1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

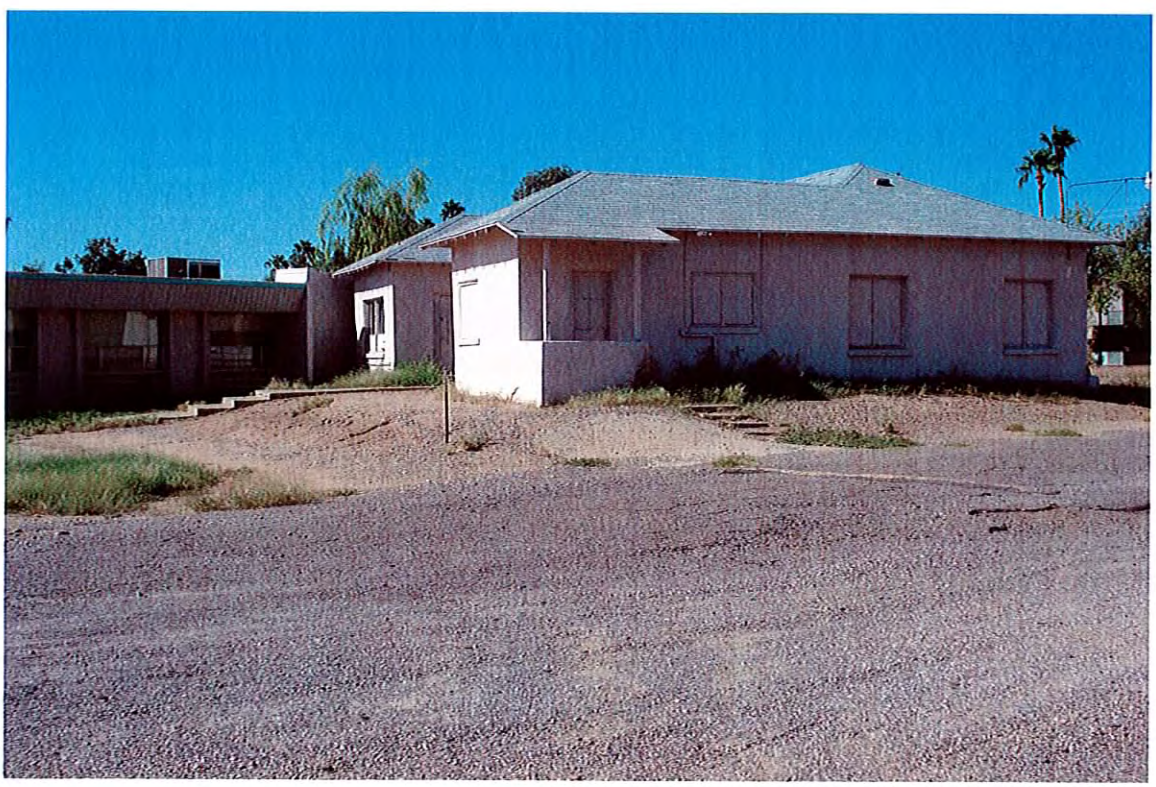
17

18

19

20

201



201

202

ATTACHMENT 53

ATTACHMENT 54


G


STANLEY
Lifeguard
THE STANLEY WORKS ® 1985

LINDON LANE VIGNETTE
ARCHITECTURAL DESIGN GROUP
6623 North Scottsdale Road
Scottsdale, Az. 85250
480-991-9111
Mark Taylor
6623 North Scottsdale Road
Scottsdale, Arizona 85250
(480) 991-9111 (480) 991-9138

Mark-Taylor Apartment Homes
University & Lindon
Tempe, Arizona

Revised
Parking Analysis

October 2008

Prepared for:
MARK-TAYLOR, INC.

For Submittal to:
CITY OF TEMPE

M-M Project Number: 8709.003

Prepared by: Paul E. Basha, P.E., P.T.O.E.
Yung Cossar, E.I.T.
Justin Thurman, E.I.T.

---

80 E Rio Salado Parkway, Suite 201
Tempe, Arizona 85281
Receptionist Phone (480) 517-5800
Direct Phone (480) 449-4686
Fax (480) 517-5801
pbasha@m-m.net

MORRISON MAIERLE, INC.
An Employee-Owned Company

Table of Contents

Executive Summary 1
Introduction 1
Results 1
Recommendations 1
Introduction 2
Scope of Study 2
Proposed Development and Surrounding Land Use 2
Existing Parking Occupancy 2
City of Tempe Required Parking 5
Recommended Parking 8

List of Figures

Figure 1: General Vicinity Map 3

List of Tables

Table 1: Parking Occupancy 4
Table 2: General Parking Space Requirements 5
Table 3: Site-Specific Parking Space Requirements 6
Table 4: Parking Space Requirement and Occupancy Comparison 7
Table 5: Code Required Parking Spaces for Proposed Development 8

List of Appendices

Site Plans of Similar Apartment Home Complexes ..... A
Parking Occupancy of Similar Apartment Home Complexes ..... B
City of Tempe Zoning and Development Code Parking Requirements C

Executive Summary

Introduction

Mark-Taylor, Inc. is proposing to provide 348 homes on approximately 14.55 acres in the City of Tempe in the greater northwest corner of Lindon Road and University Drive.

Results

The City of Tempe Zoning and Development Code utilizes the same requirement for all multi-family residential complexes throughout the City of Tempe. Some multi-family residential complexes are owner-occupied and others are renter-occupied. Vehicle ownership and travel patterns vary between owner-occupied and renter-occupied complexes. In addition, different types of apartments serve people with different traffic patterns. The amount of required parking varies with different traffic patterns which vary with different ownership types and different residents.

The City of Tempe Zoning and Development Code requires the provision of 722 parking spaces for the proposed Mark-Taylor apartment home complex near the Lindon / University intersection.

Parking occupancy counts at three (3) similar Mark-Taylor constructed apartment complexes – each with 90% to 95% of the apartments leased – indicate that the City of Tempe Zoning and Development Code requires 31% to 35% more parking spaces than are utilized on a typical weekday or weekend day.

Utilizing the average parking demand for these three (3) complexes – adjusted for 100% leased apartments – the proposed Mark-Taylor complex would require 484 parking spaces. Increasing this parking demand by 20% to ensure parking space availability would require 581 parking spaces.

Recommendations

The proposed Mark-Taylor apartment complex near the Lindon / University intersection should provide a minimum of 581 parking spaces. This represents a reduction of approximately 19.5% from the required number of 722 parking spaces. The proposed development will provide 670 parking spaces.

Introduction

Mark-Taylor, Inc. is proposing to provide 348 homes on approximately 14.55 acres in the City of Tempe in the greater northwest corner of Lindon Road and University Drive. Morrison-Maierle has been selected to prepare an analysis to determine the appropriate number of parking spaces required for this proposed development.

Scope of Study

There are three (3) purposes for this analysis:

- Count the number of utilized parking spaces at existing similar complexes
- Determine the number of parking spaces required by the City of Tempe Code
- Determine the appropriate number of parking spaces for the proposed development

Proposed Development and Surrounding Land Use

Figure 1 provides an aerial photograph of the general area in the immediate site vicinity. To the east of the property are primarily single-family residential developments; while areas north, south, and west of the property primarily consist of office and industrial buildings with some commercial establishments.

Existing Parking Occupancy

Traffic Research and Analysis – through contract with Morrison-Maierle – obtained current existing parking occupancy at three (3) existing apartment home complexes. Each of these complexes was constructed by Mark-Taylor, Incorporated. Two (2) of the complexes are within the City of Tempe – one identified as San Marbeya, located in the northwest corner of the intersection of McClintock Road and Broadway Road, the other identified as San Palmilla, and located in the northeast corner of Hardy Drive and Baseline Road. The third complex is located within the City of Scottsdale in the northeast corner of 64th Street and Thomas Road. This complex was constructed by Mark-Taylor and was identified as San Cabrilla. It is now operated by a different management company and is identified as Colonial Grand. **Appendix A** provides site plans of these three (3) complexes.

The parking occupancy counts were obtained on Thursday, 18 September 2008, and on Saturday, 20 September 2008. On the date of the counts; 95% of the San Marbeya apartments were leased, 90% of the San Palmilla apartments were leased, and 95% of the Grand Colonial Grand apartments were leased. The number of occupied parking spaces at each complex was counted at 30-minute intervals from 6:30 AM to 6:30 PM on both count days. **Appendix B** provides the complete results of these parking occupancy counts in both graphic and tabular forms.

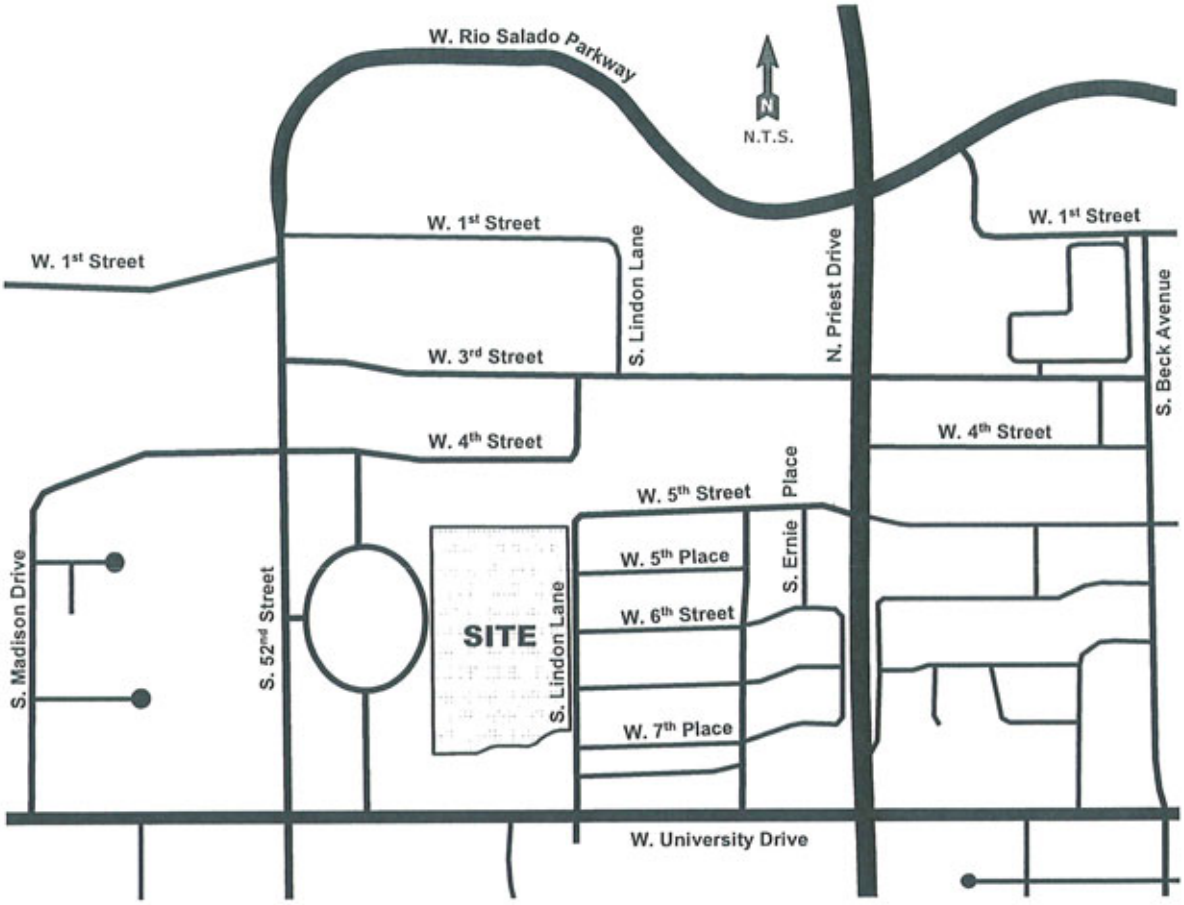


Figure 1: General Vicinity Map

Table 1 summarizes the parking data obtained from the parking occupancy measurement. This table indicates the number of apartments – as determined from the provided site plans, the number of provided parking spaces – as counted at each project site, and the maximum number of occupied parking spaces as counted from both days. The table also calculates the number of provided parking spaces per apartment and the maximum number of utilized parking spaces occupied by apartment. These calculations are provided for each complex separately and as an average for all three (3) complexes. The calculations reveal that an average of 1.90 parking spaces is provided per apartment with an average maximum demand of 1.32 parking spaces per apartment.

Table 1: Counted Parking Occupancy

		PROVIDED PARKING		MAXIMUM UTILIZED PARKING	
COMPLEX	APARTMENTS	SPACES	PER APARTMENT	SPACES	PER APARTMENT
San Marbeya	276	487	1.76	386	1.40
San Palmilla	372	794	2.13	468	1.26
Colonial Grand	180	322	1.79	236	1.31

These counted parking space occupancies were increased to consider the parking occupancies if 100% of the apartments on each property were leased. The parking demand at each complex was divided by the percentage of leased apartments at the corresponding complex. For San Marbeya and Colonial Grand, 95% of the apartments were leased; and for San Palmilla, 90% of the apartments were leased. **Table 2** provides the adjusted parking occupancy for each complex if 100% of the apartments were leased.

Table 2: Adjusted Parking Occupancy to 100% Leased Apartments

		PROVIDED PARKING		ESTIMATED PARKING DEMAND	
COMPLEX	APARTMENTS	SPACES	PER APARTMENT	SPACES	PER APARTMENT
San Marbeya	276	487	1.76	406	1.47
San Palmilla	372	794	2.13	520	1.40
Colonial Grand	180	322	1.79	248	1.38

City of Tempe Required Parking

Appendix C to this report is Chapter 6 of the City of Tempe Zoning and Development Code, the chapter pertaining to parking requirements. **Table 3** summarizes these parking space requirements. As indicated, the parking space requirement is dependent on the number of bedrooms.

Table 3: General Parking Space Requirements

Apartment	Parking Spaces
1 Bedroom	1.5 plus 0.2 per unit
2 Bedrooms	2.0 plus 0.2 per unit
3 Bedrooms	2.5 plus 0.2 per unit

Table 4 provides the number of parking spaces required by the City of Tempe code for each of the three (3) counted apartment home complexes.

Table 4: Site-Specific Parking Space Requirements

SAN MARBEYA

SIZE	UNITS	PARKING REQUIREMENT RATE	PARKING REQUIREMENT SPACES
1-Bedroom	80	1.70	136.00
2-Bedroom	156	2.20	343.20
3-Bedroom	40	2.70	108.00
TOTAL	276		587.20
REQUIRED TOTAL			588

SAN PALMILLA

SIZE	UNITS	PARKING REQUIREMENT RATE	PARKING REQUIREMENT SPACES
1-Bedroom	100	1.70	170.00
2-Bedroom	200	2.20	440.00
3-Bedroom	72	2.70	194.40
TOTAL	372		804.40
REQUIRED TOTAL			805

COLONIAL GRAND

SIZE	UNITS	PARKING REQUIREMENT RATE	PARKING REQUIREMENT SPACES
1-Bedroom	65	1.70	110.50
2-Bedroom	91	2.20	200.20
3-Bedroom	24	2.70	64.80
TOTAL	180		375.50
REQUIRED TOTAL			376

Table 5 provides a comparison of the number of parking spaces required by the City of Tempe code to the maximum number of parking spaces occupied for each of the three (3) complexes. This analysis reveals that the number of excess parking spaces required by the City of Tempe varies from 140 to 337, with an average excess of 226 parking spaces. The analysis also reveals that the portion of the total number of parking spaces that remained unoccupied varies from 34% to 42%, with an average of 38%.

Table 5: Parking Space Requirement and Occupancy Comparison

COMPLEX	NUMBER OF APARTMENTS	TEMPE CODE REQUIRED PARKING	MAXIMUM UTILIZED PARKING	REQUIRED EXCESS PARKING SPACES	REQUIRED EXCESS PORTION OF TOTAL
San Marbeya	276	588	386	202	34%
San Palmilla	372	805	468	337	42%
Colonial Grand	180	376	236	140	37%
AVERAGE				226	38%

Table 6 provides a comparison of the number of parking spaces required by the City of Tempe code to the estimated maximum parking demand for each of the three (3) complexes assuming 100% of the apartments were leased. This analysis reveals that the number of excess parking spaces required by the City of Tempe varies from 128 to 285, with an average excess of 198 parking spaces. The analysis also reveals that the portion of the total number of parking spaces that remained unoccupied varies from 31% to 35%, with an average of 33%.

Table 6: Parking Space Requirement and Adjusted Occupancy Comparison

COMPLEX	NUMBER OF APARTMENTS	TEMPE CODE REQUIRED PARKING	UTILIZED PARKING WITH 100% LEASED	REQUIRED EXCESS PARKING SPACES	REQUIRED EXCESS PORTION OF TOTAL
San Marbeya	276	588	406	182	31%
San Palmilla	372	805	520	285	35%
Colonial Grand	180	376	248	128	34%
AVERAGE				198	33%

Recommended Parking

Table 7 provides the number of parking spaces required by the City of Tempe Zoning and Development Code for the proposed Mark-Taylor apartment home complex at the intersection of Lindon Road and University Drive.

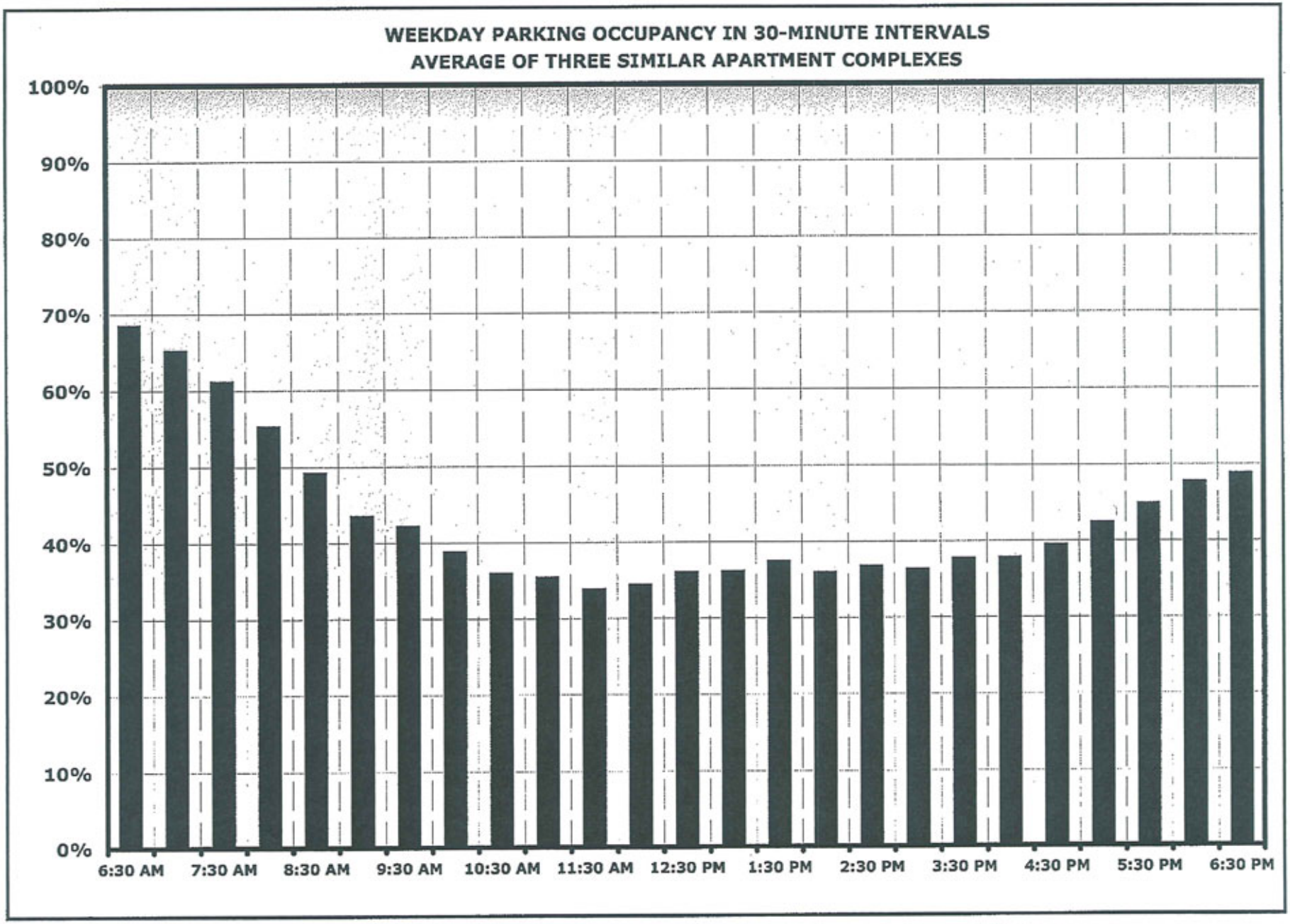
Table 7: Code Required Parking Spaces for Proposed Development

LINDON & UNIVERSITY
PARKING REQUIRED BY CITY OF TEMPE CODE

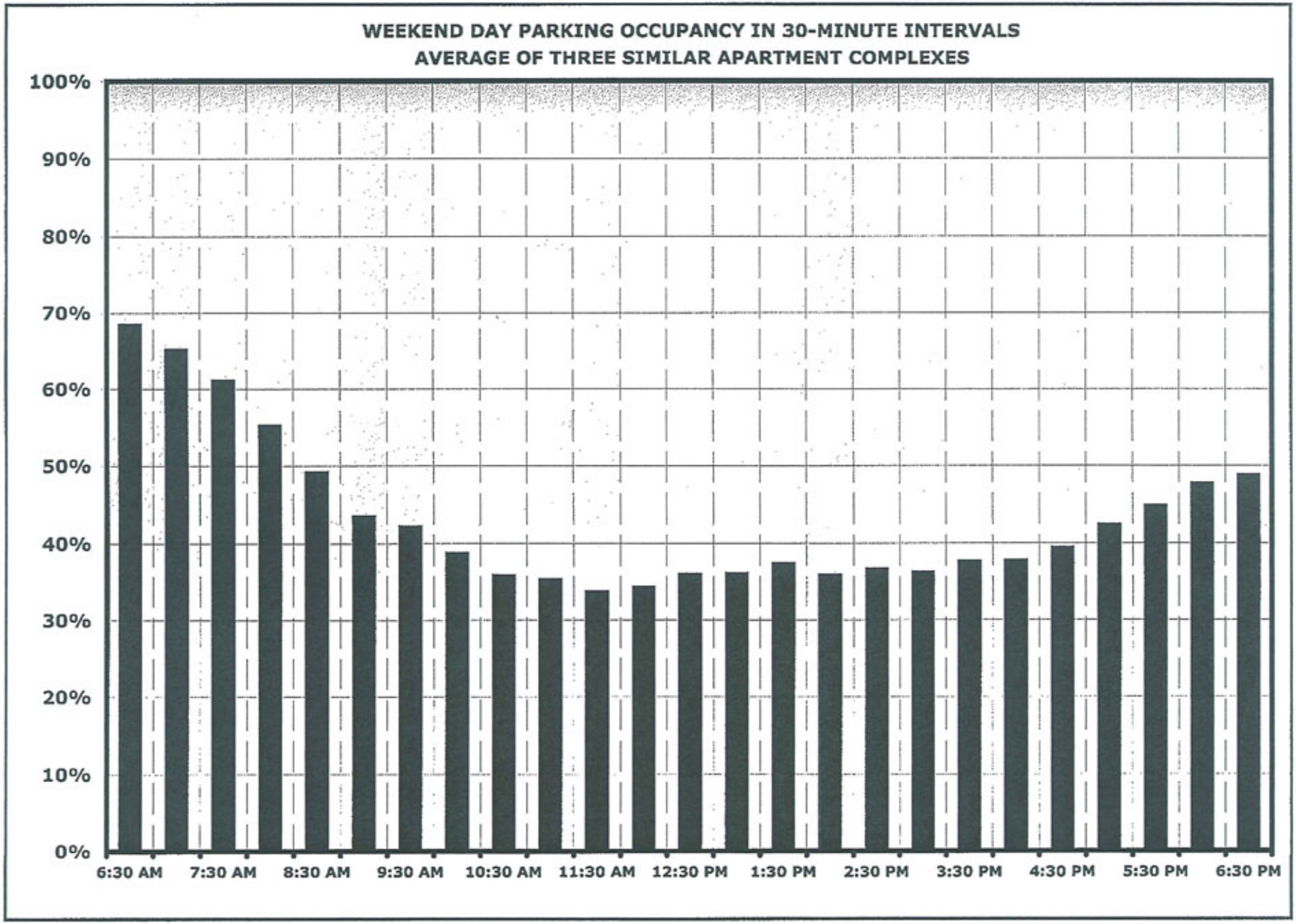
SIZE	UNITS	PARKING REQUIREMENT RATE	PARKING REQUIREMENT SPACES
1-Bedroom	129	1.70	219.30
2-Bedroom	179	2.20	393.80
3-Bedroom	40	2.70	108.00
TOTAL	348		721.10
REQUIRED TOTAL			722

The analysis of parking occupancy at three (3) similar existing complexes implies that the provision of 722 parking spaces would be inappropriately excessive for this proposed complex. It would also be inappropriate for this proposed complex to only provide the minimum number of occupied parking spaces from the three (3) similar complexes. It would be appropriate to provide surplus parking spaces to ensure that parking spaces within the complex are available on the property. It is also appropriate to provide additional parking spaces to minimize the amount of travel to locate an unoccupied parking space.

Utilizing the average excess parking space portion of the three (3) complexes, the proposed complex should provide an absolute minimum of 484 parking spaces. An appropriate surplus would be 20%. Therefore, the proposed Mark-Taylor apartment home complex should provide a minimum of 581 parking spaces. The proposed Mark-Taylor apartment complex near the Lindon / University intersection will provide 670 parking spaces.



ATTACHMENT 68



ATTACHMENT 69

MEMORANDUM

Public Works Department
TRANSPORTATION DIVISION

Tempe

Date: October14, 2008

To: Kevin O'Melia, Sr Planner, Development Services

From: Cathy Hollow, Sr Civil Engineer

Subject: University and Lindon Apartments Traffic Impact Analysis

I have reviewed the traffic impact analysis prepared for the University and Lindon Apartments. The project has 348 apartments which are located in the northeast quadrant of University Drive and Lindon Lane, north of an existing office complex. The project is expected to generate 2,339 external trips on a daily basis with 257 AM peak hour trips and 273 PM peak hour trips.

The report indicates that a traffic signal may be required at University Dr and Lindon Lane in the future due to the apartment traffic. Transportation is recommending that funding for the signal be included as a condition of approval.

The report also indicates that the eastbound to northbound left turn from 5th St to Priest Dr will be operating at level of service E in the evening peak hour and level of service F in the future with the apartment traffic. Mitigation for this intersection was not discussed in the report.

Please contact me at (480) 350-8445 if you have any questions.