



**SACRAMENTO  
HOUSING AND REDEVELOPMENT  
AGENCY**



1

October 28, 1987

Budget & Finance Committee and  
Transportation/Community Development  
Committee of the City Council  
Sacramento, California

SUBJECT: Alkali Flat Parking Study

SUMMARY

The attached report is submitted to you for review and recommendation prior to consideration by the Redevelopment Agency of the City of Sacramento.

RECOMMENDATION

The staff recommends approval of the attached resolution approving the Alkali Flat Parking Study and authorizing implementation of the recommendations.

Respectfully submitted,

*William H. Edgar*  
WILLIAM H. EDGAR  
Executive Director

TRANSMITTAL TO COMMITTEE:

*Jack R. Crist*  
JACK R. CRIST  
Deputy City Manager

Attachment



# SACRAMENTO HOUSING AND REDEVELOPMENT AGENCY



October 14, 1987

Redevelopment Agency of the  
City of Sacramento  
Sacramento, California

Honorable Members in Session:

SUBJECT: Alkali Flat Parking Study

## SUMMARY

The Agency has obtained a comprehensive parking study of the Alkali Flat Redevelopment Area and recommends that the report be used as a reference tool for preparation of a development proposal for the 12th Street Commercial area. This report has been reviewed at length by Agency staff and by the Alkali Flat Project Area Committee. Additional recommendations are presented in the conclusion.

## BACKGROUND

At its regular meeting of July 29, 1986, the Redevelopment Agency adopted resolution 86-044 which authorized the execution of a parking study contract with TJKM Transportation Consultants for Alkali Flat, Project Area Number 6. The project was approved as part of the implementation strategy "due to the continuing problems of parking for residents and the elimination of on street parking along at least a portion of 12th Street". The study was proposed "to evaluate current parking demand, estimate future demand based on successful revitalization of 12th Street and recommend methods to meet those demands and identify potential funding sources." In drafting the RFP both City and Agency staff agreed that the scope of the study should encompass the entire 24 square block project area in order to assess commuter congestion in residential areas.

The Agency agreed that the project should be implemented by the City's Parking Division. Division staff handled administrative matters and maintained liaison with Agency staff, and the parking consultant.

The project commenced in September 1986 and a draft report was submitted to the Agency on January 15, 1987.

(1)

# SACRAMENTO HOUSING AND REDEVELOPMENT AGENCY

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City of Sacramento  
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## FINDINGS

### CURRENT CONDITIONS

General findings determined that there are 1,539 on-street and 4,110 off-street spaces (total 5,649 parking spaces) in the survey area. Presently parking congestion is not prevalent except along G and H Streets between 7th and 10th Streets. Employees parking in two-hour zones appear to move their cars regularly to avoid receiving parking tickets. Although surveys demonstrated that there is a surplus of on street parking in Alkali Flat, there is very limited public parking and there are conflicts between residents and commuters.

### PROJECTED FUTURE CONDITIONS

Five and ten year parking demand and deficiency surveys project approximately 300 space shortage based on current trends. The study further suggests that parking lots or structures should be developed to meet this demand. TJKM indicates that future parking demand should be estimated at 4.5 spaces per 1000 square feet for office and retail new construction.

This ratio is higher than the City's current parking standard of 2.5 per 1000 however, the consultant feels this is more realistic.

A proposed location for construction of a new 290 space parking garage is at the corner of 12th and E Streets. Spaces within the proposed facility could also serve new office and retail development on 12th Street.

Suggested revenue sources for a new parking structure are parking meter income from within the area, parking mitigation fees (new construction), tax increment funds, parking revenue bonds and creation of a parking assessment district. It was determined that projected total development costs for the 290 space garage is around \$3 million dollars. (Our estimate is \$4 million) Either a capital or operating subsidy will be necessary for the project since projected revenues from the facility will be well short of covering debt service and operating expenses.

# **SACRAMENTO HOUSING AND REDEVELOPMENT AGENCY**

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Both Agency and City parking division staff reviewed the report thoroughly and made recommendations for additions and modifications. A final report was submitted to the Agency on May 27, 1987. This report was transmitted to the Alkali Flat PAC who, in turn, referred it to their Planning Committee. The PAC studied the report and formulated its recommendations over a several month period. On September 1, 1987 the PAC adopted its final recommendations and directed that the parking study be forwarded to the commission and the Redevelopment Agency. The PAC recommendations are summarized at the end of this report.

Copies of the complete parking study are on file with the City Clerk and the Agency Clerk for your review. A copy of the "Executive Summary" of the report is attached as EXHIBIT A. This summary covers existing and future conditions, City and County facility development, the impact of future light rail design and revenue sources to finance additional parking. Staff has summarized the consultant's recommendations below.

## **TJKM RECOMMENDATIONS**

1. Increase on-street parking enforcement.
2. Install additional short-term parking meters.
3. Increase parking meter rates from 25 cents hour to 50 cents/hour in order to discourage commuter parking and to generate revenue for development of off-street parking.
4. Amend the City Parking Ordinance to require increase in parking requirements for new construction [from 2.5 spaces per 1000 s.f. to 4.5 spaces per 1000 s.f.]. Require parking mitigation fee from developers who cannot meet requirement on site.
5. Construct an off-street parking facility to meet a projected parking need of 290 parking spaces. Suggested location for parking facility is on 12th Street between D and E Streets. Finance garage by issuance of a Certification of Participation in-lieu of a parking revenue bond to achieve lower debt service coverage. Retire debt by utilizing five financing tools.

# **SACRAMENTO HOUSING AND REDEVELOPMENT AGENCY**

Redevelopment Agency of the  
City of Sacramento  
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- (a) off-street parking revenue from garage;
- (b) on-street parking meter revenue collected from within the area;
- (c) parking mitigation fee from new construction;
- (d) tax-increment funds as available; and
- (e) contribution from future increases in the Redevelopment Agency Parking Facility Fund.

## **FINANCIAL DATA**

There is no direct financial impact as a result of approval of this staff report and resolution, however, there will be a cost to the City Parking Division's budget if some of the recommendations are adopted.

## **ENVIRONMENTAL REVIEW**

This report is not a project and therefore, not subject to environmental review.

## **POLICY IMPLICATIONS**

The actions proposed in this staff report are consistent with previously approved policy and no changes are being recommended.

## **VOTE AND RECOMMENDATION OF PROJECT AREA COMMITTEE (PAC)**

At its regular meeting of September 1, 1987, the Alkali Flat Project Area Committee adopted a motion recommending that the following actions be taken as a result of the Parking Study:

1. Request the City to increase on-street parking enforcement.
2. Request the City to install additional short-term parking meters in non-residential zones.
3. Investigate financing methods to construct an off-street parking facility which would serve local area businesses and local business employees only (i.e. not a commuter parking lot).

# SACRAMENTO HOUSING AND REDEVELOPMENT AGENCY

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As part of its motion, the PAC specifically voted against increasing parking meter rates and increasing the parking space ratio requirement for new development. The vote was as follows:

AYES: Booher, Dolinar, Glauz, T. Williams, Barrientos,  
Cabrera, Camacho, Rasul

NOES: None

ABSENT: Bustamante, Davila, Finn, Huerta, Hyde, Williams

## VOTE AND RECOMMENDATION OF THE COMMISSION

At its regular meeting of October 19, 1987 the Sacramento Housing and Redevelopment Commission adopted a motion recommending that you approve the attached resolution by the following vote.

AYES:

NOES:

ABSENT:

## RECOMMENDATION

The staff recommends the adoption of the attached resolution which accepts the Alkali Flat Parking Study prepared by TJKM Transportation Consultants and authorizes the Executive Director to take the following actions:

- (1) Request that the City Parking Division increase its on-street parking enforcement and install short-term meters in non-residential zones, and

# SACRAMENTO HOUSING AND REDEVELOPMENT AGENCY

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October 14, 1987  
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- (2) Work with the PAC and City Planning and Parking Divisions to develop a parking structure development strategy to support development of Agency-owned property on 12th Street and use the study as a reference tool in preparing a Request for Proposal (RFP) for the 12th Street Commercial Development project.

Respectfully submitted,

*William H. Edgar*

WILLIAM H. EDGAR  
Executive Director

TRANSMITTAL TO COUNCIL:

---

WALTER J. SLIPE  
City Manager

Contact Person: Trish Davey 440-1322

0468Q

# RESOLUTION NO.

ADOPTED BY THE REDEVELOPMENT AGENCY OF THE CITY OF SACRAMENTO  
ON DATE OF

## ALKALI FLAT PARKING STUDY AND IMPLEMENTATION OF VARIOUS RECOMMENDATIONS

BE IT RESOLVED BY THE REDEVELOPMENT AGENCY OF THE CITY  
OF SACRAMENTO:

Section 1: The Alkali Flat Parking Study prepared by  
TJKM Transportation Consultants is hereby accepted.

Section 2: The Executive Director is directed to  
request the City of Sacramento to increase on-street parking  
enforcement within Alkali Flat and to install additional  
short-term parking meters in all non-residential zones.

Section 3: The Executive Director is authorized to  
commence preparation of the Twelfth Street Commercial RFP  
utilizing the TJKM Parking Study as a reference tool and to  
coordinate with the City Parking Division, financing  
alternatives for a parking structure servicing 12th Street  
commercial revitalization and development needs.

\_\_\_\_\_  
CHAIR

ATTEST:

\_\_\_\_\_  
SECRETARY

154WPP1(253)

**ALKALI FLAT  
PARKING STUDY**

**FOR THE  
CITY OF SACRAMENTO**

**BY**

**TJKM TRANSPORTATION CONSULTANTS  
9801 FAIR OAKS BLVD., SUITE 300  
FAIR OAKS, CALIFORNIA 95628**

**MAY 1987**

**41-048/AJ**

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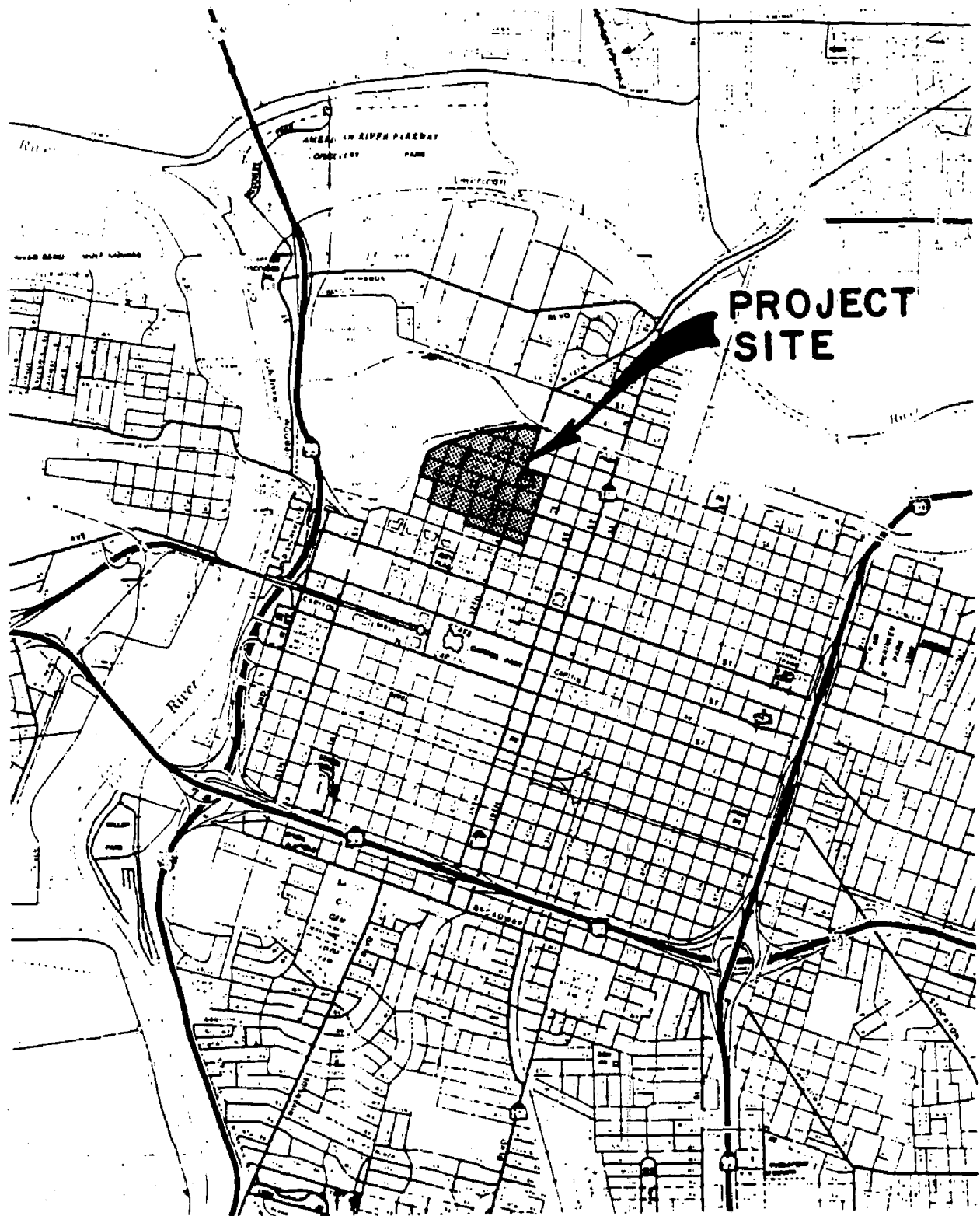
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## INTRODUCTION

This report contains the results of the detailed on- and off-street parking study completed for the Alkali Flat area in downtown Sacramento. Alkali flat generally encompasses the area northerly from G Street between 7th and 13th Streets. However, for this study the consultant surveyed the area north of H Street between 7th and 14th Streets. On- and off-street parking in the study area was surveyed on a typical weekday and Saturday in September 1986. Figure 1 is a vicinity map. Figure 2 is a map illustrating the study area.

The purpose of this study was to determine existing parking conditions, assess the impacts of Light Rail (LRT), determine parking demand over a five- to ten-year period in the future, and propose a parking plan for Alkali Flat with recommendations for parking operation, parking improvements, and financial feasibility. Each of the above listed subjects are covered in detail in the body of the report.



**PROJECT  
SITE**

SOURCE: C.S.A.A.

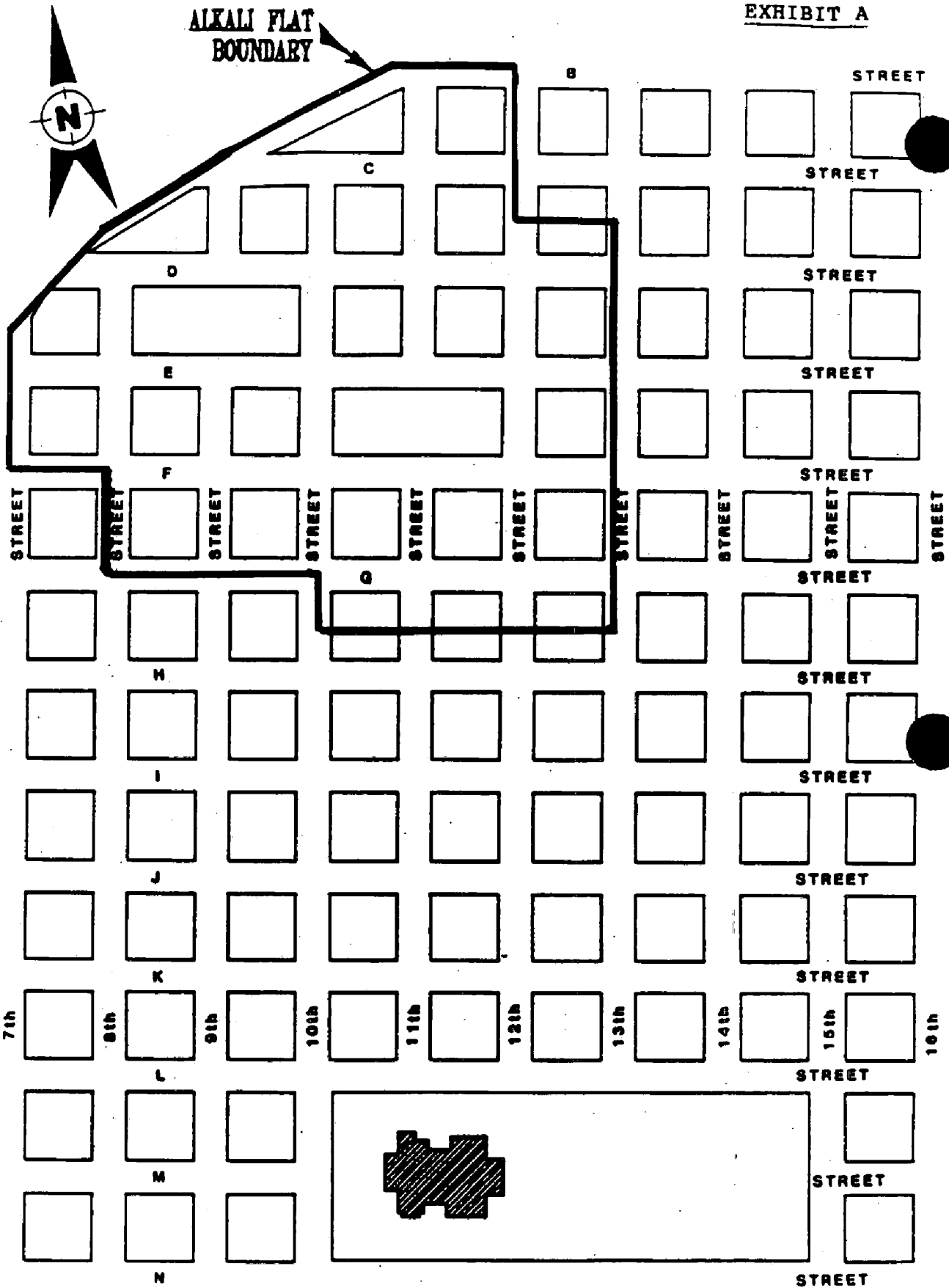
**ALKALI FLAT PARKING STUDY**

VICINITY MAP

PREPARED BY  
**JKM**

FIGURE 1

ALKALI FLAT  
BOUNDARY



# ALKALI FLAT PARKING STUDY

STUDY AREA

PREPARED BY

**JKM**

FIGURE 2

## EXECUTIVE SUMMARY

Existing Conditions

An inventory was made of all on- and off-street parking spaces in the study area. The results of this inventory showed 1,539 on-street and 4,110 off-street spaces. Field surveys were completed between 10 a.m. and 6 p.m. on a typical weekday and on a Saturday to determine the usage, duration, and turnover of on-street parking and the usage of off-street parking facilities. At the present time parking congestion is not prevalent, although some parking problems were noted along G and H Streets from 7th to 10th Streets and other spot locations in the study area. It was noted that all on-street parking has been removed on 12th Street to accommodate the construction of Light Rail Transit.

Field observations showed that employees working south of G Street were parking in the Alkali Flat area. At 10 a.m. there were 370 more cars parked on the street than at 6 a.m., and while not completely accurate, this is indicative of outside employee parking in the study area. Within the study area itself, there is an overflow of employee parking on the street system from the Crystal Creamery. Some employees parking in two-hour zones, move their cars regularly to avoid receiving a parking ticket. More frequent parking enforcement would help but not eliminate this problem.

The results of our field surveys showed a surplus of on-street parking in the overall study area. While private off-street parking does not appear to be a problem, there is very limited public parking in Alkali Flat. Regional Transit has provided two off-street lots totaling 60 spaces in the 12th and E Streets area. The present usage of these lots is relatively low, from 10 to 20 percent, because parking meters are

installed and motorists use free on-street parking even though the walking distance is greater.

### Future Needs

Alkali Flat: Future parking needs in Alkali Flat were estimated based on proposed five- and ten-year development as obtained from the Sacramento Housing and Redevelopment Agency and the City of Sacramento Planning Department. The five- and ten-year proposed development is shown in Figure 13. Figure 14 shows the demand and deficiency of parking broken down by four separate areas in Alkali Flat. Most of the shortages are programmed for Area 3 located easterly of 10th Street and south of E Street. The total parking needs are estimated at 830 spaces. Applying reductions for parking that would be developed on site and due to the availability of on-street parking, it is estimated that approximately 300 spaces should be developed. Reference is also made to Table I showing a summary of proposed development and parking demand. Future parking needs have been estimated at 4.5 spaces per 1,000 square feet for offices and retail. The City Zoning Ordinance requires 2.5 spaces per 1,000 square feet which is not unusual since zoning ordinances typically require less parking than is actually needed.

Parking needs along the 12th Street corridor are based primarily on accommodating the short-term parker. For this reason it is not proposed to provide credit for parking needs due to the LRT line being located on 12th Street. The light rail facility will be of major benefit to commuters and, thus, reduce the need for employee parking.

Several locations were evaluated as possible sites for new off-street parking. All of the locations studied were along the 12th Street corridor. The proposed location for a 290-

**TABLE I**  
**PARKING DEMAND**

**SUB-AREA NO. 1**

Five-Year: Offices - 50,000 square feet = 225 spaces  
Ten-Year: (Same as five-year)

**SUB-AREA NO. 2**

Five-Year: Offices - 18,000 square feet = 85 spaces  
Ten-Year: (Same as five-year)

**SUB-AREA NO. 3**

Five-Year: Offices & Retail - 77,000 square feet = 350 spaces  
Ten-Year: (Same as five-year)

**SUB-AREA NO. 4**

Five-Year: (No demand)  
Ten-Year: Offices & Retail - 37,000 square feet = 170 spaces

<b><u>TOTAL DEMAND</u></b>	Five-Year =	660 spaces
	Ten-Year =	<u>170</u> spaces
	<b>TOTAL</b>	<b>830 spaces</b>

New on-site parking = 230  
Total off-street demand = 600  
50 percent credit for on-street surplus = 295  
Additional off-street parking needed = 305

**NOTES:** For offices and retail assume a need of 4.5 spaces per 1,000 square feet.

space parking structure is the northwest corner of 12th and E Streets, which is the Casa Sanchez restaurant site (see Figure 15). Acquisition of the restaurant property and the dry cleaners directly west would be required to provide adequate space for an off-street parking facility. Spaces in this new structure could also serve new office and retail development that is proposed by the Sacramento Housing and Redevelopment Agency on the easterly side of 12th Street between C and E Streets.

City & County Parking Facility Development: The City of Sacramento is planning to expand City government facilities east of 10th Street between H and I Streets where a public safety building is to be constructed. A new City Administrative Center is planned behind City Hall to the north. The existing 621-space parking structure in the 10th, 11th, H, and I Streets block is to be torn down to provide for the public safety building and a new 1,778-space parking garage will be constructed in the remainder of the block. Other proposed City parking facilities include the east end garage along the south side of I Street between 10th and 11th Streets which would add an additional 1,000 parking spaces. Also, the City may expand the community center garage across to the east side of 13th Street with up to 1,400 parking spaces. An alternate location for this expansion is the northwest quarter of the 12th, 13th, I, and J Streets block which would add 400 spaces. Future expansion of the convention center, development of a proposed Hyatt Hotel at 12th and L Streets, a future hotel development on J Street, along with expansion of City government facilities will utilize all of the City's proposed parking expansion.

In reference to County parking facilities, a new courthouse is planned for the 8th, 9th, F, and G Streets block which is now used for jury parking. Also, their existing lease of the 240-space S. P. lot expires January 1988 and further use will be

on a month-to-month basis. The County building design section estimates a present shortage of 700 parking spaces with a future need for 1,850 spaces. A new County parking garage is proposed in the 7th, 8th, F, and G Streets block, initially at 780 spaces and expandable to 1,500 spaces. One hundred spaces will be gained as parking through use of the old main jail area so that the expected deficit in County parking is 250 spaces over the next 20 years.

Impacts of Future LRT Design: Regional Transit is projecting that the entire 18 miles of track on the Interstate 80 and Folsom lines will have double trackage within three years. Also their projections show that within one year, the LRT ridership will increase from about 9,000 to 20,500 daily passengers. Presently they are estimating that approximately 5,000 persons have diverted from automobiles to LRT. The existing three-car trains are running at 15-minute headways with standing-room only for some passengers. The 3,700 free parking spaces located throughout the system, are at 85 to 95 percent occupancy. These parking facilities can be expanded to 5,400 spaces as funds become available.

### Study Alternatives

Increased on-street parking enforcement would be beneficial to Alkali Flat. The City Parking Division is planning to hire additional parking enforcement personnel in the future and at that time, there could be a stepped-up parking enforcement program. As the on-street parking demand increases, more prevalent use of parking meters would be appropriate and would reduce all-day parking in timed zones because of the cost of parking and ease in enforcement.

Although there are 601 residential parking permits and 720 visitor permits in Alkali Flat, City staff carefully review

all applications and do not feel that this privilege is abused in the Alkali Flat area.

In reference to the use of diagonal parking to increase the number of on-street parking spaces, this is not recommended because of the hazard created in backing from a parking space and as the street width available for traffic flow is reduced.

### Revenue Sources

In the "Financial Feasibility" portion of this study, a number of revenue sources were discussed: Off-street parking, on-street parking meters, parking mitigation fee, tax increment financing, parking revenue bonds, and a parking assessment district. It is our opinion that parking revenue bonds would be a better source of financing than a parking assessment district. Instead of actually selling parking revenue bonds, a certificate of participation could be obtained so that a 1.5 to 1.0 debt service coverage would not be required. It is recommended that a combination of off-street parking revenues, on-street parking meter revenues, and a parking mitigation fee be used to off-set the certificate of participation debt service coverage. In the future as tax increment financing would become available, this also could be used to help satisfy the debt service requirements for constructing a new parking structure.

### Financing the Parking Plan

In reviewing Table II it can be seen that a parking revenue shortfall will exist if the only source of revenue is from the off-street parking facilities. Annual costs are estimated at \$369,000.00 and estimated off-street revenues will only handle 40 percent of the annual costs, or \$150,000.00.

To eliminate the parking revenue shortfall, it is recommended that on-street parking meter rates be increased to 50 cents per hour for both the 219 two-hour meters and the 367 ten-hour meters located in Alkali Flat. These meters would generate approximately \$146,000.00 dollars per year of increased revenue and it is recommended that all of this increase be allocated to the development of off-street parking in Alkali Flat.

In addition, an estimated \$35,000.00 per year of additional revenue could be obtained from a parking mitigation fee, assuming that developers would pay for approximately 90 spaces of off-street parking at \$4,000.00 per space over a ten-year period of time. The remaining shortfall could come from the \$1,000,000.00 that is paid annually into the SHRA parking fund by the City. While this fund is pledged to other projects, City off-street revenues are increasing and this fund could be a viable source for Alkali Flat parking. A summary of all revenue sources is shown in Table III.

In order to develop the recommended parking plan, it is suggested that the City of Sacramento use on-street parking meter revenue as it becomes available and money from the proposed parking mitigation fee to acquire the recommended site for off-street parking. This facility initially could be constructed as a surface lot and expanded into a parking structure as financing would become available.

TABLE II

FINANCIAL EVALUATION

<u>SITE</u>	<u>NO. OF SPACES</u>	<u>DEVELOPMENT COSTS</u>			<u>ANNUAL COSTS</u>			<u>ESTIMATED OFF-STREET REVENUES</u>	<u>REVENUE SHORTFALL</u>
		<u>PROPERTY</u>	<u>CONSTRUCTION</u>	<u>TOTAL</u>	<u>DEBT SERVICE</u>	<u>OPERATING</u>	<u>TOTAL</u>		
*	290	\$ 260,000	\$ 2,030,000	\$ 2,290,000	\$ 243,000	\$ 126,000	\$ 369,000	\$ 150,000	\$ 219,000

\* Northwest Corner of 12th & E Streets

**ALKALI FLAT  
PARKING STUDY**

**FOR THE  
CITY OF SACRAMENTO**



TRANSPORTATION CONSULTANTS

PLEASANTON  
SACRAMENTO  
FRESNO  
CONCORD

May 27, 1987

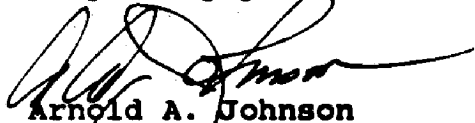
Mr. Mark J. Morgan  
Parking Division Manager  
City of Sacramento  
1023 J Street, Suite 202  
Sacramento, CA 95814

Dear Mr. Morgan:

Enclosed is a final report for the Alkali Flat Parking Study. This report outlines in detail existing parking conditions in the study area and provides recommendations for future parking facilities to accommodate anticipated growth in the study area. We have investigated several methods of financing additional off-street parking and have provided a detailed financial analysis.

We have appreciated the opportunity of being involved in this important project and become familiar with the parking needs in Alkali Flat. Please feel free to contact me with any questions or concerns regarding this project.

Very truly yours,



Arnold A. Johnson

AAJ:wsr  
41-048

Attachments

**ALKALI FLAT  
PARKING STUDY**

**FOR THE  
CITY OF SACRAMENTO**

**BY**

**TJEM TRANSPORTATION CONSULTANTS  
9801 FAIR OAKS BLVD., SUITE 300  
FAIR OAKS, CALIFORNIA 95628**

**MAY 1987**

**41-048/AJ**

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## INTRODUCTION

This report contains the results of the detailed on- and off-street parking study completed for the Alkali Flat area in downtown Sacramento. Alkali flat generally encompasses the area northerly from G Street between 7th and 13th Streets. However, for this study the consultant surveyed the area north of H Street between 7th and 14th Streets. On- and off-street parking in the study area was surveyed on a typical weekday and Saturday in September 1986. Figure 1 is a vicinity map. Figure 2 is a map illustrating the study area.

The purpose of this study was to determine existing parking conditions, assess the impacts of Light Rail (LRT), determine parking demand over a five- to ten-year period in the future, and propose a parking plan for Alkali Flat with recommendations for parking operation, parking improvements, and financial feasibility. Each of the above listed subjects are covered in detail in the body of the report.

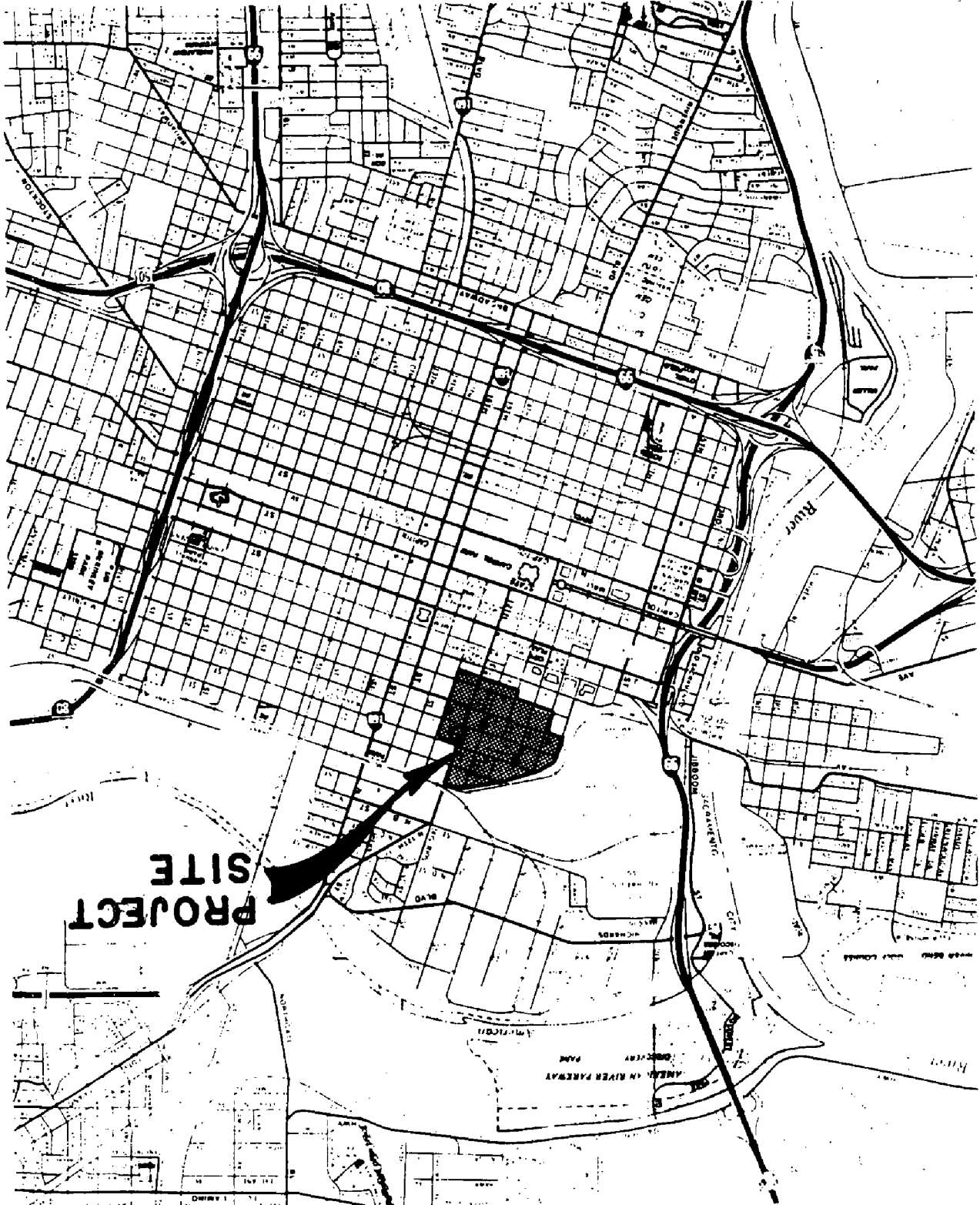


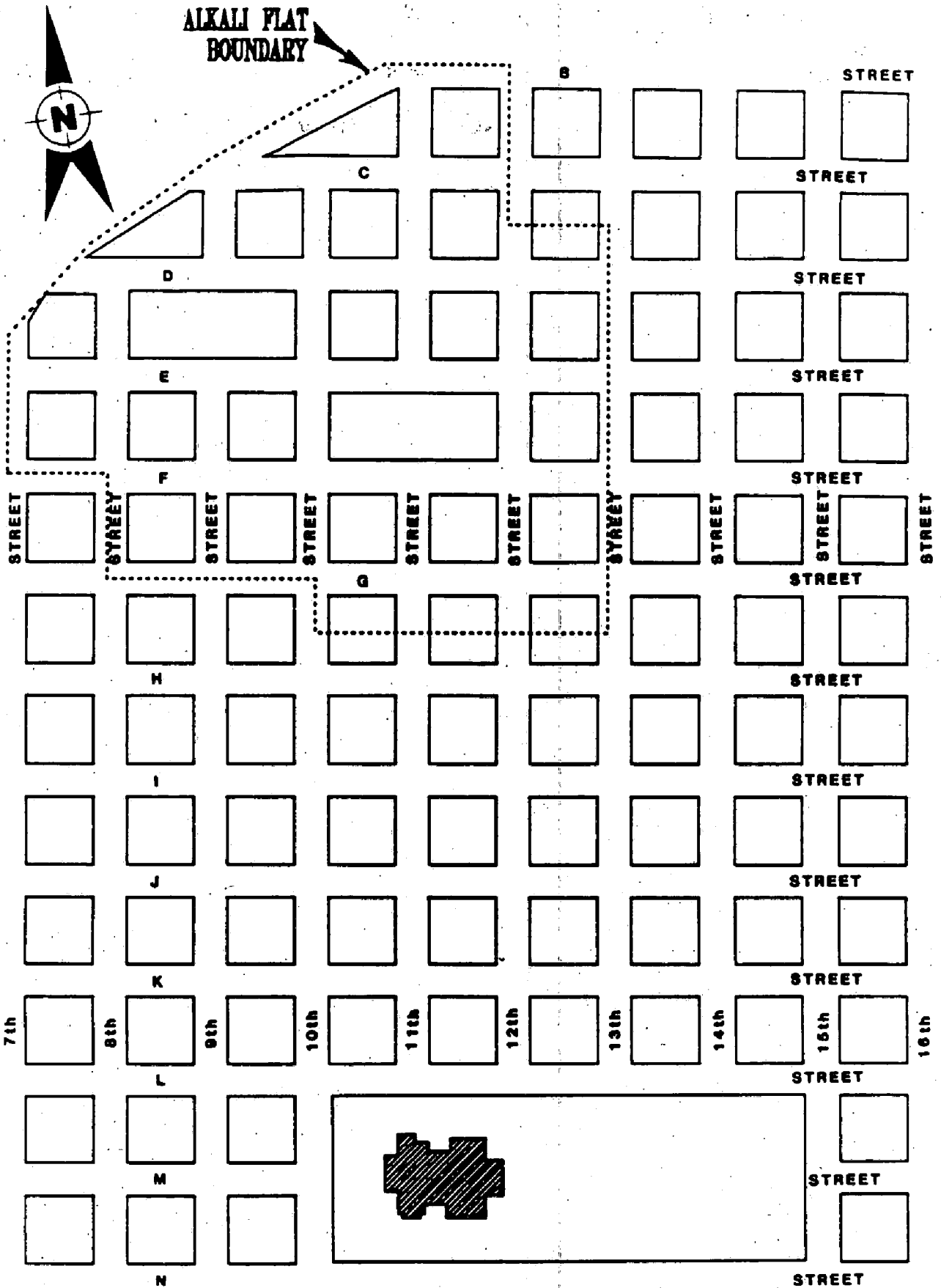
VICINITY MAP

FIGURE 1

# ALKALI FLAT PARKING STUDY

SOURCE: C.S.A.A.





# ALKALI FLAT PARKING STUDY

**STUDY AREA**

PREPARED BY  
**TJKM**

**FIGURE 2**

## EXECUTIVE SUMMARY

### Existing Conditions

An inventory was made of all on- and off-street parking spaces in the study area. The results of this inventory showed 1,539 on-street and 4,110 off-street spaces. Field surveys were completed between 10 a.m. and 6 p.m. on a typical weekday and on a Saturday to determine the usage, duration, and turnover of on-street parking and the usage of off-street parking facilities. At the present time parking congestion is not prevalent, although some parking problems were noted along G and H Streets from 7th to 10th Streets and other spot locations in the study area. It was noted that all on-street parking has been removed on 12th Street to accommodate the construction of Light Rail Transit.

Field observations showed that employees working south of G Street were parking in the Alkali Flat area. At 10 a.m. there were 370 more cars parked on the street than at 6 a.m., and while not completely accurate, this is indicative of outside employee parking in the study area. Within the study area itself, there is an overflow of employee parking on the street system from the Crystal Creamery. Some employees parking in two-hour zones, move their cars regularly to avoid receiving a parking ticket. More frequent parking enforcement would help but not eliminate this problem.

The results of our field surveys showed a surplus of on-street parking in the overall study area. While private off-street parking does not appear to be a problem, there is very limited public parking in Alkali Flat. Regional Transit has provided two off-street lots totaling 60 spaces in the 12th and E Streets area. The present usage of these lots is relatively low, from 10 to 20 percent, because parking meters are

installed and motorists use free on-street parking even though the walking distance is greater.

### Future Needs

Alkali Flat: Future parking needs in Alkali Flat were estimated based on proposed five- and ten-year development as obtained from the Sacramento Housing and Redevelopment Agency and the City of Sacramento Planning Department. The five- and ten-year proposed development is shown in Figure 13. Figure 14 shows the demand and deficiency of parking broken down by four separate areas in Alkali Flat. Most of the shortages are programmed for Area 3 located easterly of 10th Street and south of E Street. The total parking needs are estimated at 830 spaces. Applying reductions for parking that would be developed on site and due to the availability of on-street parking, it is estimated that approximately 300 spaces should be developed. Reference is also made to Table I showing a summary of proposed development and parking demand. Future parking needs have been estimated at 4.5 spaces per 1,000 square feet for offices and retail. The City Zoning Ordinance requires 2.5 spaces per 1,000 square feet which is not unusual since zoning ordinances typically require less parking than is actually needed.

Parking needs along the 12th Street corridor are based primarily on accommodating the short-term parker. For this reason it is not proposed to provide credit for parking needs due to the LRT line being located on 12th Street. The light rail facility will be of major benefit to commuters and, thus, reduce the need for employee parking.

Several locations were evaluated as possible sites for new off-street parking. All of the locations studied were along the 12th Street corridor. The proposed location for a 290-

**TABLE I**  
**PARKING DEMAND**

**SUB-AREA NO. 1**

Five-Year: Offices - 50,000 square feet = 225 spaces  
Ten-Year: (Same as five-year)

**SUB-AREA NO. 2**

Five-Year: Offices - 18,000 square feet = 85 spaces  
Ten-Year: (Same as five-year)

**SUB-AREA NO. 3**

Five-Year: Offices & Retail - 77,000 square feet = 350 spaces  
Ten-Year: (Same as five-year)

**SUB-AREA NO. 4**

Five-Year: (No demand)  
Ten-Year: Offices & Retail - 37,000 square feet = 170 spaces

<b><u>TOTAL DEMAND</u></b>	Five-Year =	660 spaces
	Ten-Year =	<u>170</u> spaces
	<b>TOTAL</b>	<b>830 spaces</b>

New on-site parking = 230  
Total off-street demand = 600  
50 percent credit for on-street surplus = 295  
Additional off-street parking needed = 305

**NOTES:** For offices and retail assume a need of 4.5 spaces per 1,000 square feet.

15). Acquisition of the restaurant property and the dry cleaners directly west would be required to provide adequate space for an off-street parking facility. Spaces in this new structure could also serve new office and retail development that is proposed by the Sacramento Housing and Redevelopment Agency on the easterly side of 12th Street between C and E Streets.

City & County Parking Facility Development: The City of Sacramento is planning to expand City government facilities east of 10th Street between H and I Streets where a public safety building is to be constructed. A new City Administrative Center is planned behind City Hall to the north. The existing 621-space parking structure in the 10th, 11th, H, and I Streets block is to be torn down to provide for the public safety building and a new 1,778-space parking garage will be constructed in the remainder of the block. Other proposed City parking facilities include the east end garage along the south side of I Street between 10th and 11th Streets which would add an additional 1,000 parking spaces. Also, the City may expand the community center garage across to the east side of 13th Street with up to 1,400 parking spaces. An alternate location for this expansion is the northwest quarter of the 12th, 13th, I, and J Streets block which would add 400 spaces. Future expansion of the convention center, development of a proposed Hyatt Hotel at 12th and L Streets, a future hotel development on J Street, along with expansion of City government facilities will utilize all of the City's proposed parking expansion.

In reference to County parking facilities, a new courthouse is planned for the 8th, 9th, F, and G Streets block which is now used for jury parking. Also, their existing lease of the 240-space S. P. lot expires January 1988 and further use will be

on a month-to-month basis. The County building design section estimates a present shortage of 700 parking spaces with a future need for 1,850 spaces. A new County parking garage is proposed in the 7th, 8th, F, and G Streets block, initially at 780 spaces and expandable to 1,500 spaces. One hundred spaces will be gained as parking through use of the old main jail area so that the expected deficit in County parking is 250 spaces over the next 20 years.

Impacts of Future LRT Design: Regional Transit is projecting that the entire 18 miles of track on the Interstate 80 and Folsom lines will have double trackage within three years. Also their projections show that within one year, the LRT ridership will increase from about 9,000 to 20,500 daily passengers. Presently they are estimating that approximately 5,000 persons have diverted from automobiles to LRT. The existing three-car trains are running at 15-minute headways with standing-room only for some passengers. The 3,700 free parking spaces located throughout the system, are at 85 to 95 percent occupancy. These parking facilities can be expanded to 5,400 spaces as funds become available.

### Study Alternatives

Increased on-street parking enforcement would be beneficial to Alkali Flat. The City Parking Division is planning to hire additional parking enforcement personnel in the future and at that time, there could be a stepped-up parking enforcement program. As the on-street parking demand increases, more prevalent use of parking meters would be appropriate and would reduce all-day parking in timed zones because of the cost of parking and ease in enforcement.

Although there are 601 residential parking permits and 720 visitor permits in Alkali Flat, City staff carefully review

all applications and do not feel that this privilege is abused in the Alkali Flat area.

In reference to the use of diagonal parking to increase the number of on-street parking spaces, this is not recommended because of the hazard created in backing from a parking space and as the street width available for traffic flow is reduced.

### Revenue Sources

In the "Financial Feasibility" portion of this study, a number of revenue sources were discussed: Off-street parking, on-street parking meters, parking mitigation fee, tax increment financing, parking revenue bonds, and a parking assessment district. It is our opinion that parking revenue bonds would be a better source of financing than a parking assessment district. Instead of actually selling parking revenue bonds, a certificate of participation could be obtained so that a 1.5 to 1.0 debt service coverage would not be required. It is recommended that a combination of off-street parking revenues, on-street parking meter revenues, and a parking mitigation fee be used to off-set the certificate of participation debt service coverage. In the future as tax increment financing would become available, this also could be used to help satisfy the debt service requirements for constructing a new parking structure.

### Financing the Parking Plan

In reviewing Table II it can be seen that a parking revenue shortfall will exist if the only source of revenue is from the off-street parking facilities. Annual costs are estimated at \$369,000.00 and estimated off-street revenues will only handle 40 percent of the annual costs, or \$150,000.00.

TABLE II

FINANCIAL EVALUATION

<u>SITE</u>	<u>NO. OF SPACES</u>	<u>DEVELOPMENT COSTS</u>			<u>ANNUAL COSTS</u>			<u>ESTIMATED OFF-STREET REVENUES</u>	<u>REVENUE SHORTFALL</u>
		<u>PROPERTY</u>	<u>CONSTRUCTION</u>	<u>TOTAL</u>	<u>DEBT SERVICE</u>	<u>OPERATING</u>	<u>TOTAL</u>		
*	290	\$ 260,000	\$ 2,030,000	\$ 2,290,000	\$ 243,000	\$ 126,000	\$ 369,000	\$ 150,000	\$ 219,000

\* Northwest Corner of 12th & E Streets

To eliminate the parking revenue shortfall, it is recommended that on-street parking meter rates be increased to 50 cents per hour for both the 219 two-hour meters and the 367 ten-hour meters located in Alkali Flat. These meters would generate approximately \$146,000.00 dollars per year of increased revenue and it is recommended that all of this increase be allocated to the development of off-street parking in Alkali Flat.

In addition, an estimated \$35,000.00 per year of additional revenue could be obtained from a parking mitigation fee, assuming that developers would pay for approximately 90 spaces of off-street parking at \$4,000.00 per space over a ten-year period of time. The remaining shortfall could come from the \$1,000,000.00 that is paid annually into the SHRA parking fund by the City. While this fund is pledged to other projects, City off-street revenues are increasing and this fund could be a viable source for Alkali Flat parking. A summary of all revenue sources is shown in Table III.

In order to develop the recommended parking plan, it is suggested that the City of Sacramento use on-street parking meter revenue as it becomes available and money from the proposed parking mitigation fee to acquire the recommended site for off-street parking. This facility initially could be constructed as a surface lot and expanded into a parking structure as financing would become available.

## EXISTING PARKING AND PROPERTY CONDITIONS

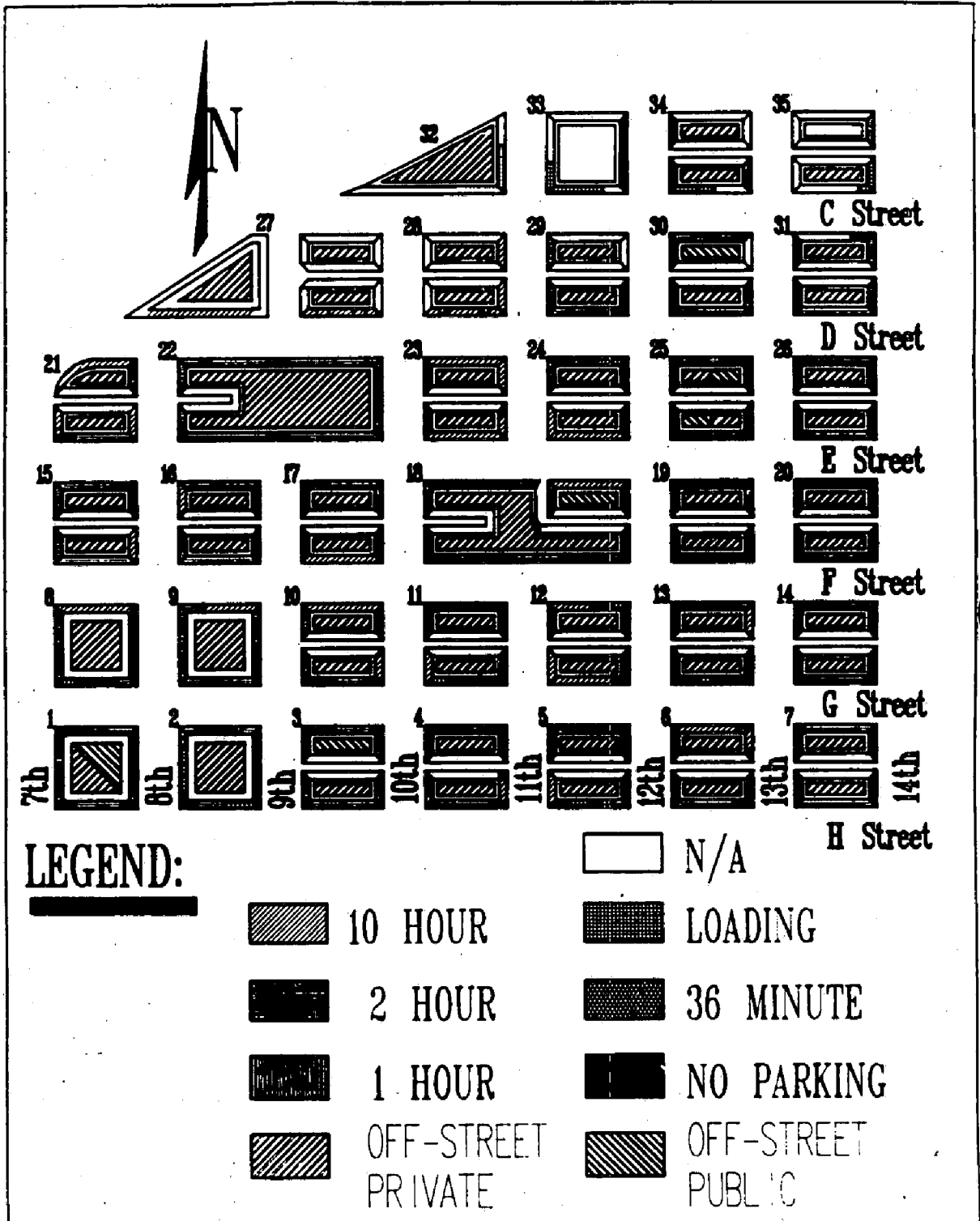
### On- and Off-Street Parking Inventory

The first step in evaluating existing parking conditions is to take an inventory of available parking. This was completed by the consultant early on in the study by making a physical count in the field of on- and off-street parking spaces. Information was obtained from the City as to the location of on-street parking meters and this was verified in the field by the consultant. Information for public off-street parking facilities, such as the County garage at 7th and G Streets, was determined by obtaining a count of the number of parking spaces from the County. Where on-street parking spaces are not marked, measurements were taken assuming 24 feet for an interior space and 18 feet for an end space on a block. The on-street parking inventory was summarized to show legal parking spaces, loading zones, bus stops and no-parking areas.

The results of the parking inventory showed 1,539 on-street spaces and 4,110 off-street spaces in the area between 7th and 14th Streets north of G Street. In counting the number of parking spaces the center line of 7th Street, H Street, and 14th Street were assumed as the study boundary area. Reference is made to Figure 3 which shows the on- and off-street inventory. The results of the on- and off-street parking inventory were used as a basis for the parking surveys discussed below.

### Parking Usage, Duration, and Turnover Survey

The purpose of the various parking surveys was to obtain information for evaluating parking needs. Parking surveys were conducted on a typical weekday and on a Saturday. The



## ALKALI FLAT PARKING STUDY

INVENTORY SUMMARY OF ON-STREET  
AND OFF-STREET PARKING



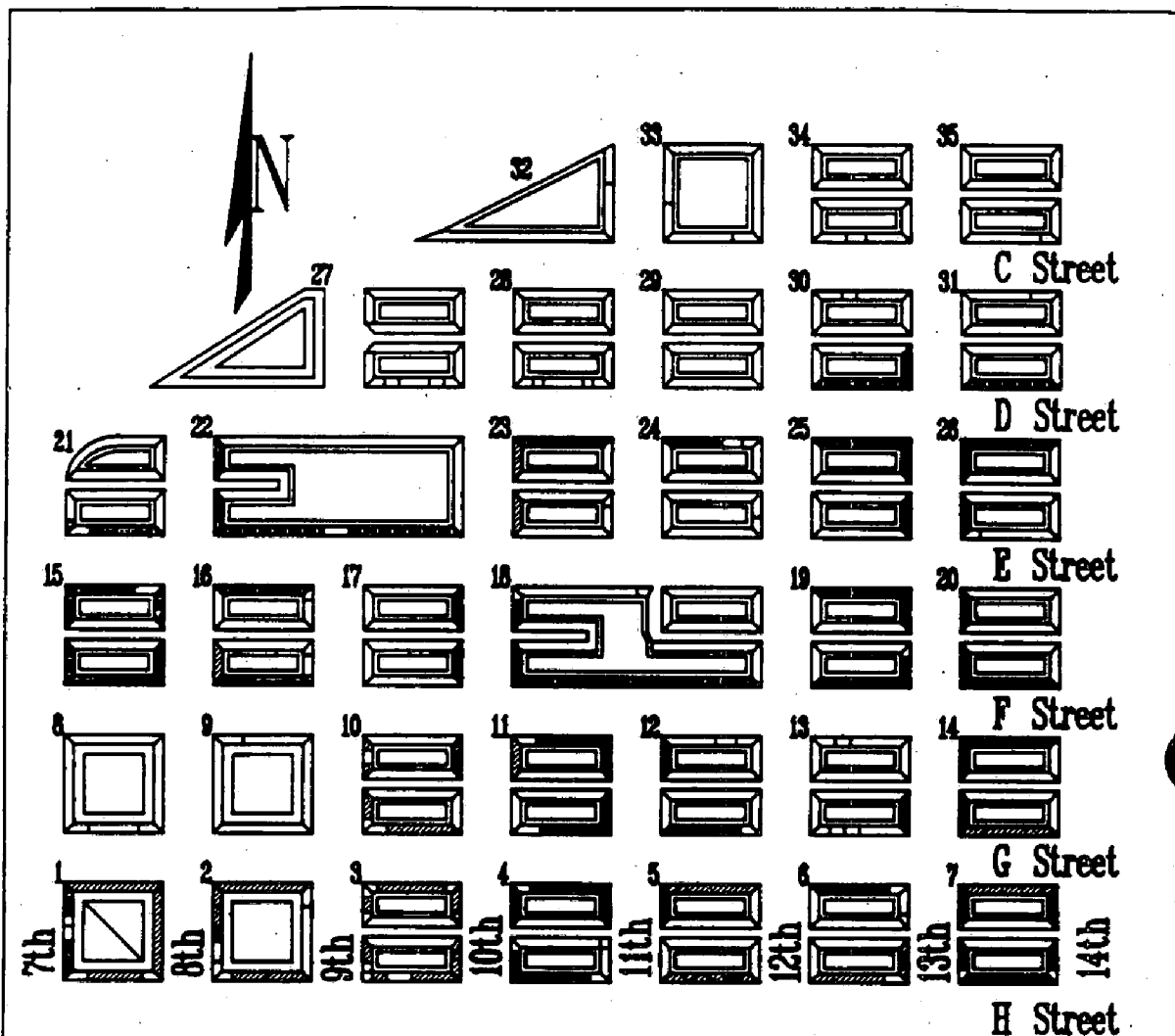
Figure 3

Saturday survey was done on September 20, 1986, and the weekday survey on Tuesday, September 23, 1986. On both days, observations were made between 10 a.m. and 6 p.m. The frequency of observations was based on the time limit of parking with a minimum of two observations during the study period. For example, with two-hour on-street parking the survey was made between 10 a.m. and 12 Noon, and three additional observations between Noon and 6 p.m. Ten-hour parking meters and off-street facilities were surveyed once in the morning and once in the afternoon.

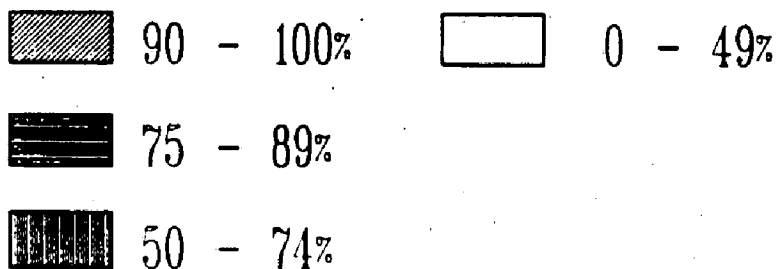
The field surveys were completed using a two-person crew. One person drove and the recorder entered data using a portable lap-top computer. Three digits of the license plate were recorded to enable the observers to determine the length of time parked, and the number of times each space was utilized as well as the average occupancy per block.

The occupancy or usage of parking spaces is a measure of the need for additional parking. Generally, when on-street parking in the block is at 90 percent occupancy, this is considered to be maximum practical usage because parkers perceive that parking generally is not available. Therefore, an occupancy higher than 90 percent is an indicator of needed additional parking. For public off-street facilities, the maximum occupancy level is considered to be slightly less or approximately 85 percent because the available spaces are not as visible in a parking garage. For private off-street facilities, the occupancy level can approach 100 percent.

Figures 4 through 7 show the results of the weekday on-street parking survey. Figure 4 illustrates occupancy by block face greater than 90 percent, between 75 and 90 percent, between 50 and 75 percent, and less than 50 percent. As can be seen in the figure, most of the parking occupancy over 90 percent is between G and H Streets from 7th to 10th Street, with other



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**ALKALI FLAT PARKING STUDY**

SUMMARY OF OCCUPANCY  
FOR TYPICAL WEEKDAY



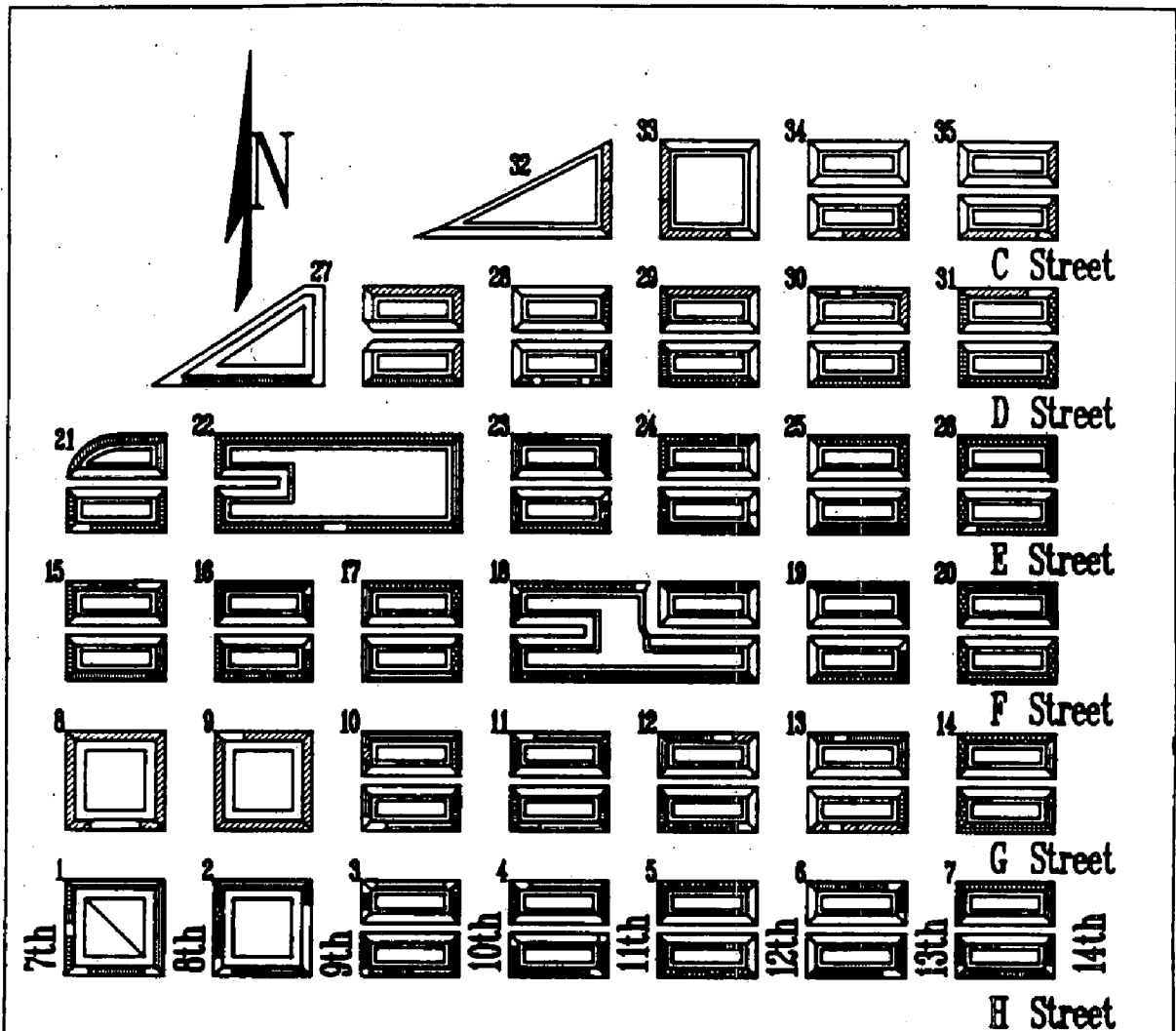
Figure 4

spot locations in the study area. Generally speaking, there is no on-street occupancy over 90 percent in the northeasterly portion of the study area.

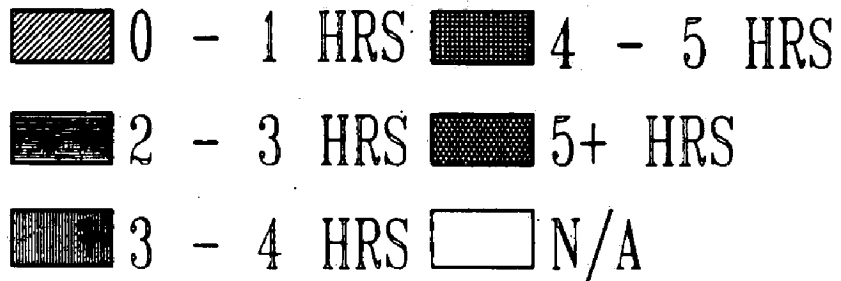
Figure 5 shows the results of the Tuesday duration study. In comparing Figure 5 with Figure 3, it is interesting to note that there are over 90 block faces where vehicles are parking for more than two hours and less than 25 percent of these block faces authorize parking for more than two hours. It is realized that some of this is due to the "F" permits that are issued to residents who are then allowed to park in a two-hour zone for an unlimited period of time. However, in the southerly portion of the study area, where there is a high concentration of commercial uses, there are many block faces where the duration of parking exceed three hours. As a matter of information pertaining to "F" permits, the City Parking Division has issued 601 residential stickers, 728 visitor stickers, and 106 temporary visitor permits for the Alkali Flat area. Also, we were advised that the two-hour parking areas are enforced a minimum of once each day and more frequently in areas where complaints are received by the City.

Figure 6 illustrates existing parking turnover for the Tuesday survey. There are approximately 140 block faces in the study area and there were only five block faces with a turnover exceeding three per day. Approximately 50 block faces had a turnover of between one and three and over 80 block faces with a turnover of less than one. Figure 7 illustrates the surplus or deficiency in on-street parking. This surplus or deficiency was determined by comparing the average occupancy with the 90 percent practical capacity.

Figures 8 through 11 have been prepared showing survey results for occupancy, duration, turnover, and demand on a typical Saturday. As can be seen from Figure 8, there are no on-street areas with an occupancy of over 90 percent and very few



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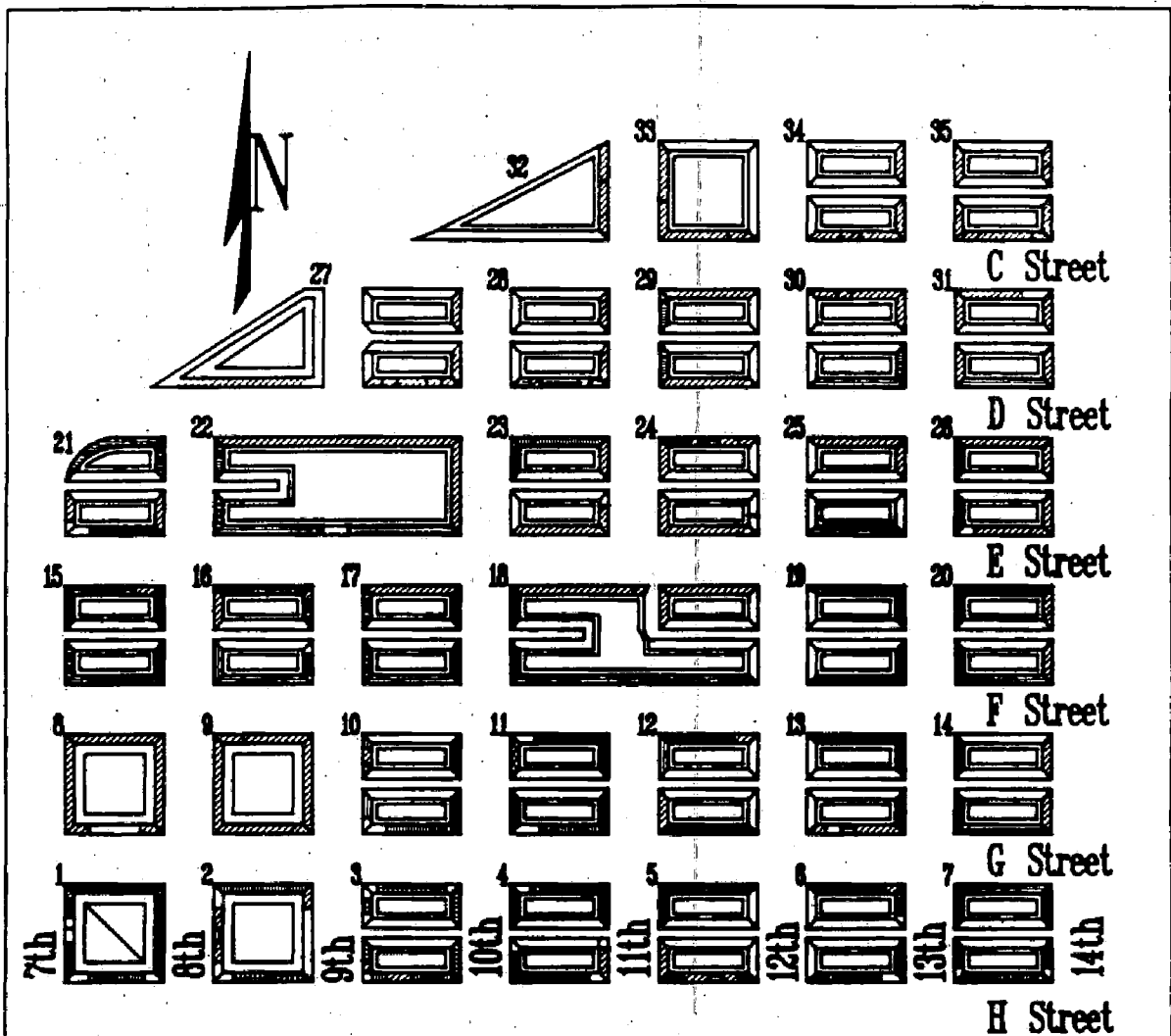


**ALKALI FLAT PARKING STUDY**

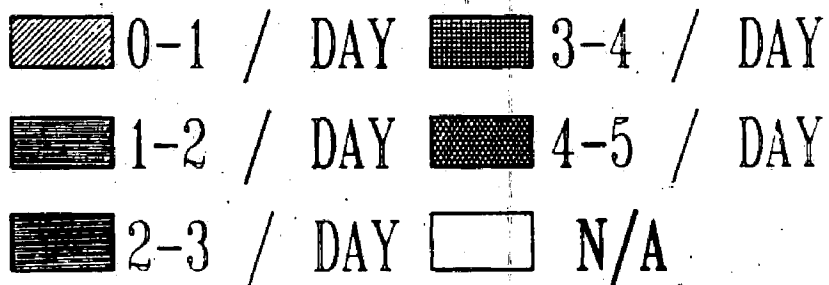
SUMMARY OF DURATION  
FOR TYPICAL WEEKDAY



Figure 5



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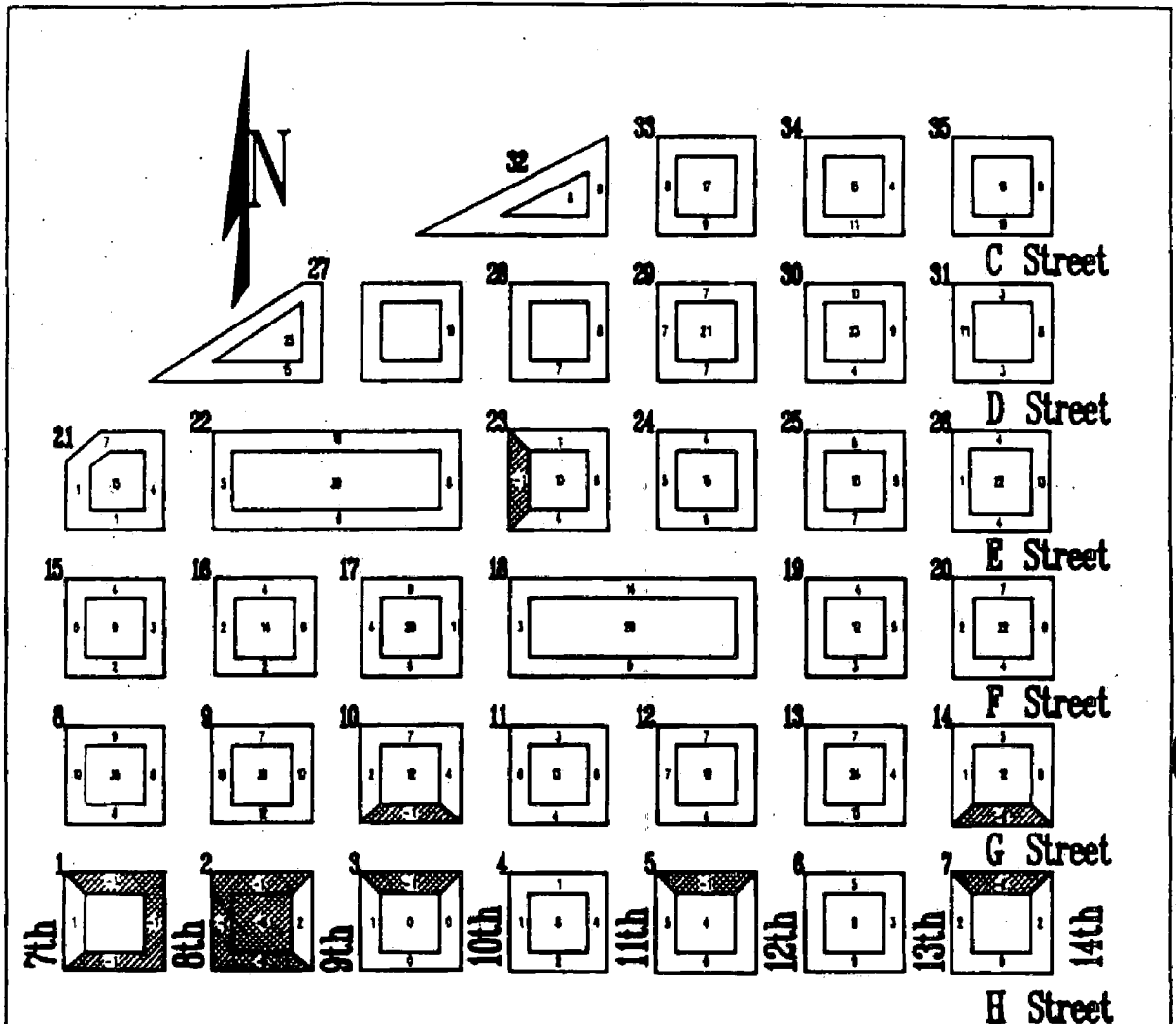


**ALKALI FLAT PARKING STUDY**

SUMMARY OF TURNOVER  
FOR TYPICAL WEEKDAY



Figure 6



**LEGEND:**



DEFICIENCY



SURPLUS

NOTE:

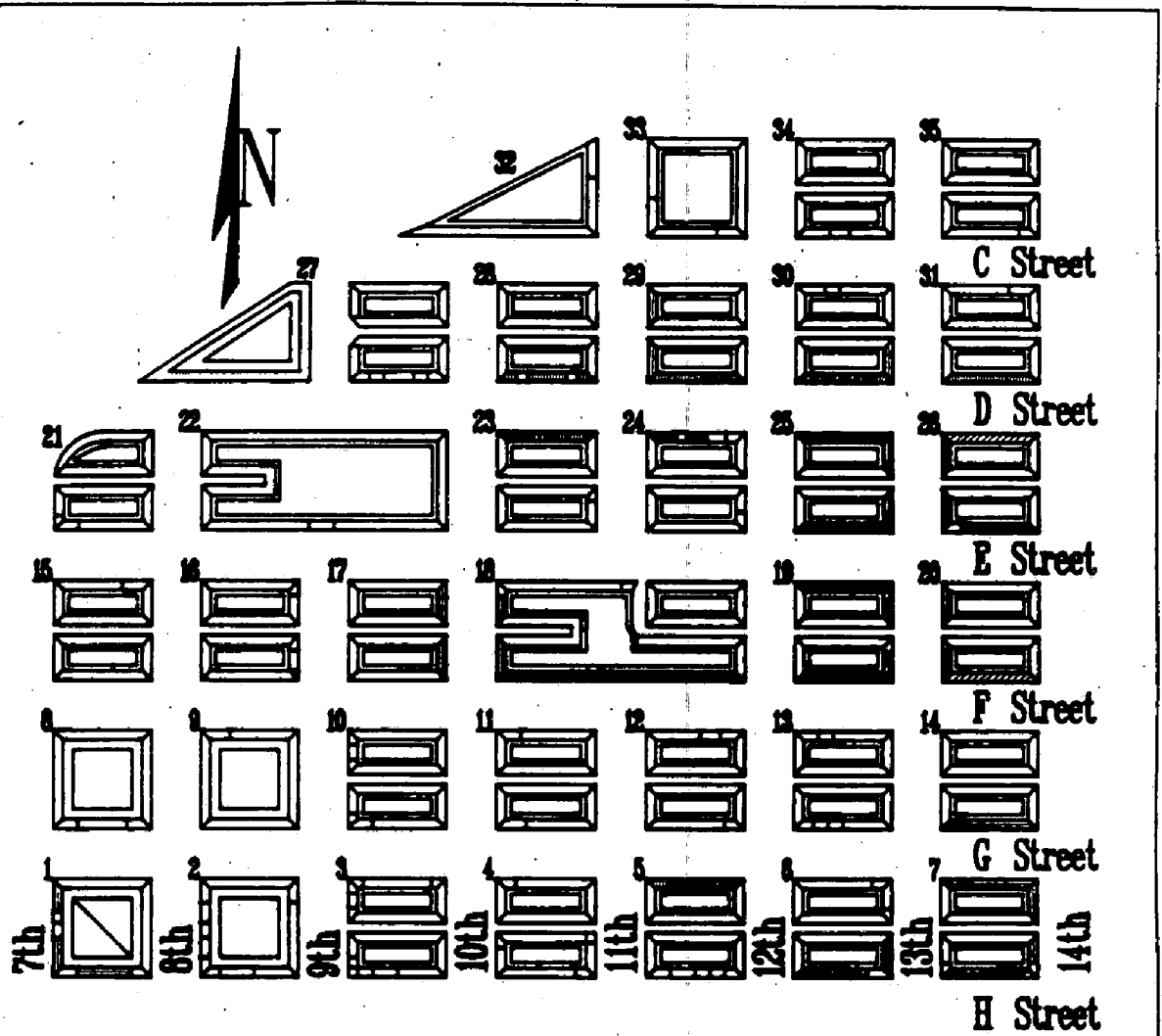
Numbers represent the # of spaces, and the total is shown in the center of each block

**ALKALI FLAT PARKING STUDY**

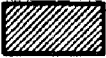



SUMMARY OF SURPLUS AND DEFICIENCY  
FOR A TYPICAL WEEKDAY



Figure 7



**LEGEND:**

-  90 - 100%
-  75 - 89%
-  50 - 74%
-  0 - 49%

**ALKALI FLAT PARKING STUDY**

SUMMARY OF OCCUPANCY  
FOR SATURDAY



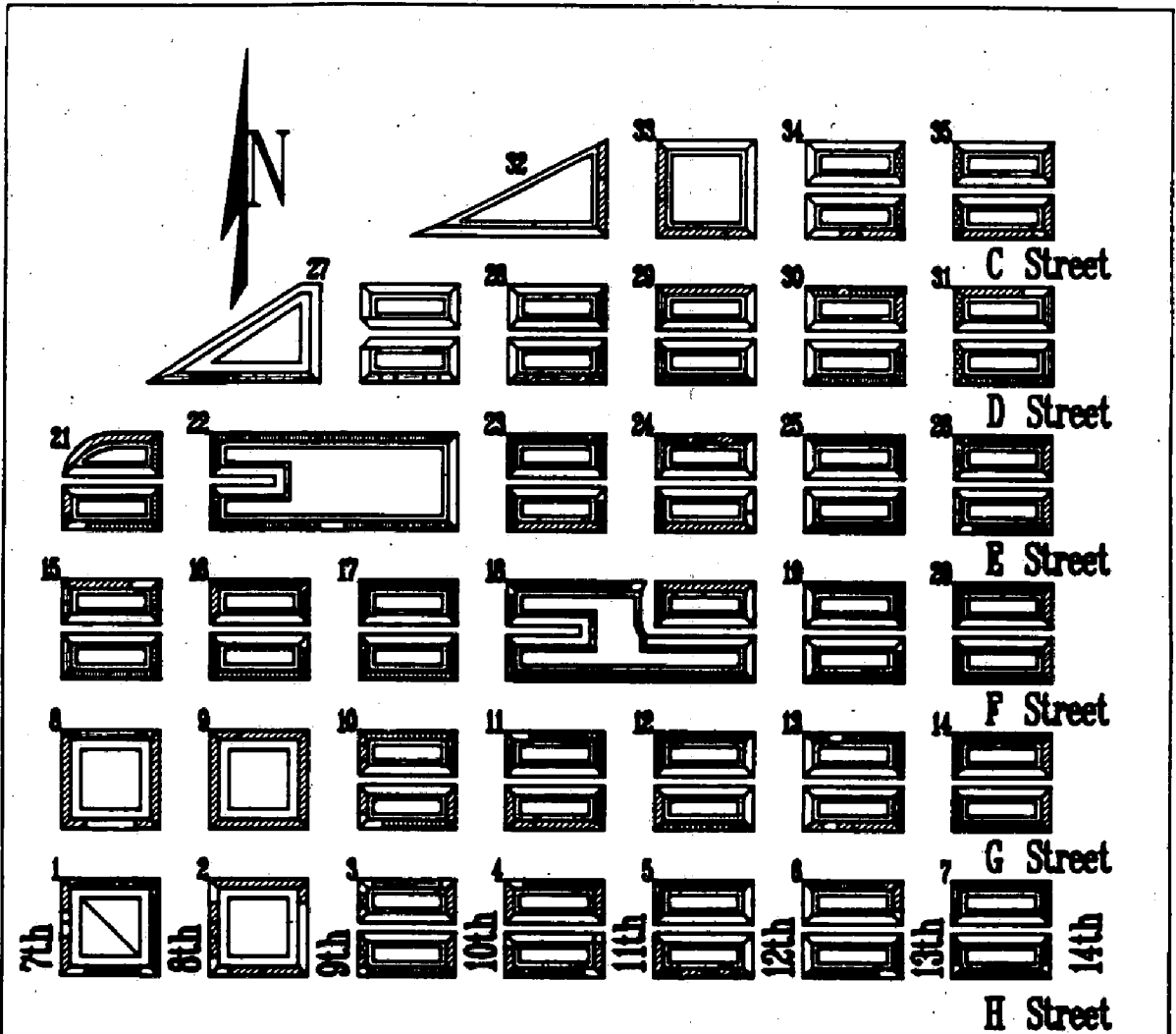
Figure 8

block faces with an occupancy greater than 75 percent. Generally speaking, parking in the Alkali Flat area is not a problem on a typical Saturday. In reviewing Figures 9 and 10, it can be seen that the duration and turnover results are similar to what was surveyed on a typical weekday.







Reference is made to Figure 11 which shows a summary of surplus and deficiency parking for a typical Saturday in the Alkali Flat area.

Figure 12 shows the results of the off-street parking occupancy study on a typical weekday. In reviewing Figure 12 and comparing the inventory from Figure 3, it can be seen that the available off-street parking is primarily in private lots. Where public off-street parking is available, such as the County Garage at 7th and G Streets, the occupancy is relatively high. In addition to the County garage, other public off-street parking in the study area includes the following:

1. A lot on the southwest corner of 12th Street at E Street
2. A lot along the south side of G Street between 9th and 10th Streets
3. A lot along the south side of C Street between 12th and 13th Streets
4. Two small lots within the block numbered 25 on Figure 3.



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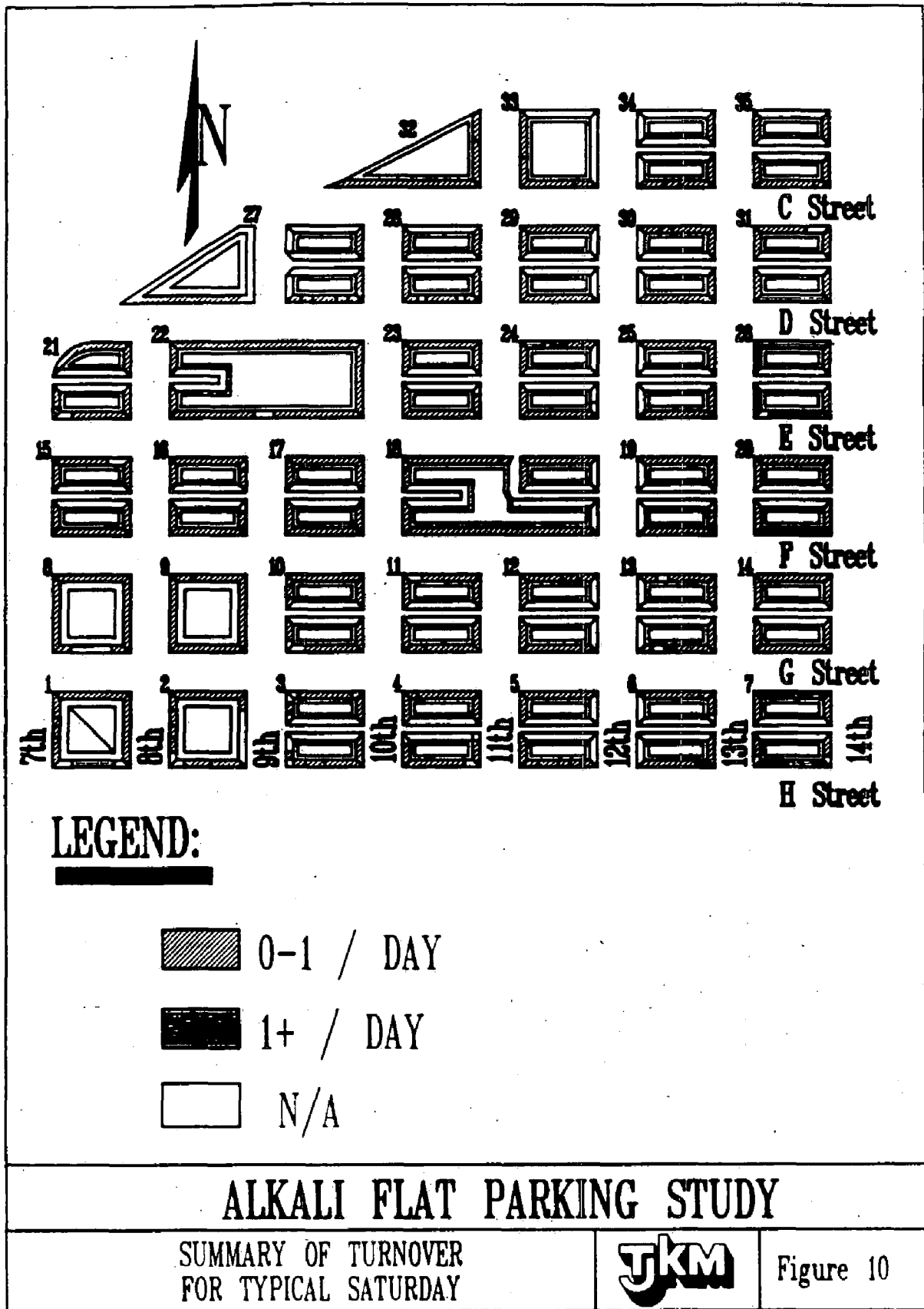
- |   |  |
|---|--|
|  0 - 1 HRS |  4 - 5 HRS |
|  2 - 3 HRS |  5+ HRS    |
|  3 - 4 HRS |  N/A       |

**ALKALI FLAT PARKING STUDY**

SUMMARY OF DURATION  
FOR TYPICAL SATURDAY



Figure 9



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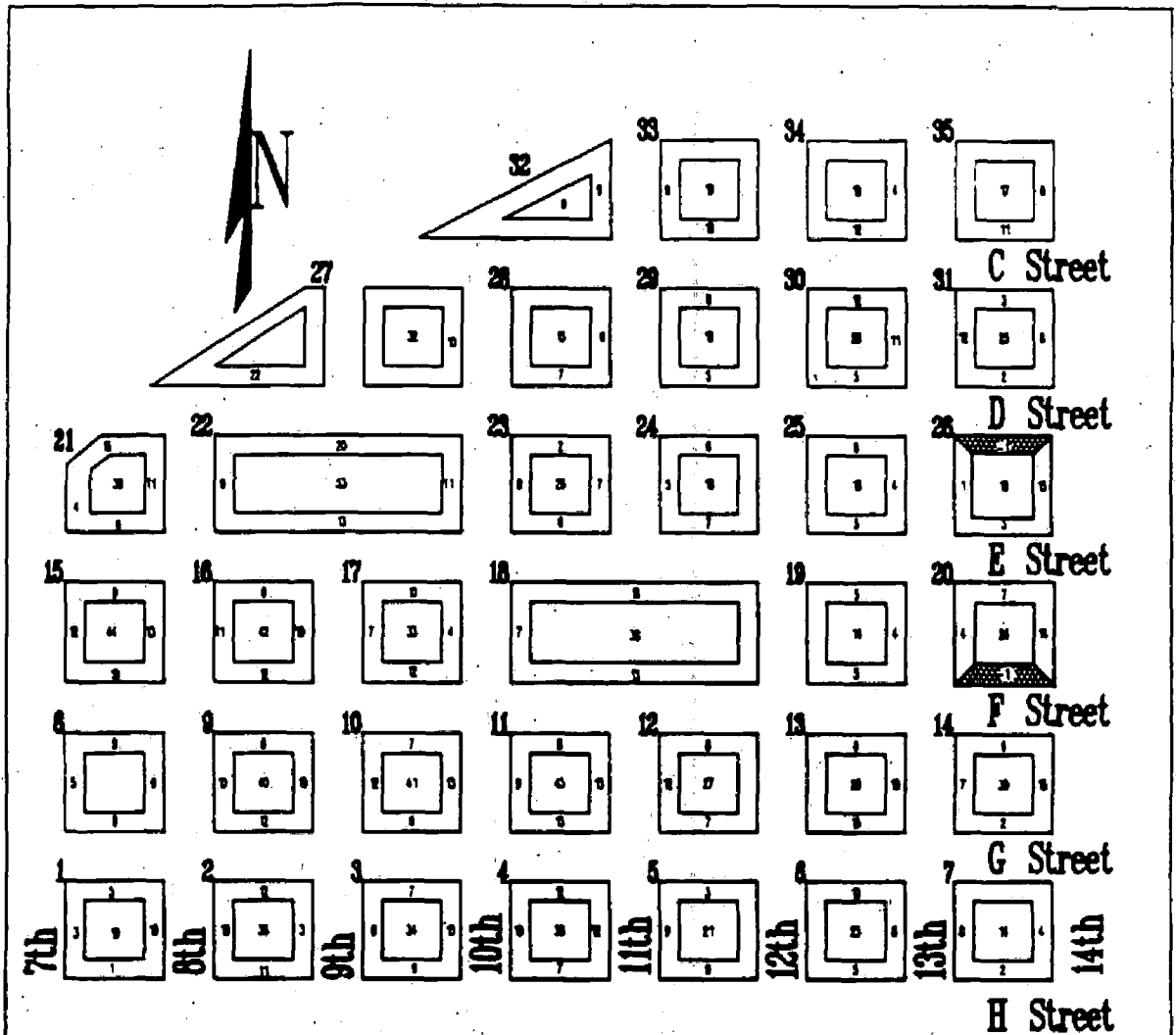
- 0-1 / DAY
- 1+ / DAY
- N/A

**ALKALI FLAT PARKING STUDY**

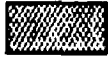

SUMMARY OF TURNOVER FOR TYPICAL SATURDAY



Figure 10



**LEGEND:**

-  DEFICIENCY
-  SURPLUS

NOTE:

Numbers represent the # of spaces, and the total is shown in the center of each block

**ALKALI FLAT PARKING STUDY**

SUMMARY OF SURPLUS AND DEFICIENCY  
FOR A TYPICAL SATURDAY



Figure 11



## Impacts of Commercial Activities on Adjacent Residential Areas

As a part of the field parking survey, observations were made to determine areas where the overflow of employee parking onto adjacent residential streets was construed to be a problem. Areas where this occurred was adjacent to the 12th Street corridor, in the vicinity of 11th and C Street where the Crystal Creamery is located, and where employees working along G Street and points south would park in the residential areas and walk to work. In an attempt to get a handle on the number of employees parking in the residential areas, an early morning car count was made prior to 7 a.m. and compared with the survey of cars taken at 10 a.m. on a typical weekday. At 7 a.m. there were 740 vehicles parked in the study area. It was determined that an additional 370 cars, assumed to belong to employees, were parked in all of Alkali Flat when the detailed survey began at 10 a.m. It is realized that there is some error in this assumption since a portion of the residents would have left during this three-hour time period. However, this information is indicative of the employee parking situation.

Some of these impacts to residential areas are from governmental offices as opposed to commercial activities. It is difficult to break out the impacts of governmental offices and differentiate them from other commercial activities. However, it is our assessment that while governmental and commercial activities are somewhat impacting the residential areas, the problem is not severe. This is demonstrated in the fact that results of the parking occupancy survey were generally below 75 percent in the study area. Employee parking does cause a problem in certain selected areas and it appears to the consultant that this problem could be eliminated by more frequent parking enforcement observations by the City.

### Parking Deficiencies

Parking problems in Alkali Flat are found in certain selected locations scattered throughout the study area. In reviewing Figures 4 and 8, it can be seen that many areas had a parking occupancy of less than 50 percent on the Tuesday survey and even more locations during the Saturday survey. However, the most notable location where parking is a problem is along the G and H Streets corridor. In addition, there is a parking shortage on 12th Street since parking has been removed to accommodate the Light Rail Transit operation. Also, there are several blocks on 8th, 9th, and 10th Street where parking congestion occurs.

During Tuesdays occupancy survey, we observed 21 block faces with a parking occupancy of over 90 percent and 16 block faces with a parking occupancy of between 75 and 90 percent. On Saturday, there were no block faces with a parking occupancy of over 90 percent and only six block faces with an occupancy of between 75 and 90 percent. As discussed earlier in this report, Alkali Flat has a low turnover rate and a high duration rate for parking. Since approximately one-half of the study area is restricted to two-hour parking, some improvement in the duration and turnover rates could be attained through increased enforcement. Even though it is realized that many of the long-term parkers are residents in the area who have "F" permits. Using 90 percent occupancy as a basis for on-street parking capacity, there is a surplus of approximately 600 spaces during a typical work day and over 900 spaces on Saturday. If a more conservative 75 percent occupancy were used to measure capacity, there would be no surplus left, but a demand of 514 spaces would exist for a typical weekday. There would be a surplus of 750 spaces for a Saturday.

It is important to realize that even though technically there is a parking surplus, parking problems do exist in Alkali Flat. This is because someone in the 10th and C area, where parking is plentiful, is not going to walk to 12th and G for business purposes. Reference is made to Highway Research Board Special Report No. 125, Parking Principles, where surveys have shown that for urban areas of 500,000 to 1,000,000 population, the average walking distance is 650 feet. Where the time limit of parking exceeds five hours, this walking distance is 910 feet. Typically, people want to park within one block of their destination, and except for employees, will generally not park more than two blocks away. Later on in the report, future parking needs and locations for additional parking will be discussed.

#### Immediate Impacts of LRT on Existing Parking Conditions

The impacts of LRT on parking were determined by conferring with representatives of Regional Transit in the City of Sacramento. At the time the parking survey was conducted by the consultant, most of the on-street parking on 12th street had already been removed. Reference is made again to Figure 1 in which the map of the study area shows the LRT station at 12th and E Streets in Alkali Flat. The LRT track has been placed along the east side of 12th Street in the study area. In order to maintain the existing traffic lanes on 12th Street and adequately handle traffic flow, parking has been removed on both sides of 12th Street in the entire study area between B and H Streets.

According to information received from Regional Transit, construction of the LRT track caused the removal of 51 on-street metered parking spaces plus yellow, white, and green zones. The total estimated parking and loading zone removal was 70 on-street spaces. Since the loading zones are or will

removal, it is estimated that the total parking loss will be approximately 70 spaces. The policy of LRT is to replace lost on-street parking spaces by providing off-street surface parking. This has been done in the vicinity of 12th and E Streets where a 46-space lot has been constructed near the corner in the southwest quadrant and a 14-space lot has been constructed at the northeast corner. This replacement parking is about 10 spaces less than the parking that has been removed. However, observation of these LRT lots reveal a relatively low usage of from 10 to 20 percent depending on the time of day. Later on in the report when an assessment is made of future parking needs, additional parking for the 12th Street corridor will be addressed.

## FUTURE PARKING NEEDS

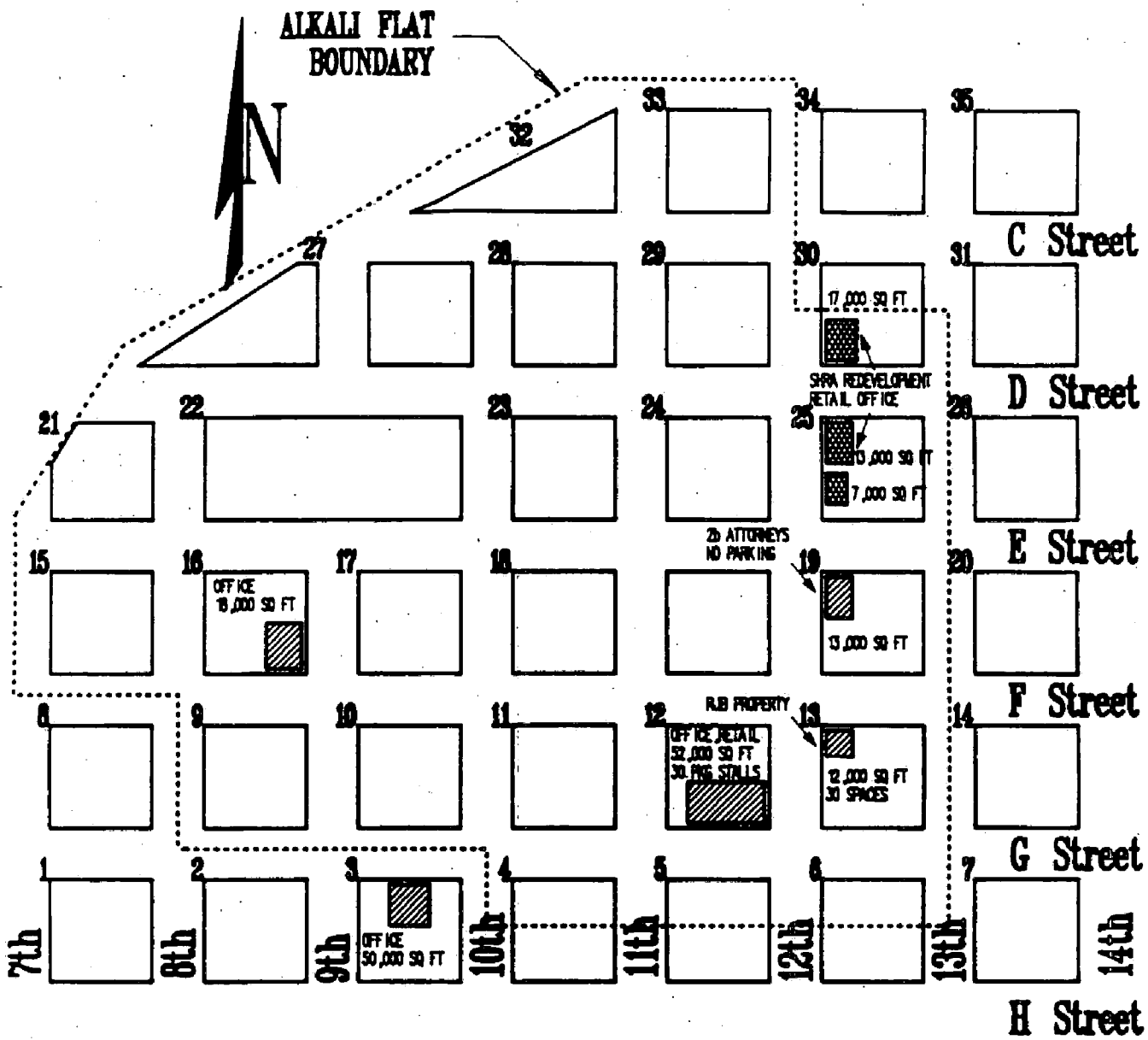
### General Discussion

Parking deficiencies exist in downtown Sacramento because developers of property are not required to provide a sufficient number of spaces. The Zoning Ordinance which mandates 1.0 parking spaces for every 400 square feet, is only about 60 percent of the actual parking needs as discussed elsewhere in this report. It would be desirable for the City of Sacramento to require that parking be mitigated just as traffic must be mitigated prior to allowing development. Mitigation credit could be allowed for demonstrated use of mass transit facilities and for use of carpools to reduce the number of automobiles that require a parking space.

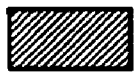
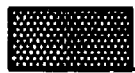
It is recommended that the City of Sacramento pass an ordinance to require a separate analysis for parking associated with each development of commercial facilities in the downtown area. It is not appropriate for a variance to be granted reducing the number of parking spaces without proper mitigation being provided by the developer to justify any parking reduction. Since the actual parking needs are almost double the Zoning Ordinance requirements, a parking mitigation ordinance would provide ways to mitigate parking needs so that the Zoning Ordinance requirements would be adequate.

### Alkali Flat

Future parking needs will occur in the study area due to proposed development in Alkali Flat. Input was obtained from the Sacramento Housing and Redevelopment Agency and the City of Sacramento concerning proposed future development. Figure 13 has been prepared showing the location of future office and



**LEGEND:**

-  5 YEAR PROPOSED DEVELOPMENT
-  10 YEAR PROPOSED DEVELOPMENT

**ALKALI FLAT PARKING STUDY**

PROPOSED FUTURE DEVELOPMENT  
FOR ALKALI FLAT

PREPARED BY  
**JKM**

Figure 13

commercial development. Also, there will be a continuation of some residential construction and rehabilitation; however, it is our understanding that parking will be provided for additional residential units.

As can be seen from Figure 13, future development has been estimated for a five- and ten-year period. Retail and office development is proposed for 12th Street. Two additional office facilities are proposed; one at the corner of 9th and F Streets, and another facility on G Street just outside of the project area between 9th and 10th Streets. In addition, it was felt by the City Planning Department that there would be future expansion of the Crystal Creamery facilities and the KCRA radio/television facilities in the 11th and C Streets area. However, discussions with these businesses and the Sacramento Housing and Redevelopment Agency staff reveal no plans for expansion.

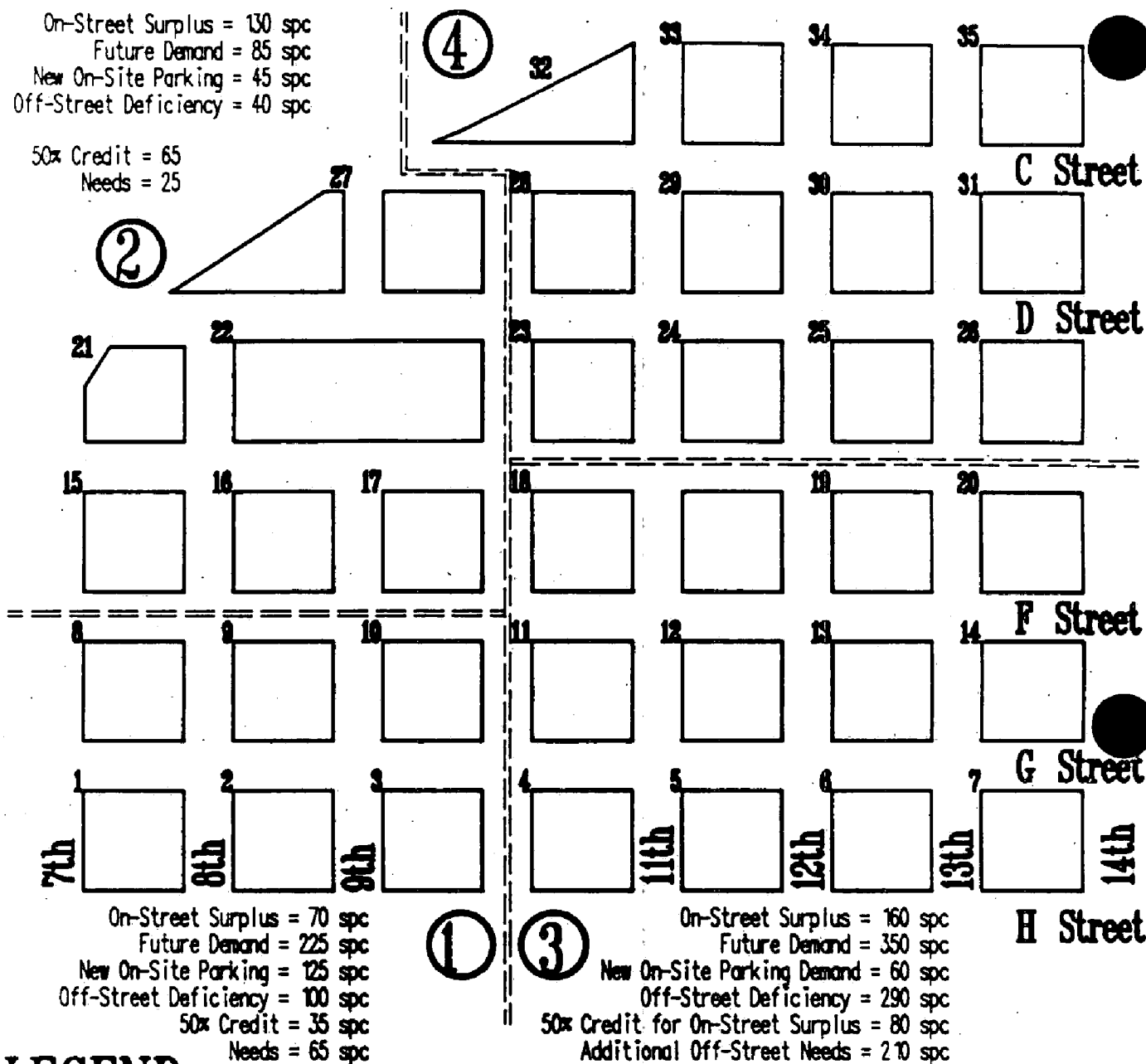
To assist in determining an estimate of future parking needs in Alkali Flat, Table I has been prepared. Future parking needs have been estimated at 4.5 spaces per 1,000 square feet for offices and retail. The City Zoning Ordinance requires 1.0 parking spaces per 400 square feet, or 2.5 spaces per 1,000 square feet. This is not unusual since, typically, City Zoning Ordinances require less parking than is actually needed. As can be seen from Figure 14, Alkali Flat has been divided into four areas. Table I shows that there will be a parking demand of 225 spaces in Area No. 1 and 165 spaces in Area No. 2 over the next five years. The five-year demand for Area No. 3 will be 350 spaces, for a total five-year parking demand estimate of 660 spaces. From five to ten years it is estimated that approximately 170 spaces will be required to support proposed office and retail development on the east side of 12th from C to E Streets. The total parking demand is estimated at 830 spaces.

On-Street Surplus = 230 spc  
 Future Demand = 170 spc  
 Off-Street Deficiency = 170 spc

50% Credit = 115  
 Needs = 55

On-Street Surplus = 130 spc  
 Future Demand = 85 spc  
 New On-Site Parking = 45 spc  
 Off-Street Deficiency = 40 spc

50% Credit = 65  
 Needs = 25



On-Street Surplus = 70 spc  
 Future Demand = 225 spc  
 New On-Site Parking = 125 spc  
 Off-Street Deficiency = 100 spc  
 50% Credit = 35 spc  
 Needs = 65 spc

On-Street Surplus = 160 spc  
 Future Demand = 350 spc  
 New On-Site Parking Demand = 60 spc  
 Off-Street Deficiency = 290 spc  
 50% Credit for On-Street Surplus = 80 spc  
 Additional Off-Street Needs = 210 spc

**LEGEND:**

==== Boundary of the 4 future parking areas

On-Street Surplus Parking = 590 spc  
 Future Demand = 830 spc  
 New On-Site Parking = 230 spc  
 Off Street Deficiency = 600 spc  
 Credit For On-Street Surplus (50% of 590) = 295 spc  
 Additional Off-Street Parking Needed = 305 spc

**ALKALI FLAT PARKING STUDY**

FUTURE PARKING DEMAND AND DEFICIENCY  
 SUMMARY FOR ON STREET PARKING

PREPARED BY  
**JKM**

Figure 14

in Alkali Flat designated by the four areas outlined in Table I. All of the existing on-street surplus probably will not be available to offset future parking needs, due to possible removal of some on-street parking in the future, and further encroachment by employees outside of Alkali Flat. For these reasons, we have given a 50 percent credit for on-street surplus, with limited benefit between areas. The parking deficiency is calculated for a typical weekday, and based on 50 percent credit for parking surplus and additional on-site parking, there will be a need for 40 spaces in Areas No. 1 and 2, and 210 spaces in Area No. 3 over a five-year period for a total parking need of 250 spaces. Area No. 4 will not need additional parking over the next five years. When considering projected ten-year development, the parking deficiency in Area No. 4 is 55 spaces with on-street surplus credit and the overall deficiency is approximately 305 spaces. It should be emphasized that future parking needs are based on future development that was partially furnished by the City and the Sacramento Housing and Redevelopment Agency and also estimated by the consultant. It is not known to what extent the 12th Street corridor will be developed over the long term. However, for purposes of this analysis, the consultant used the estimates shown in Figure 13 after conferring with the Sacramento Housing and Redevelopment Agency. The City and the Redevelopment Agency need to carefully review projected land use information shown by the consultant in order to evaluate the future parking needs that have been determined in this section of the report.

#### Impacts of Future LRT Design on Parking

As indicated earlier in this report, the immediate impacts of LRT have resulted in the loss of 70 on-street parking spaces of which 60 of these have been replaced with two off-street

station. For future development of LRT, there is no definitive long-range plan at the present time. However, in conferring with Regional Transit representatives, they are estimating that the Folsom corridor line will be opened shortly and that within three years, the entire 18-mile system will have double trackage. Initially it was thought that double trackage would be necessary in order to produce 15-minute headways, but the LRT system presently is operating every 15 minutes between 6 a.m. and 6:30 p.m.

Double trackage in the downtown area on 12th Street would not result in additional parking loss, but would cause increased delays to the flow of traffic on 12th Street. While it is anticipated that positive impacts to parking needs will occur due to the development of LRT, an actual estimate has not been made by Regional Transit or the City of Sacramento as to the number of peak hour commuters that will use LRT instead of their private automobile. Presently there are 3,700 free parking spaces at outlying LRT station sites, which helps to reduce automobile congestion downtown. On a daily basis, the LRT system now carries from 8,000 to 10,000 passengers, and it is estimated that approximately one-half or from 4,000 to 5,000 passengers have diverted from the use of a private automobile. Within one year, Regional Transit is estimating that the patronage will increase to 20,500 persons on a daily basis. Regional Transit does not yet have a breakdown of peak hour versus non-peak hour use of LRT. However, if 10 percent or approximately 500 persons are diverted from peak hour driving, and assuming an automobile occupancy of 1.2 persons, this would mean a reduction of over 400 private automobiles during the rush hour period. Using their projections of an additional 10,000 patrons within one year, this would result in a further reduction of some 800 private vehicles entering downtown Sacramento during commute periods.

Because of the additional time it takes to ride LRT as opposed to driving, and also since parking is not expensive in downtown Sacramento, these diversion estimates from private automobiles are, undoubtedly, optimistic. The actual reduction in parking needs would need to be measured by cars parked and revenues produced from the downtown parking facilities. However, as the LRT system becomes more efficient and depending upon the availability of free parking in the outlying facilities, the diversion of persons from private automobiles should have a steady growth in downtown Sacramento in the future.

#### Parking Needs From City and County Facility Development

Information obtained from the City of Sacramento, reveals that a public safety building may be developed in the 10th, 11th, H, and I Streets block where an existing parking garage is located. Further, a City administrative building is programmed to be built behind City Hall. If this occurs, it is anticipated that an additional 1,000 spaces will be constructed to support the City government facilities. Also, the proposed east end garage along the south side of I Street between 10th and 11th Streets would add an additional 1,000 parking spaces. Other parking that may be added by the City in the future is an expansion of the City Community Center garage which is located on the west side of 13th Street between I and J Streets. This garage may be expanded across to the east side of 13th Street and the estimated parking increase is up to 1,400 spaces. An alternate location for expansion of this garage is the northwest quarter of the 12th, 13th, I and J Streets block, which would add 400 spaces. It is anticipated that future expansion of the convention center, development of a proposed Hyatt Hotel at 12th and L Streets, and a future hotel development on the north side of J Street between 13th and 14th Streets, along with expansion of City

government facilities will easily utilize all of the proposed parking expansion discussed above. Since Alkali Flat is located adjacent to this area, it is critical that additional off-street parking be provided that can be reserved for the parking needs in Alkali Flat. In addition, as on-street parking becomes highly congested in the future, more stringent parking enforcement procedures will be needed to support parking needs in the study area.

In reference to the County parking needs, a new courthouse is planned for the 8th, 9th, F, and G Streets block. This is a block which now is used for jury parking. In referring to the Master Plan of Downtown Complex prepared for the County of Sacramento in 1982, it is estimated that the 2,400 existing County employees will increase by over 1,000 in the next 13 years and up to 4,200 employees by the year 2,010. Additional parking needs for the County in this same study are estimated to be almost 2,000 spaces by the year 2000 and over 2,600 spaces by the year 2010.

Discussions were held with the building design section of Sacramento County pertaining to County parking conditions. In reviewing the Master Plan of Downtown Complex, 1982, Chart I in that report summarizes parking requirements from 1982 through 2010, and a copy of this chart is included in the appendix. The 1987 parking requirements were estimated at 2,338, which is a shortage of 700 spaces from the 1,787 spaces available in 1982 less the 148 spaces lost due to the new main jail construction.

The County is proposing to construct a new parking structure in the 7th, 8th, F, and G Streets block with 780 spaces initially, expandable up to 1,500 spaces. Other parking (+400) will be provided by converting a good share of existing County parking to compact spaces. The County has no specific plans for replacing the existing jury lot somewhere

in the future. If the existing S.P. lot can be retained for parking, the County probably will shift the jury parking to this location.

In summary, the 1982 report estimates the need for 1,950 additional spaces, assuming no loss in parking. Since no new location, other than the S.P. lot, is planned for jury parking these 300 spaces would need to be added to the projected deficiency, for a total shortfall of 2,250. A 1,500-space garage plus compact parking conversion (400 spaces) and use of the old main jail area (100 spaces), reduces the expected deficit to 250 spaces by 2010.

#### Feasible Options For Parking

In this task, we explore several options for providing additional parking in Alkali Flat. Referring again to Figure 14, it can be seen that over a ten-year period of time there will be deficiencies in parking throughout the Alkali Flat area. The five-year deficiency for the west end in sub-areas No. 1 and 2 is 40 parking spaces. The City Planning Department estimated that 125 spaces would be provided on-site for the office building on the south side of G Street between 9th and 10th Streets. For the office site at the northwest corner of 9th and F Streets, 45 on-site spaces are estimated (see Figures 13 and 14). According to the redevelopment plan, this deficiency in Alkali Flat will not increase over a ten-year period of time. However, development of County facilities could seriously impact Alkali Flat if the County does not meet its needs for providing additional parking. Critical to maintaining this relatively straight line of parking deficiency is for the existing 240-space Southern Pacific leased lot to remain as parking, and for the 300-space jury lot parking to be replaced at the appropriate time. If

these parking facilities are lost, parking impacts in Alkali Flat will be much more severely felt.

For the east area of Alkali Flat, sub-areas No. 3 and 4, there will be an estimated parking deficiency of approximately 210 spaces over the next five years. This deficiency will exist in sub-area No. 3. Area No. 4 will develop a need for parking over a ten-year period, due to additional office and retail along 12th Street. Surplus on-street parking will account for some of the shortfall and reduce the deficiency in Area 4 to 55 spaces (see Figure 14 and Table I).

The consultant has done considerable study in the Alkali Flat area to determine where additional parking should be located. It is our conclusion that there are no logical sites for added parking facilities in sub-areas No. 1 and 2. However, the parking needs are minor, only 40 spaces, assuming no further impacts from the area outside of Alkali Flat. There is some question concerning this since the existing County lease for the 240-space Southern Pacific lot expires in January 1988, and from that time forward this parking facility will be leased on a month-to-month basis only. It would be desirable for the County or the City to acquire this area and preserve it for the use of parking.

The major deficiency for future parking as discussed earlier in this report, is in area No. 3 where there will be a need for 210 spaces. Including a relatively small need in Area 4, the total projected needs for these two areas is 265 spaces.

Three possible locations were considered as potential parking structures sites after the entire area was surveyed in detail by the consultant. These areas are as follows:

1. The Casa Sanchez property located at the northwest corner of 12th & E Streets.

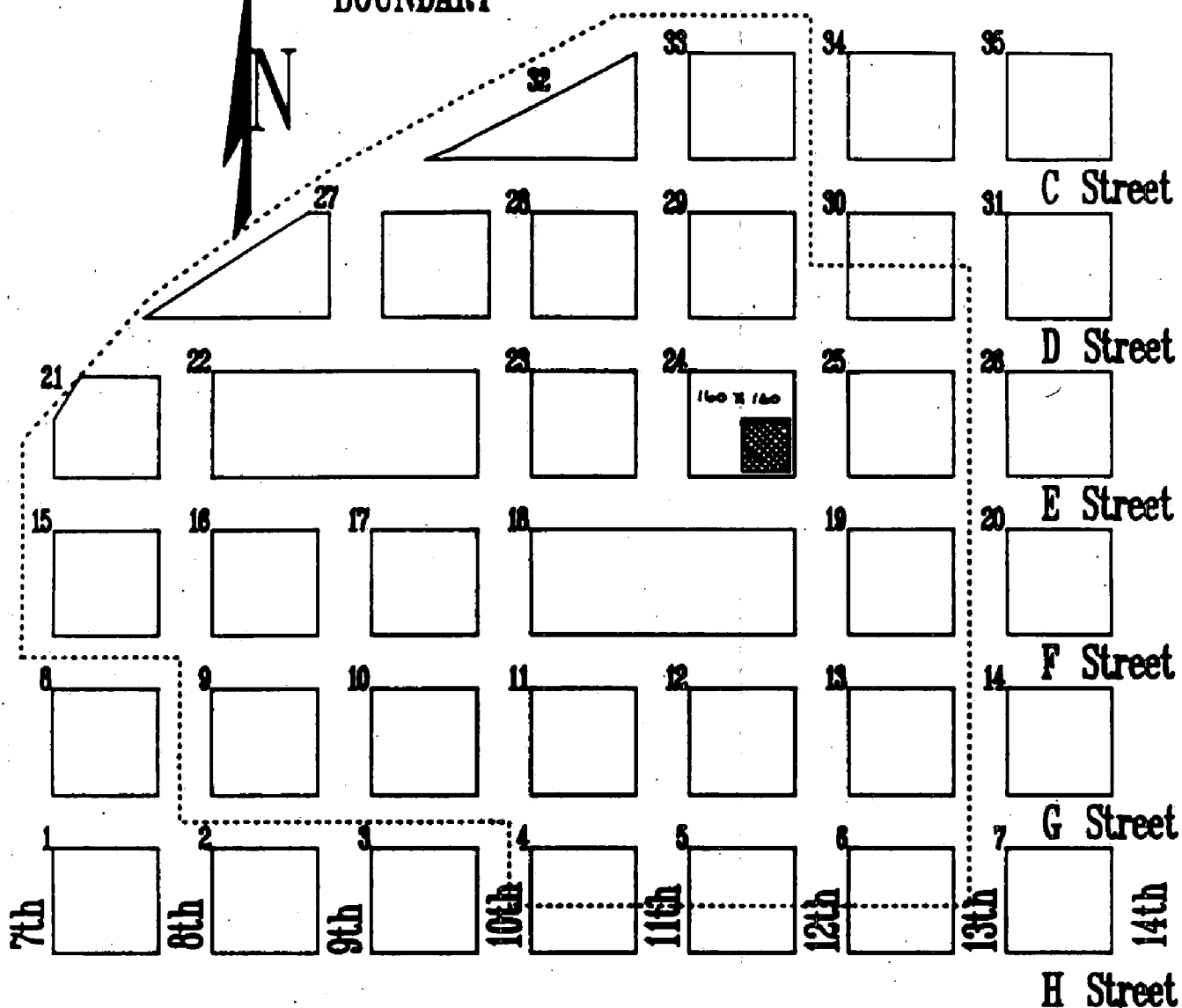
2. The southwest corner of 12th and F Streets which consists of several small businesses and vacant property.
3. The northeast corner of 12th and D Streets, which is the old City Center Motel property.

After evaluating all of these locations and discussing this matter with the City Parking Division Manager, it was determined that the most efficient development for off-street parking would be a single location with a large enough area for developing a three- or four-level parking structure.

Since the Casa Sanchez property is the more centrally located of the three sites, it was determined that this should be the recommended location for a new parking structure (see Figure 15). The parcel is approximately 160 feet by 120 feet in size, and by adding the cleaning facility located to the west, the area for parking development would be 160 feet of frontage on 12th Street and an equivalent amount of frontage on E Street. This is approximately one-quarter block in size and sufficiently large to function either as a straight-ramp or split-level design for parking. It is estimated that approximately 73 cars could be parked per level at an average of 350 square feet for each vehicle including maneuvering area, stairwells, elevators, etc. It is estimated that a four-level structure would produce 290 spaces, which would more than meet the 265 needed spaces as projected earlier in this report.

In reference to this proposed 290-space parking garage, 93 spaces would be available to fulfill the City Code requirements for parking pertaining to the proposed retail and office development on the east side of 12th Street between C and E Streets as proposed by the Sacramento Housing and Redevelopment Agency. For this reason, it would be

ALKALI FLAT  
BOUNDARY



**LEGEND:**



RECOMMENDED PARKING LOCATION  
Spaces Provided : 290

ALKALI FLAT PARKING STUDY

RECOMMENDED LOCATION  
FOR PARKING

PREPARED BY

**JKM**

Figure 15

appropriate for approximately 32 percent of the parking structure cost to be subsidized by the developers that would occupy this 12th Street frontage. As discussed above, one of the potential sites for off-street parking is the east side of 12th Street where redevelopment is proposed between C and E Streets. If the developers of this area would rather provide their own parking facilities, then it would only be necessary for the City to construct a three-level parking facility. However, it would seem to be more efficient for all of the parking to be located in one structure, especially since this structure would be no more than one block away from the proposed office and retail area.

As a final comment pertaining to parking needs, 50 percent of the on-street surplus was credited against parking deficiencies. It did not seem appropriate to give a full credit for on-street surplus since there may be additional impacts to the use of on-street parking in Alkali Flat in the future from the downtown area south of G Street. Another reason for not relying too heavily on the use of surplus on-street parking, is that it may be necessary for the City to remove additional on-street parking in the future in order to handle the movement of traffic. Streets that may be vulnerable for the loss of on-street parking would include G and H Streets and also E and F Streets if it is determined in the future that these streets need to be four-lane facilities.

In reference to future expansion of KCRA and Crystal Creamery facilities, these businesses were contacted by the consultant. KCRA has recently expanded and has no current plans for additional facilities. In reference to the Crystal Creamery, they are concerned about employee parking and would like to have additional area for parking and development. However, they along with KCRA are essentially land locked and do not anticipate any expansion.

## STUDY ALTERNATIVES

### Parking Operation and Regulation

At our meeting with the Alkali Flat community, concern was expressed that on-street parking was being abused in the study area. As reported earlier in this study, the parking duration and turnover study in Alkali Flat would support this; however, due to permit parking, the extent of on-street parking abuse is difficult to ascertain. It is the recommendation of the consultant that the City step up its on-street parking enforcement in Alkali Flat at the time that the Parking Division hires four additional parking enforcement personnel. The present parking enforcement staff is numbered at 14 and this would increase the total to 18. As stated earlier, we were advised that the City's Parking Division enforce in Alkali Flat a minimum of once each day. A doubling of this effort probably would solve any parking abuse problem, although it would be desirable to enforce two-hour zones every two hours. It is felt that the availability of on-street parking would be greatly enhanced with a stepped up parking enforcement problem. As the redevelopment of Alkali Flat proceeds, it may be desirable to install parking meters which are much more easily enforced and would greatly increase the availability of on-street parking spaces.

### Parking Improvements

In addition to parking meters which were discussed above, other parking improvements that have been suggested include the installation of diagonal parking. The problems with diagonal parking are two-fold: First, the angle parking takes up more of the on-street usable area for traffic flow, and secondly, a hazard is created when cars back out of the

diagonal parking spaces. It is our opinion that the adverse effect of backing from diagonal parking spaces is not mitigated due to the ease in gaining access to the parking space. While it is true that it takes longer to parallel park, the area is not permanently removed for the flow of traffic as would occur with angle parking. For these reasons, it is recommended that the City not consider implementing any diagonal parking on City streets.

As stated earlier in the report, there are 601 residential parking permits in Alkali Flat along with 728 visitor permits and 106 temporary visitor permits. City staff is of the opinion that the use of permanent and visitor parking permits is not abused in Alkali Flat. They carefully review all applications for parking permits and do not issue a permit without verification of the street address in the study area.

#### Off-street Parking Operation

It is recommended that new off-street parking constructed in Alkali Flat be maintained and operated by the City's Parking Division, unless the parking facilities are located on private property and controlled by a business development. It is estimated that the development of off-street parking facilities in Alkali Flat will cost about \$8,000.00 including the amount and cost of acquiring property. The recommended parking structure to be located at 12th and E Streets eventually should be attendant operated. However, electronic automation control would be possible for monthly parking until there is a demand for full use by short-term parking.

## FINANCIAL FEASIBILITY

In completing this study, the consultant has determined the demand for future parking and suggested locations where additional off-street parking may be constructed. However, the key element to the success of any parking program is how it is to be financed. If the City provides 290 additional off-street parking spaces in Alkali Flat at the 12th & E location recommended earlier in this study, the total cost will require about 2.3 million dollars (see Table II). The annual debt service and operating costs would be approximately \$369,000.00 and revenues from the parking facilities would support up to 40 percent of operating and debt service costs. Very quickly it can be seen that additional sources of revenue are going to be required in order for off-street parking to be provided in Alkali Flat. In the paragraphs that follow, the consultant reviews the several methods of financing and recommends a plan of action for the provision of off-street parking in the study area.

### Revenue Sources For Off-Street Parking

Off-Street Parking Revenues: Some of the revenues to pay for off-street parking can come directly from the off-street parking facility. Typically, revenues are obtained from attendant operation; or where parking turnover is not as critical, parking meters or monthly parking fees are utilized. When money is borrowed to acquire property and construct a parking garage, revenues generally are not sufficient to offset the cost of debt service along with maintenance and operation. Information obtained from the City's Parking Division indicates that the average monthly revenue in the City's parking lots is \$58.00 per space. If the cost of developing a parking space is \$8,000.00, the annual debt

service over 30 years at 10 percent interest is approximately \$72.00 per month. This monthly cost would, of course, be proportionately lower if the cost of developing parking is less. In addition, the City estimates that it takes approximately \$36.00 per space per month to maintain and operate a City parking facility.

On-Street Parking Meters: An excellent source of revenue for off-street parking can be obtained from on-street parking revenues. In the City of Sacramento, all on-street parking revenues go into the general fund and are used for general City maintenance which, of course, includes the cost of maintaining the City's existing meters and can provide funds for purchasing additional parking meters. If the City of Sacramento established an off-street parking ordinance in which any increases to the on-street parking meter rates were pledged to develop off-street parking, this would provide an excellent source of additional funds. In this way, the development of parking would be offset in effect by the users of parking instead of parking meter revenues being used for general City maintenance. A proposal of this nature could be approved since it does not take away from the general fund tax base. This procedure has met with success in other cities. The City of Sacramento has approximately 5,100 on-street parking meters and the annual gross revenues are close to two million dollars. Thus, it can be seen that any increase in meter rates would go a long way toward offsetting the cost of providing additional off-street parking. It must be realized, of course, that on-street parking revenue in other portions of the downtown area could not be used to offset the development of off-street parking in Alkali Flat. The on-street meter revenues would need to come from within the study area.

Parking Mitigation Fee: A parking mitigation fee is a fee that would be paid by developers in lieu of providing parking on their own property. For example, if a developer of an

office building needed to furnish 100 parking spaces and only had the facilities for 50 on-site parking spaces, the developer could pay a parking mitigation fee for the other 50 spaces. If it is determined that each parking space is worth \$8,000.00, then this mitigation fee would amount to \$400,000.00 for 50 parking spaces. In developing a parking mitigation fee ordinance, the City would need to establish an equitable cost of parking for Alkali Flat and the parking mitigation fee would be tied in with the City's zoning requirements for off-street parking. Since the zoning ordinance does not require a sufficient amount of parking to satisfy demand, the parking mitigation fee could only partially offset the need for off-street parking.

Tax Increment Financing: Since Alkali Flat is a redevelopment area, it is eligible for the use of tax increments to pay for parking improvements. However, in discussing this matter with the Sacramento Housing and Redevelopment Agency, we were informed that the use of tax increments in Alkali Flat is leveraged out and additional financing is not available at the present time. The availability of additional credits for tax increment financing would depend upon increased assessed value in the study area that would then create additional eligibility for tax increment financing.

Parking Revenue Bonds: Parking revenue bonds can be sold to pay for development of additional off-street parking. However, revenue bonds only can be sold if funds are available that can be pledged to pay for the debt service on the bonds. Revenue sources such as parking meters and the parking mitigation fee discussed above can be pledged to support parking revenue bonds. The borrowing of money in this way increases the total capital cost of parking that can be developed over what could be accomplished on the pay-as-you-go basis. When parking revenue bonds are sold, available revenues must be at least one and one-half times the debt

service and maintenance requirements before an off-street parking program can be authorized. Instead of actually selling parking revenue bonds, another method that can be used is to obtain a Certificate of Participation for parking so that a loan can be obtained to develop parking without the one and one-half debt service coverage being required. Parking revenue bonds for public parking are tax exempt. Where a portion of a parking facility is reserved for private use, the private share of bonds would be taxable.

Parking Assessment District: A parking assessment district could be established in Alkali Flat where bonds are sold and guaranteed by the value of real estate property in the district. An assessment district can be established under the 1911 or 1913 act and the procedures to establish the district are fairly straight forward. In discussing this matter with representatives from the City of Sacramento, it is our understanding that the City has not utilized a parking assessment district to establish off-street parking. However, this procedure is available and the City would support the use of assessment district proceedings. In order for a parking assessment district to be successful, at least 60 percent of the assessed property value would need to sign a petition favoring the establishment of a parking assessment district. In this way, it is unlikely that a parking assessment district would be protested out at the time the City Council hearings would be held. In using the 1911 act, bonds are sold at the end of the project after a determination is made as to what property owners will not be paying cash for the improvements. Using the 1913 proceedings, the bonds are sold early on in the project so that funding can be available to pay for up-front costs which simplifies payments being made for engineering and construction costs during the course of the project development.

## Financing the Parking Plan

Reference is made again to Figure 15 which shows recommendations for a future off-street parking structure in Alkali Flat. In studying the problem of financing this additional public parking facility, there arises the fundamental problem of who is going to be taxed to pay the bill. In the previous section of this report, the various methods of obtaining revenue for parking development was discussed. The first available source of revenue, of course, is from the off-street parking facility itself. However, as stated earlier, this revenue is not sufficient to pay for the annual cost of retiring the debt service and maintenance costs.

On-street parking meter revenues could be an excellent source to supplement off-street revenues, this appears to be a practical application for Alkali Flat. The number of existing parking meters in the Alkali Flat meter district is about 219 two-hour and 367 ten-hour meters. It is recommended that the meter rates be increased to 50 cents per hour and that all of the increase be pledged to off-street parking development. It is felt that the use of on-street parking meters for supplemental revenue in Alkali Flat would be very beneficial.

There are two other sources of revenue available to supplement the cost of developing off-street parking in Alkali Flat: either a parking mitigation fee, or a parking assessment district. Because of the large residential area remaining in Alkali Flat, it would appear that the use of a parking assessment district is not desirable. However, implementing a parking mitigation fee could provide financial assistance to the City in developing off-street parking. As development proceeds in Alkali Flat, monies could start to accrue in a parking mitigation fee fund. Reference is made to Table II which has been developed comparing the cost of development,

annual debt service, maintenance costs, and estimated revenues needed to cover the development costs for off-street parking. It is proposed that the parking structure be developed during the next five years. The annual debt service is based on 10 percent bonds amortised over a 30 year period of time. The annual payment shown is the amount required to retire the bonds as well as handling operation and maintenance costs. Revenues are estimated from the existing operation of City parking facilities downtown. As can be seen from the table, off-street parking revenues are not sufficient to cover the annual payment for developing parking. Additional funds will be needed from a parking mitigation fee and on-street parking meters.

It is possible from both a practical and legal standpoint to finance a parking program using revenue sources such as on-street parking meters and a parking mitigation fee. Referring again to Table I, estimates have been made as to development costs, annual costs, and estimated revenues. The cost of property acquisition was determined from comparable property appraisals in the surrounding area. Construction costs were estimated at \$7,000.00 per space for a parking structure using information from Public Parking Structures Design and Construction, Seymore Gage Associates, 1985. The annual debt service was determined by assuming parking revenue bonds sold at 10 percent interest over a 30-year period of time. Operating costs were determined using information obtained from the City Parking Division. Their annual operating budget, less bond and rent payments, averages approximately \$36.00 per space per month. Off-street parking revenues also were estimated using information obtained from the City. For the fiscal year ending July 1986, the revenue collected per space per day averaged \$2.33 which would equate to approximately \$58.00 per month per space. However, for Alkali Flat, the average revenue collected probably would be less than the average. For purposes of this revenue estimate, we

used \$43.00 per month, which was the average revenue figure utilized in a report prepared by the City in January of 1985. While \$43.00 per month for short-term parking would not be obtained initially, the deficit could be made up by renting spaces to monthly parkers.

As can be seen from the table, there will be a parking revenue shortfall of \$219,000.00 per year for the off-street facility recommended for Alkali Flat. It is estimated that approximately \$146,000.00 per year could be obtained from the 219 two-hour and 367 ten-hour parking meters in Alkali Flat if the rate was raised to 50 cents per hour, and if all of the increase could be pledged to off-street parking development. The \$146,000.00 was calculated by assuming the two-hour meters would have an average 60 percent occupancy, and the ten-hour meters would have an average 50 percent occupancy. The maximum additional revenue for the two-hour meters would have 20 cents per hour and a \$1.75 per day for the ten-hour meters. This calculates out to an additional annual revenue of \$65,700.00 for the two-hour meters and \$80,300.00 for the ten-hour meters, totaling \$146,000.00.

Additional funds could be obtained by implementing a parking mitigation fee and by assessing developers for each parking space required under the zoning ordinance that will not be provided by the developer on site. Assuming that developers would pay for 93 such off-street spaces, this would be equivalent to \$70,000.00 per year of the annual operating costs if developers were assessed the full cost of \$8,000.00 per space for parking construction. However, it is doubtful whether the full amount could be assessed. The cost of surface parking is estimated at from \$3,500.00 to \$4,000.00 per space depending on the cost of land. Using \$4,000.00 per space for a mitigation fee, this would generate \$35,000.00 per year. Another source of revenue could be from the SHRA parking fund. Approximately \$1,000,000.00 per year is paid by

the City of Sacramento into this fund, which is pledged to other projects. As revenues increase, the remaining shortfall could be supplied from this fund.

It should be pointed out that the average occupancy for the two-hour and ten-hour meters will increase as Alkali Flat redevelops. If the average occupancy after ten years was increased to 90 percent for both two-hour and ten-hour meters, this would generate an additional \$97,000.00 per year which would more than offset any shortfall in revenue. Reference is made to Table III which summarizes revenue sources for financing the parking structure.

**TABLE III**  
**REVENUE SOURCES FOR FINANCING PARKING STRUCTURE**

<u>SOURCE</u>	<u>ESTIMATED ANNUAL REVENUE</u>
1. Off-Street Revenues	\$ 150,000.00
2. On-Street Meter Revenue	146,000.00
3. Parking Mitigation Fee	35,000.00
4. SHRA Parking Fund*	<u>38,000.00</u>
<b>Total Estimated Revenues</b>	<b>\$ 369,000.00</b>

\* Revenues from the SHRA Parking Fund would be dependent upon increased payment from the City.

It is our recommendation that off-street parking in Alkali Flat be developed as financing becomes available. Parking mitigation fee money and increased on-street parking meter revenues could be used to cover the cost of acquiring the recommended site where off-street parking is to be constructed. Initially this site could be developed as a surface parking lot to reduce the total cost of construction and the parking structure could be built as revenues become available to cover the annual costs of paying for constructing and maintaining the facility.

# APPENDIX

APPENDIX  
PARKING SPACE SUMMARY

BLOCK NO.	FACE NO.	10-HOUR	2-HOUR	1-HOUR	36-MIN.	NO LIMIT	WHITE ZONE	YELLOW ZONE	GREEN ZONE	HANDICAP ZONE
1	1		8					2		
	2		9							
	3		11							
	4		7							
	Off-Street					864				
2	1				3		3	3		2
	2		4		7					
	3						3			
	4		13							
	Off-Street					60				
3	1		7				3			
	2		8					2		
	3			11						
	4		8							
	Off-Street					204				
4	1			11						
	2		11							
	3	5	7							
	4		13							
	Off-Street					323				
5	1	4	7							
	2		7					3		
	3									
	4		14							
	Off-Street					49				
6	1									
	2		13		1					
	3	6	8							
	4	11						2		
	Off-Street					187				
7	1		16							
	2		11							
	3		14							
	4		13							
	Off-Street					86				
8	1		5			6				
	2		4				4			
	3		9							
	4	10						3		
	Off-Street					248				
9	1		11							
	2		13							
	3		11							
	4	8								
	Off-Street					351				
10	1		10				3			
	2		13							
	3	7	8							
	4	10								1
	Off-Street					197				
11	1	6	5							
	2		11				3			
	3		16							
	4		11							
	Off-Street					62				

BLOCK NO.	PAGE NO.	10-HOUR	2-HOUR	1-HOUR	16-MIN.	NO LIMIT	WHITE ZONE	YELLOW ZONE	GREEN ZONE	HANDICAP
12	1	7	7							
	2	7	2							
	3									
	4	8						3		
	Off-Street					70				
13	1									
	2		13					1	1	
	3	6	8							
	4		13						1	
	Off-Street					74				
14	1		15							
	2		13							
	3		16							
	4		12							
	Off-Street					25				
15	1		14							
	2		16							
	3	7	8							
	4		10							
	Off-Street					124				
16	1	7	7							
	2		15							
	3		9					2		
	4		15							
	Off-Street					10				
17	1		10							
	2	14								
	3		14							
	4		15							
	Off-Street					68				
18	1		13							
	2		32					2		
	3					4				
	4	5	13							
	Off-Street					81				
19	1									
	2		14							
	3		15							
	4		17							
	Off-Street					68				
20	1		14							
	2		12							
	3		15							
	4		13							
	Off-Street					39				
21	1	2		2						
	2		12							
	3	7	8							
	4	16								
	Off-Street					93				
22	1		15							
	2		28							
	3		15							
	4		35							
	Off-Street					119				
23	1		14							
	2	10								
	3	8								
	4	8							1	
	Off-Street					100				

BLOCK NO.	FACE NO.	10-HOUR	2-HOUR	1-HOUR	16-MIN.	NO LIMIT	WHITE ZONE	YELLOW ZONE	GREEN ZONE	HANDICAP ZONE
24	1	6	8			1				
	2	7				13				
	3									
	4		10					4		
	Off-Street					57				
25	1									
	2		17							
	3		15							
	4		17							
	Off-Street					87				
26	1		12							1
	2		8							
	3		16							
	4		12							
	Off-Street					58				
27	1	25								
	Off-Street					227				
28	1	6								4
	2	12								
	Off-Street									
29	1		14							
	2		16							
	3		7			6				
	4					8				
	Off-Street					84				
30	1									
	2		17							
	3		8			8				
	4		11					3		
	Off-Street					41				
31	1		15							
	2		12							
	3		12							
	4					3				
	Off-Street					31				
32	1								3	
33	1									3
	2					2				8
	Off-Street									
34	1									
	2					9		3		
	3		7							
	Off-Street					56				
35	1					11				
	2					9			2	
	3		2			3			4	
	Off-Street					6				



CHART I  
 DETERMINATION OF PARKING REQUIREMENTS IN MPA  
 (Presuming removal of Sheriff's Patrol in 1984 and 1995)

Year	General Growth at 2.5%/yr to 1990 and 2.0%/yr to 2010	General Growth <sup>†</sup> Parking Required	Court Growth Parking Required	Total Parking Required	Total Parking Required (less Patrol)	Total County <sup>*</sup> Personnel in MPA (Day shift only)	Patrol Parking Required	Total Personnel (less Patrol)
1982	0	2,050	0	2,050	2,050	2,322		
83	51	2,101	19	2,120	2,120	2,380		
84	53	2,154	19	2,173	1,904*	2,440	144	2,296
85	54	2,208	19	2,227	2,079	2,500	148	2,352
86	55	2,263	19	2,282	2,131	2,563	151	2,412
87	56	2,319	19	2,338	2,183	2,627	155	2,472
88	58	2,377	19	2,396	2,237	2,693	159	2,534
89	60	2,437	19	2,456	2,293	2,760	163	2,597
1990	61	2,498	19	2,517	2,350	2,829	167	2,662
91	60	2,548	19	2,567	2,397	2,886	170	2,716
92	51	2,599	19	2,618	2,444	2,943	174	2,769
93	52	2,651	19	2,670	2,493	3,002	177	2,825
94	53	2,704	19	2,723	2,543	3,062	180	2,882
95	54	2,758	19	2,777	2,415	3,124	362	2,762
96	55	2,813	19	2,832	2,463	3,186	369	2,817
97	56	2,869	19	2,888	2,511	3,250	377	2,873
98	57	2,926	19	2,945	2,561	3,314	384	2,930
99	59	2,985	19	3,004	2,612	3,381	392	2,989
2000	60	3,045	19	3,064	2,665	3,449	399	3,050
1	61	3,107	19	3,126	3,079	3,517	407	3,110
2	62	3,169	19	3,188	2,772	3,586	416	3,172
3	63	3,232	19	3,251	2,827	3,656	424	3,234
4	65	3,297	19	3,316	2,883	3,723	433	3,300
5	66	3,363	19	3,382	2,941	3,800	441	3,367
6	67	3,430	19	3,449	2,999	3,883	450	3,433
7	69	3,499	19	3,518	3,059	3,961	459	3,502
8	70	3,569	19	3,588	3,120	4,040	468	3,572
9	71	3,640	19	3,659	3,182	4,121	477	3,644
2010	73	3,713	19	3,732	3,245	4,204	487	3,717

† Current requirement based upon 1787 spaces currently available plus 200 waiting list plus 50 jury overflow plus 13 contingency.

\* See breakdown by activity.

• Indicates removal of patrol.