



CARLSBAD
CLOVIS
IRVINE
LOS ANGELES
PALM SPRINGS
POINT RICHMOND
RIVERSIDE
ROSEVILLE
SAN LUIS OBISPO

June 5, 2023

Clint Kleppe
Extra Space Development
2795 East Cottonwood Parkway, Suite 400
Salt Lake City, UT 84121

Subject: Parking Analysis for the 1761 West Katella Avenue Extra Space Self-Storage Project (LSA Project No. 20220838), Anaheim, California

Dear Mr. Kleppe:

LSA has prepared this parking analysis for the proposed self-storage building project (project) at 1761 West Katella Avenue in Anaheim, California. Existing residential, commercial and institutional uses surround the project site.

This parking analysis is to determine whether the proposed parking supply provided on site would accommodate the expected peak parking demand for the proposed project. To determine the parking demand of the proposed project, LSA has analyzed parking requirements from the Institute of Transportation Engineers (ITE) *Parking Generation Manual, 5th Edition*, empirical data parking studies, and the municipal code requirements of adjacent cities to further justify the number of parking spaces recommended for the proposed project.

PROJECT DESCRIPTION

The proposed project is the addition of a 2story self-storage building within the existing Extra Space facility, located at 1761 West Katella Avenue, Anaheim, California. The existing facility includes 62,235 sf, including a 58,956 sf self-storage building (to remain) and a separate 3,279 sf self-storage building (to be demolished) on site.

As part of the project, approximately 57 RV/Boat/Vehicle storage spaces (surface parking) and the 3,279 sf self-storage building will be removed, and a 52,661 sf self-storage building will be constructed on site. The total self-storage sf on-site (including the existing 58,956 sf to remain) will be 111,617 sf, including a total of 871 storage units. Access to the site will continue to be provided via Humor Drive. The project (both existing and proposed) will provide 21 parking spaces on-site. The conceptual site plan is provided in Attachment A.

PARKING ANALYSIS

City of Anaheim Requirements

The off-street parking requirements in Anaheim are specified in Anaheim Municipal Code (AMC) Section 18.42.040. Per Table 42-A of the City's Code, a parking demand study is required for self-storage facilities.

National Parking Rates

LSA referenced parking rates from the ITE *Parking Generation Manual*, 5th Edition. Rates are derived from a compilation of multiple parking surveys across the country and calculated to generate an average parking rate for mini-warehouse/self-storage uses.

As such, the ITE *Parking Generation Manual* states that, for mini-warehouse/self-storage land uses, a parking rate of 0.10 spaces per 1,000 sf on weekdays and 0.09 spaces per 1,000 sf on weekends should be used. Application of these rates would require the project (a 111,617 total sf Extra Space Storage facility) to provide 11 parking spaces on weekdays and 10 parking spaces on weekends for the site. The project would provide a total of 21 parking spaces. As such, the project would provide adequate parking supply on-site based on industry standards.

Surveyed Self-Storage Parking Rates

A parking study was prepared for a similar Extra Storage space project in the City of Inglewood (*Parking Demand Analysis for the Extra Space 1070 Inglewood Project, City of Inglewood, California*, LLG 2021). This analysis was based on empirical data collected at two Extra Space Storage facilities in Southern California (i.e., 3846 Century Boulevard in Inglewood and 5855 West Centinela Avenue in Los Angeles). A parking ratio (per storage unit) was developed based on the surveyed self-storage facilities. The parking study and empirical data are included in Attachment B.

The highest aggregate calculated parking demand ratio based on the surveys was 0.013 spaces per unit. Applying this to the total 871 units proposed on site would require a parking supply of 11 spaces on-site.

The *Trip Generation and Parking Study for Public Storage Facilities in Los Angeles Area* (Crain & Associates, 1987, provided as Attachment C) is an analysis of five different self-storage facilities in Southern California. This study was based on data collected through multiday parking lot and driveway surveys. According to this study, the average parking rate is 0.01 parking space per self-storage unit. Application of this rate to the proposed project of 871 storage units on site would require 9 parking spaces.

CONCLUSION

Based on the application of empirical parking rates from the ITE *Parking Generation Manual*, Extra Space Storage facilities in Southern California, and Crain & Associates research, the proposed 21 parking space supply is within the range of demand expected for the project and would be sufficient to accommodate the peak parking demand of the 111,617 sf self-storage facility in Anaheim.

If you have any questions, please contact me at (949) 553-0666.

Sincerely,

LSA Associates, Inc.



Ken Wilhelm

Principal

Attachments: A – Conceptual Site Plan
B – *The Parking Demand Analysis for Extra Space 1070 Inglewood Project, City of Inglewood, California* (LLG, 2021)
C - The Trip Generation and Parking Study for Public Storage Facilities in Los Angeles Area (Crain & Associates, 1987).

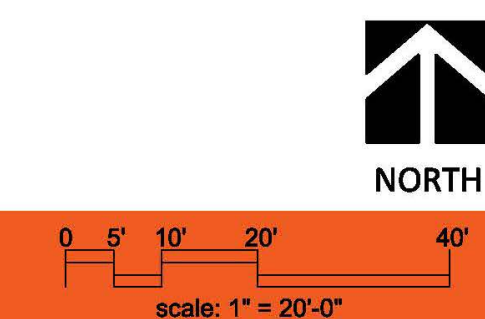
ATTACHMENT A

SITE PLAN

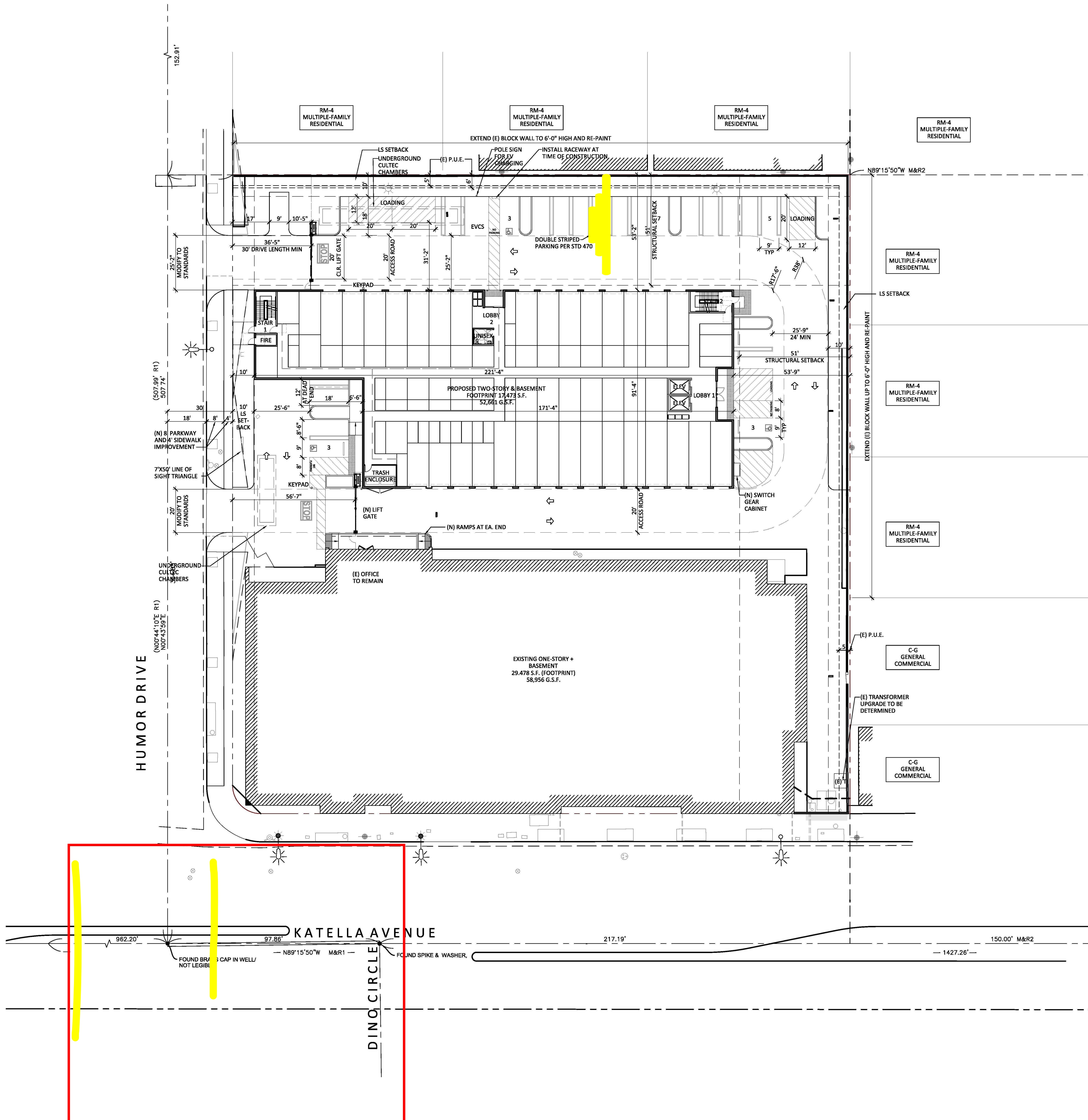


1761 W. KATELLA AVENUE, ANAHEIM, CA 92804
APN 128-542-011

CONCEPTUAL SITE PLAN
05.18.23



SHEET 2
KSP
STUDIO
architecture + engineering
23 ORCHARD ROAD, SUITE 200
LAKE FOREST, CA 92630
T 949.380.3970 F 949.380.3771



PROJECT DESCRIPTION	
REDEVELOPMENT OF SITE WITH EXISTING ONE-STORY W/ BASEMENT 58,956 S.F. SELF-STORAGE BUILDING TO REMAIN AND PROPOSED CONSTRUCTION OF TWO-STORY WITH BASEMENT SELF-STORAGE BUILDING.	
PROJECT INFORMATION	
PROJECT ADDRESS:	1761 W. KATELLA AVENUE, ANAHEIM, CA 92804
SITE APN:	128-542-011
SITE AREA GROSS:	84,010 S.F. OR 1.93 ACRES
EXISTING ZONE:	C-G GENERAL COMMERCIAL
PROPOSED ZONE:	NO CHANGE
GENERAL PLAN:	RESIDENTIAL-LOW-MEDIUM
EXISTING USE:	SELF-STORAGE W/ CUP GRANTED
HISTORICAL LAND USE PERMITS:	CUP3779, SUBTTM325B, VAR1376, VAR2181
USE (PROPOSED):	SELF-STORAGE CUP REQUIRED INCLUDES VARIANCE FOR F.A.R.
F.A.R. ALLOWED:	0.50
F.A.R. EXISTING:	0.74 (62,235 S.F. / 84,010 S.F.)
F.A.R. PROPOSED:	REQUEST FOR VARIANCE 1.33 (111,617 S.F. / 84,010 S.F.)
SETBACKS REQUIRED:	
FRONT LANDSCAPE:	10' ABUTTING LOCAL STREET
FRONT STRUCTURAL:	10' ABUTTING LOCAL STREET
SIDE LANDSCAPE:	10' ABUTTING RESIDENTIAL & LOCAL STREET
STRUCTURAL ALONG RESIDENTIAL ZONE:	51'
REAR LANDSCAPE:	10' ABUTTING RESIDENTIAL
REAR STRUCTURAL ALONG RESIDENTIAL:	51'
SETBACKS PROVIDED:	
FRONT LANDSCAPE:	10'
FRONT STRUCTURAL:	10'
SIDE LANDSCAPE:	10'
STRUCTURAL ALONG RESIDENTIAL ZONE:	52'
REAR LANDSCAPE:	10'
REAR STRUCTURAL ALONG RESIDENTIAL:	53'-2"
STRUCTURAL HEIGHT MARK:	28' (2-STORIES)
STRUCTURAL HEIGHT PROPOSED:	28' (2-STORIES)
LANDSCAPE REQUIREMENTS:	LANDSCAPING SHALL BE PERMITTED AND/OR REQUIRED IN INDUSTRIAL ZONES, SUBJECT TO CHAPTER 18.46.
FENCES, WALL, & HEDGES:	FENCES, WALLS, HEDGES, AND BERMS SHALL BE PERMITTED AND/OR REQUIRED IN INDUSTRIAL ZONES, SUBJECT TO SECTION 18.46.110.
NOTES:	
1.	THE MAX STRUCTURAL HEIGHT IS BASED ON THE DISTANCE OF THE COMMERCIAL BUILDING FROM ANY SINGLE-FAMILY ZONE.
BUILDING AREA	
TOTAL BUILDING AREA OF EXISTING BLDG(S):	3,279 S.F. (E) 1-STORY DRIVE-UP
(29,478 S.F. FOOTPRINT)	58,956 S.F. (E) 1-STORY W/ BASEMENT
	62,235 S.F.
EXISTING BLDG AREA TO BE DEMOLISHED:	-3,279 S.F.
TOTAL:	58,956 S.F.
PROPOSED BUILDING (G.S.F.):	
BASEMENT STORAGE:	17,473 S.F.
1ST FLOOR STORAGE:	17,473 S.F.
2ND FLOOR STORAGE:	17,715 S.F.
TOTAL:	52,661 S.F.
TOTAL GROSS SQUARE FOOTAGE:	111,617 S.F.
NET INCREASE IN BUILDING FLOOR AREA:	52,661 S.F.
CAR & BIKE PARKING ANALYSIS	
PARKING PROVIDED FOR (E) SELF-STORAGE:	75 SP
PER SECTION 18.42	
PARKING REQUIRED FOR NEW BUILDING:	REQUIRES PARKING DEMAND STUDY
PER SECTION 18.42	(REFER TO PARKING ANALYSIS & TRANSPORTATION ANALYSIS BY LSA)
TOTAL PARK'G PROVIDED FOR SELF-STORAGE:	21 SP
ACCESSIBLE PARKING REQUIRED: (26-50 SP)	25P (TABLE 11B-208.2)
ACCESSIBLE PARKING PROVIDED:	25P
EV / CAV SPACES REQUIRED:	
CLEAN AIR VEHICLES SPACES REQ'D:	15P (5.106.5.2)
EV CHARGING SPACES REQ'D:	15P (5.106.5.3.3 AND TABLE 11B-228.3.2)
EV CHARGING/ EV/CAV PROVIDED:	15P
(INCLUDED IN TOTAL PROVIDED)	
** IF THE CALCULATION OF PARKING RESULTS IN THE REQUIREMENT FOR A FRACTION OF A PARKING SPACE, SUCH A PARKING SPACE NEED NOT BE PROVIDED UNLESS THE FRACTION EXCEEDS 50%.	
** FUTURE CHARGING SPACES QUALIFY AS DESIGNATED PARKING AS DESCRIBED IN 5.106.5.2 DESIGNATED PARKING FOR CLEAN AIR VEHICLES	
LOADING REQUIREMENTS:	(1) 12'X20' SPACE FOR EVERY 25,000 S.F. OF GFA 84,010 S.F. AREA / 25,000 = 3 SP REQUIRED
LOADING PROVIDED:	(3) 12'X20' LOADING SP

ATTACHMENT B

PARKING DEMAND ANALYSIS FOR THE EXTRA SPACE 1070 INGLEWOOD PROJECT, CITY OF INGLEWOOD, CALIFORNIA

MEMORANDUM

To: Danny Morris
Extra Space Storage

Date: April 20, 2021

From: Clare M. Look-Jaeger, P.E. *CL-Jaeger* LLG Ref: 1-21-4426-1
Chin S. Taing, PTP, RSP1 *CS*
Linscott, Law & Greenspan, Engineers

Subject: **Parking Demand Analysis for the Extra Space 1070 Inglewood Project, City of Inglewood, California**

Engineers & Planners

Traffic
Transportation
Parking

Linscott, Law & Greenspan, Engineers

600 S. Lake Avenue
Suite 500
Pasadena, CA 91106

626.796.2322 T
626.792.0941 F
www.llgengineers.com

Pasadena
Irvine
San Diego
Woodland Hills

This memorandum has been prepared by Linscott, Law & Greenspan, Engineers (LLG) to summarize the parking demand analysis prepared for the proposed development of the Extra Space storage facility ("proposed project") located at 3846 West Century Boulevard in the City of Inglewood, California. Pursuant to our coordination, this analysis was prepared so that a determination could be made as to the adequacy of the future planned parking supply to meet the anticipated peak parking demand following development of the proposed project. The memorandum provides a review of the following:

- A description of the proposed site conditions, including a review of the proposed parking supply;
- Off-street parking requirements applicable to the project site pursuant to the City of Inglewood Municipal Code;
- A review of off-street parking requirements for self-storage facilities in other neighboring jurisdictions;
- A review of the potential parking demand using published parking demand ratios for self-storage facilities (e.g., as summarized in the Institute of Transportation Engineers [ITE] *Parking Generation* publication¹);
- A review of the observed weekday and weekend day parking demand at other Extra Space self-storage facilities within the study area (i.e., through the conduct of site-specific/empirical surveys);
- A forecast of peak parking demand for the project site employing the empirical parking ratio, and;
- A conclusion regarding adequacy of the proposed parking supply to accommodate the forecast future peak parking demand.

Existing Setting

The existing site is currently developed with an Extra Space storage facility on an approximate 1.3-acre site situated along the south side of Century Boulevard, just west of Doty Avenue in the City of Inglewood, California. The vicinity map is

¹ Institute of Transportation Engineers *Parking Generation Manual*, 5th Edition, Washington D.C., 2019.

Philip M. Linscott, PE (1924-2000)
William A. Law, PE (1921-2018)
Jack M. Greenspan, PE (Ret.)
Paul W. Wilkinson, PE (Ret.)
John P. Keating, PE
David S. Shender, PE
John A. Boorman, PE
Clare M. Look-Jaeger, PE
Richard E. Barretto, PE
Keil D. Maberry, PE
Walter B. Musial, PE
Kalyan C. Yellapu, PE

displayed in **Figure 1**. The site is generally bounded by Century Boulevard to the north, existing vacant land for the future Arena development to the south, future Arena access roadway and an industrial warehouse to the east, and hotel use/s to the west. The existing site comprises a 53,785 square-foot Extra Space self-storage facility that is planned to be demolished as part of the proposed project development.

Project Description

The proposed project consists of the redevelopment of a self-storage facility with approximately 196,170 square feet of net rentable area which may consist of roughly 2,000 storage units. The proposed project is planned to provide a total of 51 at-grade parking spaces, including one accessible parking space, all within the center of the project site. Vehicular access to the project site will be accommodated via one site driveway on Century Boulevard. **Figure 2** provides an illustration of the conceptual project site plan as well as the changes to the overall parking supply with the proposed self-storage facility.

Parking Calculation Per City of Inglewood Municipal Code

A calculation of the Code parking requirement was prepared in accordance with the City of Inglewood Municipal Code off-street parking requirements (Section 12-45, Industrial and Storage Parking Requirements). In accordance with the Municipal Code parking regulations, the parking requirements applicable to the self-storage facility are as follows:

- Self-Storage Facilities 1.0 parking space for each 2,000 square feet of gross floor area

Source: City of Inglewood Municipal Code (Section 12-45)

Through strict application of the Municipal Code parking regulations, the following parking requirement would be calculated for the proposed project:

- Self-Storage Warehouse: $196,170 \text{ SF} \times 1.0 \text{ space}/2,000 \text{ SF} = 98 \text{ spaces}$

Total Code Required Project Parking = 98 spaces

Based on the above calculation, the City Code parking requirement for the project would consist of a total of 98 parking spaces. When comparing the above Municipal Code parking requirement to the proposed project parking supply of 51 spaces, a theoretical shortfall of 47 parking spaces is calculated. Based on reviews of other parking standards established by other agencies in surrounding communities and parking demand characteristics at other existing self-storage facilities similar to the

proposed project, parking demand could be expected to be much lower for the project than what is currently required by strict application of the City Code. The following sections provide a summary of these reviews.

As part of the parking supply, the project must also provide a minimum of two (2) handicap accessible space in the parking area. This complies with the Americans with Disabilities Act requirement of a minimum of two (2) spaces of the total on-site parking supply as accessible space (i.e., for parking facilities with 51 to 75 spaces with one in every six handicap spaces being van accessible).

Other Agency Parking Requirements

Research was also conducted regarding the parking requirements for the self-storage warehousing land use in other jurisdictions and is summarized below for informational purposes only. The parking requirement for the proposed project based on application of the parking ratios from the various agencies are as follows:

- City of Hawthorne

The City of Hawthorne Municipal Code (Section 17.58.030, Required Parking), specifies the parking requirements for self-storage facilities as one (1) space for each 2,000 square feet of gross floor area for the first 10,000 square feet and one (1) space for each 4,000 square feet thereafter. Application of this parking requirement to the proposed project would result in a theoretical off-street parking requirement of 52 parking spaces (i.e., $[10,000 \text{ square feet} \times 1 \text{ space} / 2,000 \text{ square feet} = 5 \text{ spaces}] + [186,170 \text{ square feet} \times 1 \text{ space} / 4,000 \text{ square feet} = 47 \text{ spaces}] = 52 \text{ spaces}$). The project's proposed parking supply of 51 parking spaces would therefore be just shy of meeting the theoretical parking requirement specified by the City of Hawthorne Municipal Code.

- City of Los Angeles

The City of Los Angeles Municipal Code (Section 12.21.A.4 Number of Parking Spaces Required), specifies the parking requirements for self-storage facilities as one (1) space for each 500 square feet of floor area for the first 10,000 square feet, and one (1) parking space for each 5,000 square feet of floor area in excess of the first 10,000 square feet. Application of this parking requirement to the proposed project would result in a theoretical off-street parking requirement of 57 parking spaces (i.e., $[10,000 \text{ square feet} \times 1 \text{ space} / 500 \text{ square feet} = 20 \text{ spaces}] + [186,170 \text{ square feet} \times 1 \text{ space} / 5,000 \text{ square feet} = 37 \text{ spaces}] = 57 \text{ total spaces}$). The project's proposed parking supply of 51 parking spaces would therefore not

adequately accommodate the theoretical parking requirement specified by the City of Los Angeles Municipal Code.

- City of El Segundo
The City of El Segundo Municipal Code (Section 15-15-06, Required Parking Spaces), specifies the parking requirements for self-storage facilities as one (1) space for each 5,000 square feet of gross floor area or each 50 storage units, with a minimum of 5 total spaces. Application of this parking requirement to the proposed project would result in a theoretical off-street parking requirement of 39 parking spaces (i.e., $196,170 \text{ square feet} \times 1 \text{ space} / 5,000 \text{ square feet} = 39 \text{ spaces}$). The project's proposed parking supply of 51 parking spaces would therefore adequately accommodate the theoretical parking requirement specified by the City of El Segundo Municipal Code.
- County of Los Angeles
The County of Los Angeles Municipal Code (Section 22.112.070, Required Parking Spaces), specifies the parking requirements for self-storage facilities as one (1) space per 1,000 square feet of gross floor area of warehousing areas and one (1) space per 400 square feet of gross floor area of office space. Application of this parking requirement to the proposed project would result in a theoretical off-street parking requirement of 198 parking spaces (i.e., $[194,372 \text{ square feet} \times 1 \text{ space} / 1,000 \text{ square feet} = 194 \text{ spaces}] + [1,798 \text{ square feet of office space} \times 1 \text{ space} / 400 \text{ square feet} = 4 \text{ spaces}] = 198 \text{ spaces}$). The project's proposed parking supply of 51 parking spaces would therefore not adequately accommodate the theoretical parking requirement specified by the County of Los Angeles Municipal Code.

Generally, while it is found that three (3) jurisdictions in the area (i.e., City of Hawthorne, City of Los Angeles, and City of El Segundo) would theoretically require fewer or roughly the same number parking spaces than the City of Inglewood Municipal Code parking ratio for self-storage warehousing land uses, the variance in requirements is extensive. Thus, application of the City's self-storage warehouse land use parking ratio to the proposed project is not recommended based on LLG's experience, as it typically overstates actual parking demand.

As stated above, these parking standards are provided for informational purposes only as it is recognized that parking demand is also influenced by a site's proximity to other influences including other comparable sites, employment, adjacent and convenient public transportation services, etc.

Parking Demand Based on ITE Parking Ratios

In addition to reviewing the Code parking requirements of various agencies, the average peak parking demand for various land use types is often estimated using ratios published in the Institute of Transportation Engineers' (ITE) *Parking Generation Manual*², 5th Edition. The *Parking Generation Manual* presents the state-of-the-practice understanding of the relationship between parking demand and various characteristics associated with individual land use developments, based on parking studies conducted at locations throughout North America. When utilizing the ITE publication, the parking demand for the proposed project can be calculated based upon ratios per 100 storage units for the self-storage facility. The average parking rate for Land Use Code 151 (Mini-Warehouse) on a typical weekday is 1.36 parked vehicles per 100 storage units, while the average parking rate on a typical Saturday is 0.94 parked vehicles per 100 storage units. Application of the Land Use Code 151 average parking demand ratios to the proposed project would result in a forecast weekday peak parking demand of 27 vehicles (i.e., 1.36 parked vehicles x 2,000 units / 100 units = rounded to 27 parked vehicles), which is 71 spaces fewer than what would be required through strict application of the City's Code.

Empirical Parking Demand Studies of Existing Self-Storage Facilities

This section summarizes site-specific self-storage parking accumulation surveys that have been conducted by LLG. Empirical parking demand studies of existing Extra Space self-storage sites in the study area have been conducted and are included for purposes of this parking analysis. The purpose of these studies was to determine existing parking demand ratios for other self-storage facilities that are similar in nature to the proposed project and to be able to compare the forecast parking demand using the derived empirical parking ratios to those determined simply through strict application of the City's Municipal Code.

Existing Extra Space Storage Facilities

In order to determine the expected actual peak parking demand for the proposed project, a site-specific parking demand analysis was conducted for two (2) existing Extra Space self-storage facilities in the surrounding area as shown in **Figure 3**. The sites selected for the analysis are as follows:

- Extra Space Storage, 3846 Century Boulevard, Inglewood, California (563 storage units, 53,785 SF)

² Institute of Transportation Engineers *Parking Generation Manual*, 5th Edition, Washington D.C., 2019.

- Extra Space Storage, 5855 West Centinela Avenue, Los Angeles, California (1,147 storage units, 76,856 SF)

Parking accumulation surveys were conducted at each of the sites by a traffic count subconsultant (The Traffic Solution) in hourly time increments on a typical mid-week day (i.e., Tuesday) from 8:00 AM to 8:00 PM, and on a typical weekend day (i.e., Saturday) from 8:00 AM to 8:00 PM in March/April 2021. Brief summaries of the parking accumulation surveys are presented below and further detailed in **Tables 1** and **2** for the weekday and weekend day, respectively:

- Extra Space Storage, 3846 Century Boulevard
 - On Wednesday, March 31, 2021, the peak parking demand occurred at 10:00 AM when seven (7) vehicles were parked at the site.
 - On Saturday, April 3, 2021 the peak parking demand occurred at 1:00 PM when five (5) vehicles were parked at the site.
- Extra Space Storage, 5855 West Centinela Avenue
 - On Wednesday, March 31, 2021, the peak parking demand occurred at 5:00 PM when 14 vehicles were parked at the site.
 - On Saturday, April 3, 2021 the peak parking demand occurred at 1:00 PM when 15 vehicles were parked at the site.

Existing Derived Peak Parking Demand Ratio

By comparing the peak parking demand at each site to the number of occupied storage units, the existing peak parking demand ratio can be calculated for each of the existing self-storage facilities. The calculated peak parking demand ratios for both survey locations are summarized in **Table 3**. The aggregate peak parking demand ratio, which blends the peak parking demand and number of occupied units for all sites in order to reduce the variation due to individual characteristics at each site, is also presented in **Table 3**. It is concluded that the peak parking demand ratio, based on the aggregate of both existing Extra Space Storage sites, is 0.013 vehicles per occupied storage unit for the weekday and 0.012 vehicles per occupied storage unit for the weekend (Saturday).

Forecast Project Peak Parking Demand

As described above, based on the empirical surveys conducted at the comparable sites, the highest aggregate peak parking demand ratio was determined to be 0.013 spaces per occupied storage unit. Application of this peak parking demand ratio is appropriate as it results in the most conservative analysis based on the empirical site-specific survey data. Application of this peak parking demand ratio to the proposed 2,000-unit self-storage project yields a forecast peak parking demand of 26 parking spaces (i.e., $0.013 \text{ spaces/occupied storage unit} \times 2,000 \text{ storage units} = \text{rounded to } 26 \text{ spaces}$) which assumes that all storage units are fully occupied. In comparison, this empirically derived peak parking demand (i.e., 26 spaces) is fairly similar to the parking demand forecast (i.e., 27 spaces) when applying the ITE parking ratio for self-storage facilities to the proposed project.

As previously noted, the parking supply for the project is planned to total 51 on-site spaces. Therefore, it is concluded that the proposed parking supply for the project is sufficient to accommodate the empirically-derived peak parking demand of 26 vehicles. During other time periods of the day and other days of the week, a greater parking surplus could be expected for the proposed project.

Summary of Key Findings and Conclusions

This parking demand analysis was prepared for the Extra Space 1070 Inglewood project in order to determine if sufficient on-site parking exists to adequately accommodate the future peak parking demand following full occupancy of self-storage facility. Based on the parking analysis, the following conclusions are made:

1. Pursuant to the application of the City of Inglewood Municipal Code parking requirements to the future planned project, a total of 98 parking spaces would be required. When compared to the total future parking supply of 51 spaces, a theoretical shortfall of 47 parking spaces is calculated.
2. Research was also conducted regarding the parking requirements for the self-storage warehousing land use in other nearby jurisdictions for informational purposes only. Generally, while it is found that three (3) jurisdictions in the area (i.e., City of Hawthorne, City of Los Angeles, and City of El Segundo) would theoretically require fewer or roughly the same number parking spaces than the City of Inglewood Municipal Code parking ratio for self-storage warehousing land uses, the variance in requirements is extensive. As such, application of the City's self-storage warehouse land use parking ratio to the proposed project is not recommended based on LLG's experience.

3. The average parking ratio for ITE Land Use Code 151 (Mini-Warehouse) on a typical weekday is 1.36 parked vehicles per 100 storage units, while the average parking ratio on a typical Saturday is 0.94 parked vehicles per 100 storage units. Application of the Land Use Code 151 average parking demand ratios to the proposed project would result in a forecast weekday peak parking demand of 27 vehicles (i.e., $1.36 \text{ parked vehicles} \times 2,000 \text{ units} / 100 \text{ units} =$ rounded to 27 parked vehicles).
4. Empirical parking demand studies of two (2) existing self-storage facilities have been conducted in order to determine existing parking demand ratios for other Extra Space self-storage sites. The derived peak parking demand ratio, based on the aggregate of both existing Extra Space Storage sites, is 0.013 vehicles per occupied storage unit for the weekday and 0.012 vehicles per occupied storage unit for the weekend (Saturday).
5. Application of the empirical peak parking demand ratio to the proposed project yields a forecast peak parking demand of 26 parking spaces (i.e., $0.013 \text{ spaces/occupied storage unit} \times 2,000 \text{ storage units} =$ rounded to 26 spaces). Both the empirically derived peak parking demand (i.e., 26 spaces) and the ITE-generated parking demand (i.e., 27 spaces) are much lower than the City's Code parking requirement of 98 spaces. Therefore, LLG recommends employment of either the site-specific parking ratio or the ITE parking ratio to the proposed project in order to determine the adequacy of the proposed parking supply to meet the forecast parking demand.

Please feel free to contact us at 626.796.2322 should you have any questions regarding this parking assessment conducted for the Extra Space 1070 Inglewood project.

c: File

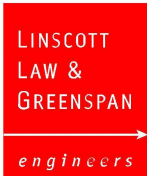
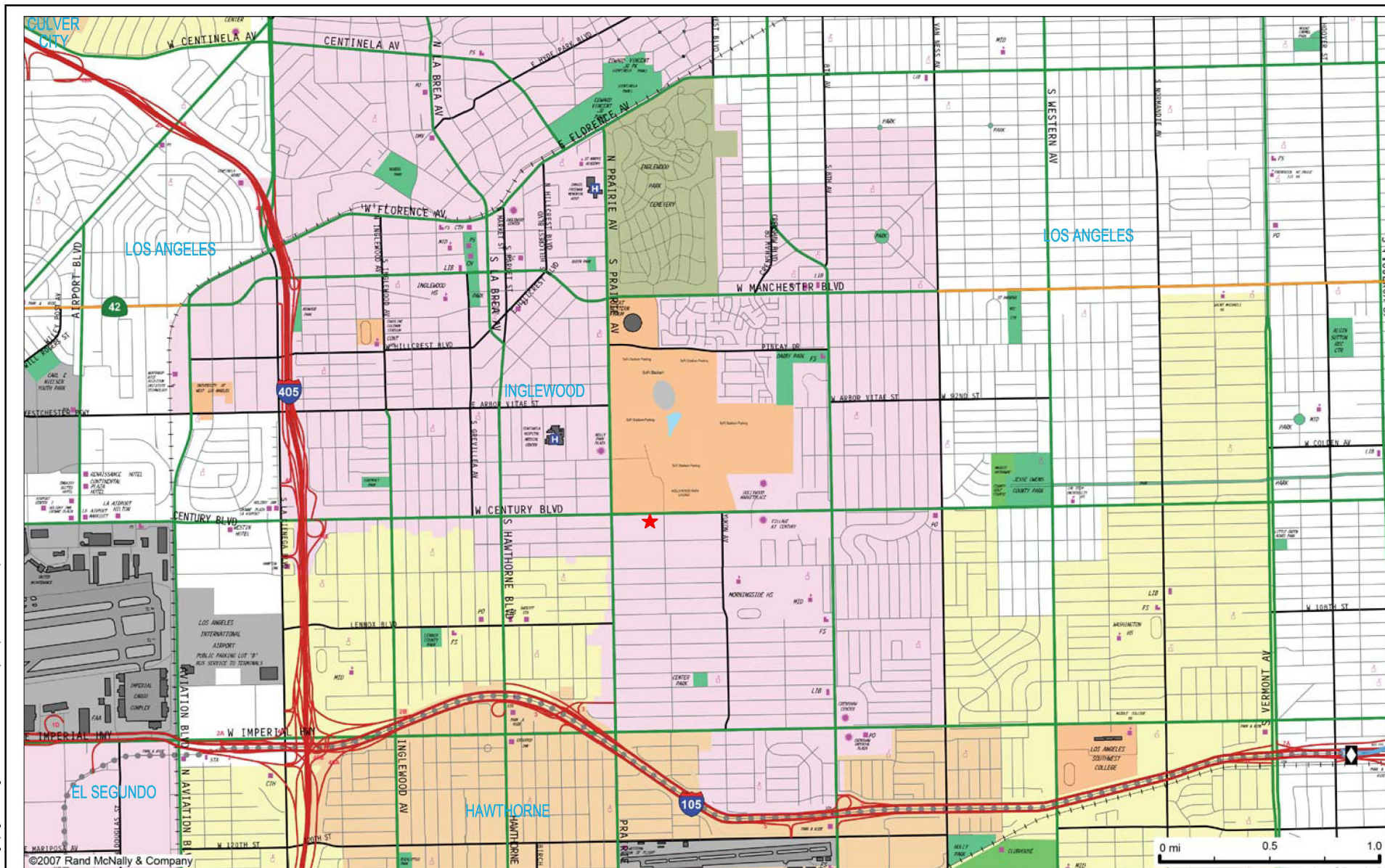


Figure 1
Site Vicinity Map

Extra Space 1070 Project

o:\job_file\4426\dwg\fig-2.dwg LDP 07:52:23 03/19/2021 rodriguez

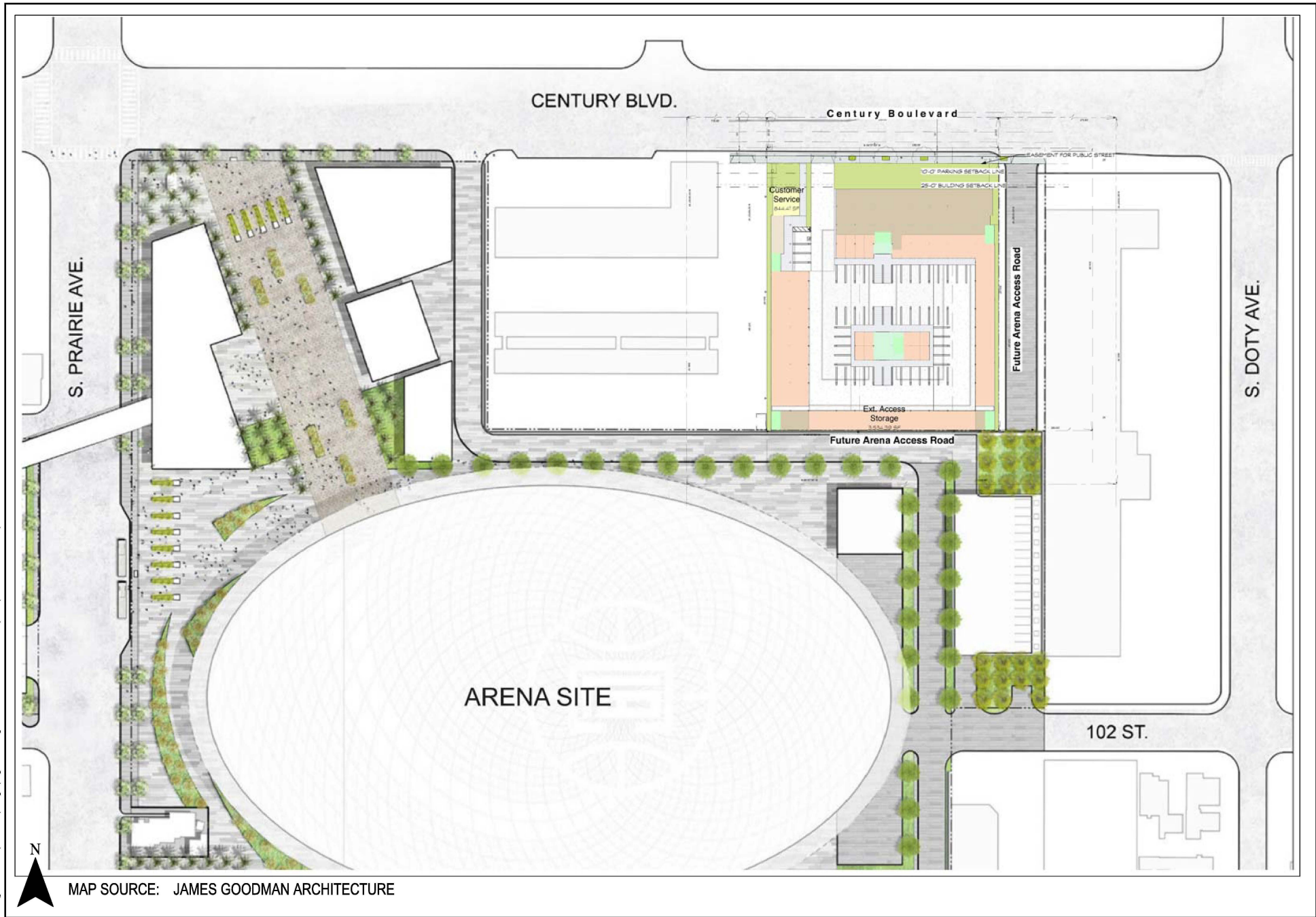


Figure 2
Site Plan

o:\job_file\4426\dwg\fig-3.dwg LDP 13:20:30 04/14/2021 rodriguez

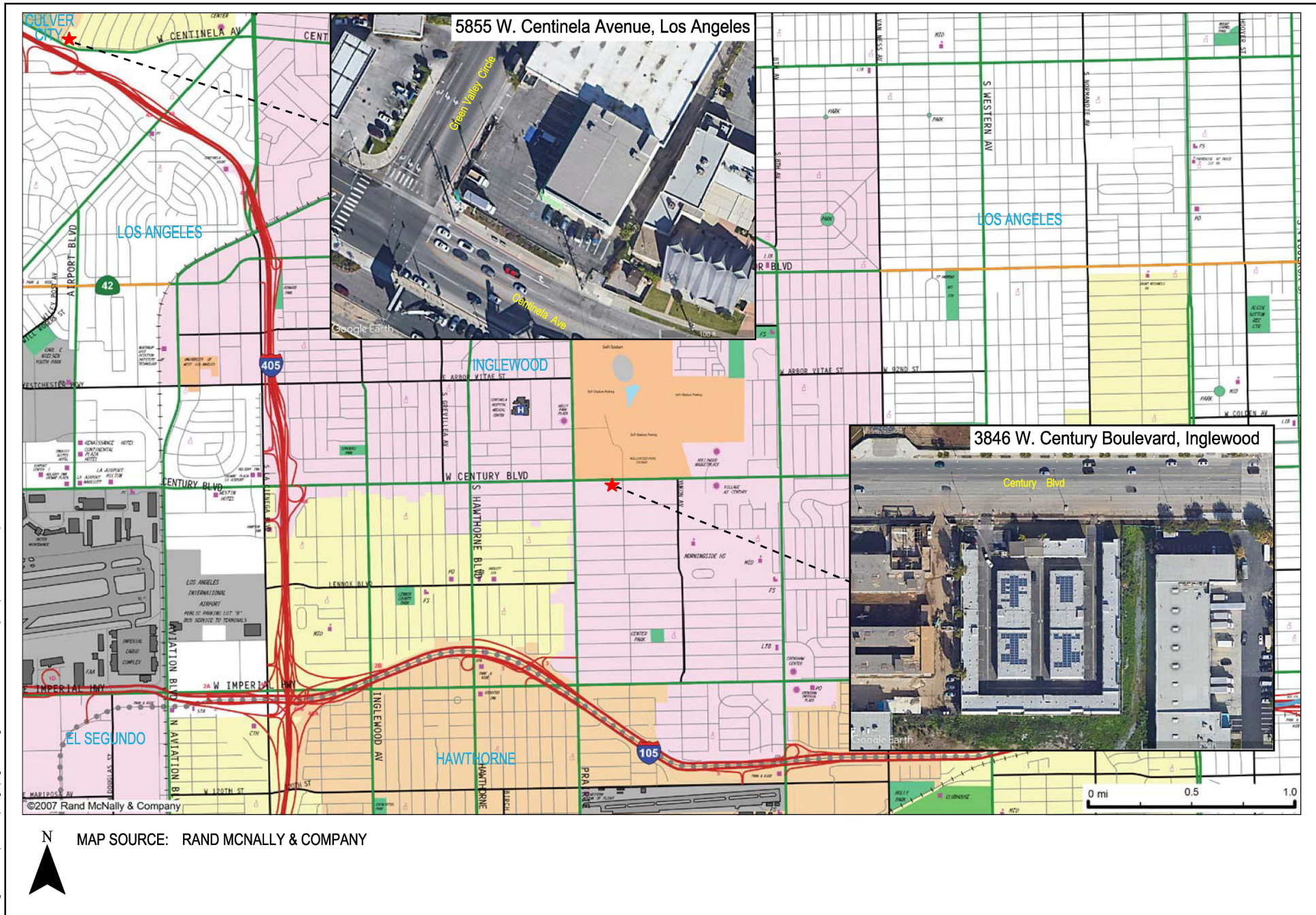


Figure 3
Survey Site Locations

Table 1
PARKING ACCUMULATION SURVEYS
EXTRA SPACE STORAGE (SURFACE PARKING LOTS)
WEDNESDAY, MARCH 31, 2021

PARKING LOCATION	[1] NO. OF SPACES	TIME OF DAY [2]																									
		8:00 AM		9:00 AM		10:00 AM		11:00 AM		12:00 PM		1:00 PM		2:00 PM		3:00 PM		4:00 PM		5:00 PM		6:00 PM		7:00 PM		8:00 PM	
		OCC.	PERCENT	OCC.	PERCENT	OCC.	PERCENT	OCC.	PERCENT	OCC.	PERCENT	OCC.	PERCENT	OCC.	PERCENT	OCC.	PERCENT	OCC.	PERCENT	OCC.	PERCENT	OCC.	PERCENT	OCC.	PERCENT	OCC.	PERCENT
3846 W. Century Boulevard, Inglewood Site																											
Standard Spaces	33	2	6.1%	2	6.1%	6	18.2%	5	15.2%	6	18.2%	3	9.1%	3	9.1%	2	6.1%	3	9.1%	3	9.1%	2	6.1%	2	6.1%	0	0.0%
Accessible Van Spaces	1	0	0.0%	0	0.0%	1	100.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Total Inglewood Site Parking	34	2	5.9%	2	5.9%	7	20.6%	5	14.7%	6	17.6%	3	8.8%	3	8.8%	2	5.9%	3	8.8%	3	8.8%	2	5.9%	2	5.9%	0	0.0%
5855 W. Centinela Avenue, Los Angeles Site																											
Standard Spaces	16	7	43.8%	7	43.8%	7	43.8%	8	50.0%	7	43.8%	7	43.8%	9	56.3%	7	43.8%	7	43.8%	10	62.5%	7	43.8%	7	43.8%	6	37.5%
Reserved Spaces	4	3	75.0%	3	75.0%	3	75.0%	3	75.0%	3	75.0%	3	75.0%	3	75.0%	3	75.0%	3	75.0%	3	75.0%	3	75.0%	3	75.0%	3	75.0%
Loading Spaces	3	0	0.0%	1	33.3%	2	66.7%	1	33.3%	1	33.3%	3	100.0%	1	33.3%	0	0.0%	1	33.3%	1	33.3%	0	0.0%	1	33.3%	1	33.3%
Accessible Van Spaces	1	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Total Los Angeles Site Parking	24	10	41.7%	11	45.8%	12	50.0%	12	50.0%	11	45.8%	13	54.2%	13	54.2%	10	41.7%	11	45.8%	14	58.3%	10	41.7%	11	45.8%	10	41.7%
Total Both Sites Parking Demand	58	12	20.7%	13	22.4%	19	32.8%	17	29.3%	17	29.3%	16	27.6%	16	27.6%	12	20.7%	14	24.1%	17	29.3%	12	20.7%	13	22.4%	10	17.2%

[1] Parking inventory confirmed by LLG Engineers in March 2021.
[2] The existing hourly parking demand was determined based on parking occupancy counts conducted at the surface parking lots for each site by The Traffic Solution in March/April 2021.

Table 2
PARKING ACCUMULATION SURVEYS
EXTRA SPACE STORAGE (SURFACE PARKING LOTS)
SATURDAY, APRIL 3, 2021

PARKING LOCATION	[1] NO. OF SPACES	TIME OF DAY [2]																									
		8:00 AM		9:00 AM		10:00 AM		11:00 AM		12:00 PM		1:00 PM		2:00 PM		3:00 PM		4:00 PM		5:00 PM		6:00 PM		7:00 PM		8:00 PM	
		OCC.	PERCENT	OCC.	PERCENT	OCC.	PERCENT	OCC.	PERCENT	OCC.	PERCENT	OCC.	PERCENT	OCC.	PERCENT	OCC.	PERCENT	OCC.	PERCENT	OCC.	PERCENT	OCC.	PERCENT	OCC.	PERCENT	OCC.	PERCENT
3846 W. Century Boulevard, Inglewood Site																											
Standard Spaces	33	3	9.1%	4	12.1%	2	6.1%	4	12.1%	4	12.1%	5	15.2%	2	6.1%	2	6.1%	1	3.0%	1	3.0%	1	3.0%	0	0.0%	0	0.0%
Accessible Van Spaces	1	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Total Inglewood Site Parking	34	3	8.8%	4	11.8%	2	5.9%	4	11.8%	4	11.8%	5	14.7%	2	5.9%	2	5.9%	1	2.9%	1	2.9%	1	2.9%	0	0.0%	0	0.0%
5855 W. Centinela Avenue, Los Angeles Site																											
Standard Spaces	16	8	50.0%	9	56.3%	8	50.0%	9	56.3%	9	56.3%	10	62.5%	9	56.3%	7	43.8%	7	43.8%	7	43.8%	5	31.3%	5	31.3%	5	31.3%
Reserved Spaces	4	3	75.0%	3	75.0%	4	100.0%	4	100.0%	4	100.0%	4	100.0%	4	100.0%	4	100.0%	4	100.0%	4	100.0%	3	75.0%	3	75.0%	3	75.0%
Loading Spaces	3	1	33.3%	0	0.0%	0	0.0%	1	33.3%	1	33.3%	1	33.3%	1	33.3%	1	33.3%	1	33.3%	1	33.3%	0	0.0%	0	0.0%	0	0.0%
Accessible Van Spaces	1	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Total Los Angeles Site Parking	24	12	50.0%	12	50.0%	12	50.0%	14	58.3%	14	58.3%	15	62.5%	14	58.3%	12	50.0%	12	50.0%	12	50.0%	8	33.3%	8	33.3%	8	33.3%
Total Both Sites Parking Demand	58	15	25.9%	16	27.6%	14	24.1%	18	31.0%	18	31.0%	20	34.5%	16	27.6%	14	24.1%	13	22.4%	13	22.4%	9	15.5%	8	13.8%	8	13.8%

[1] Parking inventory confirmed by LLG Engineers in March 2021.
[2] The existing hourly parking demand was determined based on parking occupancy counts conducted at the surface parking lots for each site by The Traffic Solution in March/April 2021.

Table 3
SUMMARY OF PEAK PARKING RATIOS [1]
Existing Extra Space Self-Storage Facilities

Date	OBSERVED PEAK PARKING DEMAND	TOTAL UNITS	TOTAL OCCUPIED UNITS	PEAK PARKING RATIOS (PER OCC. UNIT)	PEAK PARKING RATIOS APPLIED TO PROPOSED PROJECT	
	SPACES	UNITS	OCC. UNITS	SPS/OCC. UNIT	OCC. UNITS	SPACES
Extra Space Storage, 3846 Century Boulevard, Inglewood						
Wednesday, March 31, 2021	7 [2]	563	540	0.013	2,000	26
Saturday, April 3, 2021	5 [3]	563	547	0.009	2,000	18
Extra Space Storage, 5855 West Centinela Avenue, Los Angeles						
Wednesday, March 31, 2021	14 [4]	1,147	1,085	0.013	2,000	26
Saturday, April 3, 2021	15 [5]	1,147	1,085	0.014	2,000	28
Aggregate of Both Sites						
Wednesday, March 31, 2021	21	1,710	1,625	0.013	2,000	26
Saturday, April 3, 2021	20	1,710	1,632	0.012	2,000	24

[1] Based on parking accumulation surveys conducted by The Traffic Solution on Saturday, April 3 and Wednesday, March 31, 2021 at existing Extra Space Self-Storage facilities.

[2] The peak parking demand occurred at 10:00 AM on Wednesday, March 31, 2021.

[3] The peak parking demand occurred at 1:00 PM on Saturday, April 3, 2021.

[4] The peak parking demand occurred at 5:00 PM on Wednesday, March 31, 2021.

[5] The peak parking demand occurred at 1:00 PM on Saturday, April 3, 2021.

ATTACHMENT C

THE TRIP GENERATION AND PARKING STUDY FOR PUBLIC STORAGE FACILITIES IN LOS ANGELES AREA (CRAIN & ASSOCIATES, 1987)

**TRIP GENERATION AND PARKING STUDY
FOR PUBLIC STORAGE FACILITIES
IN LOS ANGELES AREA**

Prepared for:

PUBLIC STORAGE, INC.

Prepared by:

**Crain & Associates
2007 Sawtelle Boulevard, Suite 4
Los Angeles, California 90025
(213) 473-6508**

September 1987

INTRODUCTION

Public Storage, Inc. (PSI), a developer of self-storage, mini-warehouse facilities throughout the country, retained Crain & Associates to conduct a study of its facilities in the Los Angeles area to determine their trip-generating characteristics. In addition, PSI requested that a parking analysis be performed for these facilities in conjunction with the trip generation study. Results of both analyses would be compared to current standards and requirements to determine whether those standards and requirements may be appropriate for these type of facilities.

The following report describes the subject facilities, methodology, analysis, findings and conclusions of the study. An Appendix also is included, which summarizes the data collected.

DESCRIPTION OF FACILITIES

PSI is the largest developer and manager of self-storage facilities in the United States. Generally, a PSI facility consists of one to seven buildings, single-story and/or multi-story, containing an aggregate of between 300 and 1,000 storage spaces or units. The facilities are leased for storage purposes only. Other uses such as retail, repair and fabrication, are prohibited in the lease agreement. Storage space is leased by both individuals and businesses.

A facility site is approximately two to five acres, located in or near large population centers and close to concentrations of apartment complexes, single-family residences and commercial developments. The sites usually can be seen and/or accessed from a freeway or major thoroughfare.

Each facility has a security manager's quarters in one of the buildings near the site entrance. The manager's quarters includes a small office for transacting business with present and prospective tenants. The area containing the storage units is a secured area. Access into and out of this area is enabled by electrically operated gates opened by a push-button, coded-control mechanism, with each tenant having his or its own special access code number.

Parking is provided on-site near the manager's quarters and the storage buildings. However, parking for the storage buildings may not actually be striped since the layout of the buildings and the tenant's need to have close-by parking may preclude an effective striped parking arrangement. Instead, large unmarked areas are available near and between the buildings, which allow convenient parking access to most storage units.

There are approximately 70 PSI sites in the Los Angeles area at the present time, ranging between 20,000 and 140,000 square feet of available building area. The majority are in the 40,000 to 80,000 square-foot category, with the average size between 62,000 and 63,000 square feet. Overall, about 85 percent of these facilities in this area are occupied.

METHODOLOGY AND ANALYSIS

Initially, it was decided to try to utilize the computerized access tapes generated by the PSI facilities. As described earlier, each PSI facility is equipped with a push-button, coded-control security device. This device is linked to a monitor-computer, which registers the identity of any tenant at any given time. Through this means, the identity and total count of tenant vehicles can be obtained for any period. This information is continually provided on a printed tape each day.

By matching the entering and leaving code numbers, along with the corresponding times, peak-hour as well as 24-hour trip generation rates could be computed relatively easily. Similarly, the elapsed time between inbound and outbound code numbers would yield the length of stay of each vehicle, which would infer parking duration and, consequently, parking accumulation, the total number of vehicles parking in a given area at a given time. The peak parking accumulation would be the measure of most critical parking need, from which parking rates could be calculated.

Thus, it appeared that both trip generation and parking information could be readily derived from the register tapes. Further, since each PSI facility could furnish these tapes, a large sample size covering an extended period of time could be examined, allowing for more confidence and less statistical error in the final results.

Since data analysis of the nearly 70 facilities in the area was not feasible, PSI was requested to furnish printed tapes for ten of its more active facilities in the area, covering the same two-week period, including weekends. Unfortunately, upon close examination of the tapes, it was found that the information recorded was

unreliable and inaccurate and could not be rectified by selecting other sites and/or time periods.

The major flaw was that many vehicles were registered as entering a facility but never leaving or vice-versa. Thus, at the end of the day the inbound and outbound flows were not balanced, with many vehicles unmatched. Based on conversations with the managers of these facilities, there should be an equal number of entering and departing vehicles each day, except in unusual circumstances.

It was obvious from random field checks that the reason for the large discrepancies on the coded tapes was due to tailgating; that is, one vehicle immediately following another vehicle into or out of the facility after the lead driver had opened the security gate. Since the gates have some delay before they close, it is possible for other vehicles to go through without code-accessing. This could occur 10 to 25 percent of the time, especially during periods of peak usage when more vehicles access the system. In addition, it was noted that the coded security system applied only to those entering and leaving the secured storage area. Visitors and others parking near the manager's quarters had unrestricted access and were not monitored by the computer. Therefore, even if the printouts were reliable, they would not fully account for the total peak-hour or daily trip generation of the facility.

It was concluded that the only way to obtain complete and accurate information for all vehicles accessing a facility would be by continuous human observation. Since such field surveys can be very expensive and time-consuming, it was decided to conduct surveys at five of the previously selected ten sites in the Los Angeles area. The five selected sites were as follows:

<u>Name of Facility</u>	<u>Address</u>	<u>Size of Facility</u>	
		<u>Available Units</u>	<u>Available Square Feet</u>
Glendale/San Fernando	4820 San Fernando Road, Glendale	929	88,710
La Cienega	3401 South La Cienega Boulevard, Los Angeles	1,224	98,230
Long Beach/Cherry	4140 Cherry Avenue, Long Beach	706	70,500
Los Angeles/Beverly	3636 Beverly Boulevard, Los Angeles	1,171	81,426
Wilmington	501 East Pacific Coast Highway, Wilmington	1,119	133,859

Each site was surveyed on two weekdays, Tuesday and Thursday, and a Saturday during the month of July, 1987. Field personnel recorded every vehicle using all facility driveways, inbound and outbound, from 7:00 AM to 7:30 PM each day. (These observations were 30 minutes longer than the 7:00 AM to 7:00 PM period that these facilities were open.) Determinations were made as to whether those accessing the sites were tenants, visitors or other type of trip-makers (such as lost drivers, "U"-turners, illegal parkers, etc.). Lastly, times were recorded for each entering and departing vehicle.

As mentioned previously, these five facilities were considered by PSI to be among its more highly used facilities. At the time of the field surveys, these facilities had an average occupancy of 95 percent. It could be anticipated, therefore, that the surveys probably would result in trip generation and parking rates higher than might be expected were a much broader spectrum of facilities examined.

It also should be noted that during the month of July, PSI was advertising a bargain rate to attract new tenants. Large banners were placed outside these facilities, advertising a \$1 rental fee for the first month of tenancy. The increase in traffic due to the campaign could be expected to further skew the trip generation and parking demand at these sites toward higher than normal results. For these reasons, it could be said that the study includes somewhat "worst case" type conditions.

Since field observations were not made during the 7:30 PM to 7:00 AM period when the facilities were closed, it cannot be said that the collected data absolutely account for all traffic that might have accessed the facilities in a 24-hour period. It is possible that during the late evening or early morning hours, the manager, his family and/or visitors, may have generated a few trips. However, these potential after-hours trips would be a very small amount. They would have only a negligible effect on the overall trip generation and none on the critical peak-hour generations since all trips were recorded during the regular time period. For practical purposes, it would be reasonable to assume that the total trip generation observed during the 7:00 AM to 7:30 PM period represents the 24-hour trip generation.

Upon completion of the field surveys, the collected data were reviewed and analyzed manually for each day and site. In most cases, complete and balanced inbound and outbound vehicle movements were found. Where discrepancies occurred, the differences were extremely slight, amounting to only one vehicle more or less than the opposing movement. (In those instances, one additional vehicle was added later to the daily tally to achieve an exact balance.)

For peak-hour trip generation, the data were analyzed for the highest number of vehicle trips recorded for a 60-minute period during the peak-hour periods of 7:00 to 10:00 AM and 3:00 to 6:00 PM. In addition, an analysis was made of the peak trip

generation, the highest 60-minute vehicle measurement at each facility, regardless of the time of day. These numbers, as well as the total daily trip generation of the facility, were then related to the available storage area of the facility. As an additional step, the trip generations also were related to the occupancy of each facility. These calculations yielded trip generation rates according to available and occupied units, and available and occupied square feet. These rates were further analyzed in order to determine average trip generation values for both a weekday and a Saturday. As a final procedure, these rates were compared to the trip generation rates given for a "Mini-Warehouse" use in the nationally recognized *Institute of Transportation Engineers Trip Generation Manual (Third Edition, 1982)*.

All of the relevant information regarding the aggregated field data, trip generation analysis and comparison of trip generation rates has been assembled in Tables 1 through 5 in the Appendix.

Using the same information gathered for the trip generation study, a manual analysis was performed to determine the parking needs of these facilities. The analysis focused only on the expected parking usage associated with the storage facilities themselves, that is, the secured areas where the vast majority of the parking demand occurs as tenants access their units. No analysis was made of the parking situation in the nonsecured areas of the facilities. Since the survey was oriented toward evaluating the amount of parking needed within the secured area, no records were made of the actual parking maneuvers around the storage buildings.

By performing a parking accumulation analysis, a profile of the total number of vehicles assumed to have been parked inside at the end of each hourly period was obtained for each day and site. A peak parking accumulation analysis also was

made to determine the maximum number of vehicles parked at any one time, no matter how brief the period. The hourly and peak parking accumulation results are depicted graphically in Figures 1 through 5 of the Appendix.

It is evident from those figures that except at one site, the highest peak parking accumulation occurred on Saturday. Therefore, to determine a parking rate that should be adequate for even most periods of high parking demand, the Saturday peak parking accumulation quantities at each facility were used. These quantities were divided by the appropriate storage sizes, available and occupied, of each facility, resulting in individual parking generation rates. These rates were then combined to arrive at average parking rates, as shown in Table 6, Appendix.

For comparison purposes, several local governmental agencies in the Los Angeles area were contacted regarding parking requirements for self-storage or mini-warehouse uses. Only a few jurisdictions presently have parking requirements specifically for such uses. Most agencies continue to rely on industrial or manufacturing use parking requirements or variations thereof. Table 7, Appendix, lists current parking requirements of some of these agencies.

Using the current code parking requirements of the appropriate jurisdictions for the five study facilities, a comparison was made with the parking quantities calculated according to the average parking rate determined above. An additional comparison was made with the highest peak parking accumulation found for each facility. These comparisons are shown in Table 8 of the Appendix.

FINDINGS AND CONCLUSIONS

Findings

Although the sample size for the trip generation and parking study was rather small, each of the five study facilities was surveyed extensively. From the information collected in the study, the following findings about Public Storage (PSI) facilities in the Los Angeles area are indicated:

Trip Generation

- o PSI facilities are a relatively low trip-generating use.
- o The PM peak-hour trip generation is greater than the AM peak-hour generation.
- o The peak trip generation usually occurs between noon and closing time, and frequently does not coincide with the PM peak-hour generation. The peak trip generation is approximately 15 percent of the 24-hour generation.
- o The Saturday 24-hour trip generation is approximately 35 to 40 percent higher than the weekday generation, although the Saturday AM peak-hour generation is only slightly higher than the weekday AM peak-hour generation.
- o Approximately 75 percent of the trip generation is due to tenant use trips; the remainder is attributable to visitor and other type of trips.

- o The trip rates determined in this study for weekday AM and PM peak hours and peak generation are very similar to the Institute of Transportation Engineers (ITE) rates for a mini-warehouse use. The rates also are quite similar for Saturday peak generation. However, the study's 24-hour rates are about 25 percent less for a weekday and about 15 percent more for Saturday.
- o The basis of trip generation, either "per (storage) unit" or "per 1,000 gross square feet," generally yield similar results, with the per unit basis being slightly more accurate.

Parking Demand

- o Peak parking accumulation in the storage facility area (i.e., tenant parking) does not necessarily coincide with the peak trip generation of the facility.
- o Peak parking accumulation in the storage facility area usually occurs on Saturday and usually after 12 PM.
- o The average duration of parking in the storage facility area is approximately 30 to 35 minutes per vehicle.
- o Unless variances are granted, the code parking requirements of most local jurisdictions for self-storage/mini-warehouse facilities generally are excessive by at least 100 percent.

Conclusions

Based on the findings indicated above, it can be concluded that PSI facilities and similar self-storage facilities are relatively low trip generators during both the peak

and 24-hour periods. The results of this study tend to validate the ITE weekday and Saturday trip generations rates for the most critical AM and PM peak-hour and peak generation periods. For weekday and Saturday 24-hour trip generation, there is less similarity between the study rates and the ITE rates. Nevertheless, intuitively as well as based on study observations, it does appear that the ITE Saturday 24-hour trip generation rate should be higher, at least equal to its weekday rate.

It also can be concluded that most typical code parking requirements for industrial and manufacturing uses and which are commonly used by many jurisdictions, are inappropriate for self-storage type facilities. Such parking requirements are much greater than necessary for even the normal peak parking demands of these facilities.

APPENDIX

TABLE 1

**SUMMARY OF TRIP GENERATION
PUBLIC STORAGE FACILITIES**

Public Storage Facility	Units Available/Occupied	Square Feet Available/Occupied	Day of Week	AM Peak Hour (Occurring in 7-10 AM Period)			PM Peak Hour (Occurring in 3-6 PM Period)			Peak Hour Generation of Facility				24-Hour		
				I/B	O/B	Total	I/B	O/B	Total	I/B	O/B	Total (Time Period)	I/B	O/B	Total	
Glendale/ San Fernando	929/894 (96.2%)	88,710/85,130 (96.0%)	Tuesday	7	7	14	11	13	24	11	28	39	(2:00-3:00 PM)	108	108	216
			Thursday	8	8	16	10	14	24	13	14	27	(4:45-5:45 PM)	117	117	234
			Saturday	9	4	13	11	12	23	17	19	36	(11:30-12:30 PM)	107	107	214
La Cienega	1,224/1,099 (89.8%)	98,230/88,515 (90.1%)	Tuesday	11	11	22	9	15	24	13	14	27	(12:45-1:45 PM)	111	111	222
			Thursday	12	8	20	9	9	18	20	16	36	(12:30-1:30 PM)	124	124	248
			Saturday	15	10	25	26	26	52	29	36	65	(12:30-1:30 PM)	214	214	428
Long Beach/ Cherry	706/703 (99.6%)	70,500/70,000 (99.3%)	Tuesday	5	3	8	9	9	18	9	9	18	(4:00-5:00 PM)	63	63	126
			Thursday	15	13	28	10	15	25	16	14	30	(2:30-3:30 PM)	100	100	200
			Saturday	8	5	13	11	11	22	14	15	29	(12:00-1:00 PM)	102	102	204
Los Angeles/ Beverly	1,171/1,163 (99.3%)	81,426/80,904 (99.4%)	Tuesday	3	4	7	13	11	24	13	11	24	(3:00-4:00 PM)	71	71	142
			Thursday	2	3	5	11	9	20	11	9	20	(4:00-5:00 PM)	65	65	130
			Saturday	7	4	11	10	12	22	11	14	25	(11:15-12:15 PM)	85	85	170
Wilmington	1,119/1,036 (92.6%)	133,859/120,488 (90.0%)	Tuesday	12	9	21	12	10	22	16	20	36	(1:30-2:30 PM)	113	113	226
			Thursday	8	5	13	9	13	22	16	19	35	(1:45-2:45 PM)	111	111	222
			Saturday	15	13	28	14	22	36	30	22	52	(11:15-12:15 PM)	178	178	356

**SUMMARY OF CALCULATED TRIP GENERATION RATES
PUBLIC STORAGE FACILITIES**

Public Storage Facility	Day Of Week	Trip Generation Rate: Per Available Unit (Per Occupied Unit)						Peak Hour Generation of Facility			24-Hour Total
		AM Peak Hour			PM Peak Hour						
		I/B	O/B	Total	I/B	O/B	Total	I/B	O/B	Total	
Glendale/ San Fernando	Tuesday	0.01 (0.01)	0.01 (0.01)	0.02 (0.02)	0.01 (0.01)	0.02 (0.02)	0.03 (0.03)	0.01 (0.01)	0.03 (0.03)	0.04 (0.04)	0.23 (0.24)
	Thursday	0.01 (0.01)	0.01 (0.01)	0.02 (0.02)	0.01 (0.01)	0.02 (0.02)	0.03 (0.03)	0.01 (0.01)	0.02 (0.02)	0.03 (0.03)	0.25 (0.26)
	Saturday	0.01 (0.01)	0.00 (0.00)	0.01 (0.01)	0.01 (0.01)	0.01 (0.02)	0.02 (0.03)	0.02 (0.02)	0.02 (0.02)	0.04 (0.04)	0.23 (0.24)
La Cienega	Tuesday	0.01 (0.01)	0.01 (0.01)	0.02 (0.02)	0.01 (0.01)	0.01 (0.01)	0.02 (0.02)	0.01 (0.01)	0.01 (0.01)	0.02 (0.02)	0.18 (0.20)
	Thursday	0.01 (0.01)	0.01 (0.01)	0.02 (0.02)	0.00 (0.01)	0.01 (0.01)	0.01 (0.02)	0.02 (0.02)	0.01 (0.01)	0.03 (0.03)	0.20 (0.23)
	Saturday	0.01 (0.01)	0.01 (0.01)	0.02 (0.02)	0.02 (0.02)	0.02 (0.03)	0.04 (0.05)	0.02 (0.03)	0.03 (0.03)	0.05 (0.06)	0.35 (0.39)
Long Beach/ Cherry	Tuesday	0.01 (0.01)	0.00 (0.00)	0.01 (0.01)	0.01 (0.01)	0.02 (0.02)	0.03 (0.03)	0.01 (0.01)	0.02 (0.02)	0.03 (0.03)	0.18 (0.18)
	Thursday	0.02 (0.02)	0.02 (0.02)	0.04 (0.04)	0.02 (0.02)	0.02 (0.02)	0.04 (0.04)	0.02 (0.02)	0.02 (0.02)	0.04 (0.04)	0.28 (0.28)
	Saturday	0.01 (0.01)	0.01 (0.01)	0.02 (0.02)	0.01 (0.01)	0.02 (0.02)	0.03 (0.03)	0.02 (0.02)	0.02 (0.02)	0.04 (0.04)	0.29 (0.29)

**SUMMARY OF CALCULATED TRIP GENERATION RATES
PUBLIC STORAGE FACILITIES**

		Trip Generation Rate: Per Available Unit (Per Occupied Unit)									
Public Storage Facility	Day Of Week	AM Peak Hour			PM Peak Hour			Peak Hour Generation of Facility			24-Hour Total
		I/B	O/B	Total	I/B	O/B	Total	I/B	O/B	Total	
Los Angeles/ Beverly	Tuesday	0.00 (0.00)	0.01 (0.01)	0.01 (0.01)	0.01 (0.01)	0.01 (0.01)	0.02 (0.02)	0.01 (0.01)	0.01 (0.01)	0.02 (0.02)	0.12 (0.12)
	Thursday	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.01 (0.01)	0.01 (0.01)	0.02 (0.02)	0.01 (0.01)	0.01 (0.01)	0.02 (0.02)	0.11 (0.11)
	Saturday	0.01 (0.01)	0.00 (0.00)	0.01 (0.01)	0.01 (0.01)	0.01 (0.01)	0.02 (0.02)	0.01 (0.01)	0.01 (0.01)	0.02 (0.02)	0.15 (0.15)
Wilmington	Tuesday	0.01 (0.01)	0.01 (0.01)	0.02 (0.02)	0.01 (0.01)	0.01 (0.01)	0.02 (0.02)	0.01 (0.01)	0.02 (0.02)	0.03 (0.03)	0.20 (0.22)
	Thursday	0.01 (0.01)	0.00 (0.00)	0.01 (0.01)	0.01 (0.01)	0.01 (0.01)	0.02 (0.02)	0.01 (0.01)	0.02 (0.02)	0.03 (0.03)	0.20 (0.21)
	Saturday	0.02 (0.02)	0.01 (0.01)	0.03 (0.03)	0.01 (0.01)	0.02 (0.02)	0.03 (0.03)	0.03 (0.03)	0.02 (0.02)	0.05 (0.05)	0.32 (0.34)

**SUMMARY OF CALCULATED TRIP GENERATION RATES
PUBLIC STORAGE FACILITIES**

Public Storage Facility	Day Of Week	Trip Generation Rate: Per Available 1,000 Square Feet (Per Occupied 1,000 Square Feet)									24-Hour Total
		AM Peak Hour			PM Peak Hour			Peak Hour Generation of Facility			
		I/B	O/B	Total	I/B	O/B	Total	I/B	O/B	Total	
Glendale/ San Fernando	Tuesday	0.08 (0.08)	0.08 (0.08)	0.16 (0.16)	0.12 (0.12)	0.15 (0.15)	0.27 (0.28)	0.12 (0.13)	0.32 (0.33)	0.44 (0.46)	2.43 (2.54)
	Thursday	0.09 (0.10)	0.09 (0.09)	0.18 (0.19)	0.11 (0.12)	0.16 (0.16)	0.27 (0.28)	0.14 (0.15)	0.16 (0.17)	0.30 (0.32)	2.64 (2.75)
	Saturday	0.10 (0.10)	0.05 (0.05)	0.15 (0.15)	0.12 (0.13)	0.14 (0.14)	0.26 (0.27)	0.19 (0.20)	0.22 (0.22)	0.41 (0.42)	2.41 (2.51)
La Cienega	Tuesday	0.11 (0.13)	0.11 (0.12)	0.22 (0.25)	0.09 (0.10)	0.15 (0.17)	0.24 (0.27)	0.13 (0.14)	0.14 (0.16)	0.27 (0.30)	2.26 (2.51)
	Thursday	0.12 (0.14)	0.08 (0.09)	0.20 (0.23)	0.09 (0.10)	0.09 (0.10)	0.18 (0.20)	0.21 (0.23)	0.16 (0.18)	0.37 (0.41)	2.52 (2.80)
	Saturday	0.15 (0.17)	0.10 (0.11)	0.25 (0.28)	0.26 (0.29)	0.27 (0.30)	0.53 (0.59)	0.29 (0.33)	0.37 (0.40)	0.66 (0.73)	4.36 (4.84)
Long Beach/ Cherry	Tuesday	0.07 (0.07)	0.04 (0.04)	0.11 (0.11)	0.13 (0.13)	0.13 (0.13)	0.26 (0.26)	0.13 (0.13)	0.13 (0.13)	0.26 (0.26)	1.79 (1.80)
	Thursday	0.21 (0.21)	0.19 (0.19)	0.40 (0.40)	0.14 (0.14)	0.21 (0.22)	0.35 (0.36)	0.23 (0.23)	0.20 (0.20)	0.43 (0.43)	2.84 (2.86)
	Saturday	0.11 (0.12)	0.07 (0.07)	0.18 (0.19)	0.15 (0.15)	0.16 (0.16)	0.31 (0.31)	0.19 (0.19)	0.21 (0.21)	0.41 (0.41)	2.89 (2.91)

TABLE 3 (Continued)

**SUMMARY OF CALCULATED TRIP GENERATION RATES
PUBLIC STORAGE FACILITIES**

		Trip Generation Rate: Per Available 1,000 Square Feet (Per Occupied 1,000 Square Feet)									
Public Storage Facility	Day Of Week	AM Peak Hour			PM Peak Hour			Peak Hour Generation of Facility			24-Hour Total
		I/B	O/B	Total	I/B	O/B	Total	I/B	O/B	Total	
Los Angeles/ Beverly	Tuesday	0.04 (0.04)	0.05 (0.05)	0.09 (0.09)	0.16 (0.16)	0.13 (0.14)	0.29 (0.30)	0.16 (0.16)	0.13 (0.13)	0.29 (0.29)	1.74 (1.75)
	Thursday	0.02 (0.02)	0.04 (0.04)	0.06 (0.06)	0.14 (0.14)	0.11 (0.11)	0.25 (0.25)	0.14 (0.14)	0.11 (0.11)	0.25 (0.25)	1.60 (1.61)
	Saturday	0.09 (0.09)	0.05 (0.05)	0.14 (0.14)	0.12 (0.12)	0.15 (0.15)	0.27 (0.27)	0.14 (0.14)	0.17 (0.17)	0.31 (0.31)	2.09 (2.10)
Wilmington	Tuesday	0.09 (0.10)	0.07 (0.07)	0.16 (0.17)	0.09 (0.10)	0.07 (0.08)	0.16 (0.18)	0.12 (0.13)	0.15 (0.17)	0.27 (0.30)	1.69 (1.88)
	Thursday	0.06 (0.07)	0.04 (0.04)	0.10 (0.11)	0.07 (0.07)	0.09 (0.11)	0.16 (0.18)	0.12 (0.13)	0.14 (0.16)	0.26 (0.29)	1.66 (1.84)
	Saturday	0.11 (0.12)	0.10 (0.11)	0.21 (0.23)	0.11 (0.12)	0.16 (0.18)	0.27 (0.30)	0.22 (0.25)	0.17 (0.18)	0.39 (0.43)	2.66 (2.96)

TABLE 4
AVERAGE TRIP GENERATION RATES
PUBLIC STORAGE FACILITIES

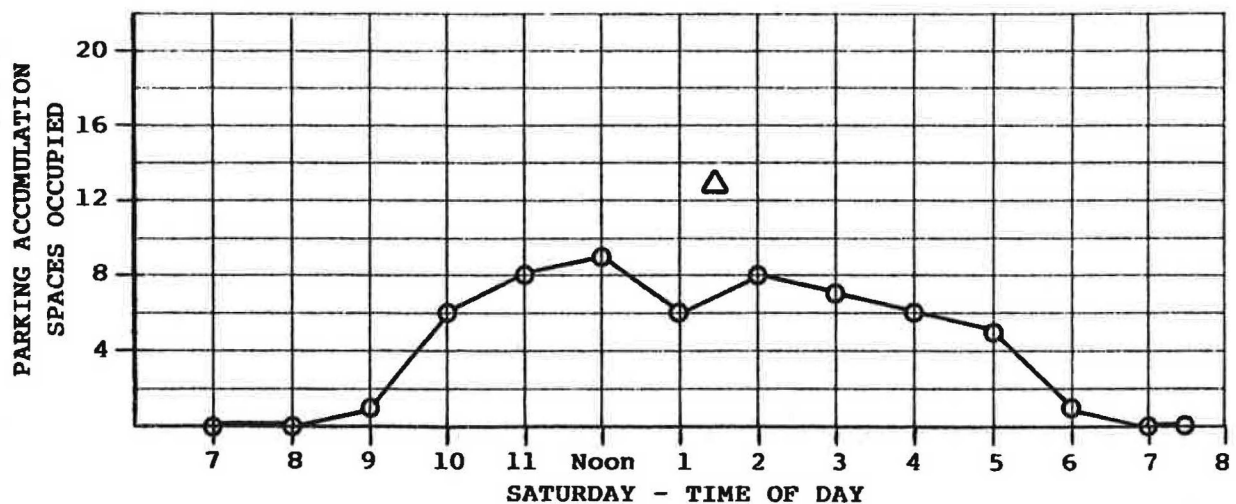
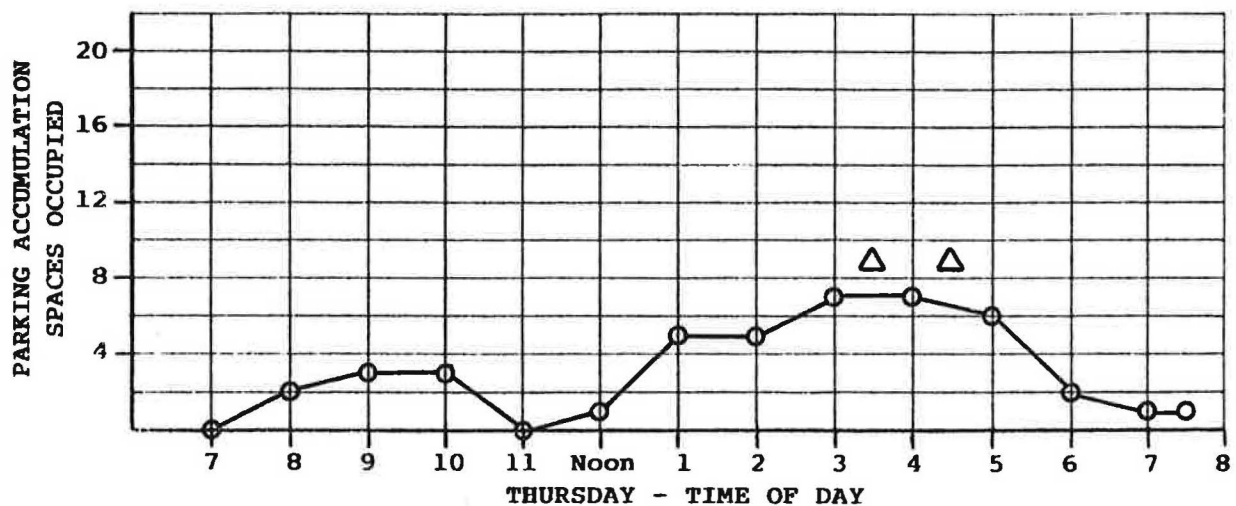
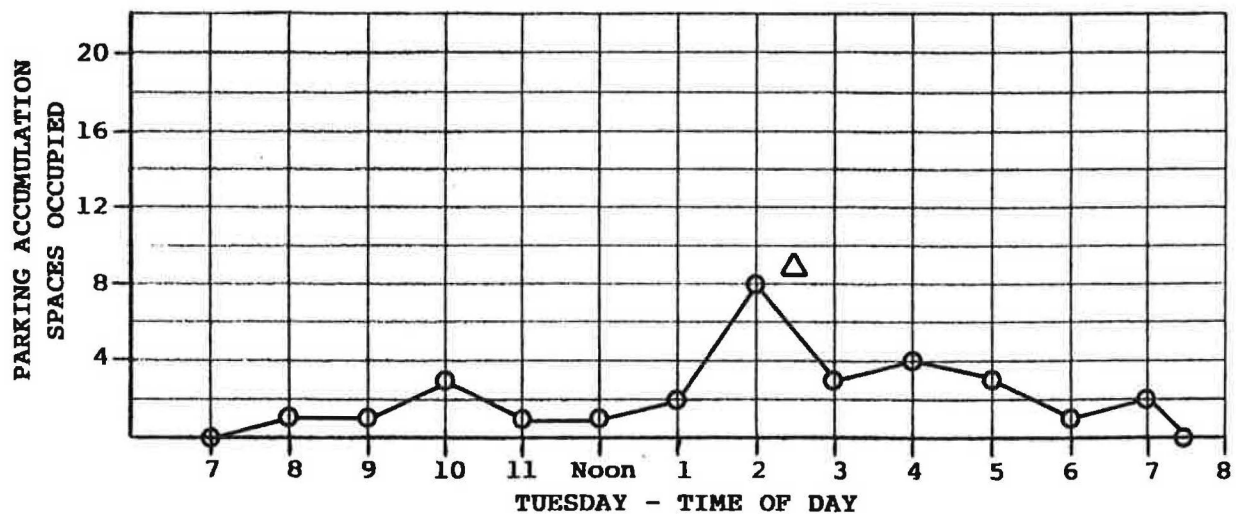
		<u>Per Available Unit</u>	<u>Per Occupied Unit</u>	<u>Per Available 1,000 Square Feet</u>	<u>Per Occupied 1,000 Square Feet</u>
<u>Weekday</u>					
AM Peak Hour (7-10 AM)					
	Inbound	0.01	0.01	0.09	0.10
	Outbound	0.01	0.01	0.08	0.08
	Total	0.02	0.02	0.17	0.18
PM Peak Hour (3-6- PM)					
	Inbound	0.01	0.01	0.11	0.12
	Outbound	0.01	0.01	0.13	0.14
	Total	0.02	0.02	0.24	0.26
Peak Hour Generation					
	Inbound	0.01	0.01	0.15	0.16
	Outbound	0.02	0.02	0.16	0.17
	Total	0.03	0.03	0.31	0.33
24-Hour	Total	0.20	0.20	2.12	2.23
<u>Saturday</u>					
AM Peak Hour (7-10 AM)					
	Inbound	0.01	0.01	0.11	0.12
	Outbound	0.01	0.01	0.08	0.08
	Total	0.02	0.02	0.19	0.20
PM Peak Hour (3-6- PM)					
	Inbound	0.01	0.01	0.15	0.16
	Outbound	0.02	0.02	0.18	0.19
	Total	0.03	0.03	0.33	0.35
Peak Hour Generation					
	Inbound	0.02	0.02	0.21	0.22
	Outbound	0.02	0.02	0.23	0.24
	Total	0.04	0.04	0.44	0.46
24-Hour	Total	0.27	0.28	2.88	3.06

TABLE 5
COMPARISON OF TRIP GENERATION RATES

	<u>Average Trip Generation Rate</u>				
	<u>ITE Manual, "Mini-Warehouse," Land Use Code 151</u>		<u>Public Storage Facilities</u>		
	<u>Per Unit</u>	<u>Per 1,000 Gross Square Feet</u>	<u>Per Unit</u>	<u>Per Available 1,000 Square Feet</u>	<u>Per 1,000 Gross Square Feet*</u>
<u>Weekday</u>					
AM Peak Hour (Total)	0.02	0.17	0.02	0.17	0.18
PM Peak Hour (Total)	0.03	0.29	0.02	0.24	0.25
Peak Hour Generation (Total)	0.03	0.32	0.03	0.31	0.33
24- Hour (Total)	0.28	2.80	0.20	2.10	2.20
<u>Saturday</u>					
Peak Hour Generation (Total)	0.04	0.40	0.04	0.44	0.46
24- Hour (Total)	0.25	2.50	0.27	2.90	3.10

* The "Per 1,000 Gross Square Feet" rates for Public Storage facilities are adjusted rates, assuming that the available square footages are approximately 95 percent of the gross square footages.

Note: The Institute of Transportation Engineers (ITE) Trip Generation Manual does not provide information regarding inbound and outbound peak-hour rates for the mini-warehouse use.



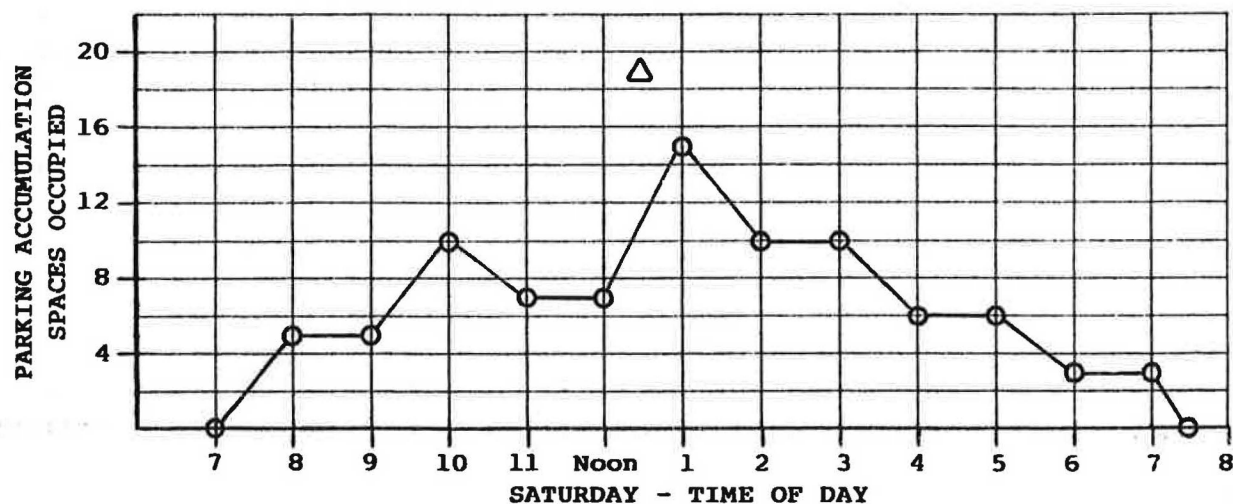
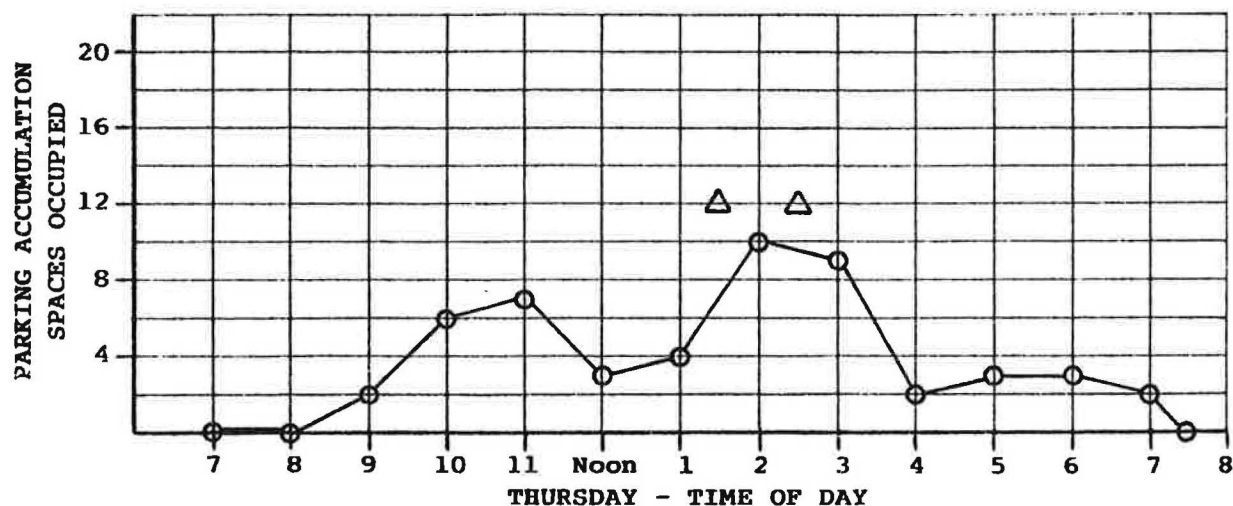
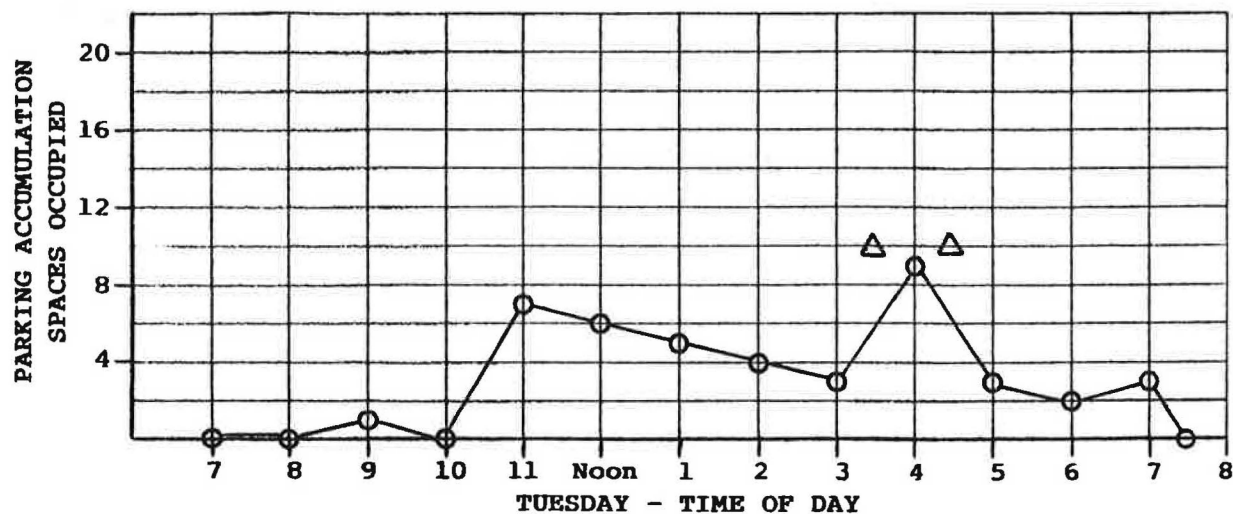
△ DENOTES PEAK ACCUMULATION

FIGURE 1
HOURLY PARKING ACCUMULATION
GLENDALE/SAN FERNANDO FACILITY



CRAIN & ASSOCIATES
 2007 Sawtelle Boulevard
 Los Angeles, California 90025
 (213) 473-6508

Transportation Planning · Traffic Engineering



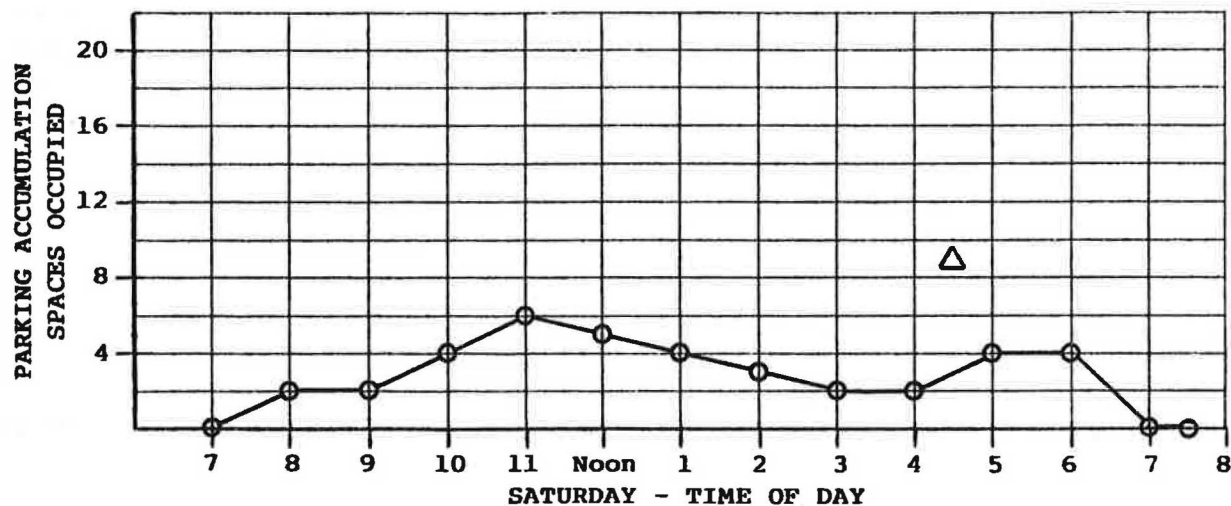
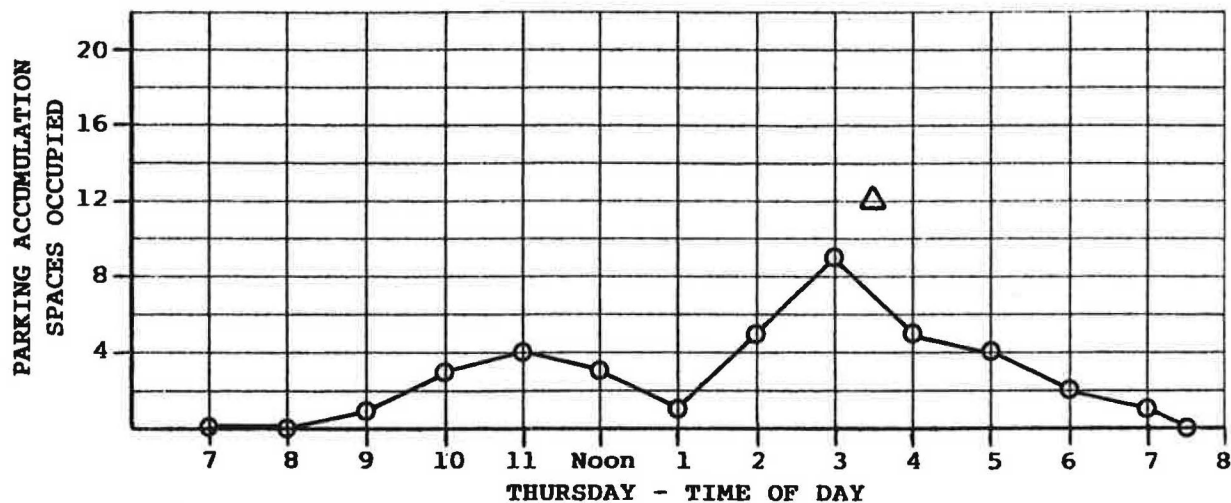
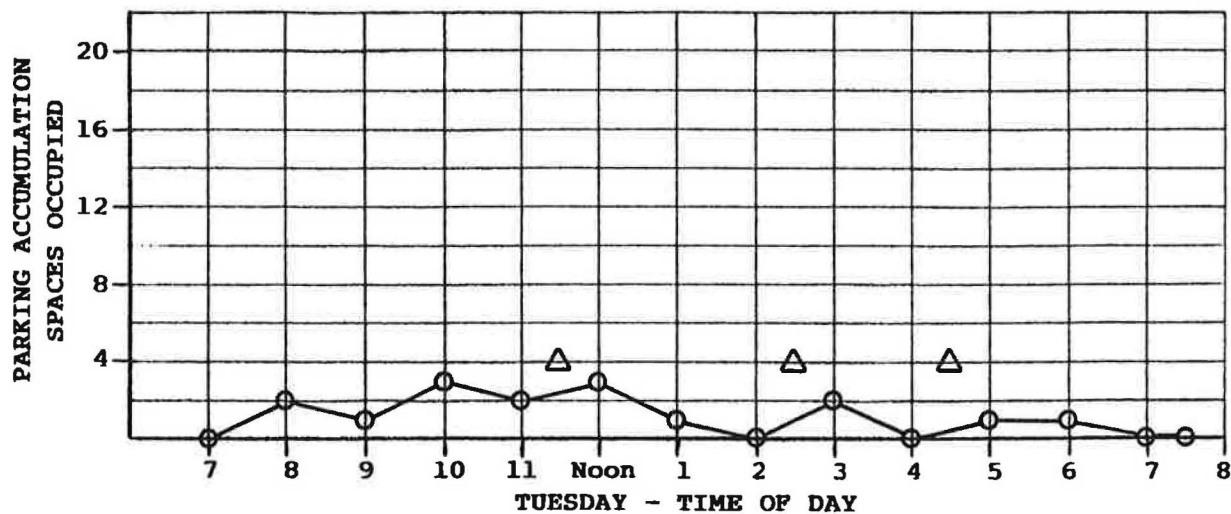
△ DENOTES PEAK ACCUMULATION

FIGURE 2
HOURLY PARKING ACCUMULATION
LA CIENEGA FACILITY



CRAIN & ASSOCIATES
 2007 Sawtelle Boulevard
 Los Angeles, California 90025
 (213) 473-6508

Transportation Planning · Traffic Engineering



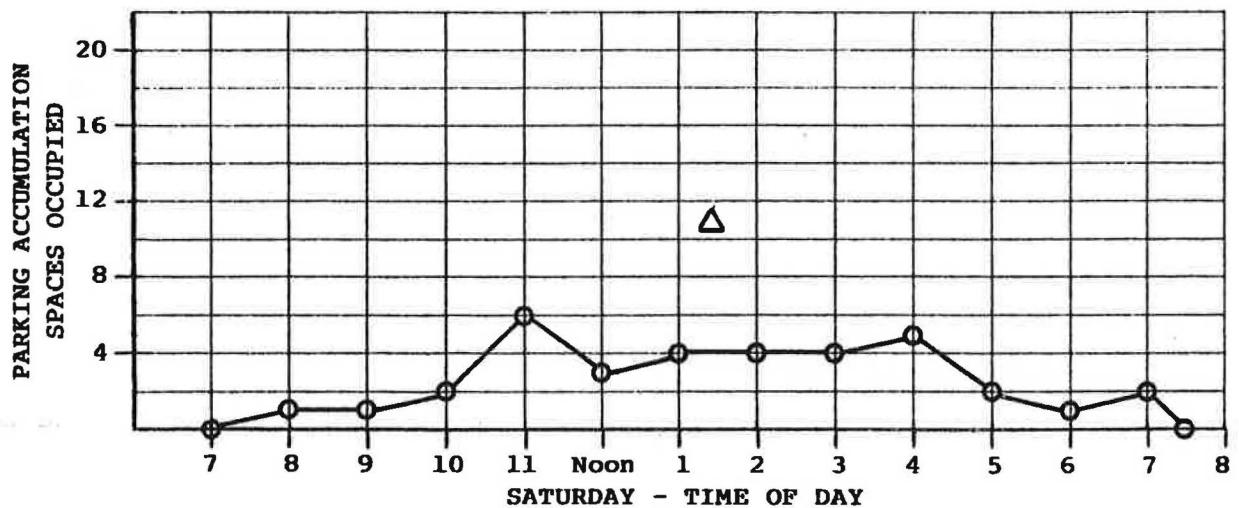
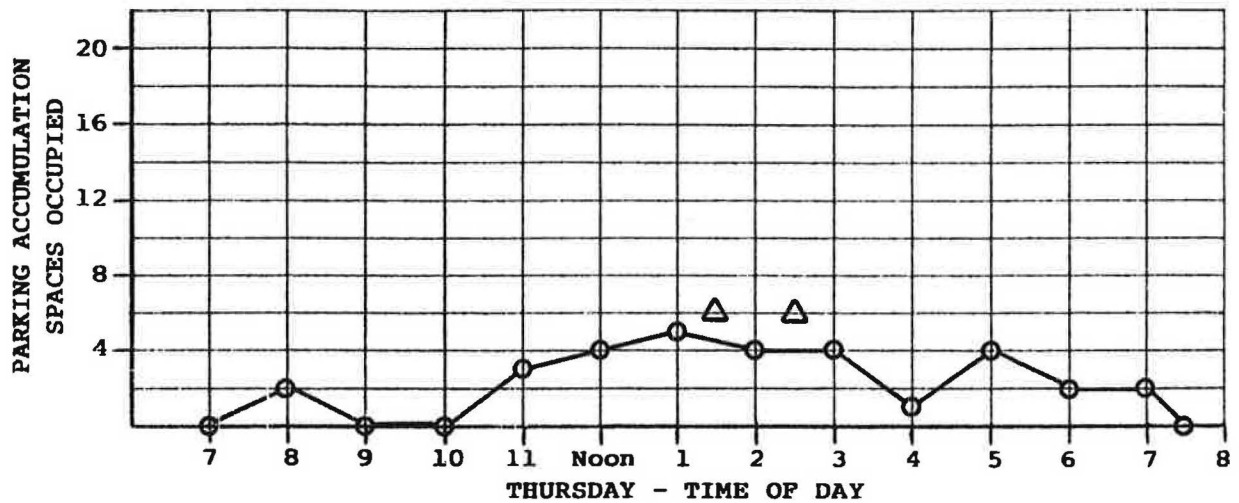
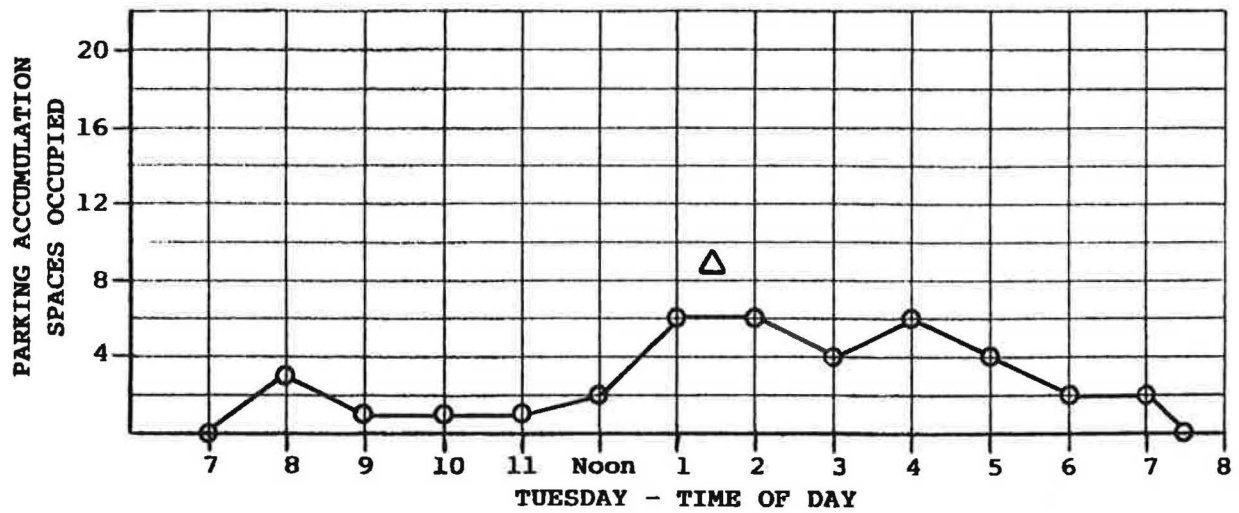
△ DENOTES PEAK ACCUMULATION

FIGURE 3
HOURLY PARKING ACCUMULATION
LONG BEACH FACILITY



CRAIN & ASSOCIATES
 2007 Sawtelle Boulevard
 Los Angeles, California 90025
 (818) 473-6508

Transportation Planning · Traffic Engineering



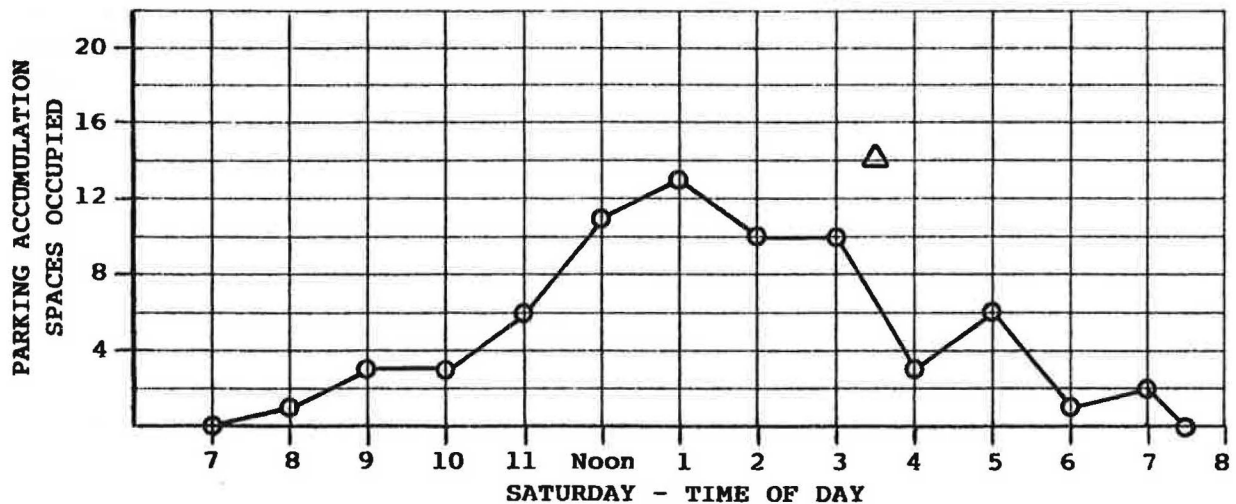
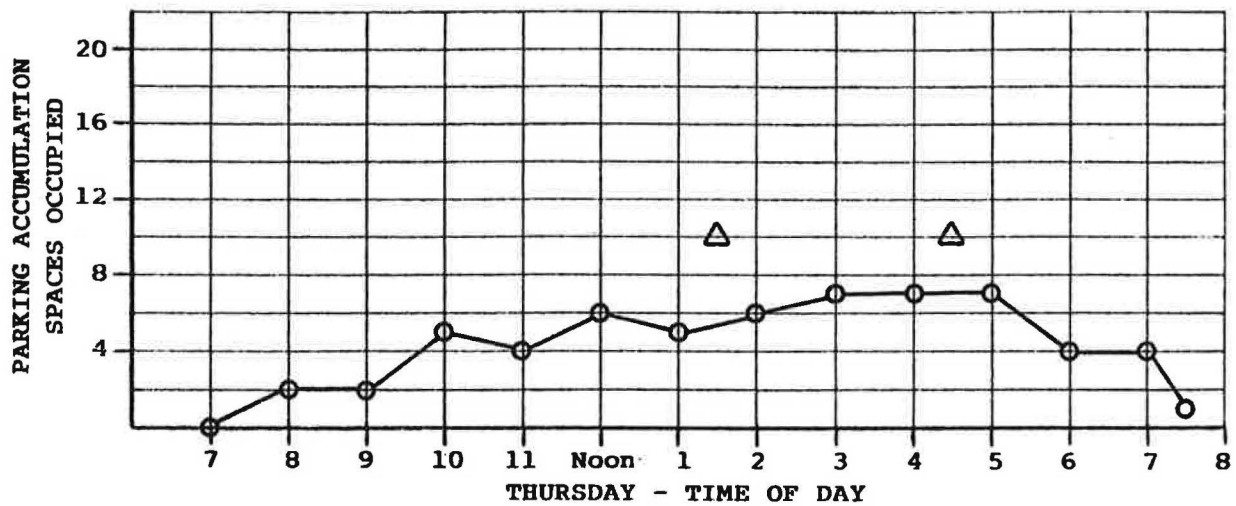
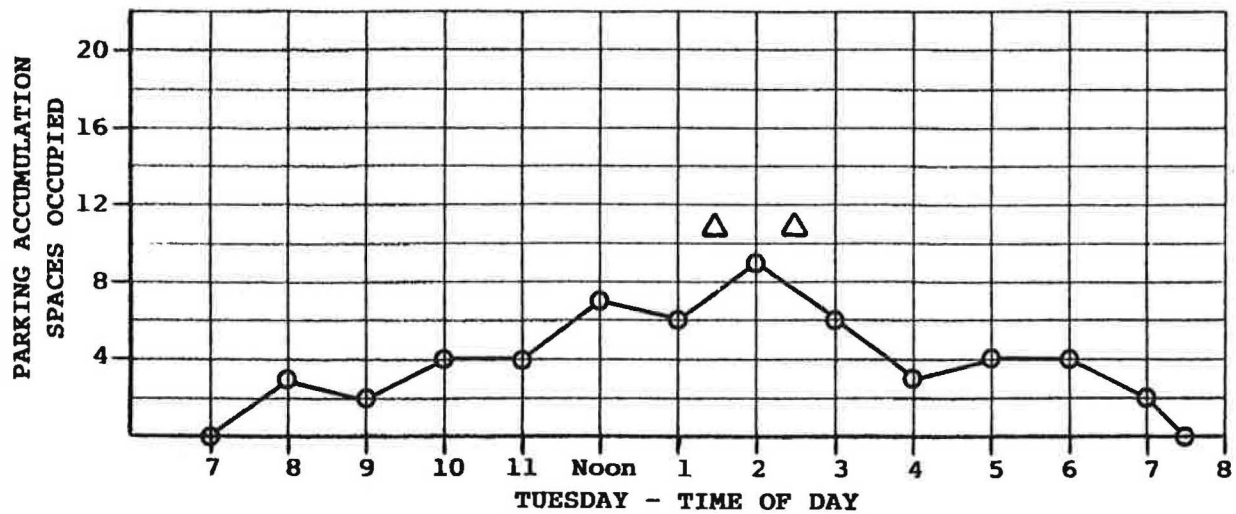
△ DENOTES PEAK ACCUMULATION

FIGURE 4
HOURLY PARKING ACCUMULATION
LOS ANGELES/BEVERLY FACILITY



CRAIN & ASSOCIATES
 2007 Sawtelle Boulevard
 Los Angeles, California 90025
 (213) 473-6508

Transportation Planning · Traffic Engineering



△ DENOTES PEAK ACCUMULATION

FIGURE 5
HOURLY PARKING ACCUMULATION
WILMINGTON FACILITY



CRAIN & ASSOCIATES
 2007 Sawtelle Boulevard
 Los Angeles, California 90025
 (313) 473-6508

Transportation Planning · Traffic Engineering

TABLE 6
SUMMARY OF CALCULATED PARKING RATES
PUBLIC STORAGE FACILITIES

Public Storage Facility	Units Available/Occupied	Square Feet Available/Occupied	Saturday Peak Parking Accumulation (Spaces)	Parking Rate			
				Per Unit		Per 1,000 Square Feet	
				Available	Occupied	Available	Occupied
Glendale/San Fernando	929/894 (96.2%)	88,710/85,130 (96.0%)	13	0.01	0.01	0.15	0.15
La Cienega	1,224/1,099 (89.8%)	98,230/88,515 (90.1%)	19	0.02	0.02	0.21	0.21
A-13 Long Beach/ Cherry	706/703 (99.6%)	70,500/70,000 (99.3%)	9	0.01	0.01	0.13	0.13
Los Angeles/ Beverly	1,171/1,163 (99.3%)	81,426/80,904 (99.4%)	11	0.01	0.01	0.14	0.14
Wilmington	1,119/1,036 (92.6%)	133,859/120,488 (90.0%)	20	0.02	0.02	0.15	0.17

Average Parking Rate:

- Per Available Unit = 0.01
- Per Occupied Unit = 0.01
- Per Available 1,000 Square Feet = 0.20 (rounded)
- Per Occupied 1,000 Square Feet = 0.20 (rounded)

TABLE 7

**CURRENT PARKING REQUIREMENTS OF LOCAL AGENCIES IN LOS ANGELES AREA
FOR SELF-STORAGE/MINI-WAREHOUSE USES**

<u>Jurisdiction</u>	<u>Parking Requirement</u>
City of El Monte	0-3,000 GSF: 1 space/250 GSF 3,001-5,000 GSF: 1 space/500 GSF 5,001-10,000 GSF: 1 space/750 GSF 10,001-50,000 GSF: 1 space/1,000 GSF 50,001 + GSF: 1 space/1,250 GSF (Typically, El Monte has been granting variances of at least 50% from these requirements for mini-warehouse uses. The City is in the process of developing specific parking requirements for such uses.)
City of Glendale	1 space/1,000 GSF
City of Long Beach	3 spaces + 1 space/100 units (For manager's quarters, 2 spaces for residence + 4 spaces/1,000 GSF for office.)
City of Los Angeles	1 space/500 GSF for first 10,000 GSF; then 1 space for each 5,000 GSF thereafter
County of Los Angeles	1 space/1,000 GSF (Typically, the County has been granting "parking permit" variances from these requirements for mini-warehouse uses. The County is in the process of developing specific parking requirements for such uses.
City of Pasadena	4 spaces/10,000 GSF (For manager's quarters, 2 spaces for residence + 3 spaces/1,000 GSF for office.)
City of Santa Monica	Unclear. The City is studying proposal requiring 1 space/4,000 GSF, and for manager's quarters, 2 spaces for residence + 4 spaces/1,000 GSF for office.)
City of Torrance	1 space/1,500 GSF (For manager's quarters, 1 space for residence + 4 spaces/1,000 GSF for office.)
City of Whittier	1 space/1,500 GSF (For manager's quarters, 2 spaces for residence + 1 space/225 GSF for office.) (Typically, Whittier has been granting variances from these requirements for mini-warehouse uses.)

TABLE 8
COMPARISON OF PARKING RATES

<u>Public Storage Facility</u>	<u>Peak Parking Accumulation (Spaces)</u>	<u>Current</u>		<u>Recommended</u>	
		<u>Code Parking Space Requirement</u>	<u>Parking Surplus(+)/ Deficiency(-)</u>	<u>Parking Space Requirement (0.20/1,000 GSF)</u>	<u>Parking Surplus(+)/ Deficiency (-)</u>
Glendale/San Fernando (88,710 SF; 929 units)	13	94	+ 81	19	+ 6
La Cienega (98,230 SF; 1,224 units)	19	39	+ 20	21	+ 2
Long Beach/Cherry (70,500 SF; 706 units)	12	11	-1	15	+ 3
Los Angeles/Beverly (81,426; 1,171 units)	11	36	+ 25	18	+ 7
Wilmington (133,859 SF; 1,119 units)	20	47	+ 27	29	+ 9

- Notes:
1. Parking requirements vary from jurisdiction to jurisdiction but normally are stated "per 1,000 gross square feet." The square footages above are available square footages, which are assumed to be approximately 95 percent of the gross square footages.
 2. Parking requirements for the managers' quarters are not included in the above calculations.
 3. The number of spaces has been rounded up to the next whole number.