# Part Two: Component Plans

# 2.1 INTRODUCTION

The development program for the Specific Plan area is depicted and regulated through a series of component plans presented in this Chapter.

These five (5) component plans as follows:

- The Land Use Plan
- The Circulation Plan
- The Streetscape Plan
- The Grading Plan, and
- The Infrastructure Plan

For each plan existing conditions or other physical form or policy determinants are described and key planning concepts presented. The Plans establish the "framework" within which all development shall occur. Only the Illustrative Site Plan, included as Exhibit 2-3, shall be considered supplementary in nature and not a part of the regulatory package.

Specific standards and requirements to which individual projects must conform in addition to Chapter 3 of the Ontario Municipal Code are set forth in **Part Three: Development Regulations.** 

Additional design criteria which must also be addressed by individual projects, but for which there is some latitude in the details of the response, are set forth as guidelines in **Part Four: Design Guidelines**.

#### 2.2 THE LAND USE PLAN

#### Structure of The Plan

The Land Use Plan describes a Planned Business and Industrial Park consisting of approximately 55 acres of retail commercial, business, manufacturing and warehousing uses. In excess of 1,000,000 square feet of building is proposed.

The Plan envisions a selective mix of light industrial and warehouse facilities, industrial distribution, single and multi-tenant office space in low to mid-rise buildings, retail commercial and a hotel with meeting facilities, all in a business-park setting. Pedestrian connections to an on-site Metrolink commuter rail station, together with a strong visual image created by building placement, massing and project amenities, distinguish the project from the surrounding development fabric.

Haven Avenue, a fully-improved primary arterial, borders the entire eastern edge of the property and provides ready access to the San Bernardino and Pomona Freeways and to Ontario Airport 3/4 mile north. Francis Street, a local east-west collector affording primary ingress and egress to the project, will ultimately be extended west from its present terminus at the on-site transit station to connect with Turner Avenue just north of the railline near Mission Boulevard.

Excise Avenue and Vanderbilt Street, to-be-developed collector streets providing secondary access, serve to divide the primary use areas, penetrating the project at its northeastern corner off Haven Avenue and connecting to Francis Street. Metroway is a continuation of Excise Street south of Francis, in a looping fashion providing access to southern sector uses and to transit platform parking before reconnecting again with Francis near the western project boundary.

Note to the Reader: Vanderbilt Street was deleted from the Specific Plan at the request of the underlying landowner by administrative determination of the Planning Director in August, 2002. A revised Land Use Diagram reflecting the deletion, replacing Exhibit 2-1, is presented on page iii of the Preface at the front of this document. References to Vanderbilt Street throughout the text, and in diagrams and graphics, have not been deleted but instead have been retained for purposes of continuity.

#### **Land Allocation**

The Land Use Diagram, Exhibit 2-1, depicts the planning areas and broadly allocates land to one of two land use "districts" proposed. It is the graphic summary of the Specific Plan and provides the frame of reference for all of the Plan's regulations.

A **Statistical Summary** of acreage by primary use is shown in Table 2-1 below.

Table 2-1
Acco Airport Center Specific Plan
Land Allocation

<u>Area</u>	Primary Use	Gross Acreage	Percent of Total
IP	Industrial Park	26.35 acres	47.8%
BP	Business Park	22.03 acres	40.0%
	Subtotal	48.38 acres	<del>87.8</del> %
	Roads & ROW	6.74 acres	12.2%
	TOTAL	55.12 acres	$1\overline{00.0}\%$

Selected primary land uses within each district, from the Matrix of Primary and Secondary Uses, Table 3-1, in Part Three: Development Regulations, shall define its character. Secondary and conditional uses, considered supportive and not dominant, add an important element of vitality and balance to that character but in general shall not exceed 25% of the aggregate square footage "yield" allotted to the district. For purposes of impact analysis and evaluation, the combination of land uses with the most substantial environmental or traffic demands was examined.

The Specific Plan is not, and should not be considered, a static document: it is predicated upon a "succession of use". Acco Airport Center has a projected 15-year build-out and changes and adjustments to the project must be anticipated. Less intensive uses are intended to yield ultimately to higher and more-intensive use as the Specific Plan area and surrounding development matures, a maturation concurrent with the expected growth of both the Ontario Airport environs and regional transit usage. Flexibility in the design and use of certain key parcels in the initial years of project implementation is requisite to reaching build-out objectives.

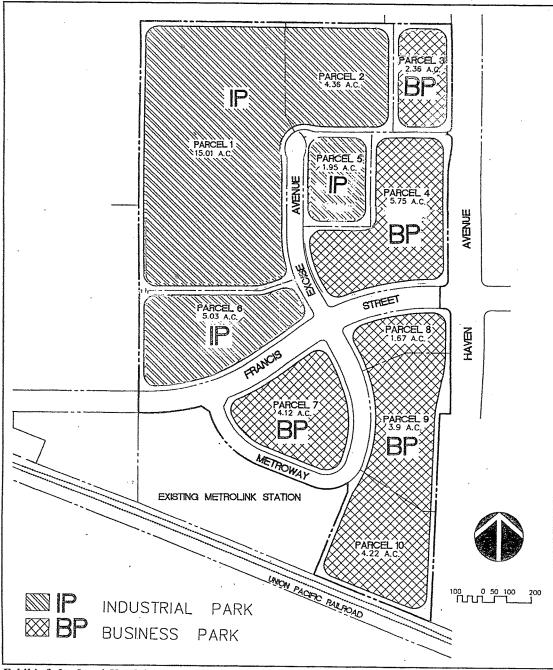


Exhibit 2-1: Land Use Diagram (see revisions in Preface, page iii)

# **Primary Land Use Districts**

#### "Business Park" Commercial/Office District

The Business Park Use (BP) designation has been applied to the portions of the site fronting on Haven Avenue at its intersection with Francis Street and to a parcel across from the MetroLink Station where the visibility of commercial uses is assured. The Plan encourages the inclusion of "high-end" commercial uses - corporate offices, support commercial, restaurants and lodging - to present the strongest possible project image.

The designation offers the developer a variety of options in responding to changing market demands through time. While professional offices, support commercial, restaurants and lodging are expected to ultimately predominate, secondary activities including light manufacturing, research and development, major retail and a range of related uses are permitted within this category as set forth in **Part Three**, **Development Regulations** of this Specific Plan document.

By virtue of the project's proximity to the airport and the substantive industrial development already approved for its immediate environs, a **hotel/meeting complex** is proposed in the southeastern portion of the site within the Business Park district. Development of any hotel or meeting facilities shall be subject to a conditional use permit.

# "Industrial Park" Light Manufacturing/Warehouse District

The Industrial Park Use (IP) designation has been applied to the . parcels north of Francis Street, fronting on both sides of Excise and Vanderbilt and buffering the Business Park parcels from the UPS Air Cargo facility activity.

Primary uses under the designation include manufacturing, assembly, storage, warehousing and distribution, research and development. Some of the industrial storage and distribution sites may be appropriate for wholesale and retail outlets for durable goods such as carpet, furniture and major appliances.

Development of parcels abutting Haven Avenue and Francis Street shall be subject to specific design guidelines as set forth on Page 4-3 of Part Four, Design Guidelines. The guidelines are intended to ensure that certain requirements related to building scale, plan function, and physical orientation with respect to adjacent properties and the street are met irregardless of use.

#### **Character of Development**

#### **Business Park District**

The Business Park District (BP) is primarily intended for retail commercial, research and development, and office-based firms seeking a working environment of convenience, prestige and professional image.

It is expected that the individual site design and architecture within the Business Park District will offer a finer development fabric, a more pedestrian orientation and a stronger visual image than the Industrial Park District. To achieve this, the development standards within the Business Park District are of a commercial rather than industrial nature. Although large, flat, unbroken tilt-up walls fronting the street are precluded in either district, facades here will require a high degree of articulation in a manner consistent with a more commercial look.

Office development will include corporate and general offices. Buildings will be multiple storied, ranging from low-rise offices (two stories) in clustered landscape settings, to more urban oriented mid-rise office buildings (three to six stories). Commercial uses will include the support services such as blueprinting and copying required to support a major business center. Retail and durable goods sales are also permissible.

Eating establishments and retail commercial which require high traffic volumes will be encouraged to locate along the Haven Avenue and Metro Way frontages. Fast food services will be permitted only if clustered as a "food park" within walking distance of the more intensive commercial/office/service uses to reduce mid-day automobile travel. Any food park will be landscaped, and will offer open space areas or courtyards to provide a pleasant dining environment.

In consideration of the project's proximity to Ontario International Airport and its location on a major airport perimeter arterial, a hotel and meeting facility has been identified as a compatible use within the Business Park district. Development of any hotel in the Specific Plan area will be subject to the approval of a conditional use permit.

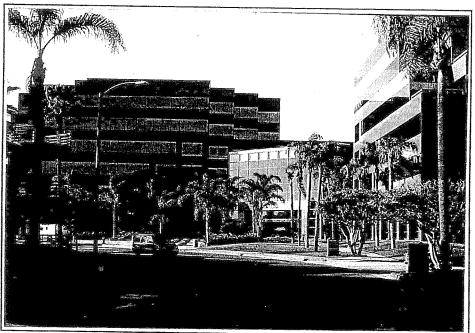
The following **primary uses** are encouraged within the Business Park district:

- Administrative & Professional Offices
- Business Support Services
- Light Wholesale, Storage and Distribution
  - Durable Goods Sales, Retail
- Business Supply Services
- Eating & Drinking Establishments
- Hotels and Meeting Facilities
- Financial Institutions
- Personal Services

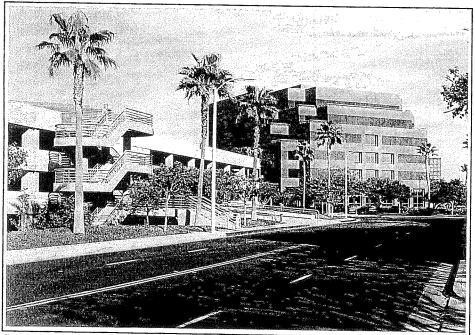
Hotel and lodging uses only shall be subject to the Conditional Use Permit (CUP) process at the point of development.

Secondary and conditional uses, considered supportive and not dominant, in general shall not exceed 25% of the aggregate square footage "yield" allotted to the district. In the "Business Park" category, secondary and conditional uses include, but are not limited to, the following:

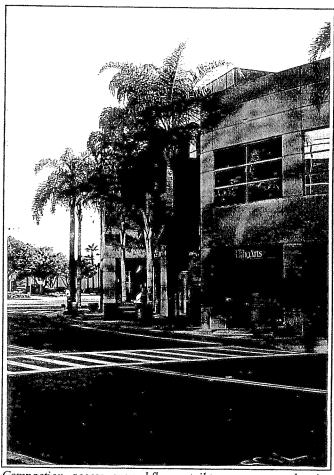
- Research and Development
- Durable Goods Sales, Wholesale
- Medical & Health Care Services
- Convenience Sales & Services
- Fast Food
- Entertainment
- Automotive Rental Agencies
- Combined Service Station & Car Wash



"Signature" buildings and carefully massed multi-story office complexes



Suppressed and terraced parking, buildings averaging 2 to 7 stories



Compaction, access, ground floor retail to encourage pedestrian

# **Industrial Park District**

The Industrial Park District (IP) within Acco Airport Center is intended to accommodate "clean" light manufacturing, research and development, warehousing and distribution, and multi-tenant industrial uses.

Administrative and professional offices and commercial activities will be permitted on a limited "support" basis only. Retail commercial and durable goods sales are also permissible secondary uses.

The character of the industrial park district will be marked by well-landscaped tilt-up low-rise industrial buildings. Uses shall be designed to present a "front-door" image to the street and shall be oriented such that loading facilities are located at the rear of the buildings or totally screened from view. Special architectural treatment shall be applied to all industrial buildings to "break" the long linear building expanse often associated with warehousing.

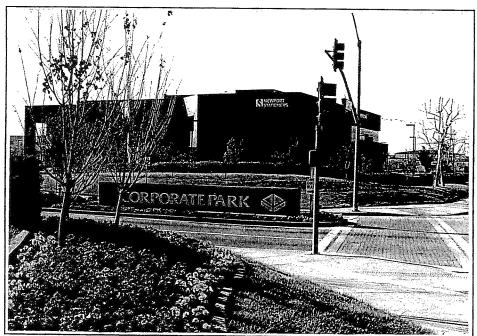
The following **primary uses** are encouraged within the Industrial Park district:

- General & Custom Manufacturing & Assembly
- Warehousing, Storage & Distribution
- Durable Goods Sales, Wholesale
- Building Supplies and Sales
- Research and Development
- Vocational & Trade Schools
- Repair Services

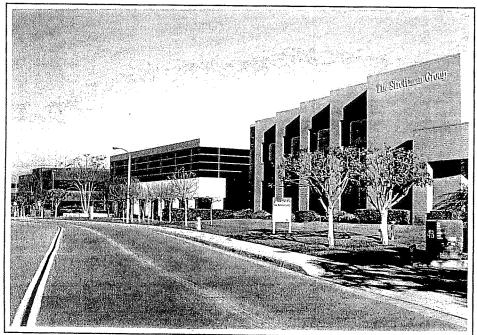
Selected secondary and conditional uses, considered supportive and not dominant, in general shall not exceed 25% of the aggregate square footage "yield" allotted to the district. In the "Industrial Park" category, secondary and conditional uses include, but are not limited to, the following:

- Administrative & Professional Offices
- Business Support Services
- Business Supply Services
- Durable Goods Sales, Retail
- Retail Sales of Goods Produced On-site
- Public Facilities & Services

In general, offices as an adjunct to an industrial use shall not exceed 25% of the usable building area in the project.



Light industrial and warehousing in corporate park setting



Buildings to 35', quality design and materials, screened loading and storage

#### **Development Yield**

The Acco Airport Center Specific Plan anticipates a total of 1,001,430 square feet of development.

The Development Yield Analysis, Table 2-2, depicts the "expected" development mix and indicates the anticipated square footage and primary use of each development parcel. Adjustments to the development program may be anticipated owing to market demand, final project design, and the inclusion of secondary uses. For purposes of impact analysis and evaluation, the combination of land uses at build-out with the most substantial environmental or traffic demands was examined.

Parcel acreage includes land devoted to internal roads and parking collectors but does not include acreage within the rights of way of Haven Avenue, Francis Street, Excise Avenue, or Vanderbilt Street.

The development mix represents an effort to balance peak-hour traffic demands: the depiction of hotel and meeting facilities within the Business Park District is an example of efforts in this regard. Parcel configuration and site design, while preliminary, seek to provide parking proximate to each use adequate to meet current City standards.

Because the Specific Plan is predicated on a succession of use, only a very limited amount of "structured" parking, if any, is to be expected in the initial years of the development program. As the market warrants, an increase in structured parking would permit an increase in development intensity.

The **Development Yield Plan**, Exhibit 2-2, presents a conceptual site design reflecting the Development Yield Analysis. It is but one of a range of possible plan alternatives and is provided for illustrative purposes only.

Note to the Reader: Vanderbilt Street was deleted from the Specific Plan at the request of the underlying landowner by administrative determination of the Planning Director in August, 2002. A revised Land Use Diagram reflecting the deletion, replacing Exhibit 2-1, is presented on page iii of the Preface at the front of this document. References to Vanderbilt Street throughout the text, and in diagrams and graphics, including those in this section, have not been deleted but instead have been retained for purposes of continuity.

Table 2-2 Acco Airport Center Specific Plan Development Yield Analysis

Parcel	Anticipated Use	Acres	Square Feet
Industrial P	ark		
1	Manufacturing & Distribution	15.01	325,500
2	Manufacturing & Distribution	4.36	70,330
5	Manufacturing & Distribution	1.95	24,000
_	Structured Parking (alternate use)		n/a
6	Manufacturing & Distribution	5.03	80,500
	Professional Office (alternate use)		124,000
	Structured Parking (alternate use)		<u>n/a</u>
	Primary Uses		500,330
	Permissible Secondary Uses (25%	125,080	
	Subtotal "Industrial Park"	26.35	500,330
Business Pa	rk		r
3	Office/Retail/Restaurant	2.36	30,000
	Manufacturing & Distribution (alt.)	40,000	
4	Retail/Restaurant/Office	5.75	67,100
	R&D/Light Wholesale/Business Su	pport	70,500
_	Professional Office (alt.use)		98,000
7	Office/Retail/Restaurant	4.12	200,000
8	Professional Office	1.67	20,000
9	Hotel (180 rooms/meeting facil.)	3.90	97,000
10	Retail/Restaurant	4.22	18,500
	Structured Parking		n/a
	R&D/Light Wholesale/Business Su	71,500	
	Primary Uses		501,100
	Permissible Secondary Uses (25%)	125,275	
	Subtotal "Business Park"	22.03	501,100
All Uses	<b>Total Development</b>	48.38	1,001,430
	Roads and Related ROW	6.74	n/a
Project	Grand Total "Expected"	55.12	1,001,430

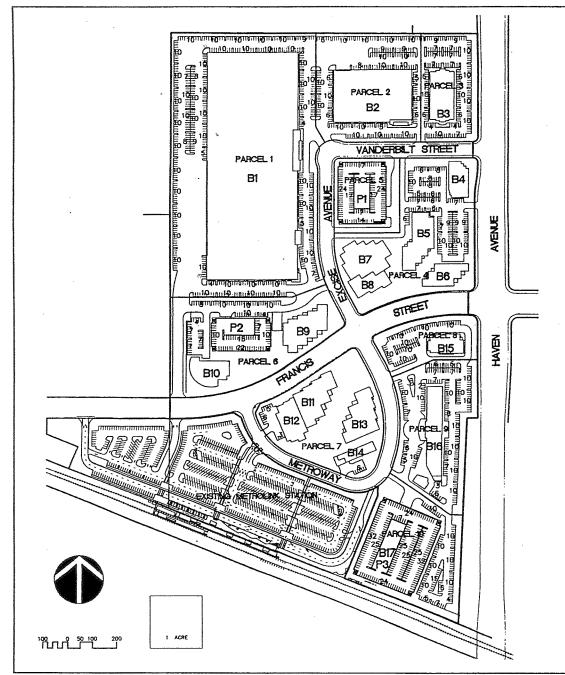


Exhibit 2-2: Development Yield Plan

# **Special Conditions**

Adjustments to the development program may be anticipated owing to market demand and final project design. As more detailed plans are prepared to respond to individual parcel users, parcel configurations and intensities will vary. This may result in re-assigning intensities to other parcels within the Specific Plan area to balance the total square footage of development while maintaining the Plan's intent.

Adjustments shall be subject to the following limitations:

- Adjustments in development mix shall involve alternate land uses selected at the development plan stage from the Matrix of Primary and Secondary Uses, Table 3-1, in Part Three: Development Regulations, providing that their cumulative impacts are equal to or less than those of the uses analyzed in the Acco Airport Center Traffic Study incorporated herein by reference and included as an Appendix in this report;
- Adjustments in parcel configuration and square footage shall
  involve a subdivision, transfer and/or exchange of area between
  individual parcels owned or legally controlled by the same party,
  or by disparate ownerships who have reached mutual formal
  agreement on the adjustment, within the Specific Plan area; and
- 3. The <u>aggregate result of all such adjustments</u> over the Specific Plan area shall not exceed the "expected" development intensity of 1,001,430 square feet or the trip generation thresholds of the *Acco Airport Center Traffic Study*.

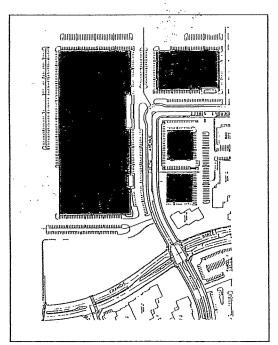
# **Density Limitation**

In no case shall the development density on any commercial parcel in the Acco Airport Center Specific Plan area exceed a floor area ratio (FAR) of 1.0. Parcels tied together by easement or recorded covenant for parking purposes shall be considered one parcel.

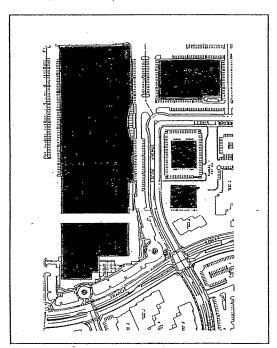
The maximum floor area ratio (FAR) for any industrial parcel shall not exceed 0.55. Industrial uses with a FAR greater than 0.45 shall require Planning Commission and City Council review and approval in accordance with Council Resolution 92-118. Parcels tied together by easement or recorded covenant for parking purposes shall be considered one parcel.

# Site Coverage

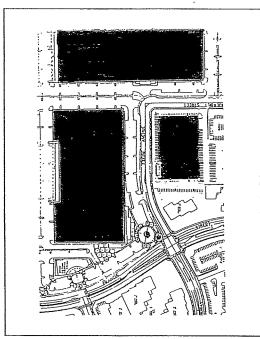
In no case shall building coverage on any individual development site or parcel exceed 55 percent of parcel area.



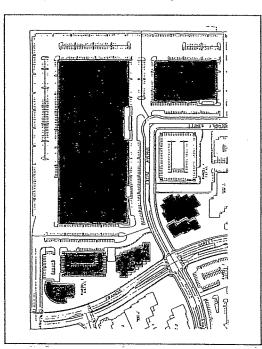
Drawing 1: Possible initial site development



Drawing 3: Combined parcels, expanded use



Drawing 2: Alternative site design



Drawing 4: Transition to more intensive use

# Site Design Flexibility

The Specific Plan recognizes the need for flexibility in individual site/building design and ultimate parcel configuration in the "spirit and intent" of Plan proposals. Parcel usage must of necessity be market-driven.

An example of the range of possible alternatives for building and parcel configuration is presented in the diagrams at left.

Final site design determinations are therefore appropriately left to the development plan stage. Adherence to the development standards of **Part Three: Development Regulations** and conformance to the design criteria of **Part Four: Design Guidelines** is required. Specific design criteria for sites contiguous to Haven Avenue and Francis Street are also set forth in those chapters.

All site designs and individual parcel plans shall be subject to the review and approval process set forth under Development Plan Review, in Part Five: Implementation of this Specific Plan document.

# Height of Buildings

The Specific Plan area falls under the jurisdiction of Part 77 of the FAA regulations related to the runway approach surface of Ontario International Airport, permitting maximum building heights of 150 feet above the 952 foot elevation contour.

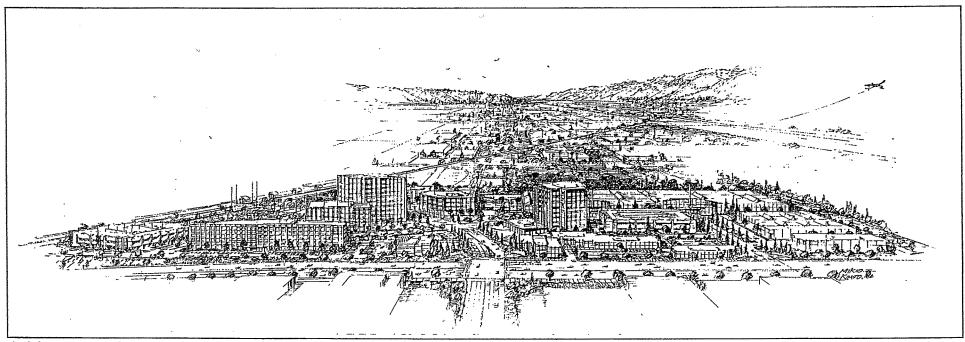
Under this regulation maximum building heights ranging from 142 feet to 172 feet, or from 12 to 14 stories, would be allowed depending on the buildings location on the project site.

# **Distance Between Buildings**

Setbacks between buildings shall be determined at Development Plan Review on a building-by-building basis.

#### Minimum Parcel Size

The minimum development parcel in Acco Airport Center shall be 0.5 acre, provided that a minimum 2 acre site shall be master-planned as a unit and be subject to development plan approval by the City's Development Advisory Board.



Aerial perspective of project, viewing west from Haven Avenue

# Density "Bonus" Opportunity

It is the intent of the Specific Plan in its land uses and densities to provide that the traffic generated by Acco Airport Center be within the capacity of the circulation system of Ontario to accommodate it. The criteria used to establish permitted uses or to review conditional uses and the findings required for approval shall ensure that the needed circulation system balance will be maintained.

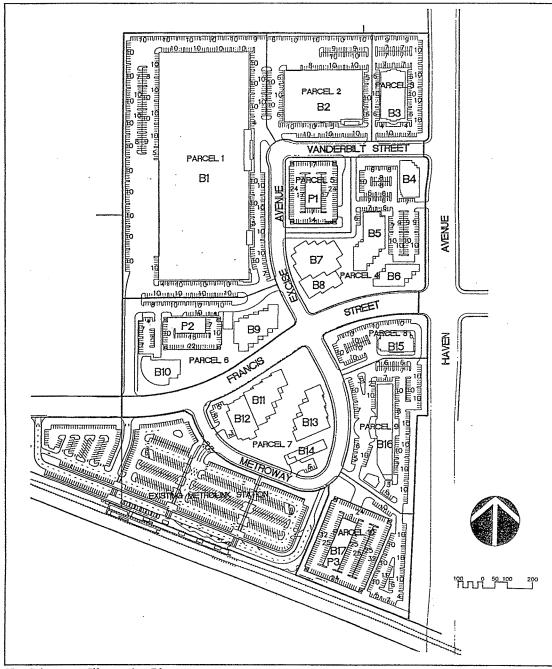
It is also a goal of the Plan to ease pedestrian access and to encourage the use of public transit. This, in turn, requires not only the provision of pedestrian amenities and well-located structured parking, but a gradually-increasing *compaction* or *intensification* of use over time if pedestrian activity is to be facilitated.

The Plan is not and should not be a static document. Though a "development yield" of 1,001,430 square feet of building is "expected" by the horizon year of the Plan, Acco Airport Center has a projected 15-year build-out and changes and adjustments to the project must be anticipated. The Plan provides flexibility to incorporate the predictable but as yet unquantifiable benefits of increased transit ridership by offering a "density bonus" opportunity, to a maximum potential

entitlement of 1,270,700 square feet of development. Portions or all of this "density bonus" can be realized only by the preparation (or revision) and approval of a Transportation Demand Management Plan (TDM) for all or part of the project, which may occur at any time during the course of Plan implementation and which shall be subject to additional environmental review at the discretion of the City.

#### **Transportation Demand Management Plan**

Any property owner may apply for a development agreement relating development density to a **Transportation Demand Management** (TDM) Plan. These plans provide means of reducing peak-hour trip generation and require regular monitoring to ensure that the peak-hour trips generated by particular uses or additional square footage do not exceed the number of trips that would be generated if the particular site in question were developed to the FAR 1.0 limit. In reviewing an application for such a development agreement, the City shall impose conditions on the additional development which assure that the peak-hour trip generation projections of the overall project are not exceeded.



Key Diagram, Illustrative Plan

# **Project Vision**

The Illustrative of Project at Full Development, included as Exhibit 2-3, is a supplementary and non-regulatory exhibit showing one conceptual development alternative. Its assumptions are presented in Table 2-3. The graphic attempts to provide a sense of the character of the buildings, site planning, circulation and parking systems, and the landscape treatment envisioned by the planners and architects for Acco Airport Center at completion. The reader should note that other less-intensive scenarios are possible within the plan framework.

The Land Use Diagram and the Development Yield Plan, Exhibits 2-1 and 2-2, together with the Development Regulations contained in Part Three, set forth primary land use categories, the range of permissible uses and development limitations parcel-by-parcel.

Table 2-3
Acco Airport Center Specific Plan
Illustrative Plan Assumptions

Building Key	Sample Occupancy	No. of Stories	Building Square Ft	Parking Demand
1	Manufacturing/Wareho	use 1	325,500	661
2	Manufacturing/Wareho		70,330	242
3	Offices	2	40,000	168
4	Office/Bank/Restaurant		11,230	shared
<b>4</b> 5	Retail/Restaurant	1	22,225	189
6	Office/Bank/Restaurant	t 2	23,000	shared
7	Offices	0-9	174,000	618
8	Retail/Restaurant	1	10,650	shared
9	Offices/Bank	4	84,000	shared
10	Offices	3	40,000	420
11	Offices/Restaurant	5-10	200,000	1127
12	Office/Retail/Restaurar	nt 2	18,000	shared
13	Offices/Bank	. 5	105,000	shared
14	Retail/Restaurant	2	11,000	shared
15	Professional Office	2	20,000	69
16	Hotel (180 rooms)	6	97,000	204
17	Retail/Parking Structur	re 3-4	<u>18,765</u>	63
All	Total in Example Sho	wn	1,001,430 1,270,700	

Note:

Asterisk total includes 269,000 square feet of "density bonus" in Buildings #7 and #11.

#### Parking Demand Generation Assumptions:

Office/Retail: 1 car/300 square feet of floor area

Manufacturing/Warehousing: 1 car/500 square feet, first 20,000 square feet;

plus 1 car/1000 square feet on balance remaining; for add'l truck bay, delete 4 cars

Hotel: 1 car/room + staff

These standards were assumed for estimating purposes only.

For complete parking standards, refer to Ontario Municipal Code.

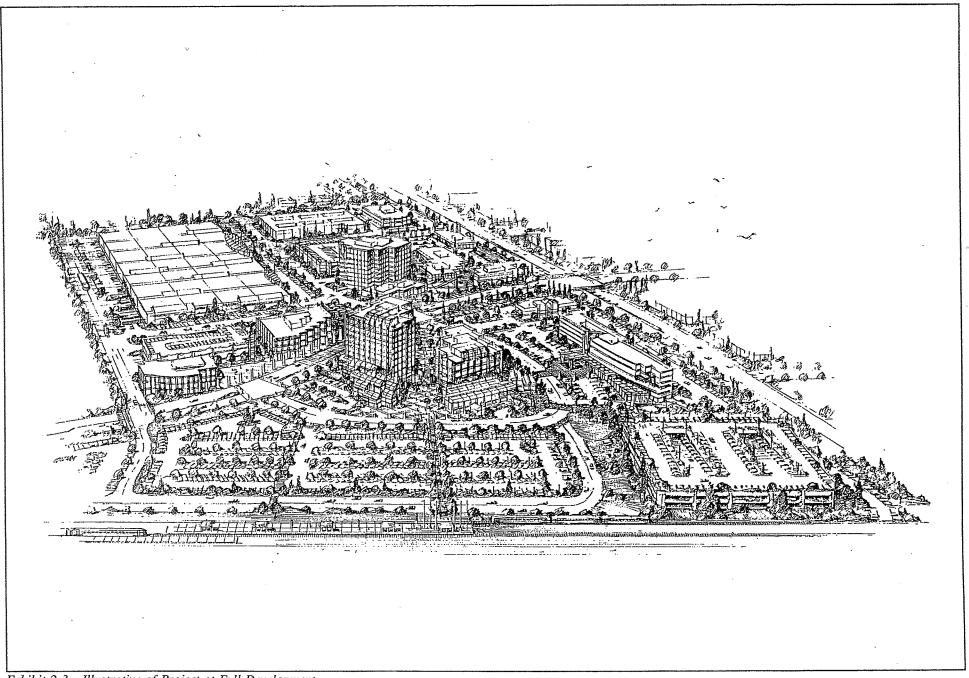


Exhibit 2-3: Illustrative of Project at Full Development

#### 2.2 THE CIRCULATION PLAN

#### Structure of The Plan

The Circulation Plan presents the overall concept of vehicular and pedestrian movement within Acco Airport Center.

#### **Vehicular Circulation**

The vehicular circulation pattern is designed to provide a smooth and continuous flow of traffic to all individual development parcels of Acco Airport Center and to facilitate east-west traffic through the project. The sequential visual experience of the visitor as well as the safety of motorist and pedestrian were prime considerations in the design of the system.

All roads and attendant right-of-way depicted on the Circulation Plan are to be dedicated to the City with the exception of the internal parking collector roads and the parking areas themselves. Public sidewalks will be incorporated within these dedicated right-of-ways where noted.

#### **Pedestrian Circulation**

Pedestrian linkages are an equally important feature in the Acco Airport Center design.

A pedestrian "spine" separate from vehicular travelways will ultimately provide the most direct access from the commuter rail platform to major activity centers (building clusters) and structured parking in the heart of the project. The "spine" seeks to internalize and intensify pedestrian activity and concentrate amenity along a single travel corridor, creating a special "sense of place". Seasonal plantings, water features, canopy trees, trellis, special paving and lighting and other design features will be used along the walkway to accentuate stopping points and to create an intimate scale.

An easement for public access, variable in width but averaging 15', shall connect affected parcels and define the length of this "spine". Individual buildings and major building complexes shall be required to orient their entries directly to the spine as well as to adjacent fronting roads during their site plan development. Also during site plan development, internal "paseos" shall be identified for design reinforcement to link more remote buildings of the Business Park to this main pedestrian corridor.

Public sidewalks in the parkway area of roadways provide access to buses and property frontages.

#### **Public Transit**

The original Specific Plan acknowledged local and regional interest in developing an intermodal transportation network and acknowledged the possibility of a future amendment should a commuter rail station be established at Acco Airport Center on the Riverside-to-Los Angeles Metrolink line serving the airport and activity centers in eastern Ontario. Construction of the present transit platform and related parking in the spring of 1993 impacted the ACCO Airport Center Specific Plan as drafted and created the need for this Specific Plan amendment.

Omnitrans provides bus service to the project area. Service expansions are in response to ridership demand.

Tentative bus stop locations at obvious collection points or crossings of major roadways by the pedestrian system are shown on the Plan. Omnitrans prefers "far side" intersection stops at approximately two to four block intervals (1/4 mile). Bus stops are a minimum of 8' by 60'.

#### Parcel Access & Parking

Likely key points of access penetration to development parcels and parking are shown as a guideline only. Additional curb cuts shall be kept to a minimum and fully justified.

#### Signalization

A traffic signal will be installed at the Francis Street/Excise Avenue intersection, pursuant to the requirements of the specific plan traffic study. Final determination of signalization requirements and the location of median openings along Francis Street will occur concurrent with more detailed site planning.

The proposed Circulation Plan for Acco Airport Center is illustrated in Exhibit 2-4.

Note to the Reader: Vanderbilt Street was deleted from the Specific Plan at the request of the underlying landowner by administrative determination of the Planning Director in August, 2002. A revised Land Use Diagram reflecting the deletion, replacing Exhibit 2-1, is presented on page iii of the Preface at the front of this document. References to Vanderbilt Street throughout the text, and in diagrams and graphics, including those in this section, have not been deleted but instead have been retained for purposes of continuity.

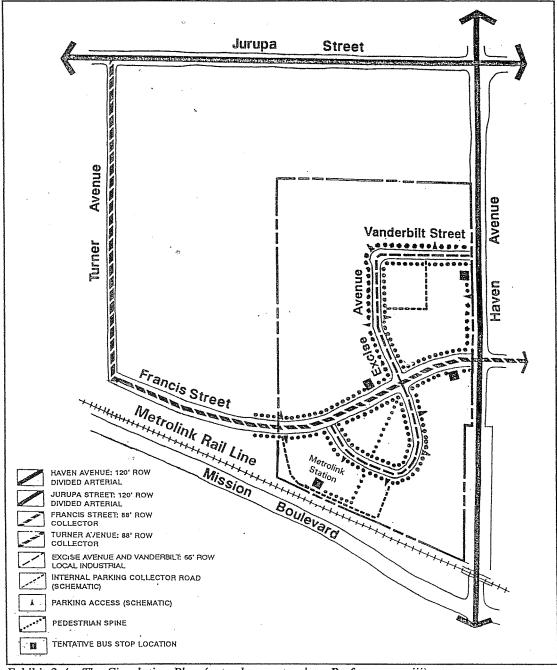


Exhibit 2-4: The Circulation Plan (note changes to plan, Preface, page iii)

# **Projected Traffic Flows**

Design criteria for the roadway elements of the Plan were established by traffic studies prepared by Kimley-Horn Associates in conjunction with the Traffic Engineering Department of the City.

The Acco development is projected to generate 13,467 daily trips on the Ontario circulation network. Project generated trips plus related project trips and ambient growth were applied to the network and the resulting level of service (LOS) was calculated for peak hour conditions.

A full Environmental Impact Report (EIR) was prepared for the Acco Airport Center Specific Plan as adopted. There are no changes from the traffic conditions previously evaluated. All intersections operate at an acceptable level of service at peak hours with the exception of Haven Avenue at Jurupa Street, which operates at an LOS of F during the AM peak volume. This condition exists without the project and is related to the sheer volume of regional traffic on Haven Avenue and Jurupa Street.

Signalization of major intersections (Haven Avenue at Jurupa, Francis, and Mission, and Turner Avenue at Jurupa) was anticipated in the study and work is completed. The intersection at Haven Avenue and Vanderbilt does not meet signal warrants because it is a right-in/right-out access point.

It should be noted that traffic studies do not indicate a requirement for westerly egress from the project site along Francis to Turner. Thus, the extension of Francis west of Acco Airport Center can occur as part of development of the UPS property. Similarly, no improvements to Turner are required as part of Acco Airport Center.

The City proposes that ACCO Airport Center be limited to the peak hour trips stated in the project traffic study included in the Appendix of this Specific Plan. The project sponsor will be responsible to supply the City the projected peak hour trips generated from each site within the Specific Plan area as they are developed. The trip generation will be from the ITE Trip Generation Manual, or other recognized publications approved by the City Engineer. The City will use the supplied information to monitor the traffic generated from this development.

Roadway needs in the project vicinity, in terms of travel lanes and turning movements, are diagrammed in Exhibit 2-7.

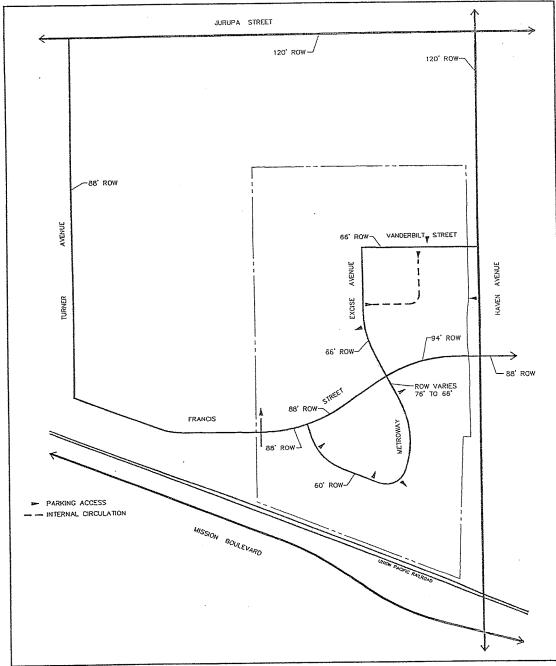


Exhibit 2-5: Right-of-Way Diagram (note changes to plan, Preface, page iii)

# **Roadway Cross-Sections**

Average rights-of-way and representative roadway cross-sections are depicted in Exhibit 2-5 and Exhibit 2-6 respectively. No on-street parking shall be permitted in Acco Airport Center.

Identified on Exhibit 2-6 are certain "landscape easements," intended to supplement the dedicated parkways within the public right-of-way. The combined landscape area is referred to as "parkway" in the Streetscape Cross-Sections of The Streetscape Plan.

#### Haven Avenue (Divided Arterial (120' R.O.W.))

Haven Avenue provides the project's most strategic frontage from an image and marketing standpoint.

Haven Avenue is designed as a limited-access, median-divided primary arterial with a 120- foot right-of-way. The right of way provides for 3 travel lanes in each direction on 40' of pavement, a 14-foot median, and two 13-foot dedicated parkways. The parkway provides space for a 5-foot sidewalk.

Primary access to the Specific Plan area from Haven is provided by a controlled intersection at Francis Street. A secondary right-in, right-out access point will be provided at Vanderbilt. Private access direct to Haven Avenue will be considered in conjunction with site development; however, no more than one private access point to Haven from the specific plan area may be allowed.

#### Francis Street (Collector Street (88'-94' R.O.W.))

Francis Street, a local east-west collector, intersects with Haven Avenue and provides major access to the project. Francis will ultimately connect (by others) through to Turner Avenue.

The right-of-way west of the Excise intersection accommodates a 16' raised median, 2 travel lanes totalling 32' in each direction, and 4-foot dedicated parkways on each side of the road. The right-of-way between Excise and Haven is widened to 94' to accommodate double left turn lanes. A 5-foot sidewalk abuts the curb. Curb cuts along Francis shall be kept to a bare minimum.

The Haven Avenue/Francis Street intersection is designed with dual left-turn lanes eastbound on Francis to northbound Haven. The remaining lanes will be a through and a shared through-right.

The Francis Street/Excise Avenue intersection, the most significant intersection in the project, shall be designed with two travel lanes eastwest with a double left-turn pocket in the median eastbound and a single left-turn pocket in the median westbound. North-south movements will be handled with two lanes for each direction. Designation of lanes is specific to traffic demands on each approach.

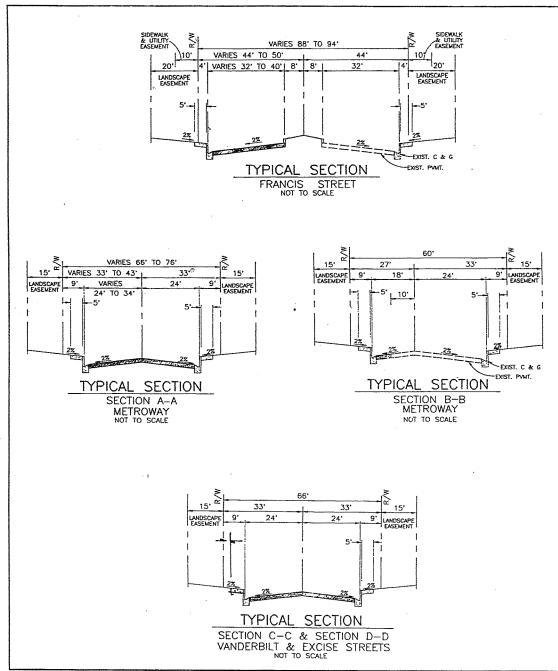


Exhibit 2-6: Roadway Cross-Sections

# Excise Avenue and Vanderbilt Street (Local Industrial Streets (66' R.O.W.))

Excise Avenue and Vanderbilt Street are local streets providing access to industrial uses adjacent to the western and northern property boundary and to the business park uses in the center and southern portions of the site. The right-of-way of both Excise and Vanderbilt shall contain 48-feet of pavement (two travel lanes in each direction) and 9-foot parkways on each side of the road. A 5-foot sidewalk adjacent to the curb shall be constructed on both sides of Excise Avenue and Vanderbilt Street.

#### Metro Way (Local Street (maximum 60' R.O.W.)

Metro Way is a local street providing essential access and exposure to uses south of Francis and primary egress to parking adjacent to the transit platform. The right of way may be less than 60' in some cases. South of Francis a 5-foot sidewalk shall be constructed on both sides of Metro Way at curbside.

# **Internal Parking Collector Roads**

Private internal roads to access parking shall be designed as part of individual parcel development activities and shall be an integrated component of the parking and circulation of the particular parcel. Internal roads shall meet City criteria wherever applicable.

#### Surface and Structure Parking

Parking lot design shall conform to the Ontario Zoning Ordinance, Off-Street Parking Section.

Parking structures shall be designed not to exceed a 35-foot height limit measured from adjacent roadway curbs. The first story of all structures shall be partially submerged and screened with bermed shoulders and landscaping to soften the massiveness of the structure when viewed from ground level. Terracing of structures shall be encouraged.

#### **Off-Site Connections**

Jurupa Street to the north of the property and Mission Boulevard to the south are both depicted on the City's Master Plan of Streets and Highways as six-lane divided major arterials.

Turner Avenue, a north-south collector street to the west, connects to Jurupa. The extension south over the railline at grade to Mission Boulevard was closed in 1994 by the City of Ontario and the connection is expected to be permanently eliminated. Francis Street will extended in the future to connect to Turner; improvements to Francis west of the project and signalization of the Francis/Turner intersection, if required, shall be the responsibility of others.

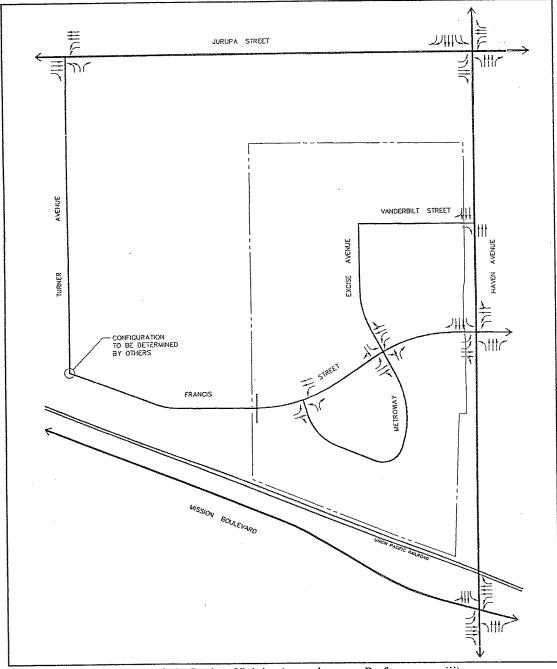


Exhibit 2-7: Roadway Needs in Project Vicinity (note changes, Preface, page iii)

# Roadway Plan

Roadway needs in the project vicinity, in terms of travel lanes and turning movements, are diagrammed in Exhibit 2-7.

A roadway plan illustrative of these needs is depicted as Exhibit 2-8, The Roadway Plan. The locations of the cross-sections displayed in Exhibit 2-6 are shown. The plan was prepared in consultation with the Traffic and Engineering Departments of the City of Ontario.

Note to the Reader: Vanderbilt Street was deleted from the Specific Plan at the request of the underlying landowner by administrative determination of the Planning Director in August, 2002. A revised Land Use Diagram reflecting the deletion, replacing Exhibit 2-1, is presented on page iii of the Preface at the front of this document. References to Vanderbilt Street throughout the text, and in diagrams and graphics, including those in this section, have not been deleted but instead have been retained for purposes of continuity.

Right-of-way "bubbling" should be anticipated as a standard condition at intersections to accommodate the turning movements shown.

Geometrics and right-of-way dedications will be finalized as part of more detailed engineering design accompanying the preparation and submittal of final maps.

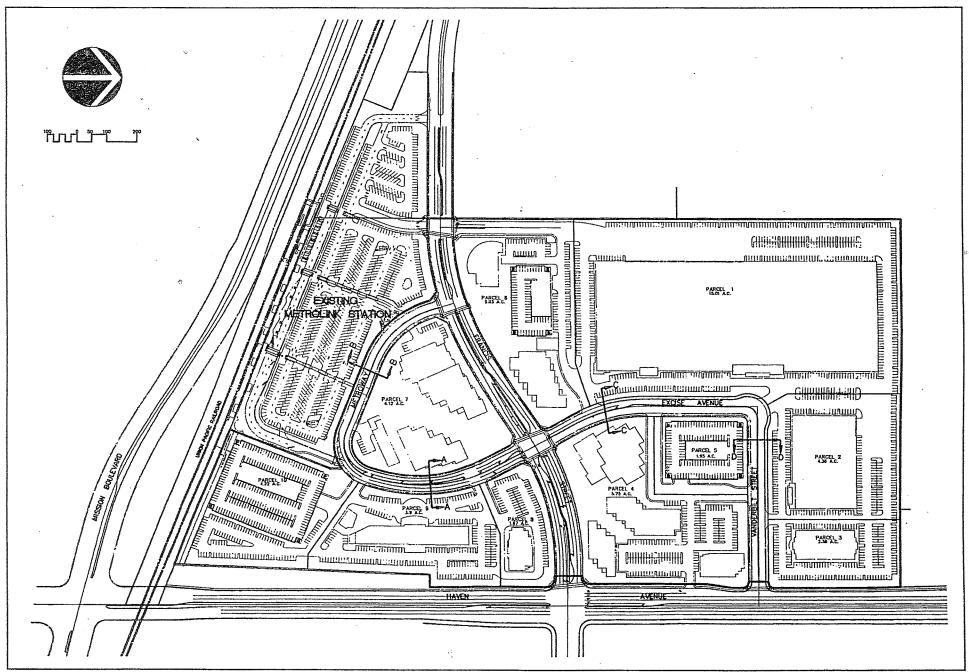


Exhibit 2-8: The Roadway Plan (note changes to plan, Preface, page iii)

#### 2.3 THE STREETSCAPE PLAN

The Streetscape Plan has been included as a component of this Specific Plan in an effort to integrate the disparate visual design elements of the major movement corridors of Acco Airport Center Ontario - vehicular and pedestrian - into a cohesive whole so that each contributes positively to the desired overall aesthetic character of the project.

It is the intent of the Streetscape Plan that a consistent quality of design in all public rights-of-way be maintained. The use of a designated hierarchy of trees and plant material along streets within the project facilitates visitor orientation and reinforces a desired continuity of image. Special "gateway" and major intersection treatments can dramatize primary entries to the project. Unique and identifiable signage, street furniture and lighting can facilitate establishment of a distinguishable design theme.

The areas encompassed by proposals of the Streetscape Plan include the dedicated right-of-way of all public roads, supplemental landscape setbacks and easements over private property for streetscape purposes, public walkways, and certain "buffer" areas shown on the Plan.

The key elements of streetscape are identified on The Streetscape Plan, Exhibit 2-9, and discussed on the pages following thereafter.

Note to the Reader: Vanderbilt Street was deleted from the Specific Plan at the request of the underlying landowner by administrative determination of the Planning Director in August, 2002. A revised Land Use Diagram reflecting the deletion, replacing Exhibit 2-1, is presented on page iii of the Preface at the front of this document. References to Vanderbilt Street throughout the text, and in diagrams and graphics, including those in this section, have not been deleted but instead have been retained for purposes of continuity.

The project-level landscaping criteria set forth in Part Four, Design Guidelines, complement Streetscape Plan proposals.

#### Plan Concept

Acco Airport Center Ontario is intended as a "destination", and as such it must stand out from the industrial fabric that surrounds it in order to be successful.

To do this, dramatic project signage, a distinctive streetscape, architectural monumentation, lighting, pedestrian-friendly site amenities, and careful control of the "view from the road" are as necessary as an inventive land use mix, physical compaction and ease of access and parking to draw the first-time visitor into the project.

The project must make a strong design statement.

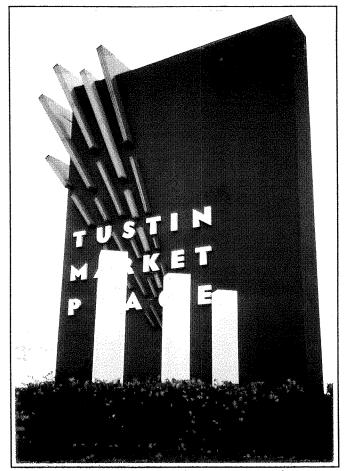
The photos on the opposite page are illustrative of such a concept, not specifics. The plan drawings on the pages following, too, are conceptual. The plant pallette and monumentation shown may or may not be suitable. Final design determinations are appropriately left to the development plan stage.



A streetscape "theme" (including planting, signage, and accent lighting)



A project "signature", expressed in major intersection monumentation



Gateway signage, enhancing visibility, announces the project

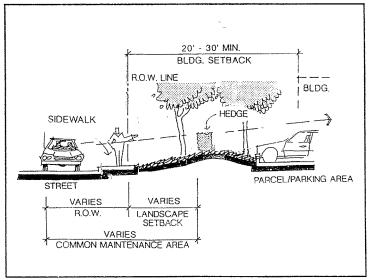
#### **Arterial Streetscapes**

The Streetscape Plan proposes the use of a specific, studied hierarchy of trees and plant material in the parkways and medians of Acco Airport Center.

Informal plantings such as randomly-spaced tree groupings ("drifts") and undulating shrub masses are proposed for wider landscape easement areas, while formal plantings such as equally spaced trees or clipped hedges of shrubs will be used in narrower parkway areas. The use of the strongest, most formal design statements integrating plant material and hardscape are reserved for intersections and major pedestrian corridors.

A desired tree form, such as "canopy" and "conical", is identified and alternate species are specified for various categories of streetscape. Shrub and groundcover plantings have been selected to be in scale with the respective tree forms and to reinforce desired themes with complementary textures and colors. A balance of evergreen and deciduous plant material is proposed to avoid a barren winter look and to add fall color accents. Plant material not suitable to local soil and microclimate conditions has been eliminated from the palette. Mature plant size and growth habits will dictate final placement of all material in relation to structures and parking.

Plantings will complement the use of landscaped berms designed to screen parking and to create topographic variation on the otherwise flat site. Use of turf shall be selective. Shrub and groundcover plantings will vary from somewhat informal masses of colorful shrubs and perennials to formal hedges and refined low groundcover massings. Slope gradients shall not exceed 2:1 in shrub and groundcover areas nor 3:1 in turf areas.



Typical Parkway Components (section drawing)

#### Haven Avenue (Streetscape One)

The Haven Avenue frontage is the most heavily viewed portion of the Specific Plan area. Design and installation of the arterial streetscape shall precede or occur concurrently with the first phase of development

The dedicated parkway of Haven will be augmented by a 25-foot landscape easement outside the public right-of-way. The interface between public and private improvements shall be detailed in subsequent stages of design and shall be subject to review and approval by the City.

Landscaping of the combined parkway will reinforce the previously established City-approved design vocabulary of the deciduous trees *Plantanus acerfolia* (London Plane Tree) and *Gleditsia triacanthos* (Locust) and the evergreen *Pinus canariensis* (Canary Island Pine). Within the project landscape easement/setback area, these varieties shall be planted in informal groupings spaced to maintain strategic view corridors to the project's interior. Tree quantities and spacing will be determined by the City's landscape standards. Wherever possible, deciduous trees will be placed in the foreground, as viewed from Haven Avenue, so that the structural branching quality of these trees in winter will be highlighted by an evergreen pine backdrop.

Secondary plantings may complement landscape statements previously established for Haven Avenue as part of the California Commerce Center project: shrubs, to include *Pittosporum tobira "Wheelerii," Raphiolepis indica "Springtime" and "Enchantress"*; groundcover, to include *Gazania rigens "Sunglow"*).

Accent shrubs Ceanothus "Yankee Point" (California Lilac) and Pittosporum tobira "Variegata" (Variegated Mock Orange) will enhance seasonal color and add texture to the existing palette. Shrubs will be planted in informal masses to reinforce tree placement except where formal hedges, possibly in combination with low berms, are desirable to screen vehicular parking along this project frontage.

#### Francis Street (Streetscape Two)

Francis Street serves as the primary entry to the project. A 20-foot landscape easement will augment 4' dedicated parkways on both sides of the road. The street also contains a median.

Francis Street will be notable for its future canopy of domed and seasonally-colorful trees, formally spaced and lining both sides of the road. A single species, either *Pistacia chinensis* (Chinese Pistache), a deciduous domed canopy tree with exceptional seasonal color, or *Cinnamomum camphora* (Camphor Tree), an evergreen majestic canopy tree with showy bronze new growth in spring, shall be selected to be used for the length of the parkway area.

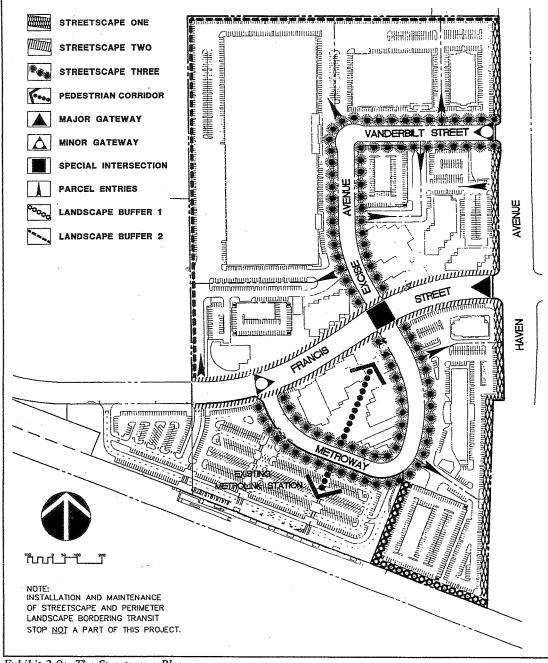


Exhibit 2-9: The Streetscape Plan

Phoenix dactylifera (Date Palm), an evergreen palm with slender trunk and gray-green waxy leaves, may be considered as an alternate or accent tree. The median may contain any one of these varieties, or a smaller-scale accent tree like the deciduous Lagerstroemia indica (Crepe Myrtle), which displays striking summer flower color in a variety of shades depending on the variety selected.

Trees shall be spaced 25'apart (palms, 20' apart) to ensure continuity if spacing is interrupted by architectural or hardscape elements.

A combination of low berms planted with turf, hedges, and formal masses of shrubs will be used in parkway areas to screen parking or to complement architecture as it relates to the street. Shrubs may include Ligustrum japonicum (Japanese privet) or Photinia fraseri (Photinia) as a screen hedge, and the perennial flowering Agapanthus africanus (Lily of the Nile), Hemerocallis species (Day Lily), or the shiny-leafed, evergreen Ilex species (Holly) in formal masses. The ground cover Tracheiospermum jasminoides (Star Jasmine) may also be used as a low formal shrub mass.

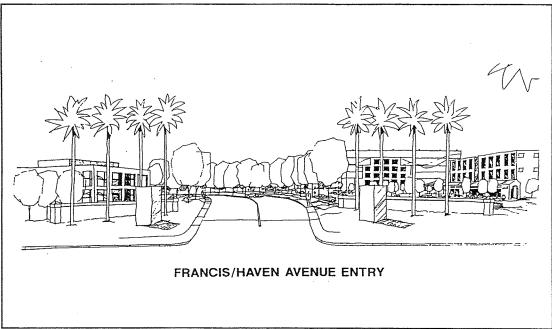
#### The Collector Streets (Streetscape Three) Metroway, Excise Avenue and Vanderbilt Street

The four lanes of Excise Avenue and Vanderbilt Street bisect the site from north to south, providing most of the access to the various development parcels of the project. Dedicated parkways here shall be augmented with a 10' to 15' landscaped easement each side.

The Excise/Vanderbilt streetscape will be characterized by either the deciduous and seasonally-colored *Liriodendron tulipifera* (Tulip Tree) or the colorful and flowering *Prunus sp.* (Purple Leaf Plum) as the chosen street tree for all parkways, with a backdrop of low berms or a 30" high screening hedge or the two in combination. The treatment is intended to block views of the industrial activities along the west and north boundaries of the development and screen views of parking areas on both sides of the street. Trees shall be formally spaced at one tree every 25 feet.

Metroway "loops" the southern portion of the site, providing access to the transit station and hotel/convention uses. Dedicated parkways of 9' here shall be augmented with landscaped easements of varying dimension on each side of the road.

While continuity with Excise/Vanderbilt to the north warrants major consideration, species options here may be augmented due to functional requirements to include the classic pine-tree-shaped *Pinus eldarica* (Mondell Pine), the slender *Phoenix dactylifera* (Date Palm), and the *Washingtonia filifera* (California Fan Palm), a stately palm with a larger diameter trunk and long-stemmed fan leaves. The Mondell Pine and California Fan Palm are both approved for use on the MetroLink site. Trees shall be formally spaced at one tree every 25 feet.



Artist's View of Francis/Haven Avenue "Gateway"

# **Gateway/Entry Monumentation**

"Gateways" to the Specific Plan Area are the focus of special landscape and hardscape improvements. They are critical to establishing the urban design quality of the project and announcing entrance.

The three primary gateways to Acco Airport Center are described below and shown on The Streetscape Plan, Exhibit 2-9.

#### 1. Major Gateway: Francis Street at Haven Avenue

The primary point of entry into Acco Airport Center occurs on Haven Avenue at Francis Street on the eastern property boundary.

The entry will be framed by sign monuments and a mass of trees to form symbolic gateposts at either side of the roadway. The gateway will occupy a triangular area of turf or groundcover measuring seventy feet (70°) on each street frontage. Design features include the use of accent trees and monuments incorporating project signage.

Special paving will mark the entry. Patterned, textured, colored, stamped concrete or pavers, used singly or in combination, may be used for emphasis. Crosswalks will be distinguished from the interior of the intersection.

#### 2. Minor Gateway: Vanderbilt Street at Haven Avenue

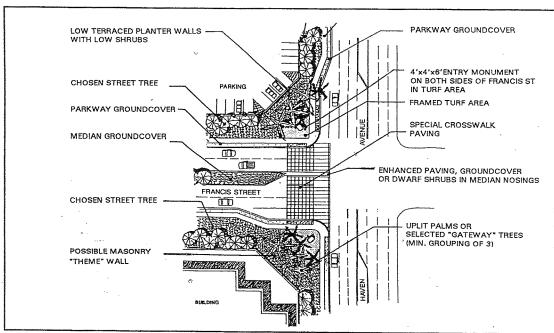
This secondary project entry will incorporate a triangular landscaped area sixty feet (60') on each street frontage. It shall include the same landscaping and paving treatments as the major gateway although the scale of the design elements shall be smaller.

#### 3. Minor Gateway: Francis Street at Metroway

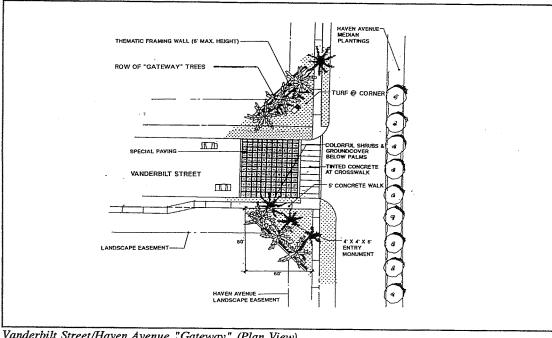
This secondary project entry should include hardscape and project signage monumentation similar to other entries but will vary to some degree in plant material selection since the southwest corner is part of the landscape easement on the Metrolink site. Trees will include *Pinus eldarica* (Mondell Pine) and *Lagerstroemia indica* (Crepe Myrtle), a deciduous accent tree displaying spectacular summer flower color.

This western "gateway" may be beneficially combined with the design treatment of the Francis Street and Metroway intersection, where a triangular landscaped area sixty feet (60') on a side has been reserved on each corner. Project signage need occur on the southeast corner only, and monumentation may be more modest in scale than at the Haven/Vanderbilt gateway.

Part Two: Component Plans 2 - 24



Francis/Haven Avenue "Gateway" (Plan View)



Vanderbilt Street/Haven Avenue "Gateway" (Plan View)

# Suggested "Gateway" Trees

# **Evergreen Trees**

Cinnamomum camphora+ Camphor tree+ Eucalyptus sp.\*+ Eucalyptus\*+ Ficus macrophylla+ Moreton Bay fig+ Melaleuca linarifolia\*+ Flaxleaf paperbark\*+ Pinus pinea\* Italian stone pine\* Schinus molle\* California pepper\* Washingtonia filifera+ California fan palm+

#### **Deciduous Trees**

Ginko biloba Pistacia chinensis Liriodendron tulipifera+ Salix babylonica Lagerstroemia indica+

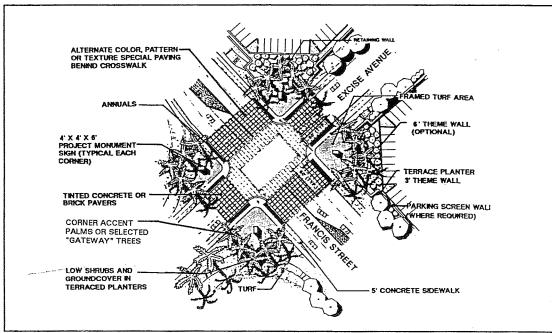
Maidenhair tree Chinese pistache\* Tulip tree+ Weeping willow Crepe myrtle+

# **Flowering Deciduous Trees**

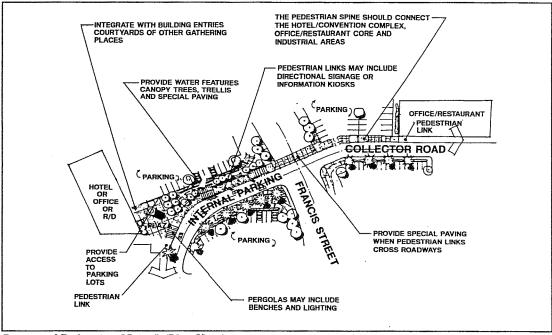
Cassia leptphyla+ Gold medallion tree+ Chorisia speciosa+ Floss silk tree+ Jacaranda mimosifolia Jacaranda\* Koelreuteria bipinnata Chinese flame tree\* Koelreuteria paniculata Golden rain tree\* Prunus blireiana+ Purple-leaf plum+ Tabebuia chrysotricha+ Golden trumpet tree+

"Drought tolerant" material denoted by asterisks (\*)

Note: Materials denoted with a "+" symbol added to list November, 1994.



Francis Street/Excise Avenue Intersection (Plan View)



Portion of Pedestrian "Spine" (Plan View)

# **Major Intersections**

Tall columnar trees in formal arrangements will be located at major intersections. The use of dramatic "specimen" trees is a suitable alternate.

Major intersections within Acco Airport Center are described below and shown on The Streetscape Plan, Exhibit 2-9.

#### 1. Major Intersection: Francis Street and Excise Avenue

The Francis Street/Excise Avenue intersection at the heart of the project area shall establish a theme for the project within an enhanced landscaped area on each corner, seventy feet (70') on each side measured from the curbface of the intersection.

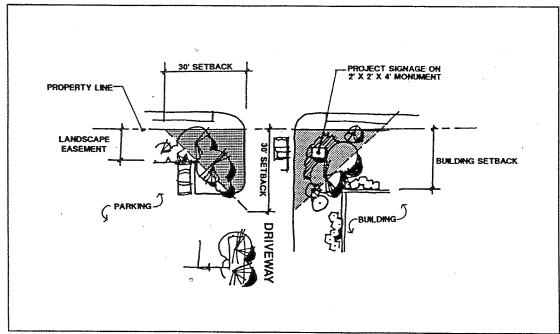
The pedestrian "spine" crosses this intersection from the southwest to the northeast corner. Significant quasi-public amenities shall front the intersection at these corners: an open courtyard or plaza to the southwest, a water or landscape-oriented focal point on the northeast set amidst hardscape spaces accessing commercial buildings to the northeast.

Major architectural monumentation should be considered for at least two of the quadrants of this intersection. "Signature" structures (see example in photo, page 2-21) along with enhanced paving, site furnishings, and accent lighting, could provide strong visual identity here at the core of the project and can serve as portals to the pedestrian corridor linking the major commercial parcels.

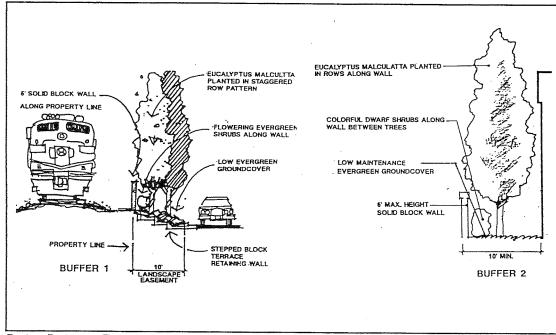
#### 2. Lesser Intersection: Francis Street and Metroway

This intersection, secondary in importance to Francis and Excise, is nonetheless effectively a "minor gateway" to the project and a significant contributor to identity. As such, some repetition of the design themes and/or elements applied to its more important neighbor are warranted.

The landscaping of this intersection will be influenced by the Metrolink site to the southwest and "business park" uses to the southeast and to the north. Trees will be a combination of the summer-flowering *Lagerstroemia indica* (Crepe myrtle) or the spring-flowering *Prunus blireiana* (Purple Leaf Plum) with an evergreen backdrop of *Pinus eldarica* (Mondell Pine) or an alternate vertical tree mass. Crosswalks will have enhanced paving and monumentation will include directional and identification signage.



Typical Parcel Entry Design (Plan View)



Project Perimeter Treatments

# The Pedestrian "Spine"

An easement for public access, variable in width but averaging 15', shall connect affected parcels and define the length of the main pedestrian "spine". Individual buildings and major building complexes shall be required to orient their entries directly to the spine as well as to adjacent fronting roads during their site plan development. Also during site plan development, internal "paseos" shall be identified for design reinforcement to link more remote buildings of the Business Park to this main pedestrian corridor. Public sidewalks in the parkway area of roadways provide access to buses and property frontages.

The planting theme includes a smaller, "pedestrian-scale" flowering accent tree, *Pyrus "aristocrat"* (Ornamental Pear), placed to form an "allee" or tree-lined path through the project. The tree is deciduous, allowing shade in summer and sun in colder months. The sculptural branch structure will, in most areas, be seen in contrast to base plantings of evergreen material. Shrubs and groundcovers will include small-scale formal plantings of colorful perennials and dense fragrant masses of *tracheiospernum jasminoides* (Star Jasmine). Seating, water features, special paving and lighting and other design features will be used to accentuate gathering places and to create an intimate scale.

#### **Parcel Entries**

Parcel entries occur wherever interior parking collectors penetrate the rights-of-way of major streets. Parcel entries will be similar in design to the gateway areas; however, they will be smaller in size, incorporating a landscaped area for the driveway entry monument signage. Design features include formal plantings of accent trees, shrub masses and turf, concealed lighting and directional signage.

# **Project Perimeter**

# Southern Property Boundary (Landscape Buffer #1)

A landscape buffer comprised of 15-gallon *Eucalyptus maculatta* (Red Gum) planted 10 feet on-center in a staggered pattern and massed 5-gallon shrubs will be utilized along the project site's southern boundary, contiguous to the commuter rail right-of-way where appropriate. This treatment will screen the railroad track as seen from on site as well as soften views from Mission Avenue.

#### North and West Property Boundary (Landscape Buffer #2)

Another landscape buffer shall be provided along the project's north and western edges. A 10-foot wide buffer of 15-gallon *Eucalyptus maculatta* (Red Gum) planted 10 feet on-center in a staggered pattern and massing of 5 gallon shrubs will be utilized to screen views and to mask aircraft operations.

#### 2.4 THE GRADING PLAN

The terrain of the site is essentially flat and unbroken, a portion of the great alluvial "fan" of the San Gabriel mountains to the north, gently sloping from the northern edge at approximately elevation 960' above sea level, to an elevation of 930' at the southern edge. The site has an average slope gradient of less than two percent.

Grading required for development will be primarily to redirect drainage, to provide a suitable base for roadways and building pads, and to create landscape interest. It is anticipated that cut and fill will be balanced onsite. Preliminary calculations indicate the total amount of cut for the project is 115,000 cubic yards while fill is 115,000 cubic yards.

A preliminary concept for the grading of the Specific Plan area is shown in **Exhibit 2-10**, **Conceptual Grading Plan**. A final master grading plan for Acco Airport Center shall be approved by the City of Ontario prior to the onset of construction and is incorporated herein by reference.

Note to the Reader: Vanderbilt Street was deleted from the Specific Plan at the request of the underlying landowner by administrative determination of the Planning Director in August, 2002. A revised Land Use Diagram reflecting the deletion, replacing Exhibit 2-1, is presented on page iii of the Preface at the front of this document. References to Vanderbilt Street throughout the text, and in diagrams and graphics, including those in this section, have not been deleted but instead have been retained for purposes of continuity.

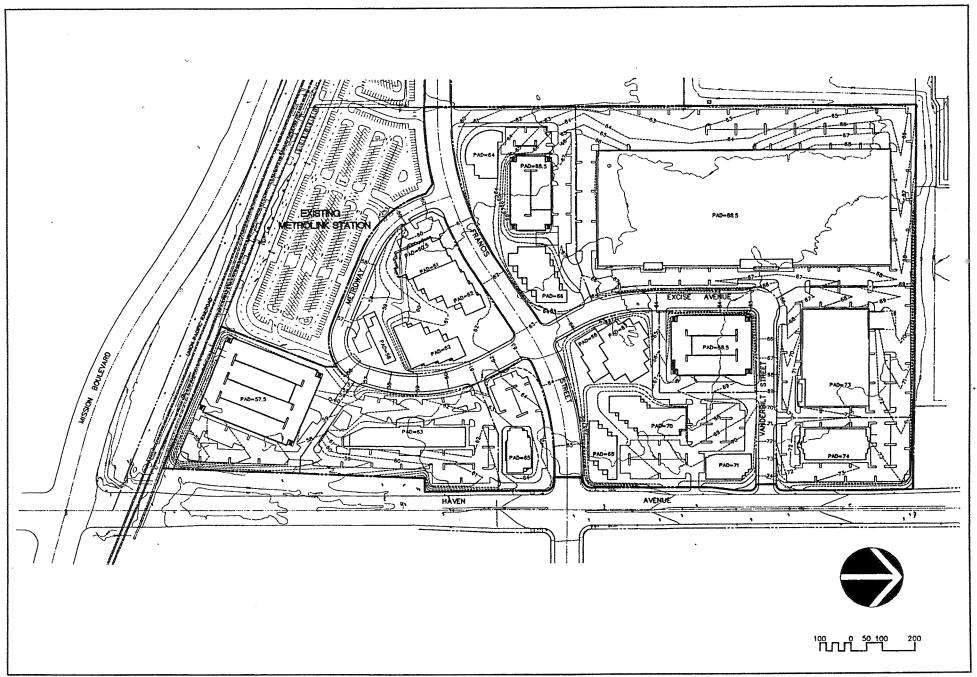


Exhibit 2-10: Conceptual Grading Plan

#### 2.5 THE INFRASTRUCTURE PLAN

The Infrastructure Plan for Acco Airport Center is presented in two exhibits: one depicting existing and proposed water and sewer services (Water and Sewer Plan, Exhibit 2-11), and the other, drainage and flood control systems (Surface Water Drainage Plan, Exhibit 2-12).

The Appendix to this Specific Plan document contains the *Preliminary Water Demand and Sewage Generation Analysis* and the *Preliminary Hydrology Study* for the project area.

All line sizes are preliminary and will be verified during final design.

Certain utilities such as electricity, cable television, gas and telephone service will be independently supplied by the various private utility companies based on service expansion plans incorporating Acco Airport Center in their development forecasts.

Note to the Reader: Vanderbilt Street was deleted from the Specific Plan at the request of the underlying landowner by administrative determination of the Planning Director in August, 2002. A revised Land Use Diagram reflecting the deletion, replacing Exhibit 2-1, is presented on page iii of the Preface at the front of this document. References to Vanderbilt Street throughout the text, and in diagrams and graphics, including those in this section, have not been deleted but instead have been retained for purposes of continuity.

#### Water System

Water service to Acco Airport Center shall be provided by the City of Ontario. Groundwater is the source of 30% to 100% of the City's water supply. The City is able to meet 100% of demand through groundwater sources, although up to 70% of its supply may ultimately be provided by imported sources. Groundwater is drawn from the Chino Basin, with the wells located within and owned by the City.

It is anticipated that water to serve the project will be drawn from the City of Ontario's 8th Street System. There are existing 12' water lines in Haven Avenue, Turner Avenue and Jurupa Street.

The system serving the project will be a "loop" system. As part of the Ontario Metrolink station improvements, 12-inch and 10-inch water lines were constructed in Francis Street and Metro Way respectively. The 12" line in Francis Street extends from a 12" line in Haven Avenue west to the property boundary. This line will ultimately extend west along Francis to connect with an existing 12" water line in Turner Avenue. The 12" Turner Avenue line extends north, meeting a 12" line in Jurupa Street and ultimately closing the loop at the Haven/Jurupa intersection.

Two additional 10-inch water lines will need to be constructed as development proceeds. One 10-inch loop system, the shorter of the two, will begin with a connection at Francis Street and extend south on Metro Way connecting to the now existing water line in that street. The other 10-inch loop system will begin with a connection at Francis Street and extend north on Vanderbilt and east on Excise, returning to Haven Avenue.

New service shall be designed to serve domestic, irrigation and fire demand. Costs of all new facilities construction, and/or any relocation, modification or other construction on existing on-site systems required due to development, shall be borne by the developer.

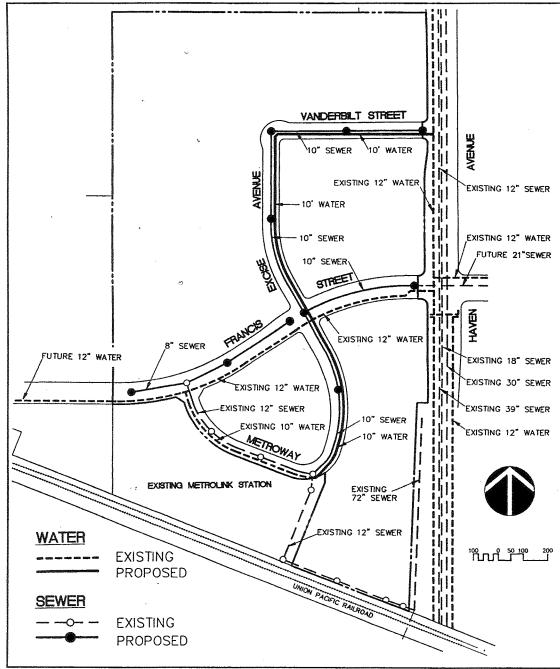


Exhibit 2-11: Water and Sewer Plan

# **Sewer System**

The City of Ontario and Chino Basin Municipal Water District (CBMWD) currently provide sewer services to the Specific Plan area. Collection facilities are provided and maintained by the City of Ontario. Wastewater treatment facilities are operated by the Chino Basin Municipal Water District under the provisions of a regional wastewater treatment contract.

Chino Basin Municipal Water District owns and operates a 72" interceptor sewer located on the west side of Haven Avenue adjacent to the project. Sewage from Acco Airport Center will be treated at Chino Basin Municipal Water District's Regional Plant No. 1. Total sewage generation within the Specific Plan site is estimated to be 491,040 gallons per day.

A connection to the interceptor sewer is provided by a metering manhole located at the southeast corner of the site. An existing 12-inch sewer main extends west from this point of connection along the southern boundary of the site, then north to Metro Way, then west and north along Metro Way to its terminus at the intersection of Metro Way and Francis Street. An easement for pipeline placement and maintenance has been granted for those segments of the main outside of the public right-of-way.

The site will be serviced through extensions of this 12" main. To intercept the on-site sewage flows, the sewer main at the intersection of Francis and Metro Way will be extended east in a 10" line and west in a 8" line located in the Francis Street right-of-way. Additionally, the sewer main at the southern-most point of Metro Way will be extended north in a 10" line in the Metro Way and Excise Street right-of-way, then east in a 10" line along Vanderbilt.

The developer shall be responsible for new construction and any relocation, modification or other construction of the existing on-site system required due to the development. Plans for modification or adjustment of District facilities shall be submitted to and approved by the District before proceeding.

# Surface Water Drainage

#### **Existing Conditions**

In its unimproved condition, the Specific Plan area is tributary to two drainage areas. Drainage is split approximately equally to a natural depression to the east at Haven Avenue and the railroad, and to Deer Creek Channel to the west.

The Lower Deer Creek Channel has until recently existed as an unlined ditch along the east side of Turner Avenue, passing under the railroad tracks and Mission Boulevard beyond the southwestern corner of the site. The channel is, however, being improved to accommodate recent development.

The design capacity of the Lower Deer Creek Channel is based on 100-year flood conditions after development. This is considered adequate to prevent significant local flooding potential. Drainage to Lower Deer Creek ultimately enters the Cucamonga Channel, which has excess capacity to safely conduct flows under future developed conditions.

The majority of the project area, according to the Flood Insurance Rate Map (FIRM) for the City of Ontario prepared by the Federal Emergency Management Agency (FEMA), is between the 500 year and 100 year flood zone. The southern third of the site is within the 100 year flood zone. The existing pattern reflects collecting of water behind the embankment supporting the railroad tracks at the southern boundary of the site.

The completion of the storm drain improvements delineated in this document will mitigate the collection of storm flows at the southeast corner of the site and this area will no longer be classified as included in the 100 year flood zone.

#### **Scheduled Improvements**

A storm drain system benefitting the project is to be constructed in the 1995-96 fiscal year by the City of Ontario as part of the *Ontario Metrolink Station Phase II* improvements.

This system will include a sub-surface connection to the Lower Deer Creek Channel at the intersection of Turner Avenue and Mission Boulevard, and a subsurface storm drain extending east along Mission Boulevard, north beneath the railroad tracks to Francis Street, and east along Francis Street to the western boundary of the site.

There is presently an 8'x13' reinforced concrete box (RCB) drainage structure located in Haven Avenue. A connection to the RCB is located at the southeast corner of the site, and a new 36" storm drain has been extended from this connection point along the southern boundary of the site, then north to Metro Way. An easement for pipeline placement and maintenance has been granted for those on-site segments of the drain line outside of the public right-of-way.

Grading of the project site will be such that storm-runoff from approximately 16 acres located south of Francis Street will be tributary to the RCB drain in Haven Avenue, and the balance of the acreage, approximately 36 acres north of Francis Street, will be tributary to the Lower Deer Creek Channel.

Storm flows from the area south of Francis Street will be collected into the existing 36" storm drain in Metro Way or at the southern boundary of the site and conveyed to the RCB drain facility in Haven Avenue.

Storm flows from the area north of Francis Street shall be collected in 36" and 42" reinforced concrete pipes (RCP) in the Excise Avenue and Francis Street rights-of-way, respectively. The RCP in Francis Street increases from a 42" to a 48" diameter pipe and conveys the storm flows west to the western boundary of the project, there to connect to the storm drain system to be constructed by the City of Ontario. The storm flows are conveyed through this system to the Lower Deer Creek Channel.

A preliminary Hydrology Study was prepared for the project area and is included in the Appendix to this Specific Plan document. The study includes preliminary storm drain pipe sizes and approximate collection point locations.

Collection points and drainage facilities within the public right-of-way in the Specific Plan area will be maintained by the City of Ontario. The Haven Avenue storm drain and the Lower Deer Creek Channel are maintained by the San Bernardino County Flood Control District.

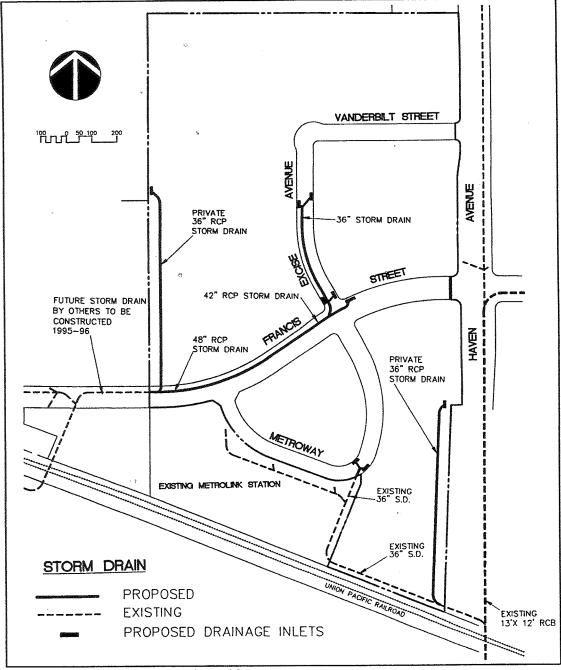


Exhibit 2-12: Surface Water Drainage Plan

#### **Utilities**

#### Electricity

Electric service shall be provided by the Southern California Edison Company. Extension of additional service to the site from mains on Haven Avenue shall depend on the timing of construction.

#### **Natural Gas**

Gas service shall be provided to the site by the Southern California Gas Company. Extension of service to the site shall be from the south, from existing facilities near the intersection of Philadelphia and Haven Avenues.

#### Telephone

Telephone service shall be provided by the General Telephone Company. Extension of service lines shall be from the north along Haven Avenue from the existing conduit at Jurupa and Haven Avenues.

#### Solid Waste

The City of Ontario currently provides solid waste disposal service throughout the city.