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MEMORANDUM

DCI JOB NO. 2014-018

TO: Terence Smith, Traffic & Parking
City of Somerville, MA

FROM: Amos Fernandes, P.E., PTOE, AICP
Transportation Manager

SUBJECT: **Parking Study**
40 Pitman St
Somerville, MA

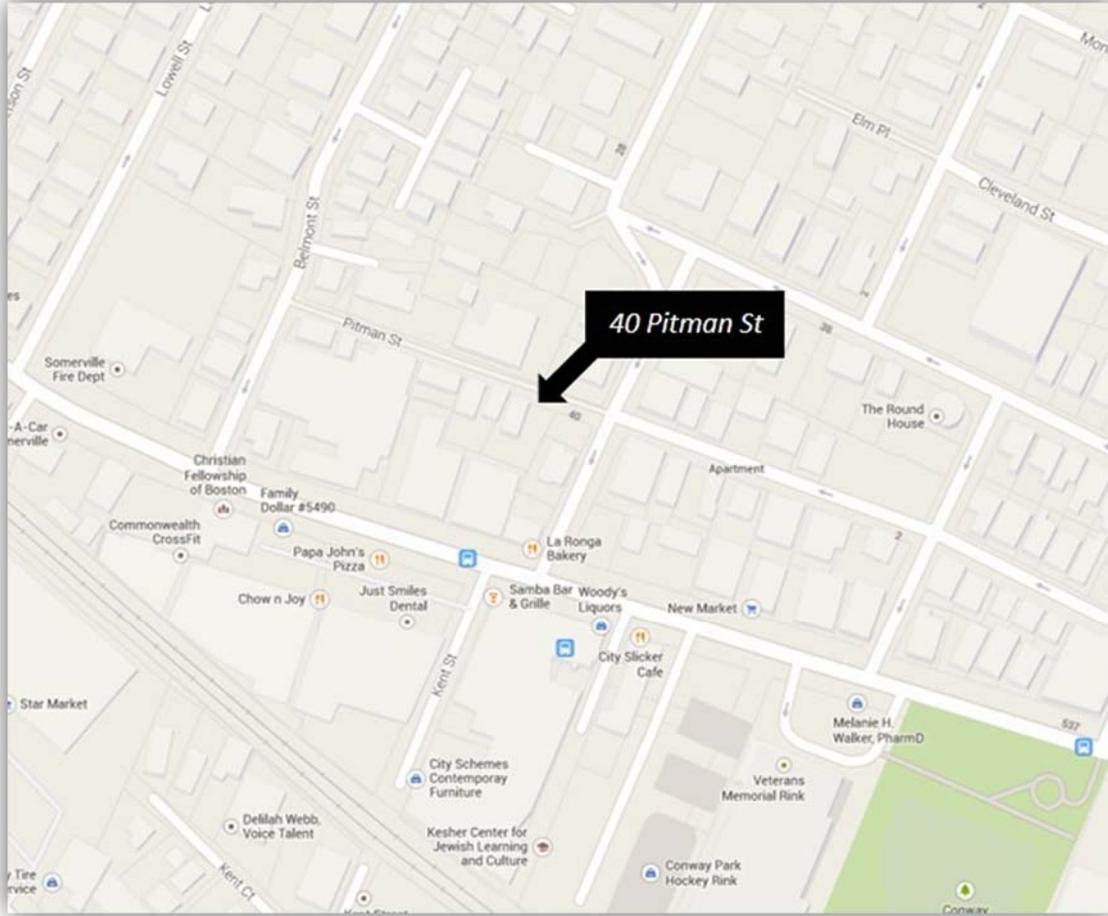
DATE: March 10, 2014

Design Consultants, Inc. has evaluated the transportation and parking impacts of the project site at 40 Pitman Street in Somerville, Massachusetts. The project at 40 Pitman Street consists of modifications to the existing residential building which will require relief from the Somerville Zoning Ordinance (Article 9) for 2 spaces. Two (2) residential units exist today. Under the Plan, three (3) additional units are proposed for a total of five (5) residential units. Six (6) off-street parking spaces are provided in the Plan and the Somerville Zoning Ordinance requires eight (8) spaces. As a result, DCI has conducted an on-street parking utilization study to determine the availability of on-street parking in the vicinity of the project site at 40 Pitman Street.

This memorandum serves to demonstrate that the 40 Pitman Street redevelopment project provides adequate parking to satisfy the proposed redevelopment and that the site will not have an adverse impact on the surrounding neighborhood's on-street parking supply. The following characteristics of the Site and the surrounding area serve to justify the parking variance requested for the redevelopment:

- Proximity to Public Transit;
- Transportation Modes and Characteristics; and
- On-Street Parking Utilization.

Figure 1: Project Location



Map Source: Google Maps

Transit Supply

The Site is conveniently situated close to public transportation. The Site is less than 1-mile away from the Porter Square Transit Station and approximately 1-mile from the Harvard Square Transit Station. Moreover, the Site is served by the following MBTA bus routes #83 and #87 on Somerville Avenue.

The Green Line Extension (GLX) project will have a proposed transit stations at Gilman Square and Union Square Station – both less than 1-mile away. The anticipated completion date for the Union Square Station is 2016. Gilman Square Station is expected to be complete by 2019. This project will extend the existing MBTA Green Line service from a relocated Lechmere Station in East Cambridge to Union Square in Somerville and College Avenue in Medford. This project is a major transportation priority of the Commonwealth and will offer a “one-seat” ride along the project corridor to downtown Boston, (eliminating the need for transfers at Lechmere Station and at Orange and Red Line stations) improving travel times within the project corridor. The new transit station will meet or exceed the Americans with Disabilities Act (ADA) standards. Mitigation measures

during construction will reduce existing noise and vibration impacts from area railroads. Once completed, trains will operate every five to six minutes in the peak periods, providing fast and efficient service to downtown Boston.

Existing Transportation Modes and Characteristics

Local transportation data for the area encompassing 40 Pitman Street was obtained and analyzed using information from the US Census Bureau and the latest American Community Survey (ACS) 5-Year Estimate (2008-2012).

The ACS is a nationwide survey that collects and produces information on demographic, social, economic, and housing characteristics about the US population every year. With respect to local transportation and the subject site, this information provides an important tool to identify unique community characteristics and allows decision makers to obtain a clear picture of their population so that scarce transportation infrastructure can be allocated efficiently and effectively.

40 Pitman Street is located in Census Tract 3512.04. The Site within the Census Tract is shown in Figure 2. Census Tracts are small, relatively permanent statistical subdivisions of a county or equivalent entity that are updated by local participants prior to each decennial census as part of the Census Bureau's Participant Statistical Areas Program. Census tracts generally have a population size between 1,200 and 8,000 people, with an optimum size of 4,000 people.

According to the 2008-2012 ACS data for Census Tract 3512.04, approximately one-third (33.5%) of the local population have no automobile. The vehicle ownership data for Census Tract 3512.04 is summarized in Table 1 and Figure 3.

Figure 2: 40 Pitman Street in Census Tract 3512.04

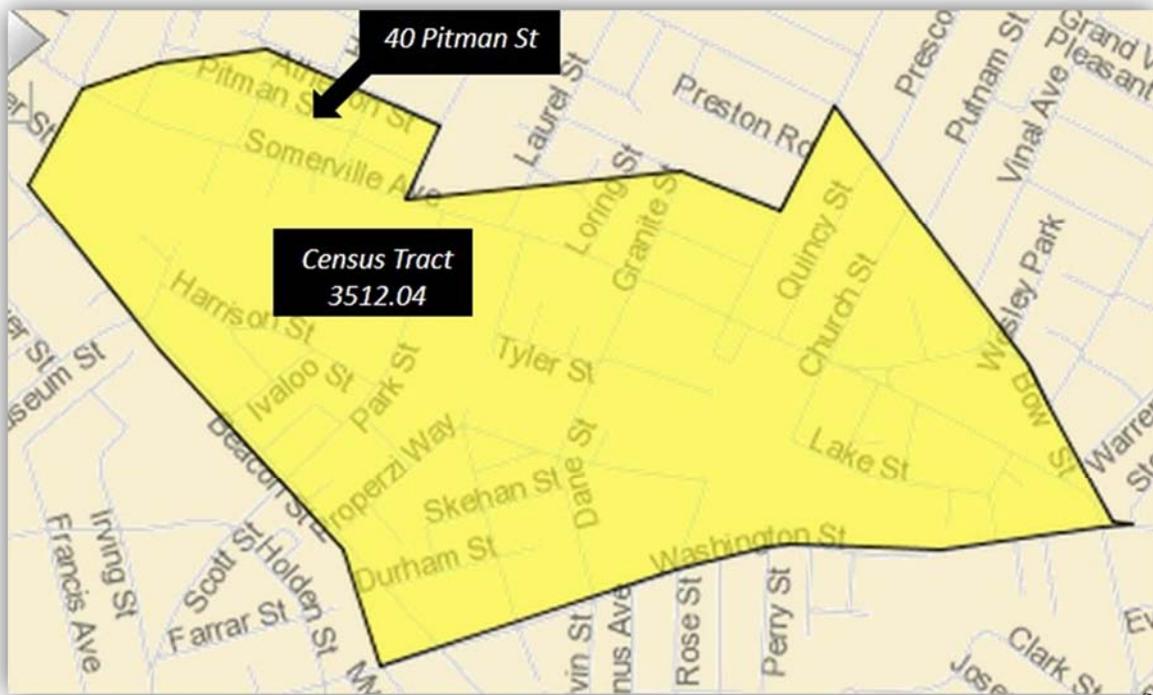
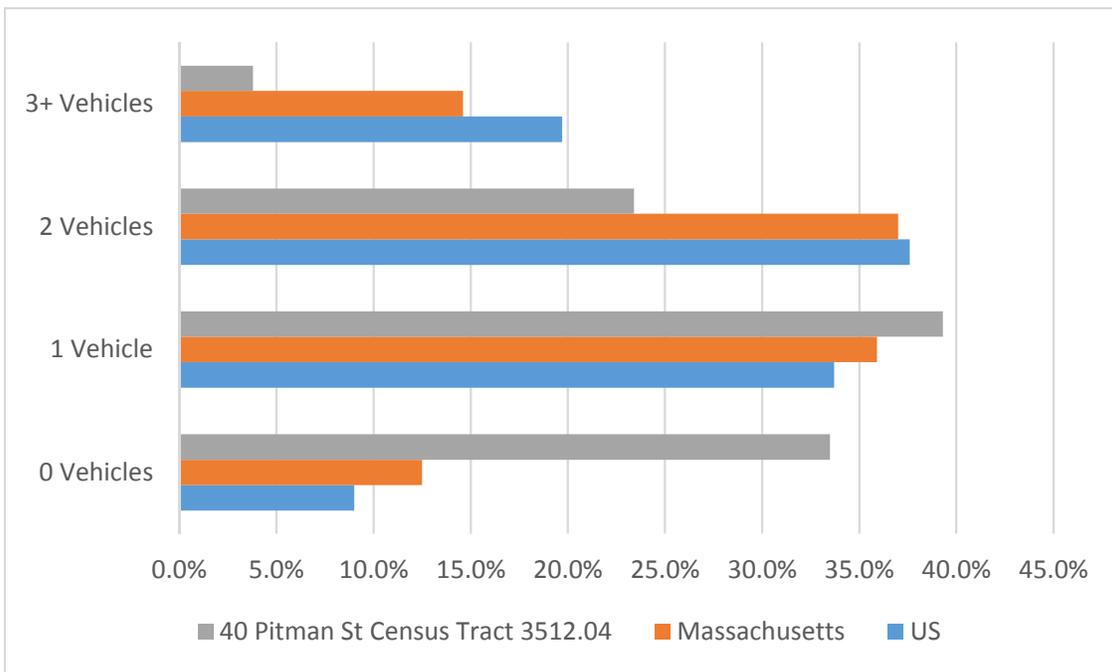


Table 1: Vehicle Ownership Summary (2008-2012 ASC Data)

Automobile Ownership	US	Massachusetts	40 Pitman St
			Census Tract 3512.04
0 Vehicles	9.0%	12.5%	33.5%
1 Vehicle	33.7%	35.9%	39.3%
2 Vehicles	37.6%	37.0%	23.4%
3+ Vehicles	19.7%	14.6%	3.8%
Total	100.0%	100.0%	100.0%

Figure 3: Vehicle Ownership Summary (2008-2012 ASC Data)



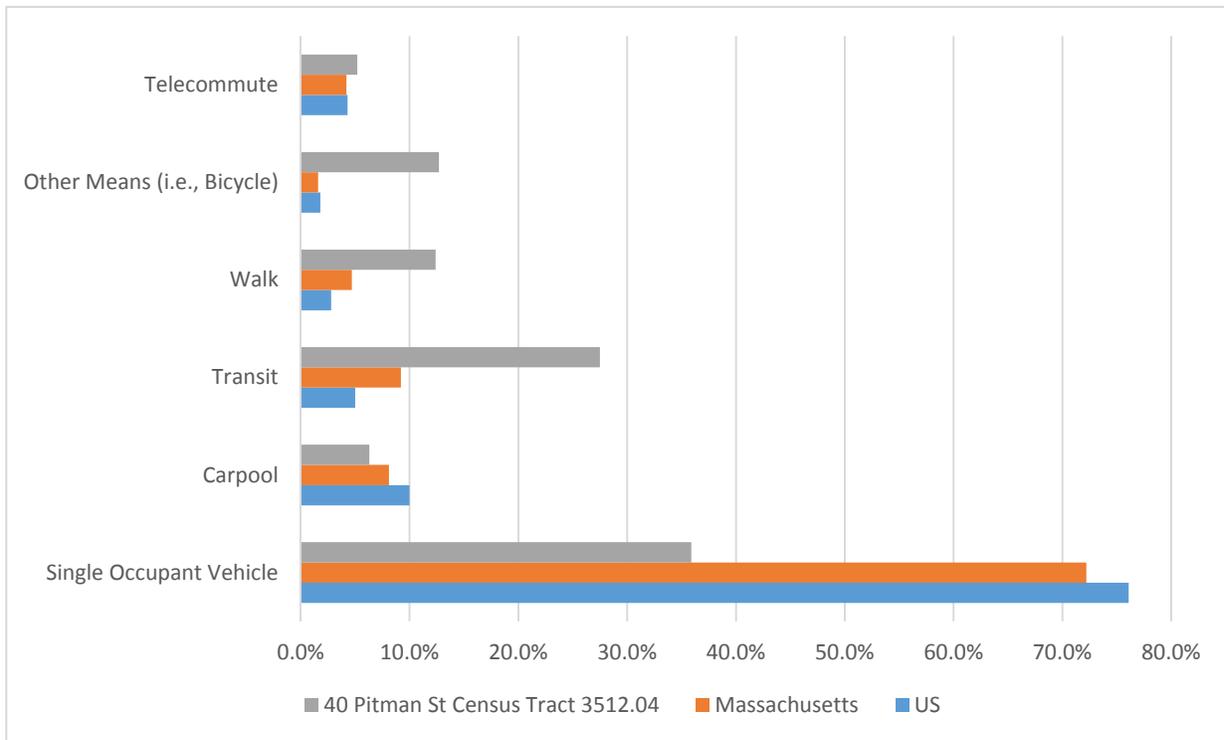
As summarized in Table 1 and illustrated in Figure 3, 40 Pitman Street is located in an area where vehicle ownership for occupied housing units is not as prevalent compared to the State and the Nation. For the entire nation and the State of Massachusetts, 91% and 87.5% of occupied housing units have access to at least 1 automobile, respectively. For the local community that encompasses 40 Pitman Street one-third of the occupied housing units has no automobile.

In terms of mode split for the commute to work, approximately (57.8%) of the local working community find transportation to work without use of an automobile. Approximately a quarter (27.5%) of the local working population use transit and over a quarter (25.1%) of the local working population walk or bicycle to work. Just over 5% of the local working population in the area of 40 Pitman Street work from home. The mode split data for Census Tract 3512.04 is summarized in Table 2 and Figure 4.

Table 2: Mode Split for the Commute to Work (2008-2012 ASC Data)

Commuting to Work	US	Massachusetts	40 Pitman St
			Census Tract 3512.04
Single Occupant Vehicle	76.1%	72.2%	35.9%
Carpool	10.0%	8.1%	6.3%
Transit	5.0%	9.2%	27.5%
Walk	2.8%	4.7%	12.4%
Other Means (i.e., Bicycle)	1.8%	1.6%	12.7%
Telecommute	4.3%	4.2%	5.2%
Total	100.0%	100.0%	100.0%

Figure 4: Mode Split for the Commute to Work (2008-2012 ASC Data)



As summarized in Table 2 and illustrated in Figure 4, 40 Pitman Street is located in an area where the automobile as a means of transportation to work is relatively obsolete compared to the State and the Nation. For the entire nation and the State of Massachusetts, 86.1% and 80.3% of the population use the automobile for the work commute, respectively. For the local community at 40 Pitman Street, only 42.2% use the automobile for the work commute.

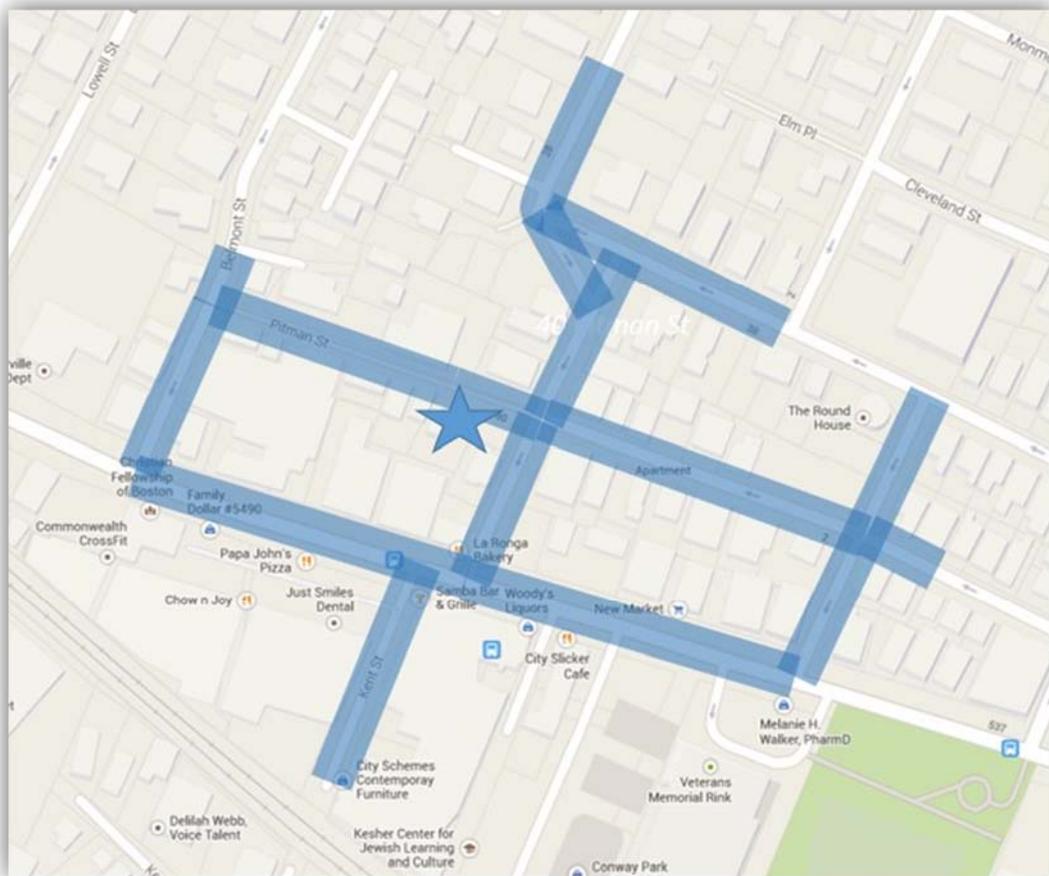
Existing On-Street Parking Utilization

The study area included all on-street parking and municipal off-street parking in the vicinity of 40 Pitman Street within 500 linear feet. DCI performed a parking survey of all available on-street and off-street parking areas to determine the existing parking utilization. The study area included the following roadways:

- Belmont St: Somerville Ave to Belmont Terrace,
- Spring St: Somerville Ave to #32 Spring St
- Beech St: Somerville Ave to Atherton St
- Kent St: Somerville Ave to End of St
- Somerville Ave: Belmont St to Beech St
- Pitman St: Belmont St to Beech St
- Cypress St: Beech St to #16 Cypress St
- Atherton St: Spring St to Harvard St

This study area is shown in Figure 3.

Figure 3: Project Study Area



On-Street Parking Inventory

DCI recorded the number of available parking spaces in the study area streets during a typical weekday and during a typical Saturday. The parking data were collected during the following time periods:

- Saturday, March 1, 2014 (11:00 – 2:00 PM)
- Tuesday, March 4, 2014 (12:00 – 2:00 PM & 5:00 – 7:00 PM)

The results of the parking surveys are summarized in Table 3. Detailed tables with the complete parking survey data are contained in the attached Appendix. As indicated by the parking survey summary, an average total of 95 permit parking spaces were available during the weekday mid-day period (12:00 PM to 2:00 PM). An average of 85 of permit parking spaces were available during the weekday evening period (5:00 PM to 7:00 PM). On Saturday, during the mid-day observation period (11:00 AM to 2:00 PM), an average of 76 permit parking spaces were available. The results of this parking survey indicate that there is a substantial amount of under-utilized permit parking spaces spread amongst the study area streets.

Table 3: Parking Survey Summary

Street	Section		Subsection	Weekday	Weekday	Weekend
	From	to		Afternoon	to Evening	to Afternoon
Belmont St	Somerville Ave	Belmont Terrace	East Side	6	7	7
			West Side	4	2	4
Spring St	Somerville Ave	#32 Spring St	East Side	5	6	6
			West Side	8	10	11
Beech St	Somerville Ave	Atherton St	East Side	3	4	6
			West Side	1	5	5
Kent St	Somerville Ave	End of St	East Side	No Parking	No Parking	No Parking
			West Side	5	3	2
Somerville Ave	Belmont St	Beech St	North Side	9	9	11
			South Side	7	8	10
Pitman St	Belmont St	Beech St	North Side	No Parking	No Parking	No Parking
			South Side	5	7	8
Cypress St	Beech St	#16 Cypress St	North Side	0	3	2
			South Side	1	1	0
Atherton St	Spring St	Harvard St	North Side	3	5	7
			South Side	4	1	1
TOTAL OCCUPIED				61	71	80
PERMIT PARKING CAPACITY				156	156	156
TOTAL AVAILABLE				95	85	76
% AVAILABLE				61%	54%	49%

Conclusions

This study has examined the transportation and parking impacts of the project site at 40 Pitman Street in Somerville, Massachusetts. The project at 40 Pitman Street consists of modifications to the existing residential building which consists of two (2) residential units today. Under the Plan, three (3) additional units are proposed for a total of five (5) residential units. Six (6) off-street parking spaces are provided in the Plan and the Somerville Zoning Ordinance requires eight (8) spaces. Therefore this project seeks a parking relief or zoning variance of two (2) off-street parking spaces.

As a result, DCI has conducted an on-street parking utilization study and determined that there is availability of on-street parking in the vicinity of the project site at 40 Pitman Street. An average total of 95 permit parking spaces were available during the weekday mid-day period (12:00 PM to 2:00 PM). An average of 85 of permit parking spaces were available during the weekday evening period (5:00 PM to 7:00 PM). On Saturday, during the mid-day observation period (11:00 AM to 2:00 PM), an average of 76 permit parking spaces were available.

40 Pitman Street is located in an area where the automobile as a means of transportation to work is relatively obsolete compared to the State and the Nation. For the entire nation and the State of Massachusetts, 86.1% and 80.3% of the population use the automobile for the work commute, respectively. For the local community at 40 Pitman Street, only 42.2% use the automobile for the work commute. For the entire nation and the State of Massachusetts, 91% and 87.5% of occupied housing units have access to at least 1 automobile, respectively. For the local community that encompasses 40 Pitman Street, one-third of the occupied housing units has no automobile.

The Site is conveniently situated close to public transportation. The Site is less than 1-mile away from the Porter Square Transit Station and approximately 1-mile from the Harvard Square Transit Station. The Site is served by the following MBTA bus routes #83 and #87 on Somerville Avenue. The Green Line Extension (GLX) project will have a proposed transit stations at Gilman Square and Union Square Station – both less than 1-mile away.

Synthesizing these site characteristics holistically, in combination with the supporting multimodal transportation infrastructure, the proposed redevelopment is expected to fit the lifestyle and goals of the local community and the City of Somerville.

Appendix

Parking Survey Data Sheets & Calculations

Parking Survey

City: Somerville, MA

Proj. No.: 2014-018

Street: 40 Pitman St

Sheet No.: 3

Date: 3/1/2014 Saturday

Field by: Steve Wen

Weather: sunny

Notes: _____

Saturday Occupied Parking Spaces

Street	Section		Subsection	11:00 AM	12:00 PM	1:00 PM
	From	to		to 12:00 PM	to 1:00 PM	to 2:00 PM
Belmont St	Somerville Ave	Belmont Terrace	East Side	8	7	6
			West Side	5	4	4
Spring St	Somerville Ave	#32 Spring St	East Side	6	5	6
			West Side	12	10	11
Beech St	Somerville Ave	Atherton St	East Side	7	6	5
			West Side	5	6	4
Kent St	Somerville Ave	End of St	East Side	No Parking	No Parking	No Parking
			West Side	1	2	3
Somerville Ave	Belmont St	Beech St	North Side	11	10	12
			South Side	12	7	10
Pitman St	Belmont St	Beech St	North Side	No Parking	No Parking	No Parking
			South Side	9	5	9
Cypress St	Beech St	#16 Cypress St	North Side	2	2	2
			South Side	1	0	0
Atherton St	Spring St	Harvard St	North Side	8	7	7
			South Side	1	1	1
TOTAL:				88	72	80

Parking Survey

City: Somerville, MA

Proj. No.: 2014-018

Street: 40 Pitman St

Sheet No.: 2

Date: 3/4/2014 Tuesday

Field by: Frantz

Weather: Overcast 20's

Notes: _____

Weekday Occupied Parking Spaces

Street	Section		Subsection	12:00 PM	12:30 PM	1:00 PM	1:30 PM	5:00 PM	5:30 PM	6:00 PM	6:30 PM
	From	to		to 12:30 PM	to 1:00 PM	1:30 PM	2:00 PM	5:30 PM	6:00 PM	6:30 PM	to 7:00 PM
Belmont St	Somerville Ave	Belmont Terrace	East Side	5	6	6	6	6	7	7	7
			West Side	4	4	3	3	2	2	2	3
Spring St	Somerville Ave	#32 Spring St	East Side	4	4	5	5	6	7	6	5
			West Side	7	7	8	8	11	11	9	9
Beech St	Somerville Ave	Atherton St	East Side	4	4	1	1	3	3	4	4
			West Side	0	0	2	2	4	4	6	6
Kent St	Somerville Ave	End of St	East Side	No Parking	No Parking	No Parking	No Parking	No Parking	No Parking	No Parking	No Parking
			West Side	3	3	6	6	3	3	3	3
Somerville Ave	Belmont St	Beech St	North Side	7	10	9	8	7	10	11	9
			South Side	8	7	6	5	9	10	6	8
Pitman St	Belmont St	Beech St	North Side	No Parking	No Parking	No Parking	No Parking	No Parking	No Parking	No Parking	No Parking
			South Side	5	5	5	5	6	6	8	8
Cypress St	Beech St	#16 Cypress St	North Side	0	0	0	0	1	3	3	3
			South Side	1	1	1	1	1	1	1	2
Atherton St	Spring St	Harvard St	North Side	7	2	2	2	4	4	6	7
			South Side	1	5	5	5	1	1	1	1
TOTAL:				56	58	59	57	64	72	73	75

Parking Survey

City: Somerville, MA

Proj. No.: 2014-018

Street: 40 Pitman St

Sheet No.: 1

Date: 2/27/2014 Thursday

Field by: Steve Wen

Weather: sunny

Notes: _____

Total Available Parking Spaces

Street	Section		Subsection	Total Available Spaces	
	From	to			
Belmont St	Somerville Ave	Belmont Terrace	East Side	11	Permit
			West Side	9	Permit
Spring St	Somerville Ave	#32 Spring St	East Side	18	Permit
			West Side	18	Permit
Beech St	Somerville Ave	Atherton St	East Side	10	Permit
			West Side	11	Permit
Kent St	Somerville Ave	End of St	East Side	No Parking	
			West Side	7	Permit
Somerville Ave	Belmont St	Beech St	North Side	17	2HR Parking except by Permit
			South Side	20	2HR Parking except by Permit
Pitman St	Belmont St	Beech St	North Side	No Parking	
			South Side	12	Permit
Cypress St	Beech St	#16 Cypress St	North Side	3	Permit
			South Side	2	Permit
Atherton St	Spring St	Harvard St	North Side	11	Permit
			South Side	7	Permit
TOTAL:				156	