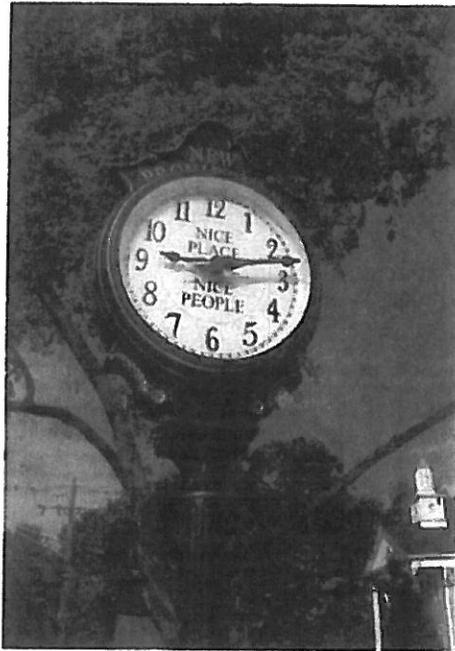


# SHARED PARKING STUDY

## DOWNTOWN SHARED PARKING for NEW PROVIDENCE Union County, New Jersey



by

## **Greenman - Pedersen, Inc.**

100 Corporate Drive, Suite 205  
Lebanon, NJ 08833  
Phone: 908-236-9001 Fax: 908-236-9669

OCTOBER 26, 2007

The signatures & seal affixed heron  
are all inclusive for the full  
contents of this document.

---

Dr. Cheryl Allen-Munley, PE, PP, CME  
New Jersey P.E. 32346 P.P. 5279

## TABLE OF CONTENTS

<b>Shared Parking Motivation.....</b>	<b>4</b>
<b>Work Program.....</b>	<b>5</b>
<b>Project Limits.....</b>	<b>6</b>
<b>Zoning Parking Requirements.....</b>	<b>7</b>
<b>Existing Parking Supply.....</b>	<b>7</b>
<b>Parking Proposed.....</b>	<b>7</b>
<b>Parking Validation.....</b>	<b>8</b>
<b>Parking Adequacy.....</b>	<b>9</b>
<b>Circulation.....</b>	<b>10</b>
<b>Conclusion.....</b>	<b>11</b>

## **LIST OF TABLES**

**TABLE 1 Parking Assessment Summary**

**TABLE 1a, 1b, 1c Parking Assessment by Block and Lot**

**Table 2a, 2b – Parking Survey Counts**

**Table 3 – Driveway Counts**

## **LIST OF FIGURES**

**FIGURE 1 – Site Map**

**FIGURE 2– Existing Conditions by Quadrant**

**FIGURES 3a, 3b, 3c – Tax Maps**

**FIGURES 4a, 4b–New Development Layout Alternatives**

**FIGURE 5 – Driveway Count Locations**

## **LIST OF APPENDICES**

**APPENDIX A: Institute of Traffic Engineers Share Parking Model Ordinance**

## Shared Parking Motivation

Creating a vibrant and diversified central business district is a challenge that many communities in New Jersey face. The most successful ones do so by creating an environment where people can move freely from store to store on foot after parking once. To be successful, a downtown must create a sense of “place”. Most of the successful downtown central business districts in New Jersey that have done this have a few common features – significant pedestrian traffic, efficient traffic flow, decorative streetscapes (such as brick paver sidewalks, ornamental light fixtures, and street furniture), interesting architectural themes, and good parking supply management.

The study of parking demand in most downtown areas reveals that while there may be sufficient parking on an overall basis, the problem is that convenient parking is not available at the right time or place. Creating shared parking facilities helps overcome this problem. The rationale for shared parking arises from understanding the overlapping needs of each parking generator. For example a parking space for an apartment building will be vacant during the day when the resident is parked in front of his office building, his doctor’s office, a restaurant or a shopping mall. If all parking needs were fully accommodated, there might be five spaces for every vehicle.

The Institute of Transportation Engineers (ITE), founded in 1930, is an international, educational and scientific association of over 16,000 transportation and traffic engineers. ITE’s publications for trip generation and parking generation are considered the industry standard. The analysis contained in this report relies both on the ITE Parking Generation Manual, 3<sup>rd</sup> Edition and the ITE Shared Parking Guidelines (Appendix A). These guidelines recognize the fluctuations of parking occupancy rates, from rates as low as 5% for an office on a weekend to 70% for a restaurant during the weekday. **Providing a separate space at every location that every vehicle may use on any day of the week is poor land use.** Land that is devoted to surplus parking costs the public in terms of lost rateables, excessive impervious coverage, inadequate public space, landscaping, walkways, and inefficient circulation.

New Providence is fortunate to possess a true town center with a concentration of retail, service and commercial uses, with abundant, free parking, all within walkable distances. Even though no formal shared parking has been established, users have created a de facto shared parking as they visit multiple

destinations without moving their vehicles. In recognition of this behavior, in 2005, New Providence (Figure 1) revised its zoning ordinance for the Central Commercial District (CCD) to reduce the parking requirement to one space for each 250 square feet regardless of use. A fair and balanced approach would formalize this use, sharing the costs and the benefits amongst all parking generators.

## **Work Program**

The New Providence Downtown Improvement District (DID) contracted the services of Greenman-Pedersen, Inc. (GPI) to determine whether sufficient parking will exist in the DID to accommodate the future needs of all businesses when full build-out occurs. To answer this question, GPI undertook the following work program:

- 1. Identified all land uses in the study area based on New Providence's Tax Assessor's records.*
- 2. In conjunction with the DID's Shared Parking Subcommittee, developed an efficient parking layout for the study area.*
- 3. Determined the net parking space supply that will be available after the proposed development is complete.*
- 4. Investigated driveways for possible closure and consolidation.*
- 5. Validated ITE's parking generation rates adjusted by the Shared Parking Guidelines, by comparing projections of currently occupied building to actual counts. Calculated future demand, by applying these rates to full build-out conditions.*
- 6. Compared the parking demand projected to the parking supply provided to determine the adequacy of the proposed plan and comment on the zoning requirements.*

## Project Limits

GPI was instructed to include the three quadrants centered at the intersection of Springfield Avenue and South Street as shown on Figure 2. This figure is based on an aerial photograph taken in 1999 updated to include the addition of McGrath Hardware, the Emergency Rescue Building, the expanded Village Center Supermarket and the Prestige Diner approved site plan. These quadrants are defined as follows:

Quadrant 1: SE corner

Quadrant 2: SW corner

Quadrant 3: NE corner not

As per the instructions of the committee, the church parking lot located on the NW corner was not included. The church's parking needs for regularly scheduled services and daytime childcare, in addition to full occupancy during weddings and funerals, preclude parkers from off-site locations.

Although initially considered, the land between the municipal pool and the SW quadrant was not included because it is prone to flooding. Moreover, a portion of the land is located within the 50' riparian buffer of Salt Creek and is listed on the Green Acres register. These constraints would make it difficult and expensive to convert the land to parking.

The Emergency Rescue building located on Academy Street behind the old municipal building has also not been included. Although the 50 spaces in its parking lot exceeds the zoning requirements for its building, the excess spaces are used during the work week by municipal employees and the adjacent office workers. However, during holidays and weekend, these spaces would be available for overflow parking.

## **Zoning Parking Requirements**

GPI obtained building size information from the New Providence Tax assessor for all structures located in the three study quadrants (Tax maps 3a, 3b and 3c). The parking requirements for the N Providence LLC's new building (8,000 SF) and the expanded supermarket (8,800 SF) have been included. The flat parking rate of one space per each 250 square feet regardless of use for the Central Commercial District (CCD) was applied to each of the structures. The results of these zoning requirements are tabulated in Table 1, Parking Assessment which summarizes the calculations for each quadrant in Table 1a, 1b and 1c. The required number of spaces for the combined three quadrant district based on the current zoning regulations is 987 parking spaces for the combined three quadrant 10.4 acres shared of parking area.

## **Existing Parking Supply**

GPI conducted a survey of the existing parking supply. The initial count was taken from the aerial photograph shown in Figure 2. Several field investigations were undertaken to determine the location of landscaping, sheds, dumpsters, drive-thrus and other obstructions. Counts of available on-street parking were also taken. Illegal parking, although observed, was not included. The results of these surveys are tabulated in Table 1. **The total existing parking is 936 off-street spaces with 46 on-street spaces. All parking is free with minimal enforcement for off-site parkers. It was found that 26 spaces are lost for both trash dumpsters and charity donation bins.**

## **Parking Proposed**

Figures 4a and 4b show two alternative layouts for N Providence LLC's proposed 8,000 SF new building. The Preferred Alternative, shown in Figure 4a, depicts the building with its loading zone facing Springfield Avenue. The other alternative, shown in Figure 4b and known as the Rotated Alternative, depicts the building with its loading zone facing South Street. Although the Rotated

Alternative provides more parking spaces, the Preferred Alternative was selected since the locations of the parking spaces were more fairly distributed in terms of their proximity to the district's businesses. Within the available space, parking was laid out with the following constraints:

- 1. Minimize parking space reductions within property lines.*
- 2. Maximize circulation, avoiding long parking lanes with dead ends.*
- 3. Provide interconnectivity between lots to limit additional movement through the congested intersection of Springfield Avenue.*
- 4. Avoid disturbing existing landscaping.*
- 5. Reduce the number of access points as much as possible given deed restrictions and circulation needs.*
- 6. Recognize the needs for dumpsters, walkways, snow removal, lighting and landscaping.*

Given these constraints, a total of 1001 spaces were provided by the Preferred Alternative, tabulated in Table 1 as Proposed Parking. Although the layout does not specifically locate dumpsters, donation bins, and cart returns, it was determined that a maximum of 30 parking spaces would be lost to them. The dumpsters currently located behind the Valley Center building will be consolidated into two central compactor facilities located at the rear of the buildings. Also, not included are shopping cart returns and dumpsters that are located outside the parking area that will not be disturbed. Given the loss of parking spaces, a net of 971 spaces will be available for parking in the shared area.

## **Parking Validation**

To determine if the parking set forth by the zoning requirements will meet the area's needs, projections were made for both weekday and weekend peak parking volumes using ITE's Parking Generation rates for both the area's existing uses and future developments. The property uses in Table 1a, 1b, 1c were classified as Land Use 820: Shopping, Land Use 701: Suburban Office Building, Land Use 110: General Light Industrial, Land Use 931: Quality Restaurant and Land Use 934: Suburban Drive-In Bank. The

Shopping Center rates were used for businesses whenever buildings were managed or owned collectively. As recommended in the ITE's Model Shared Parking Ordinance (Appendix A), percentage reductions were taken based on use and time period. For example, during the work week, an office will use 100% of its demand volume, while on the weekend only 5% will be needed.

To determine the validity of ITE's predictions for the New Providence Central Commercial District, actual parking counts were taken on three occasions, Wednesday, September 12 (10am – 6pm), Saturday, September 15 (10am – 2pm) and Saturday, September 22 (12 am – 6pm). The maximum weekday parking was found to be 475 spaces occupied, which occurred between from 12 – 1 pm and 555 spaces occupied on the weekend, which occurred between 1 – 2 pm. This observed parking demand was then compared with the predicted ITE parking volumes. These predictions were reduced to reflect the fact that the supermarket is currently vacant, the new 8,000 square foot building that has not yet been constructed and approximately 9,250 sq ft of existing building in the DID that were not occupied at the time of the parking lot occupancy counts.

These predictions, shown on Table 1 as "ITE w/o proposed", are 532 parkers on the weekdays and 615 spaces on the weekends. Comparing these predictions with the actual numbers observed, we find that ITE exceeds the weekday observations by 12% and the weekend observations by 10%. This result may be due to the fact that September shopping volume is lower than the parking volume experienced at other times of the year, most notably December. It is also possible, that New Providence patrons make multiple stops to the shopping area without moving their cars. In any case, we can conclude that the ITE projections are conservative and will exceed the amount of parking needed on a typical day.

### **Parking Adequacy**

After validating the ITE parking generation volumes for the existing conditions, the question of whether there will be adequate parking available in the future condition after the supermarket is expanded and a new 8,000 square foot building is located in the parking lot can now be addressed. Projections for full occupancy are shown in Table 1 as 694 spaces on the weekday and 817 spaces on the weekend. The net

971 spaces provided exceeded the ITE predictions by 30% on the weekdays and 18% on the weekend. This calculation assumed that 50% of the new 8,000 sq ft building would be restaurant while the remaining portion would be retail as well as all of the other currently unoccupied space.

Actual parking conditions may be somewhat better since this comparison did not take into account the additional 50 spaces located in the Emergency Rescue parking lot that will be available on weekends and holidays as well as the additional 46 on-street spaces parking spaces that will be available at all times. In the event shortages do arise during the holiday period, off-site employee parking could be arranged, possibly at the municipal pool site directly west of the retail area. Every effort should be made to encourage the public to use all of the parking spaces, not just those in the front of the building. Creating clearly marked, clean and attractive rear entrances to the Valley Center stores could accomplish this goal.

## Circulation

The parking layout for the Preferred Alternate provides a total of 971 spaces. This is 35 spaces more than is provided by the existing layout. Improvements in internal-circulation between the parking lots, increased efficiencies, and provision of a centralized compactor for the Village Center allowed this increase to occur despite the reduction in absolute parking area by the footprint of the 8,000 square foot building. This improved internal circulation also enabled us to recommend closure of three driveways. One week automatic traffic counts were taken at 14 driveways as shown on Figure 5. The peak hourly volumes are recorded in Table 3. If Driveway 2, located directly south of the Mexican Cantina and Driveway 3 between the Colorado Ski Shop and M&M Liquors were closed, the additional volume would probably enter the shared parking area at Driveway 4, directly north of the Colorado Ski Shop, also known as the "McGrath Driveway" which remain unchanged. The peak hour volumes measured (26 vehicles at Driveway 2 and 25 vehicles at Driveway 3) can be easily handled at Driveway 4 with no loss in service. The driveway located directly south of Village Nails should also be closed as the volumes were too low to measure. These driveway closures are recommended, thereby allowing the

land to be put to higher uses such as parking or in the case of the Mexican Cantina, outdoor dining. Furthermore, the reduction in curb cuts increases pedestrian safety and improves traffic flow by reducing the number of mid-block turning movements. Other driveway eliminations, while justified in terms of traffic volumes, cannot be pursued because of either deed restrictions or the localized circulation needs of adjacent businesses.

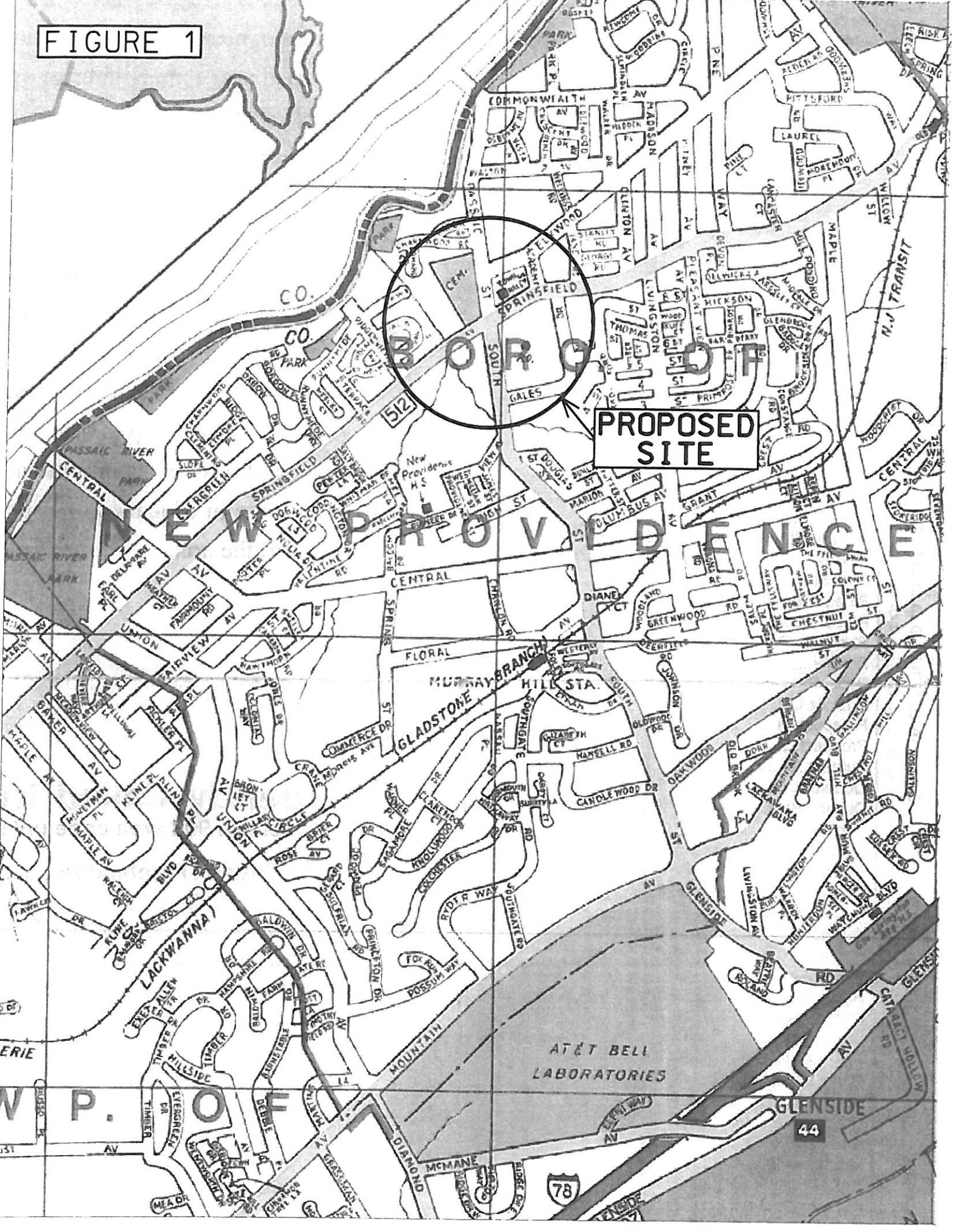
## Conclusions

The foregoing analysis has demonstrated the need for pursuing a Shared Parking approach in the New Providence Downtown Improvement Districts. Although the number of parking spaces required by zoning exceeded the number of spaces provided by 16 spaces or 1.5 percent, the projected New Providence demand of 692 spaces for normal weekday peak periods and 814 spaces for normal weekend peak periods will be more than satisfied. Better consolidation of dumpsters and/or removal of the layout constraints in the rear of the South Street buildings could also increase the parking supply. Minor, localized shortages that occur within individual quadrants can also be accommodated by on-street parking. Nevertheless, special measures will have to be taken to meet the holiday parking demand predicted to exceed normal demand by 30%. This cyclical spike is routinely met by other retail areas through the provision of off-site parking for employees.

Through consolidation and increased efficiency of available parking within the New Providence DID, parking needs can be satisfied as demand fluctuates on a daily and annual basis. The ITE Shared Parking Guidelines predict these savings to approach 9% of total required parking spaces. Significant cost savings and reductions in traffic congestion may also be achieved, although additional data is needed to quantify these benefits. Regardless of the outcome of this effort, shared parking exists in New Providence today. Formalizing a shared parking plan will require formal easement agreements between property owner that will address the current and future needs of all of the impacted property owners. A fair sharing of the burdens of shared parking should be matched by a fair sharing of its benefits.

**FIGURE 1:**  
Site Map

FIGURE 1



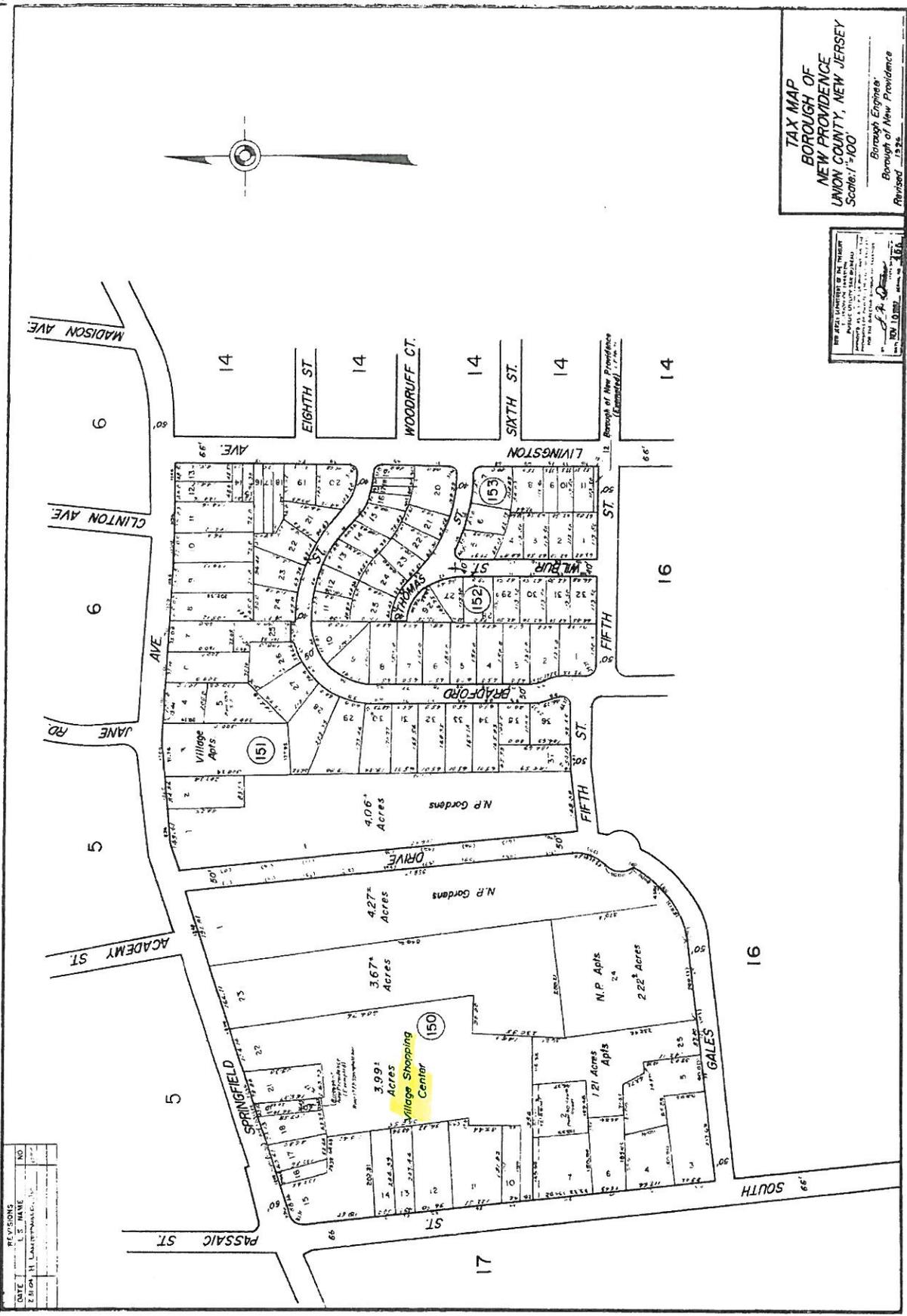
**FIGURE 2:**  
Existing Conditions by Quadrant



FIGURE 2

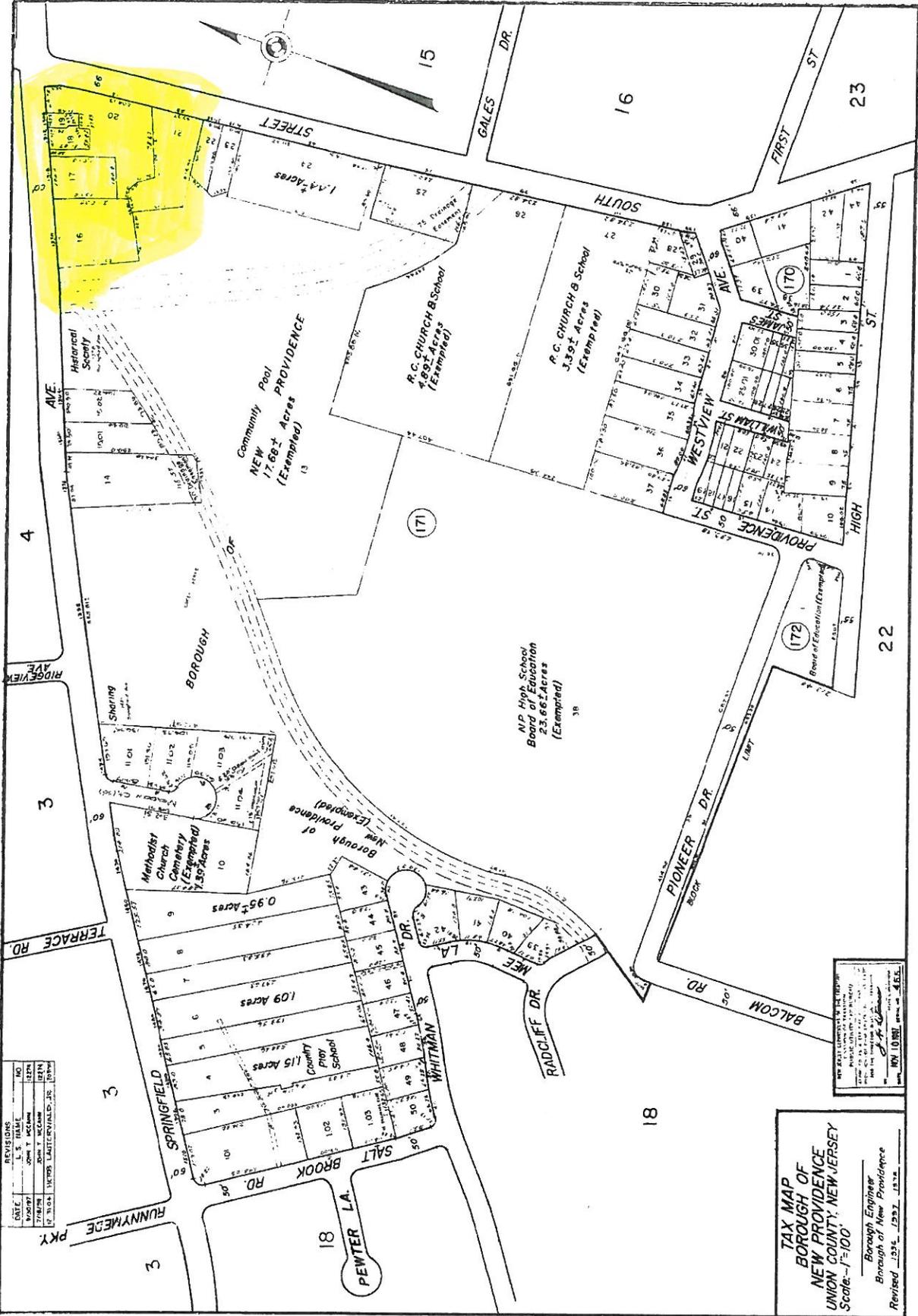
FIGURE 3d

DATE	REVISIONS	NO.
1-1-78	REVISED	1
1-1-78	REVISED	2
1-1-78	REVISED	3
1-1-78	REVISED	4
1-1-78	REVISED	5
1-1-78	REVISED	6
1-1-78	REVISED	7
1-1-78	REVISED	8
1-1-78	REVISED	9
1-1-78	REVISED	10
1-1-78	REVISED	11
1-1-78	REVISED	12
1-1-78	REVISED	13
1-1-78	REVISED	14
1-1-78	REVISED	15
1-1-78	REVISED	16
1-1-78	REVISED	17
1-1-78	REVISED	18
1-1-78	REVISED	19
1-1-78	REVISED	20
1-1-78	REVISED	21
1-1-78	REVISED	22
1-1-78	REVISED	23
1-1-78	REVISED	24
1-1-78	REVISED	25
1-1-78	REVISED	26
1-1-78	REVISED	27
1-1-78	REVISED	28
1-1-78	REVISED	29
1-1-78	REVISED	30
1-1-78	REVISED	31
1-1-78	REVISED	32
1-1-78	REVISED	33
1-1-78	REVISED	34
1-1-78	REVISED	35
1-1-78	REVISED	36
1-1-78	REVISED	37
1-1-78	REVISED	38
1-1-78	REVISED	39
1-1-78	REVISED	40
1-1-78	REVISED	41
1-1-78	REVISED	42
1-1-78	REVISED	43
1-1-78	REVISED	44
1-1-78	REVISED	45
1-1-78	REVISED	46
1-1-78	REVISED	47
1-1-78	REVISED	48
1-1-78	REVISED	49
1-1-78	REVISED	50
1-1-78	REVISED	51
1-1-78	REVISED	52
1-1-78	REVISED	53
1-1-78	REVISED	54
1-1-78	REVISED	55
1-1-78	REVISED	56
1-1-78	REVISED	57
1-1-78	REVISED	58
1-1-78	REVISED	59
1-1-78	REVISED	60
1-1-78	REVISED	61
1-1-78	REVISED	62
1-1-78	REVISED	63
1-1-78	REVISED	64
1-1-78	REVISED	65
1-1-78	REVISED	66
1-1-78	REVISED	67
1-1-78	REVISED	68
1-1-78	REVISED	69
1-1-78	REVISED	70
1-1-78	REVISED	71
1-1-78	REVISED	72
1-1-78	REVISED	73
1-1-78	REVISED	74
1-1-78	REVISED	75
1-1-78	REVISED	76
1-1-78	REVISED	77
1-1-78	REVISED	78
1-1-78	REVISED	79
1-1-78	REVISED	80
1-1-78	REVISED	81
1-1-78	REVISED	82
1-1-78	REVISED	83
1-1-78	REVISED	84
1-1-78	REVISED	85
1-1-78	REVISED	86
1-1-78	REVISED	87
1-1-78	REVISED	88
1-1-78	REVISED	89
1-1-78	REVISED	90
1-1-78	REVISED	91
1-1-78	REVISED	92
1-1-78	REVISED	93
1-1-78	REVISED	94
1-1-78	REVISED	95
1-1-78	REVISED	96
1-1-78	REVISED	97
1-1-78	REVISED	98
1-1-78	REVISED	99
1-1-78	REVISED	100



TAX MAP  
 BOROUGH OF  
 NEW PROVIDENCE  
 UNION COUNTY, NEW JERSEY  
 Scale: 1" = 100'  
 Borough Engineer  
 Borough of New Providence  
 Revised 1978

THE APPLICANT'S PUBLIC UTILITY MAP OR MAPS  
 PUBLIC UTILITY MAP OR MAPS  
 PREPARED BY THE APPLICANT  
 FOR THE BOROUGH OF NEW PROVIDENCE  
 UNION COUNTY, NEW JERSEY  
 DATE: 1-1-78  
 BY: [Signature]  
 TITLE: [Title]



DATE	REVISIONS	NO.
12/15/14	U.S. TRAIL	1
12/15/14	JOHN F. MCCORMACK	2
12/15/14	WALTER LAUTERBACH, JR.	3

FIGURE 3b

**TAX MAP OF  
BOROUGH OF  
NEW PROVIDENCE  
UNION COUNTY, NEW JERSEY**  
Scale - 1"=100'  
Borough Engineer  
Borough of New Providence  
Revised 1295, 1297, 1298

NEW PROVIDENCE BOROUGH ENGINEER  
JOHN F. MCCORMACK  
WALTER LAUTERBACH, JR.  
MON LOBBE, INC. 245

FIGURE 3C

REVISIONS	
DATE	NO.



**FIGURES: 4a, 4b:**  
New Development Layout Alternatives

FIGURE 4a





FIGURE 4b

SPRINGFIELD AVENUE

SOUTH STREET

POTENTIAL T. EC. S.

Existing Wetlands Buffer Line

UAG-S  
153.55

**FIGURE 5:**  
**Driveway Count Locations**

FIGURE 5



**Table 1:**  
**Parking Assessment Summary**

**TABLE 1 - New Providence Downtown Parking Summary**

Quadrant	Total Sq. Ft.	Existing	On Street Parking	Proposed	Weekday			Counts	ITE w/o Proposed	ITE w/ Proposed	Zoning
					Sat	Asides	Net Proposed				
1	164502	570	20	566	19	547	250	300.2	458.4	658	
2	44126	198	18	204	5	199	135	138.3	138.3	177	
3	37889	168	8	231	6	225	90	91.3	95.4	152	
Total	246517	936	46	1001	30	971	475	530	693	987	

Quadrant	Total Sq. Ft.	Existing	On Street Parking	Proposed	Weekend			Counts	ITE w/o Proposed	ITE w/ Proposed	Zoning
					Sat	Asides	Net Proposed				
1	164502	570	20	566	19	547	295	370.1	567.1	658	
2	44126	198	18	204	5	199	142	130.0	130.0	177	
3	37889	168	8	231	6	225	118	114.7	119.9	152	
Total	246517	936	46	1001	30	971	555	615	817	987	

**Note**

1. Set asides = all dumpsters, compactors charity bins, shopping cart returns to be located within parking spaces
2. Zoning required for CCD = one space per 250 sq ft regardless of use

**TABLES 1a, 1b, 1c:**  
Parking Assessment by Block and Lot

**TABLE 1a - Quadrant 1 Parking Requirements**

Block	Lot	Property Owner	Property Location	Existing Gross Floor Area (Sq.Ft.)	Required Parking Spaces (Per Zoning Requirements)	Required Parking Spaces (Per ITE Requirements Weekday)	Required Parking Spaces (Per ITE Requirements Weekend)
150	10	Faloutte, William R & Gloria P 119 Oak Ridge Ave Summit, NJ 07901	44 South St shop ctr	1973	7.9	4.7	5.9
150	11	Wachovia Corp-Property Tax Process PO Box 36246 Charlotte, NC 28236	36 South St bank	8696	34.8	30.3	30.3
150	12	A.V.S.O., L.C.-C/O Pat Mazziucco 7 Crabapple Ln Niantic, CT 06357	28 South St restaurant	3223	25.8	22.8	30.5
150	13	Madonna Management, L.L.C. 17 Watchung Ave Chatham, NJ 07928	vacant shop ctr 22 South St (residence) restaurant	3223 2043	4.085	6.6	8.2
150	14	Slikker, Leonard & Phyllis 884A Liverpool Cir Manchester Twp, NJ 08759	shop ctr 18 South St shop ctr	2042	32.7	14.4	2.6
150	15	NP Global Rty, LLC-Bank of America NC1-028-08-01 900 W Trade Charlotte, NC 28255	1298 Springfield Ave shop ctr	12022	48.1	28.7	35.7
150	16	NP Global Rty, LLC-Bank of America NC1-028-08-01 900 W Trade Charlotte, NC 28255	1288 Springfield Ave shop ctr	2606	10.4	6.2	7.7
150	17	Quinn, A. Madonna, Ryan & Madonna 1284 Springfield Ave New Providence, NJ 07974	1286 Springfield Ave shop ctr	192	0.8	0.5	0.6
150	18	Quinn, A. Madonna, Ryan & Madonna 1284 Springfield Ave New Providence, NJ 07974	1280 Springfield Ave shop ctr	4320	17.3	10.3	12.8
150	19	New Providence, NJ 07974 Urduang-Landenman, LLC 633 Arlington Ave Westfield, NJ 07090	1272 Springfield Ave shop ctr	3360	13.4	8.0	10.0
150	20	Borough of New Providence 360 Elkwood Ave New Providence, NJ 07974	Rear 1272 Springfield Ave	0	0.0	0.0	0.0
		Subtotal - Quadrant 1 w/o N Providence LLC		65975	224.0	162.2	193.1
150	21	N Providence, LLC 54 Horsehill Rd-Suite 202 Cedar Knolls, NJ 07927	1286 Springfield Ave restaurant	3970	15.9	28.1	37.5
150	22	N Providence, LLC 54 Horsehill Rd-Suite 202 Cedar Knolls, NJ 07927	1280 Springfield Ave shop ctr	49729	216.0	118.6	147.7
150	22	N Providence, LLC 54 Horsehill Rd-Suite 202 Cedar Knolls, NJ 07927	vacant shop ctr 1280 Springfield Ave vacant shop ctr	4275	10.2	10.2	12.7
150	22	N Providence, LLC 54 Horsehill Rd-Suite 202 Cedar Knolls, NJ 07927	vacant shop ctr 1200 Springfield Ave vacant shop ctr	33753	135.0	80.5	100.2
150	22	N Providence, LLC 54 Horsehill Rd-Suite 202 Cedar Knolls, NJ 07927	vacant shop ctr 1260 Springfield Ave vacant shop ctr	8800	35.2	21.0	26.1
150	22	N Providence, LLC 54 Horsehill Rd-Suite 202 Cedar Knolls, NJ 07927	vacant shop ctr 1200 Springfield Ave vacant shop ctr	4000	16.0	9.5	11.9
150	22	N Providence, LLC 54 Horsehill Rd-Suite 202 Cedar Knolls, NJ 07927	vacant restaurant 1200 Springfield Ave vacant restaurant	4000	16.0	28.3	37.8
		Subtotal - N Providence, LLC		106527	435.0	296.2	374.0
		<b>TOTAL</b>		164502	658.0	458.4	567.1

**TABLE 1b - Quadrant 2 Parking Requirements**

Block	Lot	Property Owner	Property Location	Existing Gross Floor Area (Sq.Ft.)	Required Parking Spaces (Per Zoning Requirements)	Required Parking Spaces (Per ITE Requirements Weekday)	Required Parking Spaces (Per ITE Requirements Weekend)
171	16	The Provident Microhouse LTD PTRSP 33 Division St-PO Box 997 Somerville, NJ 08876	1330 Springfield Ave shop ctr	8609	35	20.5	25.6
171	17	Valley Realty C/O Prestige Diner 1318 Springfield Ave New Providence, NJ 07974	1318 Springfield Ave restaurant	3282	14	23.2	31.0
171	18	Dennett, Mitchell & Roberts 12 Sittes Rd Warren, NJ 07059	1312 Springfield Ave shop ctr	3238	13	7.7	9.6
171	19	Govind Investments, L.L.C. 399 Route 10 East Hanover, NJ 07936	1308 Springfield Ave shop ctr	2220	9	5.3	6.6
171	20	Bank of America-AT&T RE Assmt NCA- 001-03-81 101 N Tryon St Charlotte, NC 28265	15 South St bank	3631	15	12.7	12.7
171	21	29 South St NJ, LLC-%GRC Mgmt Co 14 Fairmount Ave Chatham, NJ 07928	29 South St commercial	10080	41	28.6	1.4
171	22	Weil New Providence, L.L.C 23 St Lawrence Ave Maplewood, NJ 07040	35-37 South St shop ctr	2400	10	5.7	7.1
171	23	B & T Realty Co, Inc 39-41 South St New Providence, NJ 07974	39-41 South St shop ctr	2400	10	5.7	7.1
171	24	Provident Savings Bank PO Box 17-830 Bergen Rd Jersey City, NJ 07302	65 South St bank	8288	34	28.8	28.8
			Total	44128	177	130.3	130.0

**TABLE 1c - Quadrant 3 Parking Requirements**

Block	Lot	Property Owner	Property Location	Existing Gross Floor Area (Sq.Ft.)	Required Parking Spaces (Per Zoning Requirements)	Required Parking Spaces (Per ITE Requirements Weekday)	Required Parking Spaces (Per ITE Requirements Weekend)
50	1	CAM, L.L.C. P.O.Box 130 Summit, NJ 07902	25 Passaic St shop ctr	5470	22	13.0	16.2
50	2	Crescent Brook, L.L.C. 44 Harrison Brook Dr Basking Ridge, NJ 07920	29 Passaic St shop ctr	1300	8	3.1	3.9
50	15	Map Investment Group 155 Passaic Ave. Fairfield, NJ 07004	1253 Springfield Ave-UN 1 shop ctr	6080	25	14.5	18.1
50	16.01	Adams Realty Enterprises-% J.Savino 50 Watchung Dr Basking Ridge, NJ 07920	1275 Springfield Ave-UN 1 shop ctr	5591	23	13.3	16.6
50	16.02	Adams Realty Enterprises-% J.Savino 50 Watchung Dr Basking Ridge, NJ 07920	1275 Springfield Ave-UN 2 shop ctr	2379	10	5.7	7.1
50	16.03	KAP Group, LLC 81 Monticello Way South River, NJ 08882	1275 Springfield Ave-UN 3 shop ctr	2100	9	5.0	6.2
50	16.04	Garnett, Leonard & Esther 62 Edgemere Rd Livingston, NJ 07039	1275 Springfield Ave-UN 4 shop ctr	1050	5	7.4	9.9
50	16.05	Cascadia, Arlette 10 Overhill Way Bentley Heights, NJ 07922	1275 Springfield Ave-UN 5 shop ctr	1050	5	2.5	3.1
50	16.06	Z-Place, Inc 8 Jacobs La Scotch Plains, NJ 07076	1275 Springfield Ave-UN 6 shop ctr	1400	6	3.3	4.2
50	16.07	Shah, Rashmi, Shah, Merena 1261 Springfield Ave-UN7 New Providence, NJ 07974	1275 Springfield Ave-UN 7 shop ctr	1400	6	9.9	13.2
50	16.08	Sovis, Jan & Annia 990 Long Hill Road Millington, NJ 07948	1275 Springfield Ave-UN 8 shop ctr	1400	6	3.3	4.2
50	16.09	Timony, Margaret 469 Charnwood Rd New Providence, NJ 07974	1275 Springfield Ave-UN 9 shop ctr	1050	5	2.5	3.1
50	16.10	Gelomini, Michael 1275 Springfield Ave-UN10 New Providence, NJ 07974	1275 Springfield Ave-UN 10 shop ctr	720	3	1.7	2.1
50	16.11	Gelomini, Michael 1275 Springfield Ave-UN10 New Providence, NJ 07974	1275 Springfield Ave-UN 11 shop ctr	720	3	1.7	2.1
50	17	T J & J Realty 1263 Springfield Ave New Providence, NJ 07974	1283 Springfield Ave vacant	885 1744	2.74 6.978	4.2 0.0	1.8 5.2
50	18	Fischer, Carl E JR 3556 E 8620 South Salt Lake City, UT 84121	1291 Springfield Ave light industrial	3750	15	4.2	2.8
			<b>Total</b>	<b>37689</b>	<b>152</b>	<b>95.4</b>	<b>119.9</b>

**TABLES 2a, 2b:**  
**Parking Survey Counts**

TABLE 2a - New Providence Downtown Parking Survey (Weekday 9-12-07)

	10	11	12	1	2	3	4	5	6
Quad 1 - Sec 1	83	92	98	95	84	85	117	72	86
Sec 2	24	25	29	16	21	29	33	29	28
Sec 3	1	5	16	13	7	5	2	2	10
Sec 4	6	6	7	7	7	11	7	10	4
Sec 5	21	25	42	35	27	33	25	28	25
Sec 6	4	8	13	11	8	9	13	13	14
Sec 7	15	15	14	16	15	14	14	11	1
Sec 8	19	18	19	20	16	19	15	17	8
Total	183	205	250	214	187	208	230	187	182
Quad 2 - Sec 1	12	10	12	10	9	11	8	11	5
Sec 2	17	23	29	34	11	11	6	8	31
Sec 3	28	31	32	36	33	32	27	20	16
Sec 4	15	21	19	16	16	15	12	9	11
Sec 5	28	27	26	20	25	20	19	3	1
Sec 6	4	9	6	7	7	7	7	9	7
Sec 7	12	12	11	10	10	11	8	5	0
Total	116	133	135	133	111	107	87	65	71
Quad 3 - Sec 1	7	6	10	12	10	13	6	9	1
Sec 2	15	16	18	16	18	15	15	14	10
Sec 3	16	17	19	19	18	18	20	14	14
Sec 4	18	16	17	16	17	14	15	16	14
Sec 5	21	27	29	27	27	28	26	22	19
Total	77	82	93	90	90	88	82	75	58
Total All Quadrants	376	420	478	437	388	403	399	327	311

TABLE 2b - New Providence Downtown Parking Survey (Saturday - Yom Kippur 9-22-07)

	10*	11*	12	1	2	3	4	5	6
Quad 1 - Sec 1	30	32	31	31	22	19	24	19	16
Sec 2	41	47	46	60	57	53	31	26	24
Sec 3	8	9	7	6	7	6	5	1	2
Sec 4	20	24	35	38	28	26	24	18	21
Sec 5	14	14	19	12	13	14	17	9	11
Sec 6	2	4	6	10	9	5	4	5	8
Sec 7	5	5	7	5	6	7	5	6	3
Sec 8	28	29	38	35	40	46	35	29	24
Sec 9	3	4	5	6	5	5	3	3	2
Sec 10	2	2	4	10	13	10	11	9	8
Sec 11	7	8	11	4	5	5	1	1	2
Sec 12	11	12	18	16	15	13	13	11	9
Sec 13			58	62	60	53	50	49	47
Total	171	190	285	295	280	262	223	186	177
Quad 2 - Sec 1	20	22	36	28	29	31	27	17	15
Sec 2	23	22	25	26	24	13	2	3	9
Sec 3	7	9	20	12	8	7	4	2	2
Sec 4	4	7	11	7	7	6	4	3	2
Sec 5	15	14	24	19	8	11	8	9	7
Sec 6	0	0	0	1	1	0	0	0	0
Sec 7	8	9	9	9	8	10	6	5	6
Sec 8	5	7	17	11	13	14	14	10	7
Total	82	90	142	113	98	92	65	49	48
Quad 3 - Sec 1	10	10	13	13	16	12	17	14	11
Sec 2	11	12	25	27	36	25	20	18	18
Sec 3	22	22	18	13	10	5	4	4	4
Sec 4	14	16	50	42	29	38	22	20	22
Sec 5	31	39	12	10	10	12	13	10	10
Total	88	99	118	105	101	92	76	66	65
Total All Quadrants	341	379	545	513	479	446	364	301	290

\* = Data was inventoried on 9-15-07

**TABLE 3:**  
Driveway Counts

**Table 3 - Driveway Counts**

	Peak Date	Peak Time (Hr.)	Peak Total
Site 1 Entrance	9/29/2007	AM - 10:45AM	274
	10/1/2007	PM - 12:00PM	267
Site 1 Exit	9/29/2007	AM - 11:00AM	137
	10/1/2007	PM - 12:30PM	170
Site 2 Entrance	9/27/2007	AM - 10:45AM	9
	9/29/2007	PM - 5:15PM	13
Site 2 Exit	9/28/2007	AM - 11:00AM	9
	10/1/2007	PM - 5:45PM	13
Site 3 Entrance	9/29/2007	AM - 11:00AM	13
	9/28/2007	PM - 1:45PM	16
Site 3 Exit	9/27/2007	AM - 10:15AM	4
	9/28/2007	PM - 2:15PM	9
Site 4 Entrance	9/29/2007	AM - 11:00AM	81
	9/29/2007	PM - 12:45PM	86
Site 4 Exit	9/29/2007	AM - 11:00AM	87
	9/29/2007	PM - 12:45PM	97
Site 5 Entrance	9/29/2007	AM - 11:00AM	214
	9/28/2007	PM - 12:15PM	185
Site 5 Exit	9/29/2007	AM - 11:00AM	286
	9/29/2007	PM - 12:00PM	268
Site 6 Entrance	10/3/2007	AM - 9:00AM	41
	9/27/2007	PM - 3:45PM	39
Site 6 Exit	10/4/2007	AM - 9:30AM	39
	9/26/2007	PM - 6:30PM	44
Site 7 Entrance	10/1/2007	AM - 7:30AM	287
	10/1/2007	PM - 12:00PM	187

	Peak Date	Peak Time (Hr.)	Peak Total
Site 8 Exit	10/5/2007	AM - 7:15AM	337
	10/1/2007	PM - 12:00PM	214
Site 9 Entrance	10/3/2007	AM - 8:15AM	89
	10/4/2007	PM - 12:45PM	53
Site 9 Exit	9/29/2007	AM - 8:45AM	57
	9/27/2007	PM - 12:45PM	34
Site 10 Entrance	9/29/2007	AM - 10:45AM	23
	9/27/2007	PM - 12:45PM	17
Site 10 Exit	10/4/2007	AM - 10:15AM	9
	10/1/2007	PM - 1:45PM	6
Site 11 Entrance	9/28/2007	AM - 7:45AM	75
	9/28/2007	PM - 6:15PM	51
Site 12 Entrance	9/29/2007	AM - 10:00AM	127
	9/28/2007	PM - 12:00PM	108
Site 13 Exit	9/29/2007	AM - 11:00AM	156
	9/27/2007	PM - 12:45PM	136
Site 14 Exit	9/29/2007	AM - 9:45AM	54
	9/29/2007	PM - 1:15PM	50

**APPENDIX A:**

**Institute of Traffic Engineers Shared Parking Planning Ordinance**

---

# Appendix F. Model Shared Parking Ordinance Provisions

NOTE: The following model language is intended to provide a basis for more refined language in a new ULI *Shared Parking* manual. It is based primarily on committee member experience and the following sources: the NPA Model Parking Ordinance; the regulations of Toronto and Mississauga, Ontario, Canada; and the regulations of Los Angeles. This language would, of course, be tailored to the particular jurisdiction's needs. The recommendations and numbers included in this Appendix are for purposes of illustration only. Notes about possible options in contents are provided in brackets.

## I. Shared Parking Projects and Minimum Number of Parking Spaces

Cumulative parking requirements for mixed-use occupancies or shared facilities may be reduced where it can be determined that the peak requirements of the several occupancies occur at different times (either daily or seasonally).

**Table F-1. Weekday Parking Occupancy Rates—Percent of Basic Minimum Needed During Time Period**

Uses	Weekday Night Midnight–6 a.m.	Weekday Day 8 a.m.–5 p.m.	Weekday Evening 6 p.m.–Midnight
Residential**	100%	60% (CBD=80%)	100%
Office	5	100	20
Commercial-Retail	5	90	80
Hotel (CBD)+	100	80	100
Hotel (non-CBD)+	100	70	100
Restaurant	10	70*	100
Movie Theater	10	40	80
Entertainment	10	40	100
Conference/Convention	5	100	100

\*Fast-food, breakfast or lunch-oriented establishment = 100 percent.

+Excludes conference/convention facilities.

\*\*The minimum requirements for resident's own spaces must be met in exclusive (nonshared) parking, but guest parking and extra residents' parking may be shared.

**Table F-2. Weekend Parking Occupancy Rates Percent of Basic Minimum Needed During Time Period**

Uses	Weekend Night Midnight–6 a.m.	Weekend Day 8 a.m.–5 p.m.	Weekend Evening 6 p.m.–Midnight
Residential**	100%	80%	100%
Office	5	5	5
Commercial-Retail	5	100	70
Hotel (CBD)+	100	80	100
Hotel (non-CBD)+	100	70	100
Restaurant	20	70*	100
Movie Theater	10	80	100
Entertainment	50	80	100
Conference/Convention	5	100	100

\*Fast-food, breakfast or lunch-oriented establishment = 100 percent.

+Excludes conference/convention facilities.

\*\*The minimum requirements for resident's own spaces must be met in exclusive (nonshared) parking, but guest parking and extra residents' parking may be shared.

The minimum number of parking spaces for a shared use project shall be determined by a study following the procedures of the Urban Land Institute *Shared Parking* manual or approved substitute. The study shall be subject to the approval of the Director of Planning and Planning Commission or Board of Zoning Appeals. The actual number of parking spaces required shall be based on local demand rates as in the following tables, except that default rates from the ULI manual may be used where it is impractical to determine "local" demand rates. (For example, a proposed land use that is not found locally or whose annual peak season is too far in the future to wait to do a survey are cases where national default rates are appropriate.) These rates are set to include a small "safety margin" of parking beyond that minimally needed to serve an average peak demand.

[Insert Optional table of demand rates by weekday night, daytime and evening and weekend night, daytime and evening, adjusted for local conditions—similar to that used by Toronto or Mississauga. See Tables F-1 and F-2 for time-of-day values.]

For the purpose of determining the greatest of the aggregate gross minimum numbers of parking spaces for nighttime, daytime and evening periods, the following rules shall be applied:

- a. The minimum number of parking spaces that are to be provided and maintained for each use shall be determined by identifying the use in the column entitled "Type of Use" and the corresponding minimum number of parking spaces in the same row.
- b. The gross minimum number of parking spaces shall be multiplied by the "occupancy rate" for each use for the weekday night, daytime and evening periods, and weekend night, daytime and evening periods respectively.
- c. The gross minimum numbers of parking spaces for each of the purposes referred to for each time period shall be added to produce the aggregate gross minimum numbers of parking spaces for each time period.
- d. The greatest of the aggregative gross minimum numbers of parking spaces for each time period shall be determined.

If the shared parking plan assumes use of an existing parking facility already being used by continuing uses, then parking surveys shall be conducted at least twice during a typical week and on two or more weeks (during a peak season, if at all possible) to determine actual parking accumulation. The surveys should include morning, afternoon and evening peaks as appropriate.

The following factors should be taken into account in determining adjustments to parking supply requirements:

- a. Distance between sharing uses and the parking facility
- b. Pedestrian connections among sharing uses and the parking facility
- c. Vehicular connections
- d. Whether parking will be paid
- e. Location
- f. Proximity to major transit corridors or stations
- g. Special trip reduction program, such as subsidized vanpooling, transit, shuttle or telecommuting

Parking spaces to be shared cannot be reserved for specific uses or individuals except during off-peak hours. Spaces for residents may not be shared, although guest spaces and extra residents' spaces beyond minimum requirements may be shared with nonresidential uses.

## 2. Captive Market Parking Requirements

Parking requirements for retail, restaurant, hotel, convention and conference uses may be reduced where it can be determined that some portion of the patronage of these businesses comes from other uses (e.g., employees of area offices patronizing restaurants) located within a maximum walking distance of 500 feet. Parking requirements may be reduced up to 90 percent as appropriate. Whenever practical, such a reduction should be supported by surveys at similar establishments.

## 3. Agreement Between Property Owner and the City

Procedure. In specific instances set forth in Section, the Zoning Board of Appeals or other authority as designated by the City may approve a reduction in required parking spaces. Applications for such a reduction must be submitted in writing accompanied by the following:

- a. A parking demand analysis prepared by a qualified parking or traffic consultant, which substantiates the basis for granting a reduced number of spaces.
- b. Where the requested reduction is 50 spaces or more, a site plan showing how the additional number of spaces otherwise required could subsequently be provided on the site ("landbanking"). The additional parking area shall maintain all required yards, setbacks and driveways for subject property and shall meet all requirements of this Ordinance. The additional parking areas may be provided in a surface lot or structured facility, as determined by the City to be practical, feasible and compatible with the site plan for the use. Alternatively, the property owner must provide a performance bond sufficient to construct the number of spaces reduced in a

shared or municipal facility or to fund shuttle bus/van operations or other trip reduction elements that would reduce parking demand sufficiently. The land or performance bond must be available for two years after initial occupancy.

- c. A covenant must be executed guaranteeing that the owner will provide the additional spaces directly or by payment of in-lieu fees if the City, upon thorough investigation of the actual use of parking spaces at the building or use within two years of initial occupancy, recommends to the Zoning Board of Appeals that the approved reduction be modified or revoked. Said covenant shall meet the same requirements for covenants set forth in other sections of this document. The City must document insufficient parking supply by showing occupancy rates over 98 percent for at least two consecutive hours on at least three separate days within a single month.
- d. The owner shall pay the anticipated fee for a parking study of actual parking accumulation to be carried out within one to two years of occupancy.
- e. The land banking or performance bond requirement may be waived when the policy body will certify that previous experience on similar shared parking projects indicates it is unlikely a serious deficiency would result.
- f. The owners agree that, before a change in use or operating hours that could increase peak parking demand by at least 10 percent, a follow-up study shall be provided analyzing the change in demand patterns. Any forecast deficiency must be met by the construction of additional parking spaces, payment of in-lieu fees, or support of shuttle service or other employee trip reduction program satisfactory to the City.
- g. A shared parking operations plan must be prepared to the satisfaction of the Zoning Board of Appeals or other authority as designated by the City showing that:

- Parking spaces intended for shared parking conveniently serve the land uses intended.
- Consideration is given to the appropriate location and layout of high vs. low turnover parking spaces.
- Any controlled parking such as paid, gated or valet parking areas should be located in such a manner as to control turnover rates but not prohibit some parkers from using all spaces.
- Directional signage is provided directing drivers to the most convenient parking areas for each particular land use (if such distinctions can be made).

- Pedestrian links between parking areas and land uses are as direct and short as possible.
- Safety and security are ensured and maintained at the site through a comprehensive program including, but not limited to, signing, lighting and television monitoring if warranted.

#### 4. Covenants

When a covenant between parties is required by this Ordinance, the following standards shall apply:

- A. Be executed by the owner of said lot or parcel of land the parties having beneficial use thereof.
- B. Be enforceable by either of the parties having beneficial use thereof, or both.
- C. Be enforceable against the owner, the parties having beneficial use and their heirs, successors and assigns, or both.
- D. Be first duly recorded in the Office of the Recorder of Deeds.

#### 5. Agreement Between Sharing Property Owners

If a privately owned parking facility is to serve two or more separate properties, then a legal agreement between property owners is required that indicates responsibilities for operating, maintaining and accepting liability for personal injury and property damage. Unless explicitly stated to the contrary, the property owner of the parking facility accepts responsibility for these areas.

#### 6. Parking Space Design Requirements

All parking stalls and aisle dimensions shall meet the requirements of this section. If parking is shared among low-turnover and high-turnover uses, the high-turnover dimensions and layout shall be used for any time-restricted spaces.

#### 7. Walking Distance and Pedestrian Connections

Shared spaces to be used by residential units must be located within 300 feet of dwelling unit entrances they will serve. Shared spaces must be located within 500 feet of the principal building entrances of all other sharing uses. However, up to 20 percent of the spaces may be located greater than 500 feet but less than 1,000 feet from the principal entrances if they do not serve

residential uses. Clear, safe pedestrian connections must be provided, requiring no crossing of an arterial street except at a signalized intersection along the pedestrian pathway. Up to 75 percent of nonresidential spaces may be provided at greater distances if dedicated shuttle bus or van service is provided from a remote parking facility. The service plan and performance guarantees must be approved by the Planning Director and Planning Commission or Board of Zoning Appeals.

### **8. Valet and Tandem Parking**

Valet or tandem (double-length) parking may be used to meet shared parking requirements or supported by a shared parking operations plan. Tandem spaces may only be used for residents and business fleet operations.