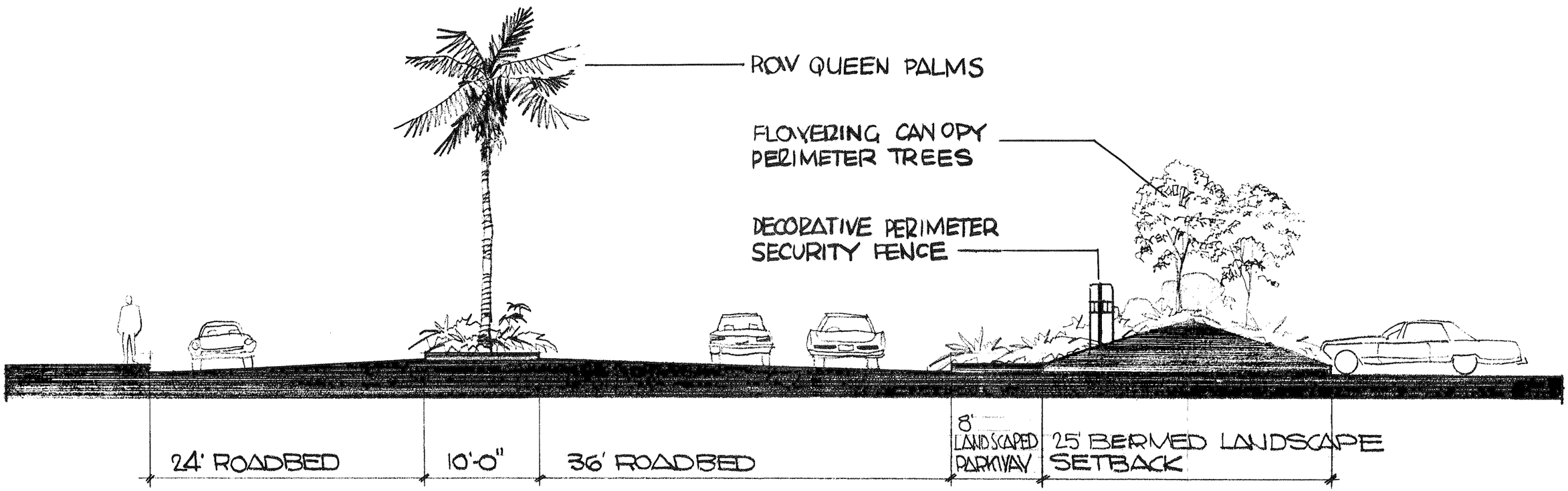
The interior street system which interconnects the buildings and parking areas will be reinforced with the use of a canopy tree form, deciduous in nature with flowers, set in a formal pattern (spacing) to give direction and a defined edge to the major vehicular circulation. (See Exhibit 17.)

Parking Areas

Parking lot trees will be a canopy tree form, evergreen in nature set in a formal patern to delineate parking patterns and to provide optimum shade and protection to the vehicles. Colorful ground cover and low-growing shrubs will be used in the medians.

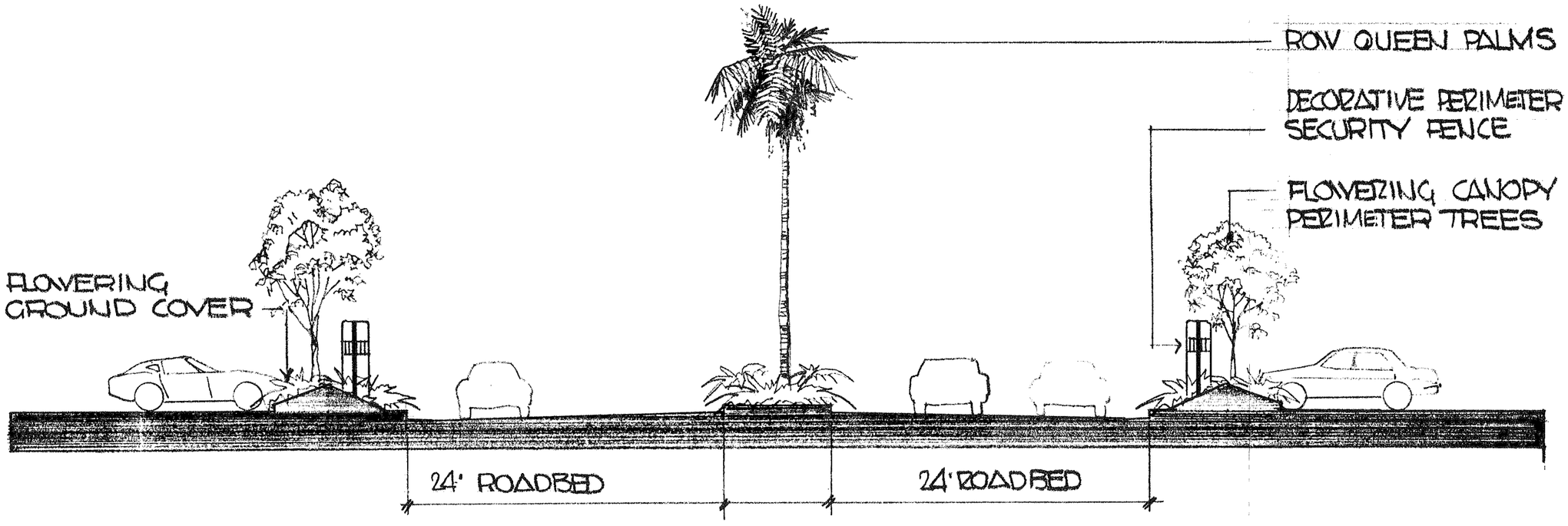
Street Medians

Street medians will consist of enriched paving, annual color and palm trees.



GLENN CURTISS SECTION

EXHIBIT 16



ENTRANCE SECTION

EXHIBIT 17

Building Entrances

All building entrances will be accentuated with palm groves and gardenesque plantings. Foundation plantings will consist of medium shrubs, accent shrubs, vertical and canopy trees to break up expanses of building and colorful ground covers.

Pedestrian Areas

Outdoor patio areas will have deciduous flowering trees for display and winter sun, flowering shrubs and ground cover.

3. Plant Materials and Application

The recommended list of plant material species appropriate for implementing the project theme and landscape concept is contained in Table 4. The Plant Matrix, which follows, also identifies the suggested zonal application of each plant type within the specific plan area.

Table 4

PLANT MATRIX

TREES

BOTANICAL NAME	STREET TREE	PARKING	MEDIAN	BUILDING
Chamaerops humulis				●
Cocos plumosa			●	●
Cupaniopsis anacardioides		●		●
Eucalyptus spp.				●
Ficus benjamina				●
Ficus ribiginosa				●
Jacaranda acutifolia	●			●
Koelreuteria paniculata	●			
Lagerstroemia indica				●
Liquidambar styraciflua				●
Melaleuca leucadendra				●
Phoenix roebelinii				●
Platanus acerifolia	●			
Prunus blieriana				●
Pyrus kawakami		●		●
Seaforthia elegans			●	●

Table 4 (con't.)

PLANT MATRIX

SHRUBS

BOTANICAL NAME	ACCENT	FOUNDATION	BACKGROUND	SCREEN	PERIMETER	PARKING
Abelia spp.		●	●		●	
Agapanthus africanus	●				●	●
Alsophila cooperi	●	●	●			
Asparagus sprengeri	●					●
Azalea	●	●				
Bougainvillea	●				●	
Calliandra inequilatera		●	●	●	●	
Carissa spp.		●			●	●
Coprosma repens	●					●
Dicksonia antarctica	●	●				
Eleagnus pungens		●	●		●	
Escallonia fradesi		●	●	●	●	
Hebe spp.	●	●			●	●
Hemerocallis spp.	●				●	
Hibiscus spp.		●	●	●	●	
Ilex spp.		●				
Leptospermum spp.			●		●	
Liriope gigantea	●				●	
Moraea iridioides	●				●	
Nandina domestica		●	●		●	
Photinia fraseri		●	●	●	●	
Pittosporum tobira var.		●			●	●
Raphiolepis spp.		●			●	●
Ternstroemia japonica		●				
Xylosma congestum			●	●	●	

Table 4 (con't.)

PLANT MATRIX

GROUNDCOVER

BOTANICAL NAME	ACCENT	FOUNDATION	BACKGROUND	SCREEN	PERIMETER	PARKING
Campanula		●				
Gazania		●			●	●
Potentilla		●			●	
Vinca Minor		●			●	
Rye/Bluegrass (turf)					●	

4. Hardscape Design Elements

Hardscape design elements include walls, fences, paving, lighting, benches, bollards, trash receptacles and signage.

Materials to be used for key hardscape elements are specified below. All materials utilized for walls, fences, paving, lighting and street furniture shall be coordinated with and complementary to architectural design details and materials.

a. Walls and Fences

- Concrete masonry: integral color, 4-inch coursing maximum.
- Brick in earth tones.
- Concrete: textured, bush-hammered, rock salt, sandblasted, painted in earth tones.
- Wrought iron.
- Stucco: integral or painted color (same as building stucco color).
- Chainlink with wood slats (utilized only where a temporary movable fence is needed.)

b. Paving

- Concrete, integrally colored, rock salt, exposed aggregate finish with brick or wood edges, or stamped concrete.
- Paving brick in earth tones.

- Paving brick tile in earth tones.
- Textured concrete in earth tones.
- Precast rough-textured pavers, integrally colored.
- Quarry tiles in earth tones.

c. Lighting

- Onsite roads/parking area light standards (architecturally compatible; to be shielded from residential zones).
- Pedestrian pathways (bollard lights).
- Pedestrian plaza/courtyards (bollard lights).
- Landscape lighting (spot or flood lights concealed in landscaping).
- Signage lighting (self-contained or concealed in landscaping.)
- Building entrance lighting (recessed architectural incandescent).

d. Signage

- Signage should be compatible with the visual image and architectural theme within the specific plan area and should identify the following elements:

  - Primary and secondary entry signs.
  - Vehicular and pedestrian directional signage.
  - The individual buildings by number and name.

- Pedestrian and vehicular orientation should be considered.
- Human scale should be maintained.
- Signage for individual buildings should not be allowed to conflict or interfere visually with other signage.
- Signage should contain only that information necessary to identify the primary elements on the lot on which the sign is located.

c. Grading Design Guidelines

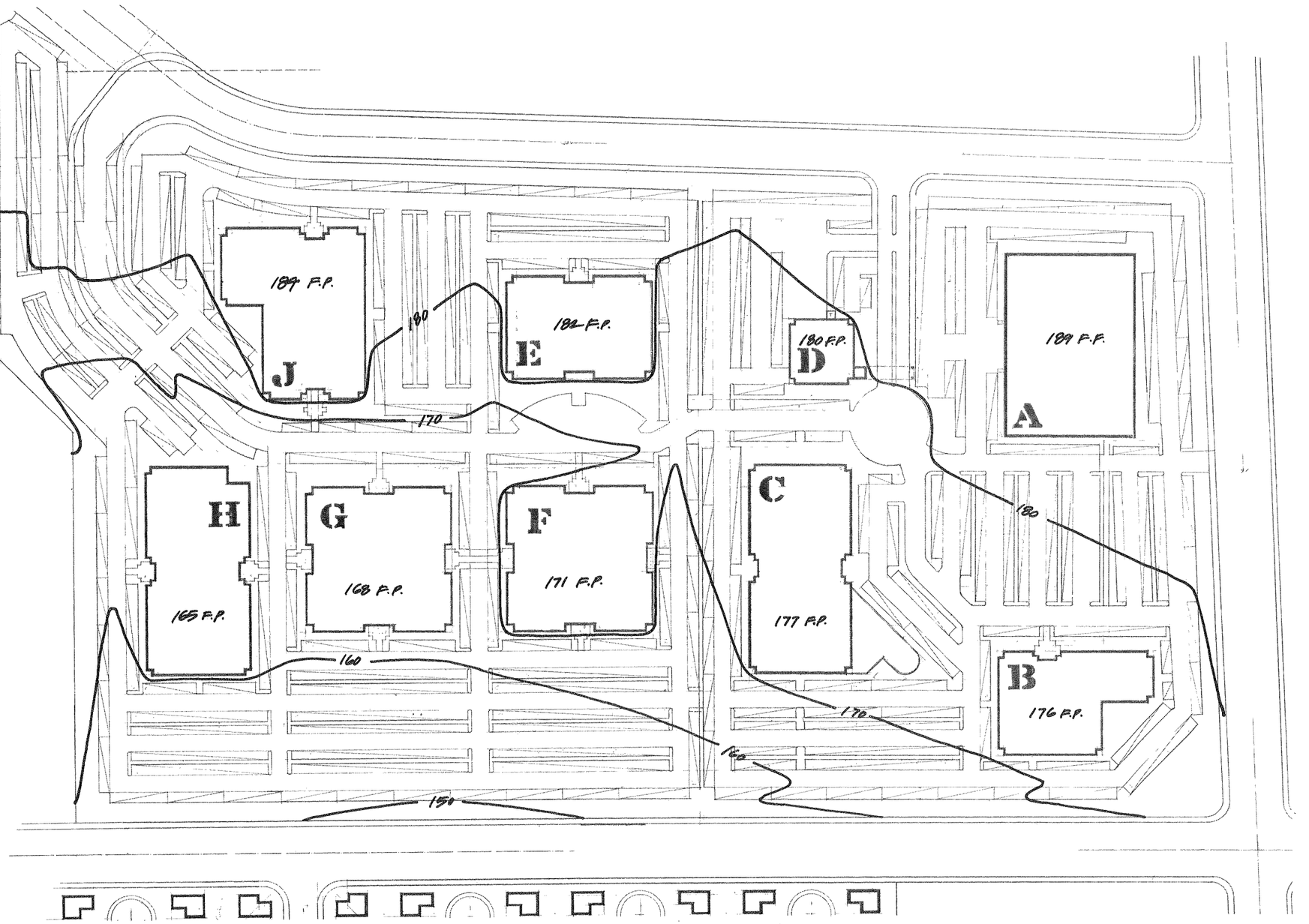
The grading concept for the specific plan area seeks to achieve a balance between the desire to reflect the site's natural topographic features and the need to provide positive drainage and to create soundly engineered development surfaces for buildings, streets and parking.

The Grading Concept Plan is shown on Exhibit 18. Exhibit 19 shows the relationship of the proposed concept with the surrounding areas.

The following guidelines support the grading concepts:

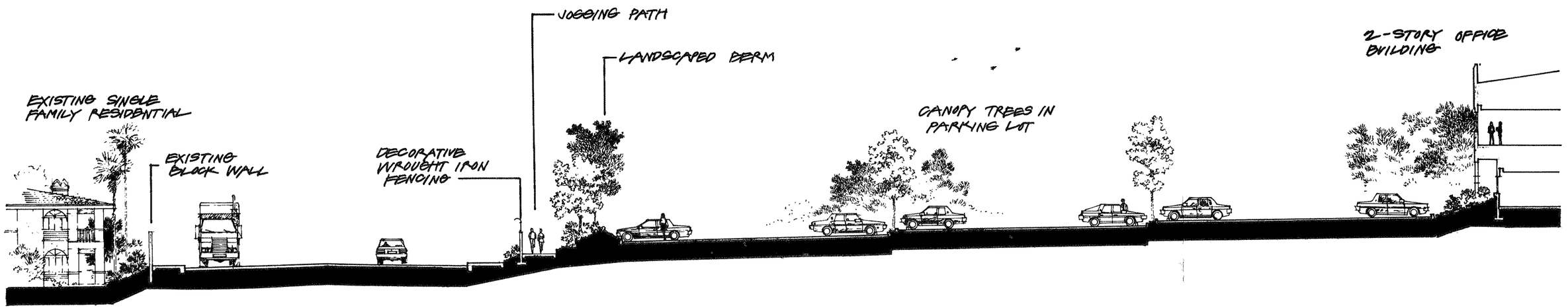
1. All graded areas not slated for immediate development should be planted or landscaped to minimize soil erosion.

2. The maximum gradient for any slope should not exceed a 2:1 inclination.

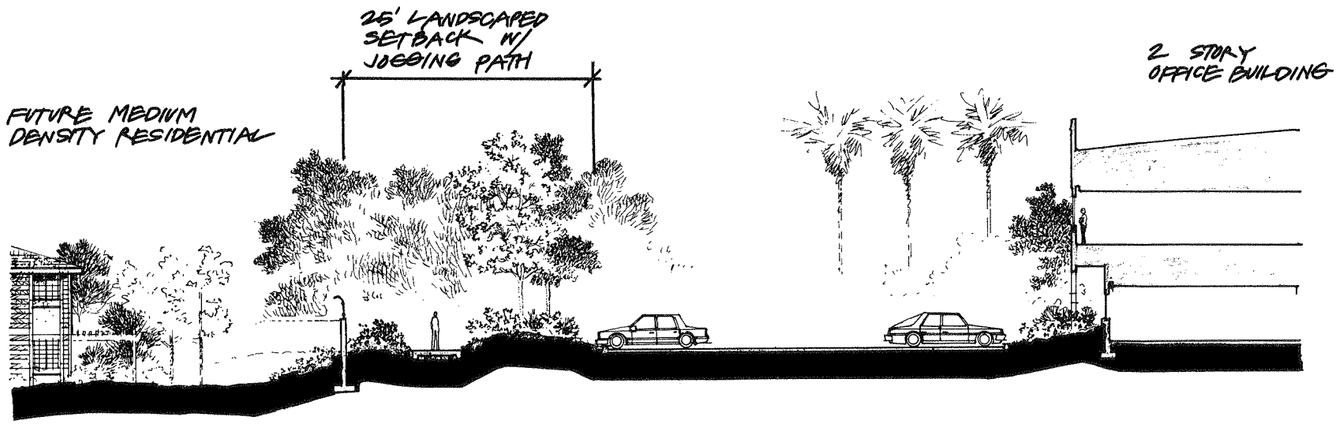


GRADING CONCEPT PLAN

EXHIBIT 18



UNIVERSITY DRIVE EDGE



FUTURE RESIDENTIAL EDGE

RESIDENTIAL EDGE SECTIONS

EXHIBIT 19

3. Terraced parking areas should be utilized to minimize grading and reduce the height of individual slopes.

4. Earthen berms should be an integral part of the grading design to provide screening along the University Drive edge and the adjoining future residential zone.

5. All manufactured slopes should be landscaped with appropriate ground cover or turf (in addition to trees and shrubs if appropriate) to stabilize the slope and minimize soil erosion.

6. Manufactured slopes which are visible from any public street or walkway should not exceed a vertical height of 15 feet, unless such a slope is extensively landscaped with plant material of sufficient intensity and scale to effectively soften its appearance.

7. Parking areas should have a gradient no greater than 5 percent.

8. The grading design should provide positive site drainage, protect structures and facilities from inundation and minimize localized ponding in landscaped or paved areas.

9. Gradients for paved areas should not be less than one percent unless concrete swales are provided.

DEVELOPMENT STANDARDS

4.1 GENERAL PROVISIONS

a. Continued Agricultural Uses

Legally established agricultural uses, together with accessory structures and uses thereto, shall be permitted to continue within the undeveloped portions of the property pursuant to the provisions of Part 5 - Open Space Zone and Special Uses of the Carson Zoning Ordinance.

b. Conflicting Regulations

In the case of conflict with the City of Carson Municipal Code, the provisions established by the Dominguez Technology Centre - Phase One Specific Plan shall prevail. Any aspect of the use or development of the property which is not provided for herein shall be subject to the provisions of the City of Carson Municipal Code.

c. Construction Codes

Construction shall comply with applicable provisions of the Uniform Building Code and the various other mechanical, electrical and plumbing codes related thereto as administered by the City of Carson and County of Los Angeles.

d. **Grading**

Grading shall be permitted within the property owned by Dominguez Properties outside of the planning area, or outside of the area of immediate development, when it is consistent with an approved grading plan.

e. **Geological and Soils Investigation**

Prior to actual grading or development of the property, a preliminary geological and soils engineering investigation shall be conducted. The recommendations of the geologist and soils engineer shall be incorporated into the grading plan.

f. **Water Service**

Water service will be supplied by the Dominguez Water Corporation.

g. **Wastewater Service**

Wastewater collection and treatment service will be furnished by the Los Angeles County Sanitation District.

h. **Drainage**

Drainage facilities will be furnished by the Los Angeles County Flood Control District.

i. **Conditions, Covenants and Restrictions**

Prior to the issuance of any certificates of use and occupancy, CC&R's or other methods or procedures which will guarantee the provision of necessary services and maintenance shall be approved by the Director.

j. **Subsurface Utilities**

All utility lines shall be subsurface throughout the planning area.

k. **Incorporated by Reference**

All applicable provisions of the City of Carson Municipal Code, except as expressly modified herein, are incorporated by reference in these regulations for the use and development of the Dominguez Technology Centre - Phase One Specific Plan.

l. **Effect on Invalidation**

If any provision of these regulations is held to be invalid by any court, the invalidity of such provision shall not affect the validity of the remaining provisions thereof.

m. **Development Review Procedures**

Procedures for the review of precise developments such as Site Plan and Design Review, as well as variances and conditional use permits are

established by Part 7 - Procedures of the Carson Zoning Ordinance which is incorporated herein by reference.

4.2 DEFINITIONS

The words, terms and phrases used in the Dominguez Technology Centre - Phase One Specific Plan shall have the meaning and construction set forth in Part 9 - Definitions of the Carson Zoning Ordinance, as modified in the following section, except where used in a context which clearly indicates a different meaning or construction.

Dominguez Technology Centre - Phase One Specific Plan

Shall mean the combined text, maps, exhibits, standards and guidelines which set forth the requirements for the use and development of the planning area.

Guidelines

Shall mean the descriptions, maps and exhibits which recommend the type, character and style of design treatment for architectural, landscape and grading features. Such guidelines establish general intent and concepts only and do not prescribe mandatory standards or specifications. Determination of consistency with the guidelines of the Dominguez Technology Centre - Phase One Specific Plan will be made by the Director.

Planning Area

Shall mean the lot or combination of lots, whether or not held in the same ownership, which are contained within the area of the legal description and which are used or intended to be used for development subject to the provisions of the Dominguez Technology Centre - Phase One Specific Plan.

Specific Plan

Shall mean the Dominguez Technology Centre - Phase One Specific Plan.

4.3 USE REGULATIONS

a. Uses Permitted

Uses are permitted in the Dominguez Technology Centre - Phase One Specific Plan as indicated in the following table:

USES PERMITTED IN THE SPECIFIC PLAN

Legend

X - Automatically permitted use.

L - Automatically permitted use provided special limitations and requirements are satisfied as noted herein, in Division 8 of Part 3 and in Division 8 of Part 4, of the Carson Zoning Ordinance.

D - Use permitted subject to the approval of the Director.

LD - Use permitted provided special limitations and requirements are satisfied as noted herein, in Division 8 of Part 2 of the Carson Zoning Ordinance, and subject to the approval of the Director.

C - Use permitted upon approval of a Conditional Use Permit.

CC - Use permitted upon approval of the City Council as prescribed under other provisions of the Carson Municipal Code.

Note: In the following list, industrial activities are classified by product, by materials used, and by processes employed. Since many industrial uses are complex in nature, it is necessary to consider all three of the abovementioned elements in classifying any specific industrial use. Uncertainties as to the proper classification for a specific use are to be resolved through Interpretations adopted in accordance with Section 9172.24, of the Carson Zoning Ordinance.

Manufacturing of the Following Products:

Pharmaceuticals - drugs, medicines, vitamin tablets.	X
Jewelry, watches, clocks, optical goods, musical instruments, scientific instruments, electronic instruments, phonographs, phonograph records, radios, television sets, electronic parts, precision metal products, wire, springs, tools, sandpaper, emery cloth, grinding wheels, printer's type.	X

Industrial Activities Involving the Following Processes:

Photo finishing, film developing and processing, photoengraving, lithography, block printing, silk screening, printing, book binding.	X
Glass silvering, optical grinding, fitting and mounting, glass blowing (no blast furnace).	X
Plastic molding (including hydraulic press).	X

Service and Repair:

Laboratory - product testing, product research.	X
Laboratory - chemical, biological, anatomical.	C

Wholesale:	
Wholesale activities of all types (except livestock and poultry).	X
Storage:	
Warehousing of furniture, household goods, dry goods, clothing, textiles, durable goods, no perishable foods.	X
Glass, lumber (no boxes or crates), naval stores, plaster, empty barrels, metal (no scrap), machinery, equipment.	X
Polyurethane foam.	C
Petroleum and petroleum products:	
Not more than 2,500 barrels	X
Natural gas:	
Below ground - any amount	X
Above ground:	
Not more than 500,000 cubic feet.	X
Oxygen, acetylene (subject to Fire Code requirements)	X

Agricultural chemicals (must be at least 100 feet from any residential zone, public school, public park, hospital or long-term health care facility).	L
Liquid petroleum gas:	
Not more than 30,000 gallons.	X
Fuel yard (not covered elsewhere, including propane).	X
Motor vehicles (not including impounding yard).	X
Transportation, Communications, Utilities and Public Service:	
Blimp port, heliport, helistop.	C
Access to other property lawfully used for purposes not permitted on subject property.	X
Education:	
Trade school.	X

Uses Permitted in Commercial Zones:

Any permanent use permitted in any commercial zone, whether automatically (X), with limitation (L) or by Conditional Use Permit (C), is automatically permitted except the following uses which are permitted as shown below:

Residential	
Mobile home park	Not permitted
Group quarters for members of a religious order.	Not permitted
Community residential care facility, boarding or rooming house, fraternity or sorority house, dormitory, residential hotel or similar group quarters, motel units with kitchens.	Not permitted
Transient hotels and motel units with no kitchens except one manager's unit.	Not permitted
Heath services:	
Hospital, long-term health care facility, public health center.	Not permitted
Ambulance service.	Not permitted

Arcades, subject to the requirements of Section 9138.4.	Not permitted
Public and quasi-public uses:	
Archaelogical dig, provided the Director determines there is a reasonable prospect that significant scientific, cultural or historical information will be obtained from the site.	D
Education:	
Elementary or secondary school - public or private.	Not permitted
Recreation:	
Golf driving range, pitch-and-putt course, golf course, subject to the limitations of Section 9138.3 of the Carson Zoning Ordinance.	L
Retail services and offices:	
Massage parlor, turkish bath, escort bureau.	Not permitted

Vehicle sales and service:	
Automobile service station, subject to the requirements of Sections 9148.3 and 9138.12 of the Carson Zoning Ordinance.	L
Automobile laundries, subject to the requirements of Sections 9148.3 and 9138.13 of the Carson Zoning Ordinance.	C
Miscellaneous retail petroleum outlet.	Not permitted
Vehicle repair.	Not permitted
Alcoholic Beverage Sales and Services:	
Alcoholic beverage sales in conjunction with a variety store, drug store, mini-market, drive-through market, food store, or grocery store excluding a supermarket, take-out food, liquor store (subject to the requirements of Section 9138.5 of the Carson Zoning Ordinance).	C

Alcoholic beverage sales and services in conjunction with a cocktail lounge, bar, arcade, pool hall, billiards, card room, bowling alley, indoor theater, night club and eating establishment other than a bona fide restaurant (subject to requirements of Section 9138.5 of the Carson Zoning Ordinance).	C
Heliports, helistops.	C
Temporary Uses:	
Election campaign office in a trailer. (Not permitted earlier than 90 days before the election. To be removed within 11 days after the election.)	L
Office or other permitted commercial use in a trailer or other mobile unit. (Permitted for a period of not exceeding 6 months during construction of a building on the same lot while a building permit is in effect. The director may approve reasonable time extensions if he finds construction is proceeding in good faith.)	L
Storage of construction materials and equipment at a construction site without the screening which would be required for permanent outdoor storage (only during the period a building permit is in effect).	L

Subdivision directional sign. (See Sections 9128.31 - 9128.35 of the Carson Zoning Ordinance).	LD
Tradefair, outdoor/sidewalk sales.	Not permitted.
Fireworks stand, fireworks storage.	Not permitted.
Tent revival.	Not permitted.
Carnival, mechanical rides, pony rides, outdoor festival and similar uses.	Not permitted.
Circus, rodeo.	Not permitted.
Yard sales.	Not permitted.

1. **Interpretation of Uses Permitted**

   Further definition and enumeration of uses permitted within the Specific Plan shall be determined by means of Interpretation in accordance with Section 9172.24 of the Carson Zoning Ordinance.

2. **Prohibited Uses**

   All uses are prohibited except as expressly permitted by the provisions of this section.

b. Accessory Uses

Section 9142, Accessory Uses, of the Carson Zoning Ordinance is incorporated herein by reference.

c. Conditional Use Permit

Section 9143, Conditional Use Criteria, of the Carson Zoning Ordinance is incorporated herein by reference.

4.4 SITE REQUIREMENTS

Sections 9145.1 - 9145.4 of the Carson Zoning Ordinance are incorporated herein by reference.

4.5 SITE DEVELOPMENT STANDARDS

a. Height of Buildings and Structures

1. Buildings - No building shall exceed a height of 50 feet.

2. Unoccupiable Structures - No unoccupiable structure shall exceed a height of 75 feet.

b. **Yards and Open Spaces**

1. Future Rights-of-way - This section is applicable only where portions of a lot are within areas planned to be part of future streets, alleys or public rights-of-way, as determined by the Director.

   In cases to which this Section is applicable, unless otherwise approved by the Planning Commission, the portions of any lot within such future right-of-way areas shall not be occupied by structures other than those encroachments allowed in future right-of-way areas as provided in Section 4.5.b.7 herein, except parking areas and drives may also be permitted. All other required setbacks, yards and open spaces shall be provided in addition to the future right-of-way areas, and the future right-of-way lines shall be considered to be lot lines for purposes of measuring such other setbacks, yards and open spaces.

2. University Drive - Notwithstanding other provisions contained herein, where any lot abuts University Drive there shall be a building setback from the street right-of-way line with a depth of at least 100 feet. Parking areas are permitted within this required setback, but shall not be located closer than 25 feet.

3. Front Yard - Each lot shall have a front yard with a required depth of 25 feet.

No portion of a required front yard shall be utilized for parking and all required front yards shall be landscaped. A required front yard shall not be occupied except as provided in Subsection 4.5.b.7 herein.

4. Side Yards - Where the side of a lot abuts a street, there shall be a side yard with a width of at least 25 feet.

Where the side of a lot abuts a lot in a residential zone, there shall be a side yard with a width of at least 25 feet. For any building (but not for an unoccupiable structure whether detached or attached to a building) over 30 feet in height, the required side yard setback shall be increased by one foot for each 2 feet of height over 30 feet.

Where the side of a lot abuts a lot in other than a residential zone, no side yard is required. If any side yard greater than approximately one inch is required or provided, it shall be at least 10 feet.

Required side yards shall not be occupied except as provided in Subsection 4.5.b.7 herein.

5. Rear Yard - Where the rear of a lot abuts a lot in a residential zone, there shall be a rear yard with a depth of at least 25 feet. For any building (but not for an unoccupiable structure whether detached or attached to a building) over 30 feet in height, the

required yard setback shall be increased by one foot for each 2 feet of height above 30 feet.

Where the rear of a lot abuts a lot in other than a residential zone, no rear yard is required. If any rear yard greater than approximately one inch is required or provided, it shall be at least 10 feet.

A required rear lot shall not be occupied except as provided in Subsection 4.5.b.7 herein.

6. Space Between Buildings - Buildings (but not including unoccupiable structures whether detached or attached to buildings) on the same lot either shall be abutting each other or there shall be a separation of at least 10 feet. Where there is a separation and both buildings are more than 30 feet in height, the required separation shall be increased by one foot for each two feet of height above 30 feet on the lower building.

7. Encroachments - Every part of a required yard or open space shall be open and unobstructed from finished grade to the sky except for facilities and activities as follows:

   a. Projections from buildings (such as eaves, awnings and shading devices; signs; architectural features; utility meters; conduits and pipes; unenclosed and unroofed stairways, landings, porches and balconies; chimneys; and

mechanical equipment) may project into a required yard not more than one-half of the width of the required yard, except that the only such projections permitted into a required front yard or a required side yard abutting a street shall be for eaves, awnings, shading devices, architectural features and signs. No projections are permitted into future right-of-way areas as determined under Subsection 4.5.b.1 herein.

b. Free-standing mechanical equipment is not permitted in any required yard except those additional yard areas required because of building height.

c. Utility-owned facilities are permitted in any required yard if also located in an approved utility easement.

d. Signs are permitted in required yards other than in existing or future street rights-of-way in accordance with the provisions of Section 4.6 herein.

e. Fences, walls, and hedges are permitted as required by other laws or regulations, or as a condition of a tract or parcel map approval, or shall not be higher than 8 feet above finished grade in a future right-of-way area, front yard, side yard abutting a street or yard abutting a residential zone. In a required front yard and any abutting future right-of-way area, any portion of a fence, wall or hedge above 3-1/2 feet in height shall not impair vision by obscuring more than 10 percent of the area in the vertical plane.

way area, such wall shall be 3-1/2 feet in height, except fencing material of any type may extend above the 3-1/2 foot solid masonry portion to a height not exceeding 8 feet, provided such extended portion does not impair vision by obscuring more than 10 percent of the area in the vertical plane.

b. No fence, wall or hedge shall exceed a height of 8 feet.

c. The height of fences, walls and hedges shall be measured from the finished grade at each point along the fence, wall or hedge. Where there is a difference between the grade on the two sides of the fence, wall or hedge, the higher grade shall be used.

2. Trash Areas - Trash areas shall be provided in accordance with Division 4 of Part 6 of the Carson Zoning Ordinance.

3. Parking, Loading, Truck Maneuvering and Driveways - Parking spaces and loading areas for each use and the areas required for access and truck maneuvering shall be provided in accordance with Division 2 of Part 6 of the Carson Zoning Ordinance, modified as follows:

For the purposes of this specific plan, Section 9162.52 of the Carson Zoning Ordinance is hereby modified to permit the substitution of a landscaped and mounded earthform in lieu of a 2 to 3-

1/2 foot high decorative masonry wall. This optional substitution is deemed warranted in consideration of the broad, 25-foot landscaped setback area separating any parking facility and a public street or walkway.

4. Screening - Parking areas which abut a public street or walkway shall be screened from view by the installation of a decorative masonry wall, a landscaped earthen berm or landscaping with trees and shrubs, or any combination thereof. Except as otherwise provided, the screening shall have a total height of not less than 36 inches. Where there is a difference in elevation on opposite sides of the screen, the total height shall be measured from the highest elevation. Screening shall have a height not greater than 36 inches within 20 feet of the intersection of a vehicular driveway and a street, two vehicular driveways, or two streets.

5. Utilities - Section 9146.8 of the Carson Zoning Code is incorporated herein by reference.

6. Site Planning and Design - Section 9146.9 of the Carson Zoning Code is incorporated herein by reference.

f. Landscaping (other than hedges) is permitted in any required yard or open space.

g. Outdoor storage is permitted only in yards other than a required front yard and abutting future right-of-way area, but not in a required parking area. Outdoor storage areas shall be screened from view from any adjoining public street, walkway or parcel.

h. Employee recreation and eating facilities (no buildings) are permitted in any yard other than a required front yard and adjacent future street right-of-way, but not in a required parking area.

i. Parking is permitted in required yards except the area within 25 feet of a public street right-of-way.

c. **Other Site Development Standards**

1. Fences, Walls and Hedges

a. A solid masonry wall shall be placed along any lot line abutting or separated only by an alley from property in a residential zone. Except in a required front yard area and any abutting future right-of-way area, such wall shall be at least 6 feet, but not more than 8 feet in height. In a required front yard area and any abutting future right-of-

4.6 SIGN REGULATIONS

a. Project Identification Signs

Signs identifying or describing the Dominguez Technology Centre are permitted, subject to the following:

1. Not more than one sign structure shall be permitted on a lot.

2. The total sign area per lot shall not exceed an area in square feet equal to two times the linear feet of lot frontage on a public street or streets for the first 100 feet of frontage, plus one-half times the frontage in excess of 100 feet.

   When the total frontage of a lot is less than the square root of the lot's area, said frontage shall be deemed to be equal to the square root of the lot's area for the purpose of determining the permitted sign area.

3. A ground sign in excess of 8 feet in height shall not be permitted. The distance between ground elevation and the bottom of a ground sign shall not exceed one foot. No ground sign shall be erected until written approval is obtained from the City Traffic Engineer. Such signs shall be in conformance with the development plans which have been approved pursuant to the Site Plan and Design Review procedure as provided in Section 9172.23 of the Carson Zoning Code.

b. **Business Signs**

Business signs are permitted, subject to the following:

1. Not more than two sign structures shall be permitted on a lot, except the Director may approve additional signs if he finds there are more than two separate businesses on the same lot, the location of not more than two sign structures would constitute an unnecessary hardship on the property owner, and the additional signs would not be materially detrimental to the public health, safety and general welfare.

2. The total sign area per lot shall not exceed an area in square feet equal to two times the linear feet of lot frontage on a public street or streets for the first 100 feet of frontage, plus one-half times the frontage in excess of 100 feet. Lot frontage on a freeway shall not be considered in computing this figure.

   When the total frontage of a lot is less than the square root of the lot's area, said frontage shall be deemed to be equal to the square root of the lot's area for the purpose of determining the permitted sign area.

   Any primary use which is developed commercial may be permitted to have a sign area equal to that permitted by Section 9136.7 B.2, of the Carson Zoning Ordinance, provided that a deed restriction

is recorded, in the Offices of the County Recorder, restricting the use on the property to a commercial use, and such proof of recordation is submitted to the satisfaction of the Director.

3. A pole sign in excess of 50 feet in height shall not be permitted. The distance between ground elevation and the bottom of such sign shall be not less than 10 feet.

4. A ground sign in excess of 8 feet in height shall not be permitted. The distance between ground elevation and the bottom of a ground sign shall not exceed one foot. Not more than one (1) ground sign shall be permitted on a lot. No ground sign shall be erected until written approval is obtained from the City Traffic Engineer. Such signs shall be in conformance with development plans which have been approved pursuant to the Site Plan and Design Review procedure as provided in Section 9172.23.

5. A sign may be affixed to a building but shall not project above the height of the building wall or roof fascia.

6. A sign shall not project into an existing or future right-of-way.

7. No "A" frame or "sandwich" sign or scintillating, flashing or revolving sign shall be permitted.

c. Real Estate Advertising Signs

Real estate advertising signs are permitted, subject to the following:

1. One unlighted sign structure is permitted per lot, except on parcels larger than five acres, one such sign structure is permitted for each street frontage of the parcel.

2. A sign structure may have any number of sign faces but the total sign area shall not exceed 100 square feet per sign structure.

3. All portions of a sign structure shall be not less than 10 feet from the inside line of the sidewalk, or if there is no sidewalk, from the lot line, except, if the building setback is less than 10 feet, the sign structure shall be not less than one-half the setback from the inside line of the sidewalk or lot line.

4. A free-standing real estate advertising sign shall not exceed 30 feet in height.

5. A sign may be affixed to a building but shall not project above the height of the building wall or roof fascia.

6. Advertising copy shall pertain only to the premises upon which the sign is located.

7. Any such signs shall be removed within two weeks after the execution of a sales agreement, escrow instructions or lease agreement.

d. Uses and Signs Prohibited

All uses and signs not expressly permitted by this section shall be prohibited, including, but not limited to the following:

1. Outdoor advertising signs and billboards.
2. Outdoor advertising structures.
3. Roof-mounted signs.
4. Advertising devices and displays.
5. Streamers, banners, penants and similar displays.
6. Rotating, revolving, flashing or moving signs.
7. Electronic message centers, other than time and temperature signs.
8. Vehicles or other devices when used as advertising displays.

e. **General Provisions**

1. Christmas decorations displayed between 30 days prior to and 15 days after December 25 are not subject to this section.

2. Any illuminated sign or lighting device shall employ only lights which emit a light of constant intensity, and no sign shall be illuminated by or contain flashing, intermittent, rotating or moving lighting or lights. In no event shall an illuminated sign or light source be so placed or so directed as to permit the illumination therefrom to be directed upon a public street or walkway or adjacent premises so as to cause glare or reflection that might constitute a hazard or nuisance.

4.7 ENVIRONMENTAL EFFECTS

Sections 9147.1 - 9147.3 of the Carson Zoning Code are incoporated herein by reference.

4.8 SPECIFIC PLAN AMENDMENT PROCESS

Minor Revisions

Minor revisions to the plans, guidelines, regulations and standards set forth in the specific plan may be approved by the Director of Planning and Community Development, provided such deviations are not detrimental to the public health, safety and welfare. Minor revisions may be approved without amending the specific plan. Minor revisions shall be limited to the following:

- A reduction in lot, yard and building area requirements by not more than ten percent (10%) of that specified;
- Increase of the total maximum building floor area within the specific plan by not more than ten percent (10%);
- Minor modifications to architectural or landscape design guidelines;
- Addition of new information or data to the specific plan maps or text which does not change the effect of any concepts or regulations;
- Changes to the community infrastructure systems which do not change the concepts nor significantly change the capacities of the systems.

Major Amendments

A. Amendment Procedures

1. The City Council may amend, supplement or change the regulations and districts herein or subsequently established after recommendation thereupon by the Planning Commission after public hearings as required by law. An amendment, supplement or change may be initiated by the City Council, by the Planning Commission or by petition of the owners of the subject property.

2. A request for a change of the land use district or regulations pertaining to a property shall be presented by the landowner or a duly authorized agent to the Planning Commission on a form furnished by the Planning Department. The form, setting forth the request and any related facts, circumstances or information, shall be filed with the Director together with the fee established by resolution of the City Council. The Planning Commission shall hear the request and shall take such action as it deems necessary in order to proceed with any studies, surveys, investigations or hearings as may be required by law. Within fifteen (15) days after the hearing, the written recommendation of the Planning Commission together with findings or other matters as may be related to the request shall be transmitted to the City Council.

3. In the case of action by the Planning Commission on a landowner's request recommending against the adoption of a change of the land

use district or regulations pertaining to a request, the City Council shall take no further action thereon unless the owner of the land, a duly authorized agent or any member of the City Council shall request a hearing by filing a written request with the Planning Director within ten (10) days after the recommendations of the Planning Commission have been transmitted to the City Council. Failure to file a written request within ten (10) calendar days shall result in termination of the request.

4. The City Council, after receipt of the report recommending approval of the application or the written request for hearing shall hold at least one public hearing and shall thereafter proceed to act on the report and recommendation as provided by the California Planning and Zoning Law (California Government Code, Section 65854 et seq.).

5. When it is found necessary for the preservation of the health, safety and general welfare of the public, the orderly development of the City of Carson and the implementation of the General Plan, the City Council or Planning Commission may require as a condition precedent to an amendment to this specific plan, the dedication of property or the installation of facilities either onsite or offsite as may be deemed necessary to protect the public interest and to make the affected properties suitable for the uses permitted by the amendment, supplement or change in regulations or district. The facilities or matters so required shall be completed or reasonable guarantees acceptable to the City shall be

provided for their completion prior to the adoption of any such amendment, supplement or change in regulations or district.

6. Changes made per this section shall not abrogate established general plan or specific plan regulations deemed necessary to the effectuation of the goals and policies of the general plan or the specific plan.

B. Notice and Hearings

The Planning Commission and City Council shall hold a public hearing on the proposed amendment of the specific plan. Notice of the hearing shall be published in a newspaper having general circulation within the affected area, not less than 10 days prior to said hearing. All affected property owners and those within 300 feet of the proposed specific plan amendment shall be notified by mail, prior to the hearing date. Any hearing may be continued, as deemed appropriate and necessary by the Planning Commission and City Council.

C. Findings and Conditions

In order for a specific plan amendment to be approved or conditionally approved, the Planning Commission and the City Council shall make all appropriate findings concurrent with any amendment. Such findings shall include, but not be limited to:

1. Substantial compliance with the following objectives:

   a. Ensure development consistent with the purpose and intent of the specific plan.

   b. Maintain maximum development flexibility while ensuring equality.

   c. Ensure that development does not exceed the City's ability to provide essential urban services.

   d. Maintain well-articulated land use and circulation relationships through sound planning application.

   e. Facilitate the provision and appropriate location of community facilities, services and facilities.

   f. Ensure aesthetic and quality control through adequate consideration of design in the development review process.

   g. Ensure suitable consideration and protection of the community's natural environment during the development review process.

   h. Consider innovative and unique land development techniques.

i. Ensure that plans developed under this section will be implemented in a timely manner.

j. Ensure that the urban form and character envisioned at the time of approval is attained upon development.

2. Consistency with the City of Carson's General Plan goals, objectives and policies.

3. Findings required per CEQA.

The Planning Commission and City Council may establish conditions to assure that the proposed specific plan amendment is consistent with the provisions of state law and the intent and purpose of the specific plan.

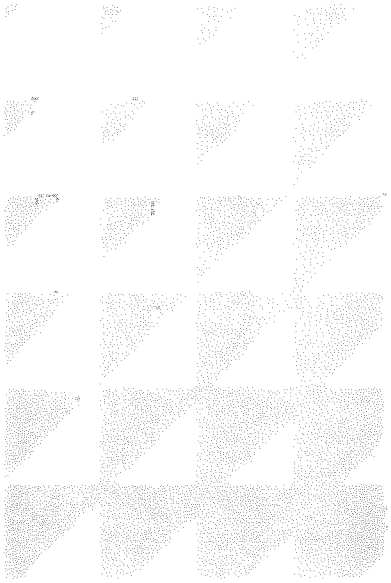
D. Effective Date

Specific plan amendments adopted per this section by ordinance shall take effect thirty (30) days after final adoption by the City Council.

Specific plan amendments adopted by resolution shall take effect immediately upon City Council approval.

E. Fees

Any application for an amendment to the specific plan shall be accompanied by a fee established by resolution of the City Council to cover the cost of handling the application as prescribed in this section.



RELATIONSHIP TO THE GENERAL PLAN

INTRODUCTION

The Dominguez Technology Centre - Phase One Specific Plan implements the City of Carson General Plan. As such, the specific plan is consistent with and supportive of the relevant goals and policies of the individual elements of the General Plan. The following discusses the relationship of this specific plan to each of the applicable General Plan Elements.

5.1 LAND USE ELEMENT

The Land Use Element has established nine general land use goals and objectives in addition to seven specific policies addressing industrial land use. These general and specific policies are:

General

1. Allow each type of land use sufficient area to develop to the fullest extent indicated by the economy and general welfare.

2. Separate nonconforming uses, replace substandard buildings and prevent deterioration of residential, commercial and industrial areas.

3. Provide a comprehensive guide for public improvement and private investment.

4. Provide a guide for continued development of a strong retail commercial center.

5. Improve development standards in order to control urban blight and protect property values.

6. Encourage the development of stable industrial and commercial uses which will broaden the economic base to create a more self-sufficient local economy.

7. Expand public community facilities in accordance with increasing population.

8. Plan for orderly future growth by updating and revising the General Plan whenever necessary.

9. Promote annexation of those areas originally within the Carson area prior to incorporation.

Specific

1. Heavy industrial areas should be separated from residential and commercial activities.

2. Light industrial areas and controlled industrial parks should be screened or buffered from adjacent residential, commercial or other heavier industrial areas.

3. All industrial areas should be served with adequate accessibility to transportation, utilities, public streets or highways and with adequate internal circulation, off-street parking and loading and service facilities.

4. Appropriate pollution and environmental standards should be enforced.

5. Industrial businesses should be encouraged to provide broader based industries and provide greater diversity for economic stability.

6. The City should attempt to maintain the industrial areas mainly in the sections of the City presently designated for industrial land uses.

7. Industrial land use conflicts should be minimized by securing the abatement of nonconforming land uses.

The Dominguez Technology Centre - Phase One Specific Plan provides for the systematic and orderly development of uses and facilities of the highest standards and quality. The regulations, guidelines and concepts of the specific plan ensure the project's compatibility with surrounding areas and expand the City's industrial/employment base by providing for a "hi-tech" environment.

Proper separation, buffering and screening requirements are established by the specific plan to mitigate potential visual impacts to surrounding residential areas.

The specific plan also ensures that adequate public services and facilities will be available including access and circulation, utilities, off-street parking and internal circulation.

5.2 OPEN SPACE ELEMENT

The Open Space Element for the City of Carson recognizes the predominantly urbanized character of the City and focuses upon those goals and objectives which are intended to maximize open space benefits within the context of limited open space opportunities. The enhancement of open space quality and the improvement of urban form and aesthetics is the fundamental goal of the Open Space Element.

The specific plan implements the goals and objectives of the Open Space Element through the provision of broad, extensively landscaped setback areas, landscaped streets (with planted medians) and generously landscaped parking areas. The development regulations and design guidelines of the specific plan exceed the minimum requirements of existing City ordinances for setbacks and landscaping, enhancing the quality of open space and enriching the visual and aesthetic character of the urban environment.

5.3 PUBLIC SERVICES AND FACILITIES ELEMENT

This element of the City of Carson General Plan addresses those public and quasi-public uses which serve the community. Operations or facilities include California State University - Dominguez Hills, water, fire, among

others. The synergistic relationship between the university and new high technology business and industry is recognized as a unique opportunity.

The Dominguez Technology Centre - Phase One Specific Plan will capitalize upon that opportunity by locating a high technology industry in close proximity to the university. The specific plan also implements other aspects of the Public Services and Facilities Element by providing adequate systems for water, wastewater and fire protection services.

5.4 RECREATION ELEMENT

The Recreation Element addresses the community-wide need to provide adequate recreational opportunities for the City's residents. To this end the City has developed an extensive system of parks, recreational facilities, activities and programs geared to all user groups.

The specific plan has been designed to implement, on a project basis, the City of Carson Recreation Element. The construction of an onsite jogging path (more than one-half mile in length) in a lushly landscaped setting, separated from all vehicular traffic, will offer recreational and exercise opportunities which augment the existing public facilities.

5.5 CIRCULATION ELEMENT

The underlying goal set forth in the Circulation Element is the establishment of a City transportation system that is efficient, safe and convenient. Specifically, a reasonably acceptable level of service is to be provided for

vehicular traffic. This is to be accomplished through a systematic approach to transportation planning, with the functional classification of streets being the first step.

The Dominguez Technology Centre - Phase One Specific Plan is consistent with the Circulation Element of the City of Carson. The plan implements the goals and policies contained therein. Specifically, the transportation analysis and planning conducted for the specific plan considered potential development and the resultant additional increased traffic from the surrounding area. As a result, the proposed transportation facilities of the specific plan provide for the safe and efficient movement of traffic, both now and into the foreseeable future, by providing the necessary improvements (additional left-turn land in Glenn Curtiss, signalized intersection, Glenn Curtiss classification as an Industrial Collector). Additionally, the specific plan seeks to maintain the integrity of the existing traffic patterns on University Drive, thereby minimizing additional traffic on the residential streets in the neighborhoods south of the project area, by taking all access from Glenn Curtiss Street and Wilmington Avenue.

5.6 SAFETY, SEISMIC SAFETY AND NOISE ELEMENTS

The Safety and Seismic Safety Elements of the General Plan have as their fundamental goal the protection of life and property from a number of potential hazards, including fire, flooding, earthquakes, crime and hazardous wastes. These elements mandate that issues be considered in development planning.

The specific plan incorporates several measures intended to reduce the risks to life and property. Adequate provisions have been made for fire protection (access, fire flows, hydrant spacing), crime (secured perimeter with manned entries), flooding (proper drainage), earthquake hazards (the site is not within an Alquist-Priolo Zone) and hazardous wastes/toxic materials (the project area is not within a former landfill site, and the proposed uses are "clean, high technology" operations which will not be using toxic materials nor generating hazardous wastes). Further, building design and construction will incorporate all measures required by the City and other applicable codes to minimize potential seismic hazards.

The protection of the public's general well being from harmful noise levels is the primary goal of the City's Noise Element. This element addresses the sources of noise and policies for controlling noise and its effect on surrounding areas.

The noise-related impacts of the specific plan are short-term (during the construction phases) and long-term (over the life of the project). Construction-related noise sources will include heavy equipment operation during grading in addition to the normal building construction activity. This short-term noise impact will be mitigated, in part, by limiting these activities to the normal daylight, workday hours.

The long-term noise impacts (from both stationary and mobile sources) are associated with the uses and operations conducted over the life of the project. The proposed use for the property - predominantly office in nature - will not produce any significant stationary source noise levels. Mobile

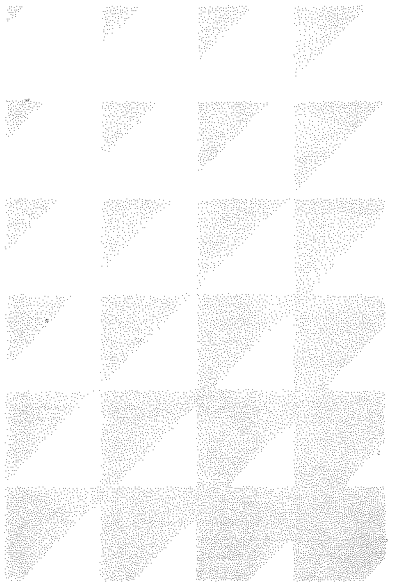
source noise levels will, however, increase as a result of the additional traffic to be generated by the project.

Residential uses are the most sensitive to increased noise levels, and increased traffic on adjacent arterial streets might have a significant potential impact on existing residential areas. The traffic analysis conducted for the specific plan finds that the distribution of traffic generated by the project is such that significant increases in traffic volumes are not expected to occur on the two arterial segments (Wilmington Avenue and University Drive) which abut existing residential neighborhoods. Therefore, no significant increases in long-term noise levels are expected to occur as a result of the project development.

5.7 PARKWAY AND RAISED MEDIAN ELEMENTS

These elements of the General Plan are established to promote the enhanced appearance of the City's circulation system and to provide for the separation of heavy volumes of traffic moving in opposite directions.

The specific plan implements the goals and objectives of these elements by (1) providing a fully landscaped parkway on Glenn Curtiss Street, (2) the installation of a raised, landscaped median for a segment of Glenn Curtiss, and (3) by providing for right-turn-only movements at the mid-block secondary access to Wilmington Avenue.



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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LIST OF FIGURES

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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.

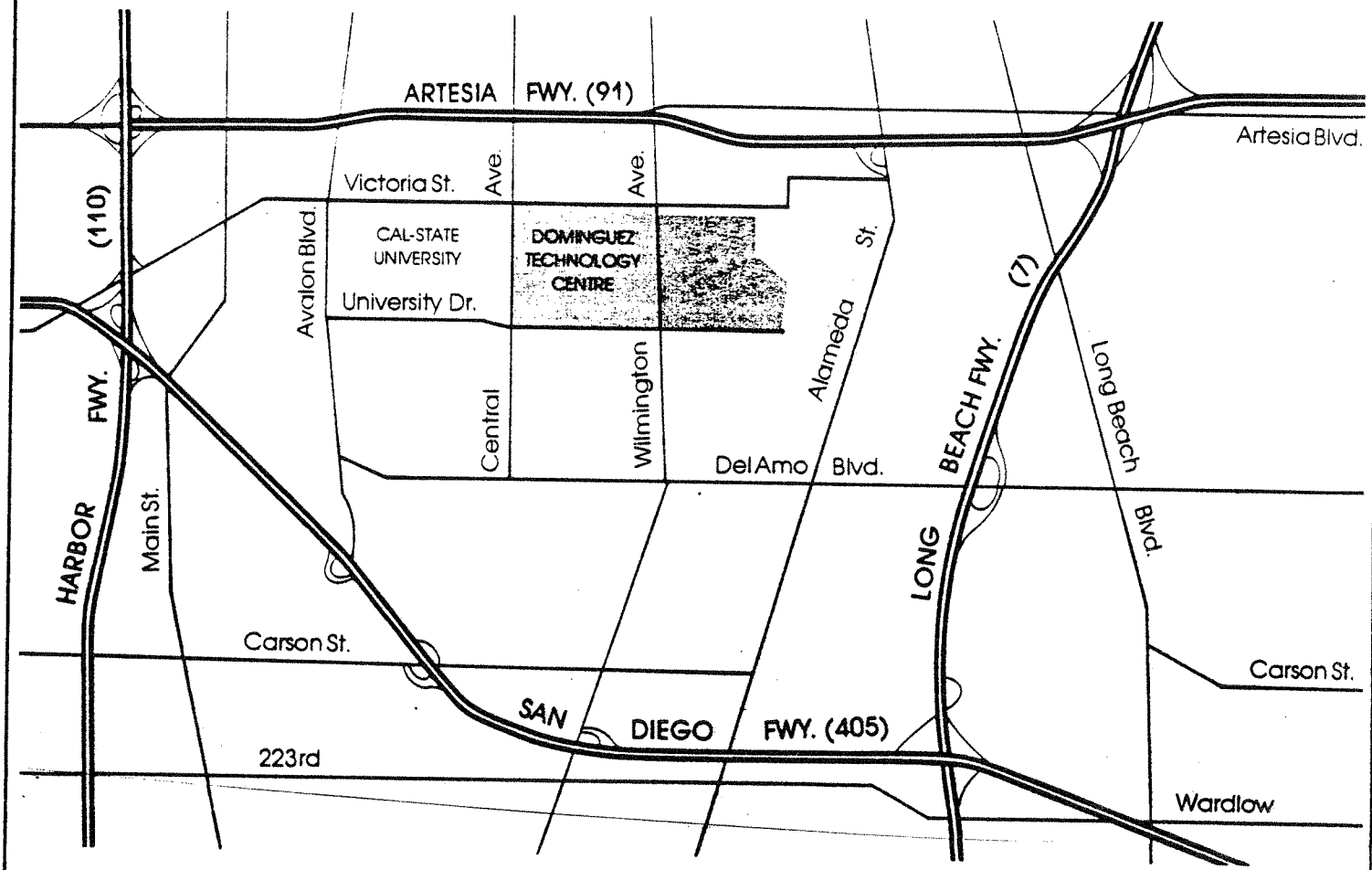

FIGURE 1

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.

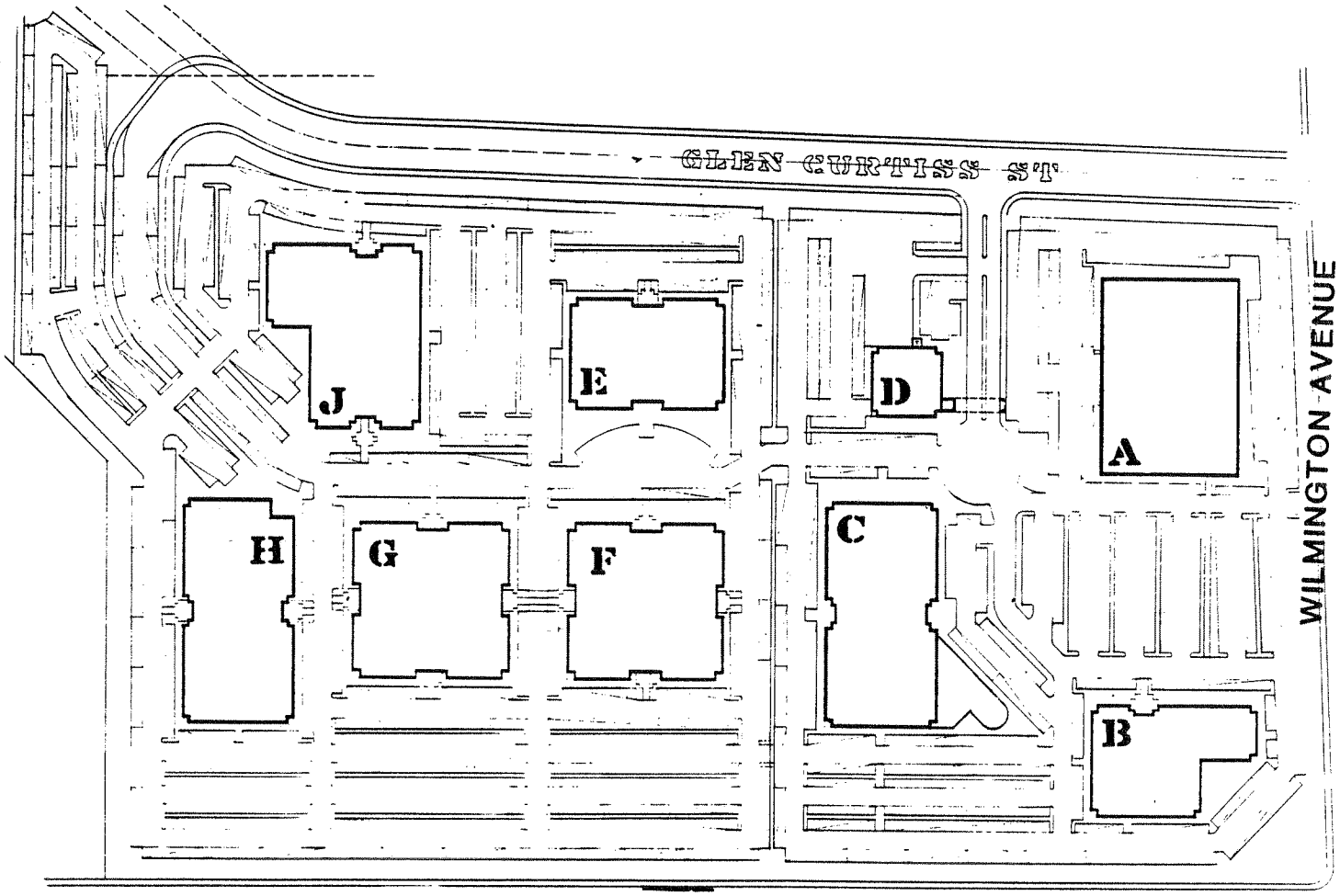

FIGURE 2

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.

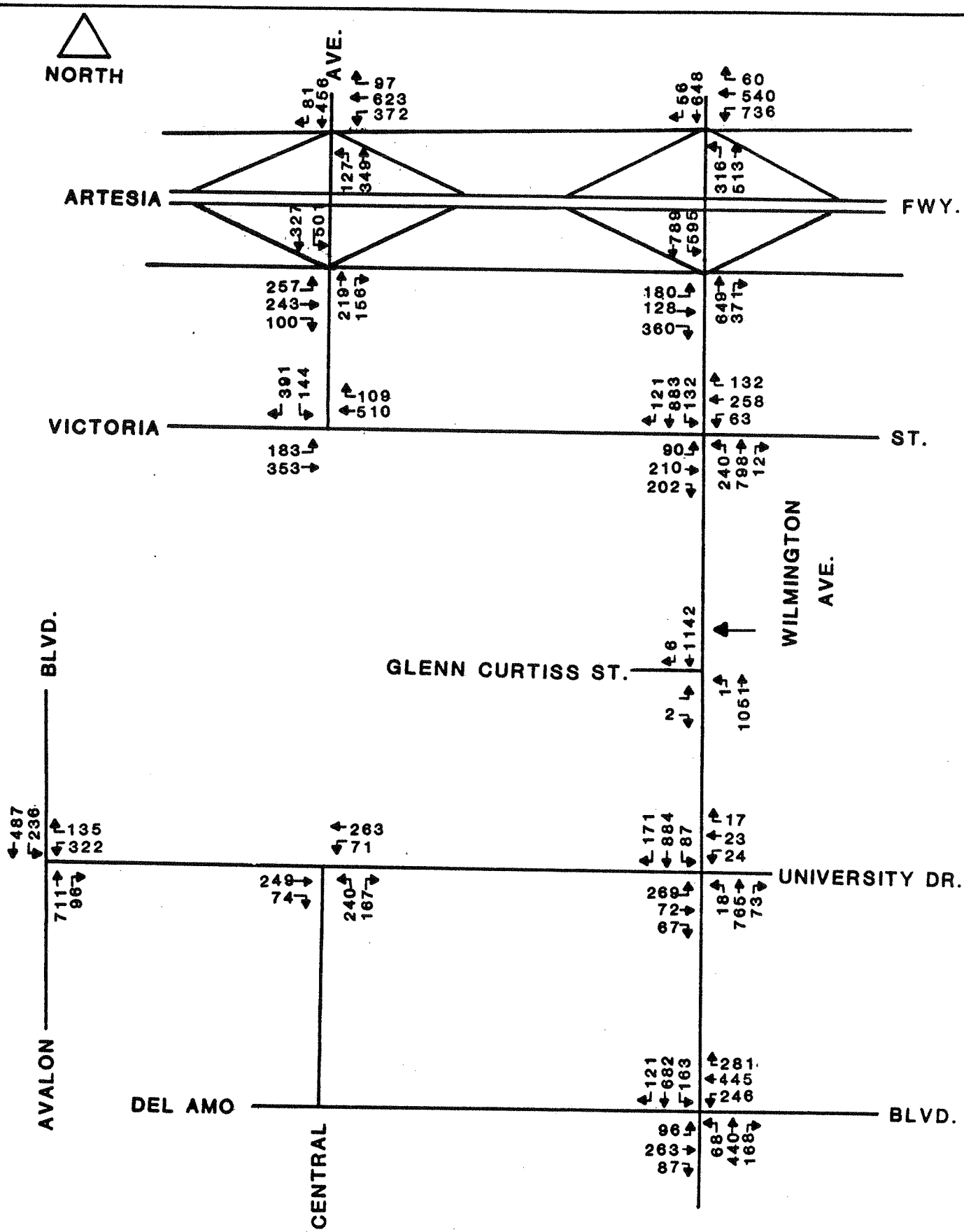

FIGURE 3(A)

EXISTING (1986) TRAFFIC VOLUMES
AM PEAK HOUR

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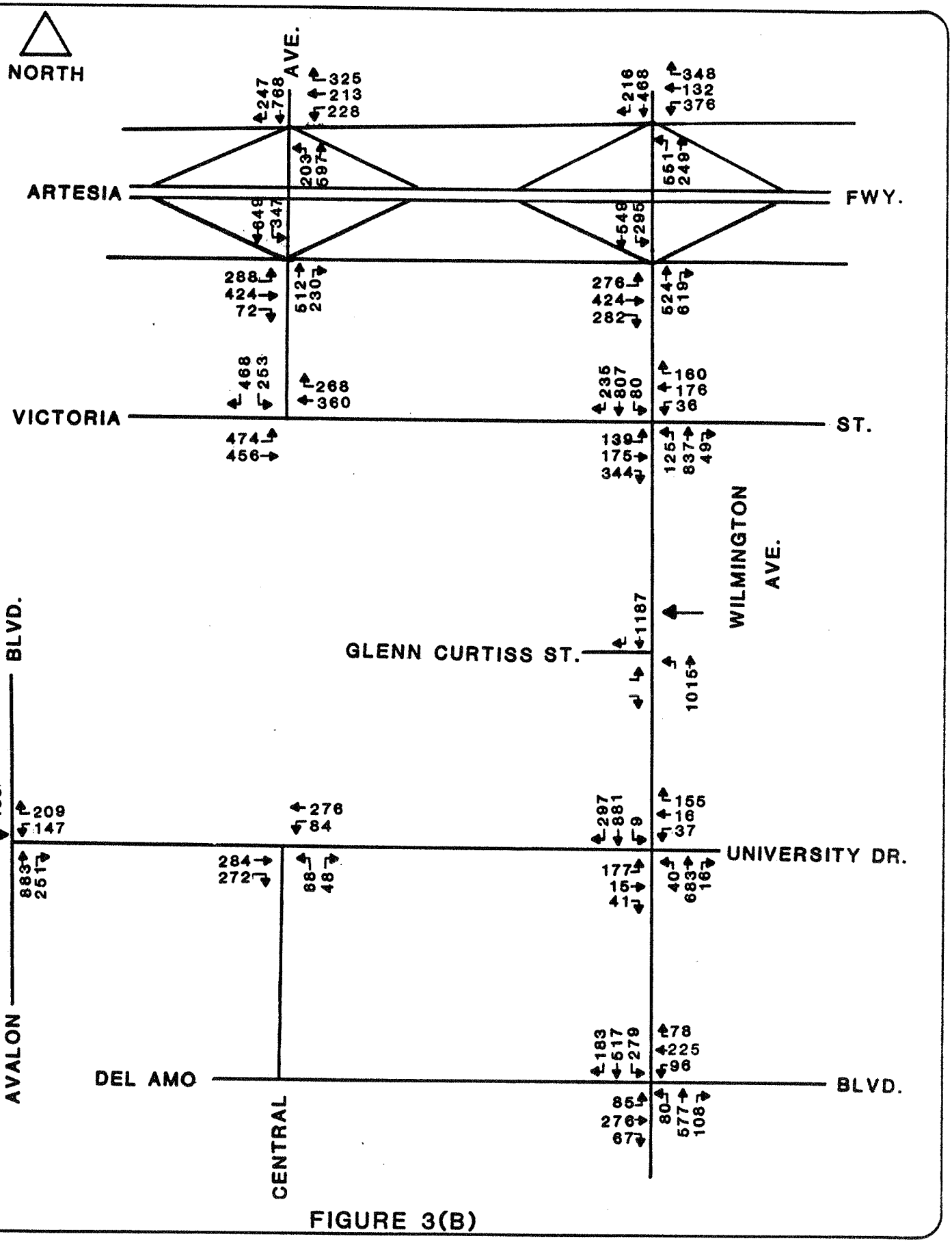

FIGURE 3(B)

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.

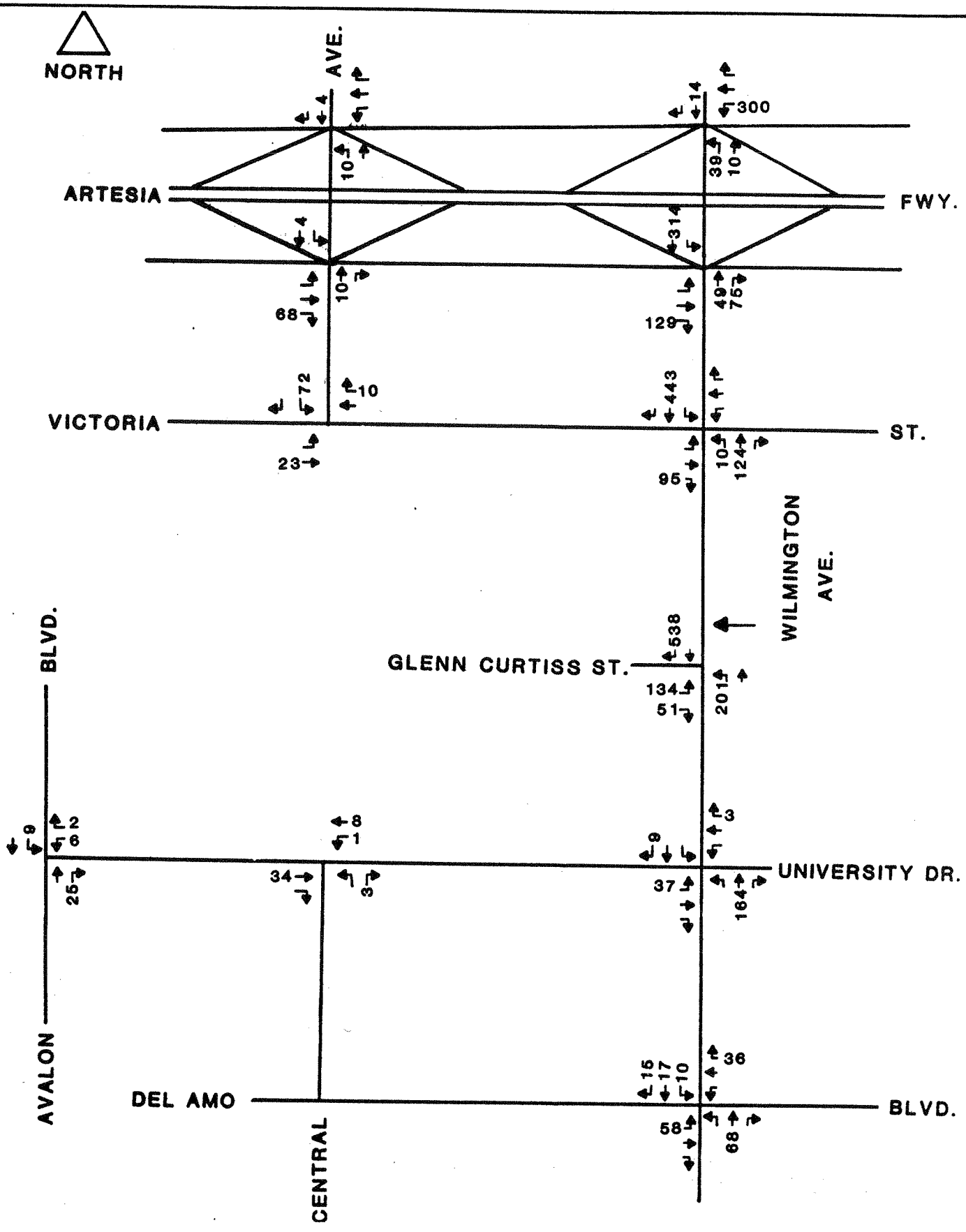

FIGURE 4(A)

PROJECT TRAFFIC VOLUMES
AM PEAK HOUR

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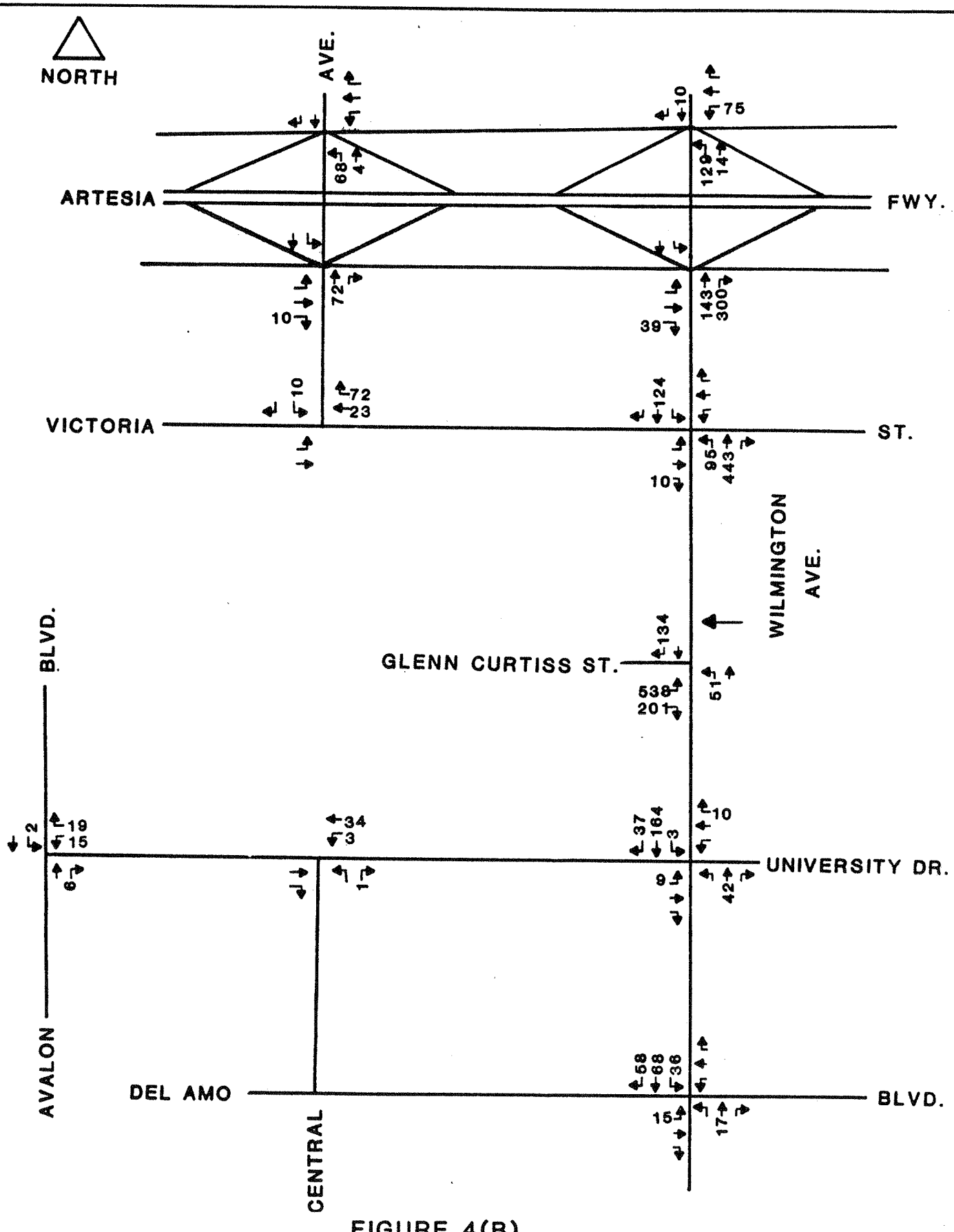

FIGURE 4(B)

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.

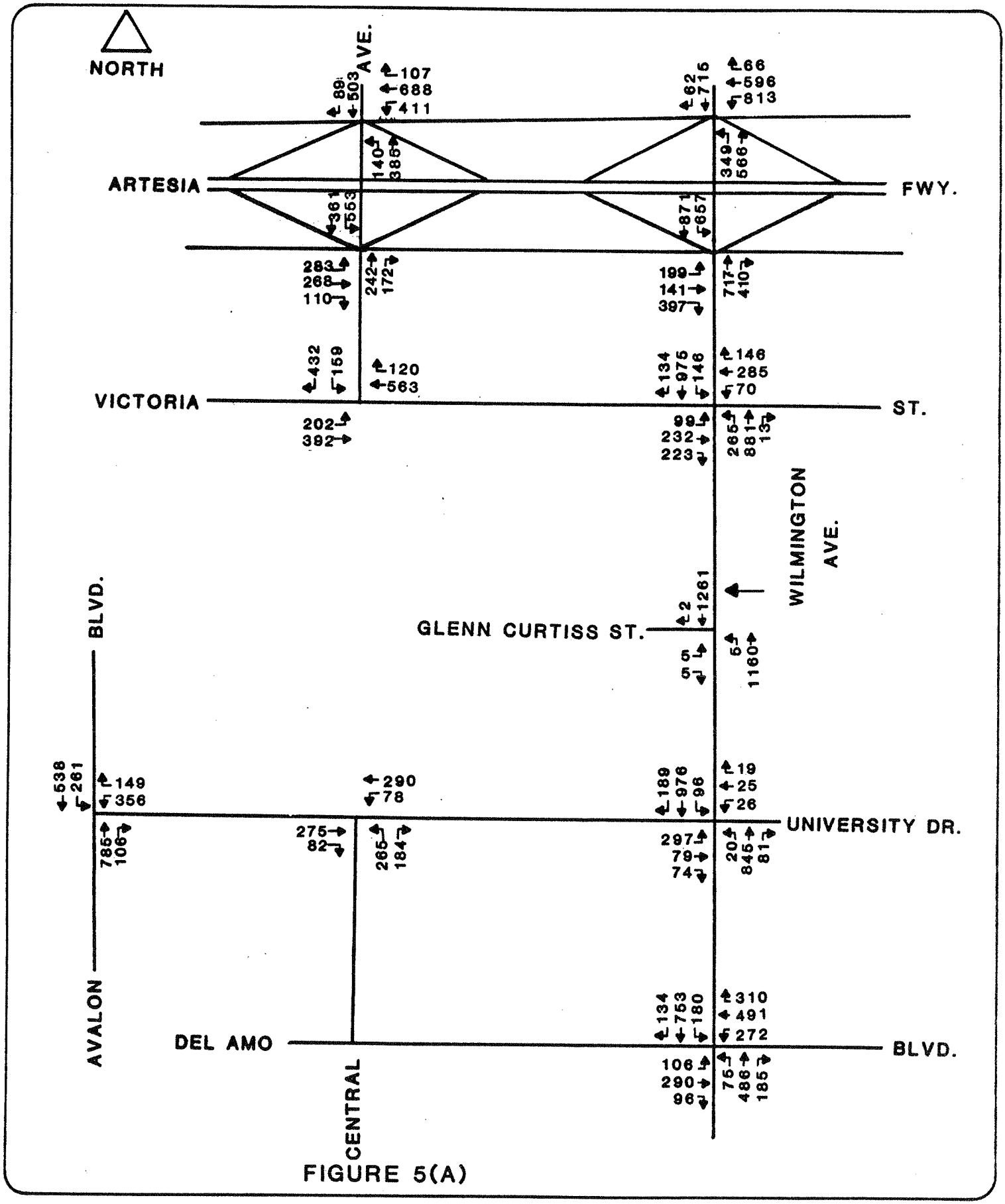

FIGURE 5(A)

FUTURE (1991) TRAFFIC VOLUMES

AM PEAK HOUR

CRAIN & ASSOCIATES
2007 Sawtelle Boulevard
Los Angeles, California 90025
(213) 473-6508
Transportation Planning · Traffic Engineering

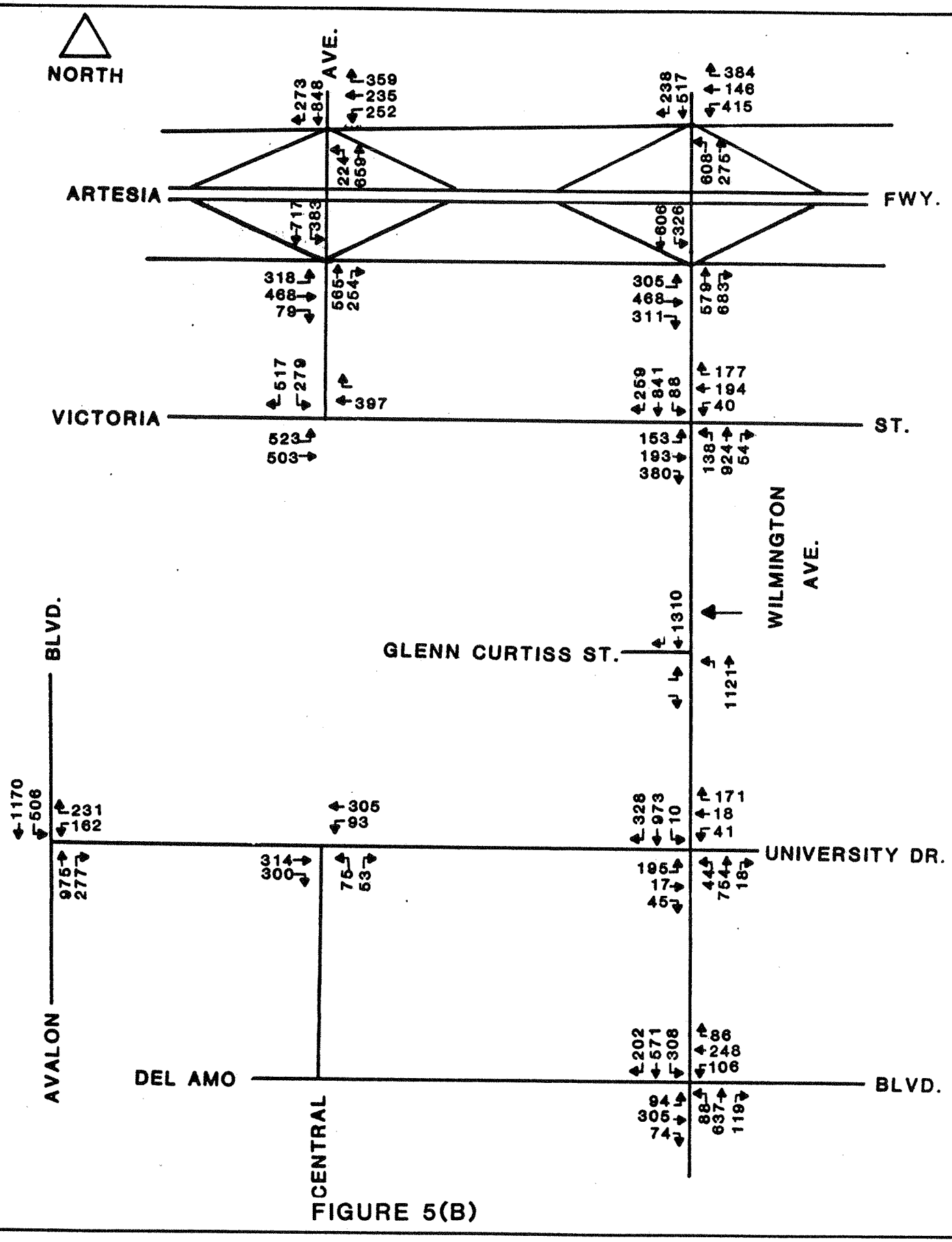

FIGURE 5(B)

FUTURE (1991) TRAFFIC VOLUMES

PM PEAK HOUR

CRAIN & ASSOCIATES
2007 Sawtelle Boulevard
Los Angeles, California 90025
(213) 473-6508
Transportation Planning · Traffic Engineering

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