

Heart and ‘Sole’

Circulation involves the flow of goods, people, and information throughout an area, whether that be an area as small as a neighborhood, an area encompassed by the boundaries of a town, or the vast area of a metropolis or region. Circulation might also cross boundaries as it occurs between various locales, both near and far. Consider the arrival of Juan Bautista de Anza’s party on March 22, 1774. This established the first land link of California with Mexico City, and the San Gabriel Mission became the chief point of contact with Mexico. Goods, people, and information were transported along this trail. On a smaller scale, consider *The Grapevine*, a newsletter that is published each quarter in the City of San Gabriel, allowing the flow of information to pass between the City Hall and local residents and entrepreneurs. Each of these is an example of circulation.



Circulation, as considered by urban planners, however, generally involves the flow of traffic, whether by foot, automobile, truck, rail, or bicycle, as it passes within a city or region. Obviously, an efficient flow of traffic is essential in order to allow residents, clients, and customers to reach their destinations in the minimum amount of time, to allow products to reach the market in time to meet the customers’ demands, and to allow emergency vehicles to reach their destinations in time to save lives. Cities must face the challenge of efficiently moving masses of people and goods. They must also consider the circulation of public utilities, such as water, sewerage, and storm run-off.



OBJECTIVES

In regards to circulation within the Mission District, the City of San Gabriel has the following objectives:

- Promote shared parking on lots with different parking demand patterns.
- Encourage joint venture parking.
- Maximize on-site parking.
- Develop secondary parking areas and re-striping.
- Provide additional on-street parking along Mission Drive.
- Establish a special event-parking plan.
- Provide infrastructure for the future

The street layout for the Mission District is irregular with straight and curvilinear streets traversing the District in multiple directions. The major roadways that cross the District include Mission Road, Junipero Serra Drive, Las Tunas Drive, Mission Drive, Broadway, and Santa Anita Street. Las Tunas Drive serves as the District’s northern boundary and functions as a major east-west arterial. Mission Road, which also serves as a major east-west arterial, crosses the southern portion of the District. Mission Drive and Santa Anita Street cross the District diagonally, intersecting at the Mission District core. Two major highways, Interstate-10 and Interstate-210, provide regional access to the Mission District.



CURRENT TRAFFIC CONDITIONS

Mission Drive serves as arterial highway for north/south vehicles coming from or going to Interstate-10. There is heavy queuing at Mission Drive, Santa Anita Street, and Mission Road. This queue is further impacted by the delay of the railroad. When traffic is stopped by the train, the queue at Mission Drive and Mission Road extends past the Mission Drive-Santa Anita Street intersection. This queue makes the use of on-street parking along Mission Drive between Mission Road and Santa Anita Street undesirable as cars are unable to back out of the parking spaces. Mission Drive north of Broadway was improved to a four-lane roadway with a landscaped raised median and no on-street parking. However, traffic levels, apparently, did not warrant this increased capacity since the result has been



increased speed along this road segment.



8.1 Traffic Improvement Opportunities: There are a number of potential design, access, and signalization improvements for the Mission District Specific Plan project area. These possible improvements, as depicted in **Exhibit 8.1: Circulation Improvements**, include the following:

- 8.1.1 Signal Timing Adjustments:** The timing of the signals along Mission Drive from Mission Road to Las Tunas should be adjusted for optimum signal phasing to improve the queue at Mission Drive and Mission Road. Future railroad improvements to establish a grade-separated crossing at Ramona will address the queue from vehicles blocked by the train.
- 8.1.2 Signal Modifications:** The intersections of Mission Drive at Broadway and at Santa Anita should be modified to allow for full signal actuation in all directions. The use of additional vehicle detection loops or video cameras detection units will help the traffic flow.
- 8.1.3 Reduction in Design Speeds:** Mission Drive between Broadway and Padilla Street should be changed to a two-lane roadway with on-street parking which would accommodate the projected capacity of this segment of road. With a two-lane roadway, additional parking could be accommodated for the adjacent residential community and would deter “cut-through” traffic.
- 8.1.4 Secondary Access Improvements:** The Auditorium access from Mission Drive should be closed to allow for a safe drop-off zone without vehicle and pedestrian conflicts. The entrance to the parking access should be on Broadway. Parking directional signs will need to be implemented to show people where to access the parking. This will also introduce additional on-street parking.
- 8.1.5 Coordination of Future Intersection Improvements:** Additional improvements might be made to intersections as a result of the railroad-lowering project.

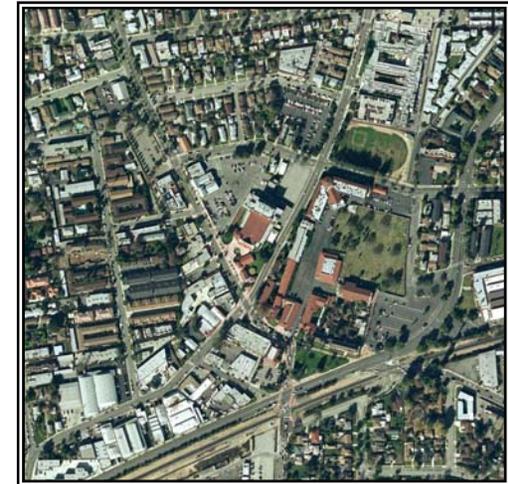
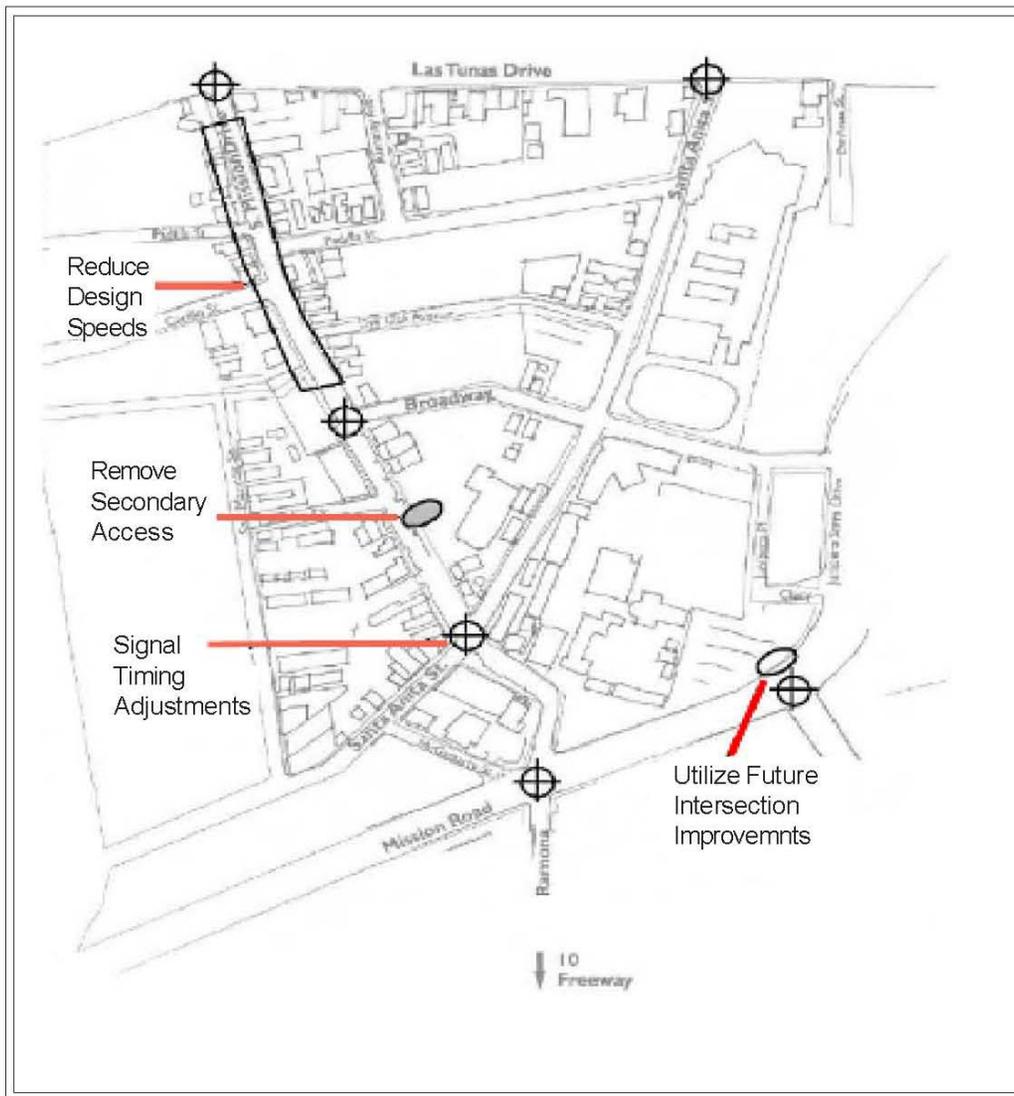


EXHIBIT 8.1 ~ CIRCULATION IMPROVEMENTS



CURRENT PARKING CONDITIONS

Weekend programs at the Civic Auditorium and services at the San Gabriel Mission result in significant peaks in localized parking demand. Each weekend evening about 7:00, parking occupancy near the Civic Auditorium is at a peak with some parking areas filled to capacity. On Sunday mornings, the parking areas near the San Gabriel Mission experience a peak during church services. Parking data indicates adequate parking supply during the peak periods to meet the overall needs of the Mission District. Approximately 36% to 50% of available parking space is used within the Mission District during the peak demand. Current parking conditions are shown in **Exhibit 8.2: Existing Parking Conditions**.

Sufficient parking supply is available during Sunday morning peak use (35% to 45% parking demand) when accounting for the available off-site parking locations within the Mission District. On Sunday mornings, the parking areas near the San Gabriel Mission experience an overflow during the 9:30 a.m. service. As parishioners typically show up within a 15-minute period before the service starts, the availability of parking spaces which are convenient or available during peak parking demand is reduced. This results in parishioners parking their vehicles illegally. Overflow on-street parking is available on Mission Road and on Junipero Place. In addition, parking is available at the basketball court located just east of the two churches. Access to the basketball parking lot consists of a gated driveway along Junipero Place. On-street parking along Santa Anita Street west of Mission Drive is full at 9:30 a.m. and 11:00 a.m. Santa Anita Street east of Mission Drive does not allow on-street parking due to the narrow roadway width.

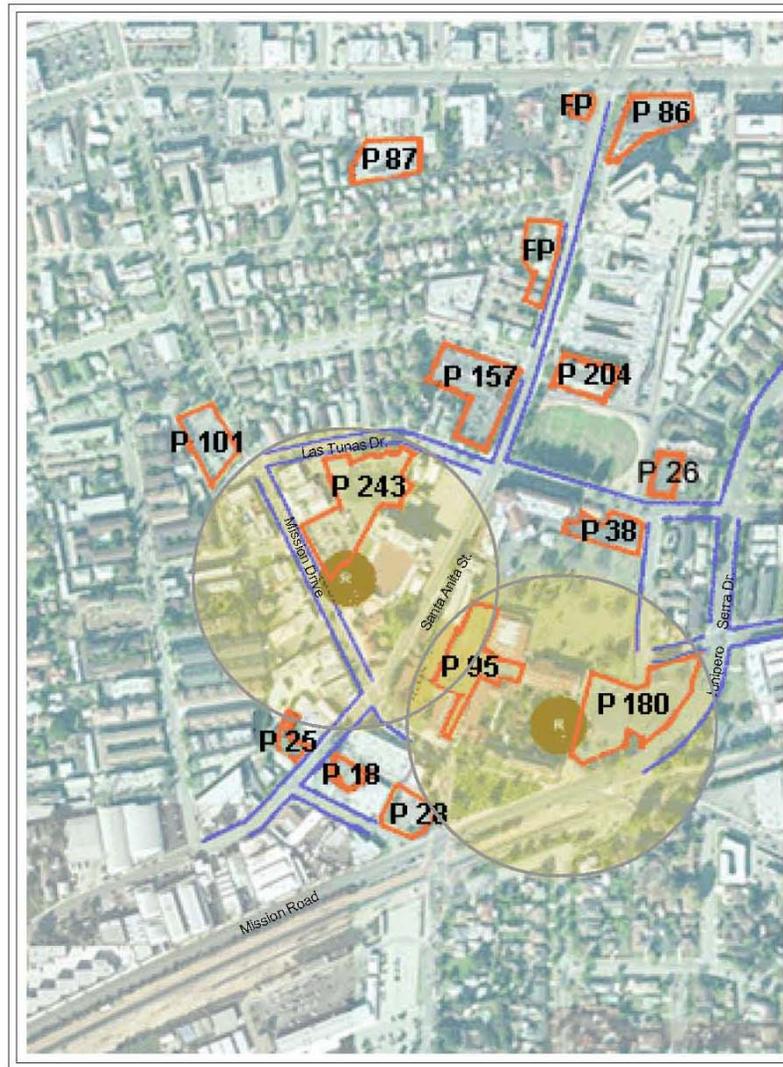


8.2 Recommended Parking Improvements

Mixed-use developments will be allowed in the Mission District Village, Market Place, Mill zones. With mixed-use developments, the peak demand of the uses is varied so that the corresponding peak parking demands of the majority of activities do not occur simultaneously. Mixed-use development requires a reduced number of parking spaces needed to serve peak activity periods within the district as a whole. Hourly, daily, and seasonal differences in the peak parking demand for various land uses in a mixed-use district make shared parking possible. **Exhibit 8.3: Parking Opportunities** and **Exhibit 8.4: Parking Improvements** depict the potential parking improvements, including additional on-street parking, shared parking opportunities, and opportunities for over-flow parking.



EXHIBIT 8.2 ~ EXISTING PARKING CONDITIONS



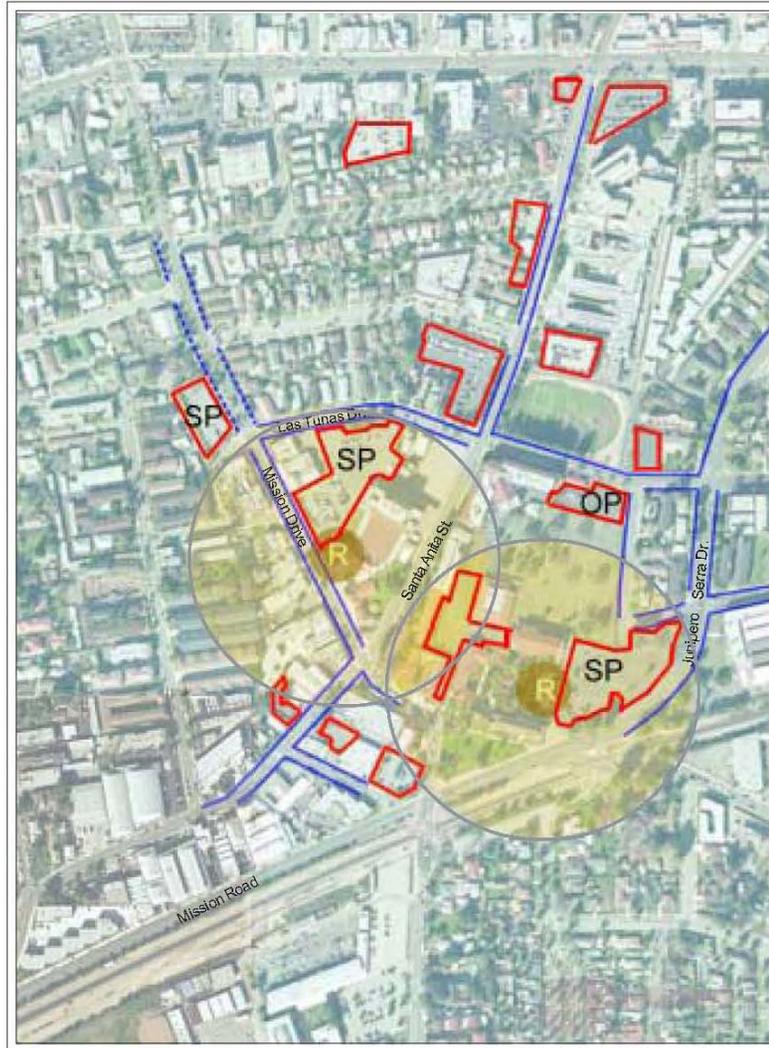
Existing Parking Conditions

LEGEND

- P(XX)** Parking Areas & Available Spaces
- R** Parking Accessibility 500' Radius
- On-Street Parking
- FP** Future Parking



EXHIBIT 8.3 ~ PARKING OPPORTUNITIES



Parking Opportunities

LEGEND

-  Parking Areas
-  Parking Accessibility 500' Radius
-  On-Street Parking
-  Potential On-Street Parking
- SP** Shared Parking
- OP** Over-Flow Parking

↑
North



8.2.1 Shared Parking: Shared parking may be applied when land uses have different parking demand patterns and, thus, are able to use the same parking areas throughout the day. Shared parking is most effective when these land uses have significantly different peak parking characteristics that vary by time of day, day of week, and/or season. In these situations, shared parking strategies will result in fewer total parking spaces being needed compared to the total number of spaces needed for each land use or business separately. Sharing parking spaces could potentially allow 15-40% more users than if each motorist were assigned a particular space.

Shared parking is often inherent in mixed-use developments, which include one or more businesses that are complementary, ancillary, or support other activities. General parking lots and/or on-street parking that are available for patrons of nearby business districts is another form of shared parking. The larger and more diverse the uses, the more efficiently parking can be shared. Due to the staggered demand for use, public parking facilities, including on-street parking spaces, can usually be shared efficiently by drivers heading to various destinations.

Application of Shared Parking in the Mission District Specific Plan Area

The opportunity to implement shared parking in the Mission District is derived from the result of two conditions:

- Variations in the peak accumulation of parked vehicles as the result of different activity patterns of adjacent or nearby land uses (i.e., the peak use for church is on Sunday morning whereas retail peak use would be weekdays or weekend afternoons).
- Relationships among land use activities that result in peoples' attraction to two or more land uses on a single auto trip to a given area or development (i.e., single trip for retail and restaurant use).

Currently, the primary uses within the Mission District are institutional and entertainment (i.e., auditorium). Thus, the balance of non-residential uses, such as retail, restaurants and office, operate at an alternative peak, providing opportunity for shared parking conditions. The current shared parking opportunities include the following:



Weekday Afternoon/Evenings - Retail, Restaurant and Office Uses

52 on-street + 18 public parking spaces available

- Shared Parking at the Church main parking lot - 180 Spaces
- Shared Parking at the Auditorium parking lot - 243 Spaces
- **Total Off-site Parking Opportunity: 423 parking spaces**

Weekend (*Sunday Morning*) - Church Uses

180 on-site parking spaces

- Shared Parking at the City Hall parking lot - 28 Spaces
- Over-flow Parking at School Play Ground - 38 Spaces
- Over-flow Parking at Auditorium parking lot - 243 Spaces
- Eliminate time restricted parking along Mission Drive - 52 Spaces
- **Total Off-site Parking Opportunity: 361 parking spaces**

Special Events - Auditorium Use

243 on-site parking spaces

- Shared Parking at the Church main parking lot - 180 Spaces
- Shared Parking at the Park-and-Ride Lot, evening only – 101 Spaces
- Over-flow Parking at School Play Ground - 38 Spaces
- **Total Off-site Parking Opportunity: 319 parking spaces**

The existing public parking facility on Alanmay Avenue is not a recommended shared parking opportunity, as it is considered undesirable given its location and safety issues as a non-visible parking lot.

Applicants for new developments or redevelopment of buildings or additions over 2,500 square feet shall be examined for the feasibility of using shared parking arrangements.

- Shared parking arrangements shall be considered when the number of parking spaces requested by the applicant is 10% higher than the existing parking and/or 10% more



than the minimum number of parking spaces required.

- Factors evaluated to establish shared parking arrangements should include operating hours, seasonal/daily peaks in parking demand, site orientation to adjacent parking, transit opportunities, pedestrian connections, distance from adjacent parking areas, and cooperation with adjacent owners.

Calculation of Parking Spaces Required with Shared Parking: The maximum number of parking spaces for a mixed-use development or where shared parking strategies are proposed shall be determined by a study prepared by the applicant following the procedures of the Urban Land Institute Shared Parking Report, ITE Shared Parking Guidelines, or other guidelines as approved by the Director of Community Development. A formal parking study may be waived for small developments where there is established experience with the land use mix and its impact is expected to be minimal.

Ancillary Uses: For uses that are considered ancillary to a larger business, no additional parking may be required. These uses might include, but are not limited to, coffee shops, snack shop, and a copy/package shop adjacent to offices. Parking requirements for similar ancillary uses may be reduced to account for cross patronage among the adjacent uses located within 800 feet. The parking requirements for these ancillary uses may be reduced as appropriate.

Reciprocal Agreement between Sharing Property Owners: If a privately owned parking facility is to serve two or more separate properties, a legal agreement between property owners guaranteeing access to, use of, and management of designated spaces is required.

Shared Parking Plan

- A shared parking plan must include a site plan of parking intended to serve the use with the proximity to the uses based on pedestrian routes of travel.
- A shared parking plan shall also include a signage plan that directs drivers to the available parking.
- A shared parking plan shall also address accessibility, safety and security, including lighting and maintenance.





8.2.2 Parking Demand Strategies: The Mission District is limited in the ability to supply new surface-parking facilities. Therefore, substantial effort must be made to reduce demand for parking within the project area. Within mixed-use developments, it is important to recognize the interrelationship between uses and the potential for reduction in parking demand. The following strategies are mixed-use parking management strategies, as outlined in **Table 8.1**, which will be evaluated with new developments or renovation projects within the Mission District.

TABLE 8.1 ~ PARKING MANAGEMENT STRATEGIES

PARKING STRATEGIES	DESCRIPTIONS	POTENTIAL PARKING DEMAND REDUCTION
Shared Parking	Share parking facilities among a group of users, rather than assigning each an individual space.	15-40%
Site Specific Parking Rate	Reduce minimum parking requirements at sites with lower parking demand based on observed parking demand.	10-30%
Spillover Management	Use management, pricing, and enforcement strategies to address spillover problems.	(Regulates use)
Overflow Parking Plans	Use overflow parking plans, rather than excessive supply, to address occasional events.	(Regulates use)
Parking Maximums	Limit maximum parking supply to avoid unbalanced parking supply.	5-10%
Decoupling Residential Parking	Rent parking spaces separately to provide monthly savings for a household that owns one vehicle or less.	5-10%
Parking Facility Design	Promote parking lot plans that maximize off-street parking.	5-10%
In Lieu Fees	Use developer fees to fund public parking instead of requiring individual facilities to provide off-street parking.	N/A
Valet Parking Services	Use of valet parking for premium users, such as retail, restaurant, & Civic Auditorium patrons.	N/A



8.2.3 Geographic Considerations Related to Parking: Parking requirements and management practices tend to vary depending on land use and geographic conditions. Parking management involves making the most convenient parking spaces available to priority uses. Parking facilities must be located near destinations. Exactly how near depends on the type of land use and the type of user. Acceptable walking distance is also affected by the quality of the pedestrian environment, climate, line of site and friction (barriers along the way, such as crossing busy traffic). The closer shared spaces are to the land uses they serve, the more likely the arrangement will be successful. See **Table 8.2:** below for acceptable walking distances.

TABLE 8.2 ~ ACCEPTABLE WALKING DISTANCES

Adjacent <i>(Less than 100 feet)</i>	Short <i>(Less than 800 feet)</i>	Medium <i>(Less than 1,200 feet)</i>	Long <i>(Less than 1,600 feet)</i>
<ul style="list-style-type: none"> • Convenience Stores • Deliveries & Loading • Emergency Services • People with disabilities 	<ul style="list-style-type: none"> • Grocery Stores • Medical Clinics • Professional services • Residents 	<ul style="list-style-type: none"> • Employees • Entertainment Centers • General Retail • Institutions • Restaurants 	<ul style="list-style-type: none"> • Major Cultural Events • Major Sporting Events • Overflow Parking

To improve circulation and promote pedestrian traffic along Mission Drive, it is recommended that secondary access drives along Mission Drive be eliminated. Emphasis within the Mission District should be given to the pedestrian to promote accessibility to multiple uses with minimal vehicle obstructions.



8.2.4 Site-Related Circulation Considerations: Directional signing, which is important in all parking facilities and is necessary for the efficient functioning of shared parking, should include the following:

- Internal signs that direct drivers to various parking areas serving specific land uses.
- Internal signs that direct drivers to available parking spaces. In more complex facilities,



areas with vacant spaces need to be identified.

- Signs at exits need to give directions to the streets surrounding the site.
- Information needs to direct drivers to and from their destinations. Graphics and color-coding are most effective in guiding pedestrians after they leave their vehicles.

Pedestrian links between parking facilities and destinations must also be carefully planned. Higher parking occupancies are not a deterrent to patrons as long as adequate parking spaces are well located and easy to find. In shared parking facilities, particularly in parking structures where drivers need to reach different destinations in a mixed-use complex, the pedestrian links must be carefully planned. Consideration in providing desirable pedestrian links for shared parking facilities include signing, safety and security, an attractive environment, lighting, and customer pathways that are as short and direct as possible.



8.2.5 Special Event Parking Plan: Along with well-signed parking facilities and clear pedestrian connections, both the San Gabriel Mission and Civic Auditorium should establish special event parking and circulation plans to address parking use beyond the available on-site parking. Such plans should include the following:

- Define anticipated inbound and outbound circulation.
- Determine the amount of off-site parking required.
- Locate off-site parking facilities as appropriate.
- Identify location of parking guides to help facilitate parking in appropriate locations.
- Provide educational materials prior to the event that identify the location of off-site parking facilities.
- Determine the need for a shuttle program to and from off-site parking facilities.



8.2.6 Parking Design: Parking opportunities could also be increased at the church and auditorium on-site parking lots by redesigning the parking to optimize the parking spaces



and to provide clear directional traffic patterns. Recommended parking sizes are compact 8-foot by 15-foot and long-term parking spaces (9-foot by 20-foot) for multi-family residential.

INFRASTRUCTURE CIRCULATION

8.3 Wastewater

Residents give little thought to wastewater. As long as the water swooshes down the drain, its disposal is taken for granted. However, a great infrastructure transports that water through sewer lines to a reclamation plant. The County Sanitation Districts of Los Angeles County provide regional sanitary sewer services to the Plan Area. Costs for facilities expansion are recovered through connection fees, which are placed into a capital improvement fund. The Los Angeles County District bases its facilities' plans on regional forecasts by the Southern California Association of Governments (SCAG) and the Los Angeles County Department of Regional Planning.

The Plan Area is located within the jurisdictional boundaries of District No. 2. The District's Allen Avenue Trunk Sewer, Sections 1, 2, 3, and 4 located along Santa Anita Street, Mission Drive, and Ramona Street from Las Tunas Drive to Grand Avenue, serves the majority of the Plan Area. This 16- to 21-inch diameter trunk sewer has a design capacity of 5.1 to 10.8 million gallons per day (mgd) and conveyed a peak flow of 1.5 mgd when last measured in 2002. A small portion of the Plan Area is served by the District's JOA-1A San Jose Creek WRP Interceptor Trunk Sewer, located along San Marino Avenue from Las Tunas Drive to Broadway. This 21- to 30-inch diameter trunk sewer has a design capacity of 13.1 to 14.5 mgd and conveyed a peak flow of 13.1 mgd when last measured in 2000.

Wastewater generated in the Plan Area is treated at the Whittier Narrows Water Reclamation Plant (WRP) located near the City of South El Monte, at the Los Coyotes Water Reclamation Plant located in the City of Cerritos, or at the San Jose Creek Water Reclamation Plant adjacent to the City of Industry. **Table 8.3** shows their design capacity and the current average flow at these plants.



TABLE 8.3 ~ RECLAMATION PLANT CAPACITY AND FLOW LEVELS

RECLAMATION PLANT	DESIGN CAPACITY	CURRENT AVERAGE FLOW
Whittier Narrows	15 mgd	7.9 mgd
Los Coyotes	37.5 mgd	30.5 mgd
San Jose Creek	100 mgd	88mgd

mgd = million gallons per day

The City of San Gabriel Public Works Division maintains the local sewage collection system. The Public Works Division operates an on-going inspection and maintenance program to identify line problems and to clean and repair manholes.

Large portions of the City’s sewer system are 50 to 75 years old. The age of the pipes coupled with small pipes is cause for concern. There have been isolated failures of the sewer system in the recent past. To identify the areas in greatest need of repair, a master plan of drainage issues is needed in order to provide suggested solutions to the City’s sewer problems.

The City Engineer has proposed funding the preparation of a citywide master sewer study and plan that identifies deficiencies and makes recommendations for improvements in the system. The sewer study will (1) assist the City in better identifying the problem areas, (2) provide a recommendation to correct the deficiency, and (3) estimate the costs to address all of the deficiencies which will enable the City to plan for the needs in its capital improvement fund.

Implementation of the Specific Plan, which includes increased density of multi-family and mixed-use development, will further strain the sewer infrastructure. The implementation of the proposed Specific Plan is estimated to increase average wastewater flow by approximately 180,000 gallons per day. Wastewater generated from the Plan Area will be treated at the Whittier Narrows Water Reclamation Plant or at the Los Coyotes Water



Reclamation Plant. Current average flow rates in these facilities are currently below design capacities as indicated above.



8.3.1 Wastewater Facilities Improvements: City and District wastewater facilities, including the trunk sewer system and treatment plants, are adequate for present needs and will be expanded, as needed, to accommodate future growth. All expansion of district facilities must be sized and service phased in a manner that is consistent with the SCAG regional growth forecast for the counties of Los Angeles, Orange, San Bernardino, Riverside, Ventura and Imperial. The available capacity of the District's facilities will, therefore, be limited to levels associated with the approved growth identified by SCAG. An evaluation of impacts on wastewater systems and associated infrastructure shall be included for future development applications in the Plan Area.



8.3.2 Sewer Connections: Future development projects in the Plan Area would pay a fee to the City and/or District for the privilege of connecting (directly or indirectly) to the sewerage system or for increasing the existing strength and/or quantity of wastewater attributable to a particular parcel or operation already connected. This connection fee is required to construct an incremental expansion of the sewerage system to accommodate future development; this would mitigate the impacts of future development on the present sewerage system. Payment of a connection fee would be required before a permit to connect to the sewer is issued. Future development will also be responsible for paying a sewer impact fee based on the type of development.

8.4 Water

Of major concern in Southern California is the availability of water to serve the current and rapidly growing population. Before any approval for housing developments can take place, especially when considering density increases that accompany multi-family units, water availability must be considered.

Five private purveyors make up the City of San Gabriel supply system. The five purveyors receive at least a portion of their water supply, via water replenishment, from the Upper San Gabriel Valley Municipal Water District. The five purveyors include the San Gabriel County Water District (SGCWD), California American Water Company (CAWC), Southern



California Water Company, Sunnyslope Water Company and San Gabriel Valley Water Company. **Exhibit 8.5** illustrates the service boundaries of the water purveyors in the Mission District.

San Gabriel County Water District supplies nearly 70 percent of the City of San Gabriel with its water supply. Currently, the water district has approximately 8,800 existing connections to its water distribution system. The District last updated its water management plan in 2000, which did not include the proposed Mission District Specific Plan project. However, according to the water district, their water supplies and facilities are adequate for present needs and can be expected to meet future supply needs.

However, isolated spots exist in the system where fire flow standards cannot be met, due to line sizes that were designed for the original single-family neighborhoods. These lines cannot provide sufficient fire flows in areas that have undergone significant intensification to higher density with multi-family development. Developers in these areas are required to upgrade the local water main or to provide other fire suppression techniques, such as on-site hydrants and building sprinklers, which meet Fire Department standards.

The City also receives a percentage of its water from the Metropolitan Water District (MWD). Currently, the San Gabriel County Water District (SGCWD) does not have a source connection to import water from the MWD; however, the California American Water Company (CAWC) does have a connection to MWD water sources. The sources for the MWD include the Colorado River, the Sacramento Delta, the Central Valley, and groundwater sources throughout the State. The Report on Metropolitan's Water Supplies, published in February of 2002 by the MWD, states that the MWD sets its demand projections for water 7 to 11 percent higher than the projections its member agencies provide. This gives the Metropolitan Water District a margin of safety in projecting water demand. The Report also states that current practices of the MWD will bring water supplies online ten years before the demand will meet supply, giving the water system a "very high degree of reliability."

With implementation of the Specific Plan, the demand for water infrastructure that is attributable to the Plan Area would increase beyond existing conditions Water Management



Plans are updated periodically in order to maintain water reliability and to incorporate the changes in water use patterns, as well as other changes in the water system. Management Plans typically identify new facility needs in addition to identifying the need for replacement or refurbishment of existing facilities. Management Plans also consider population growth, increases in density, changes in land uses, and identifiable regulatory change that may impact facility needs

The Specific Plan does not propose any new development in the Plan Area at this time, but rather would allow for an increase of 515 dwelling and 396,994 square feet of non-residential uses beyond existing conditions. The San Gabriel County Water District (SGCWD) has indicated that District facilities manage a peak water demand of approximately 11.6 million gallons per day and 7,600 acre-feet of water per year. The District's source of water supply is groundwater from the Main San Gabriel Basin via deep wells.



8.4.1 Water Monitoring: The demand for water attributable to the Specific Plan would increase throughout buildout of the Plan Area. However, water facilities, devices, and practices will be developed in accordance with the standards of the City of San Gabriel and/or applicable water purveyor as future development occurs in the Plan Area. The water purveyor will require that future development projects include the installation of a water meter in each living unit. The size and type of meter will be required to conform to guidelines established by the City of San Gabriel and/or applicable water purveyor. Additional meters will be installed, as necessary, and will conform to the applicable water purveyor's specifications.



EXHIBIT 8.5 ~ WATER SERVICE BOUNDARIES

