

Portsmouth
Parking & Traffic Safety Committee
8:00 A.M. – April 7, 2016
City Hall – Eileen Dondero Foley City Council Chambers

ON-SITE COMMITTEE: Please meet on Tuesday, April 5th at 8:00 AM in the upper parking lot at City Hall, 1 Junkins Avenue, to view the following locations:

- **High Street**
 - **Court Street at Washington Street**
-

AGENDA

I. CALL TO ORDER

II. ROLL CALL

III. ACCEPTANCE OF THE MINUTES

IV. FINANCIAL REPORT

V. PUBLIC COMMENT (15 MINUTES)

VI. NEW BUSINESS:

- A. Downtown Parking Utilization Study. Presentation of 2015 study findings and recommendations by John Burke. **Anticipated action – no action required**
- B. Court Street at Washington Street. Request by resident to remove STOP signs on Court Street approaches to the intersection. **Sample motion - move to recommend removal of STOP signs on Court Street at Washington Street.**
- C. High Street and Hanover Street. Request by DPW to remove a total of three parking spaces to accommodate sidewalk and crosswalk improvements. **Sample motion - move to recommend removal of parking spaces, two on High Street, one on Hanover Street at Fleet Street.**
- D. Miller Avenue speed limit. Request by resident to relocate speed limit signs. **Anticipated action - move to refer to City staff for further evaluation and report back.**

VII. OLD BUSINESS/ACTION ITEMS:

- A. Motorcycle parking on sidewalks. Request from Marc Stettner to revise rules regarding enforcement. **Anticipated action – move to refer to City staff for report back at future meeting.**

VIII. PUBLIC COMMENT

IX. INFORMATIONAL

- A. Traffic calming policies and procedures
- B. Water Country traffic study update
- C. Proposed private parking lot app by Brian Slovenski

ADJOURNMENT

Percentage of Fiscal Year Complete 66.67%
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Totals Thru
February 29, 2016

FY 16

	FY 16 to Date:		
	TOTALS	BUDGETED	% of Budget
Parking Meter Fees	1,473,035	1,765,500	83%
Parking Meter Space Rentals	80,589	50,000	161%
Meter In Vehicle	61,603	50,000	123%
Parking Garage Revenue	1,419,716	1,850,000	77%
Garage Passes	703,510	1,000,000	70%
Parking Validation	11,000	10,000	110%
Pass Reinstatement	2,130	2,000	107%
Vaughan St Parking Facility	11,250	15,000	75%
Parking Violations	510,591	700,000	73%
Immobilization Administration Fee	15,610	12,000	130%
Summons Admin Fee	200	5,000	4%
Total FY 16 Parking	4,289,234	5,459,500	79%

FY 16 BUDGETED

	(3,047,195.00)	Transfer to Parking Fund
	2,412,305.00	Funds Remaining in Gen Fund
	5,459,500.00	Total Revenue



John M. Burke, PE, CAPP
Independent Consulting
Parking, Transit & Downtown Development

February 29, 2016

Eric Eby, Parking & Transportation Engineer
Portsmouth Public Works Department
680 Peverly Hill Road
Portsmouth, NH 03801

RE: 2015 Parking Utilization Study, Portsmouth, NH
Technical Report

Dear Eric:

This technical report provides a summary of findings and recommendations resulting from parking utilization surveys conducted in Downtown Portsmouth during the months of May, July and October, 2015. The surveys were requested to assist the City in reviewing demand-based pricing practices and considering parking rate and regulation adjustments based on current demand. The report includes the results of the utilization surveys with recommendations.

Background and History

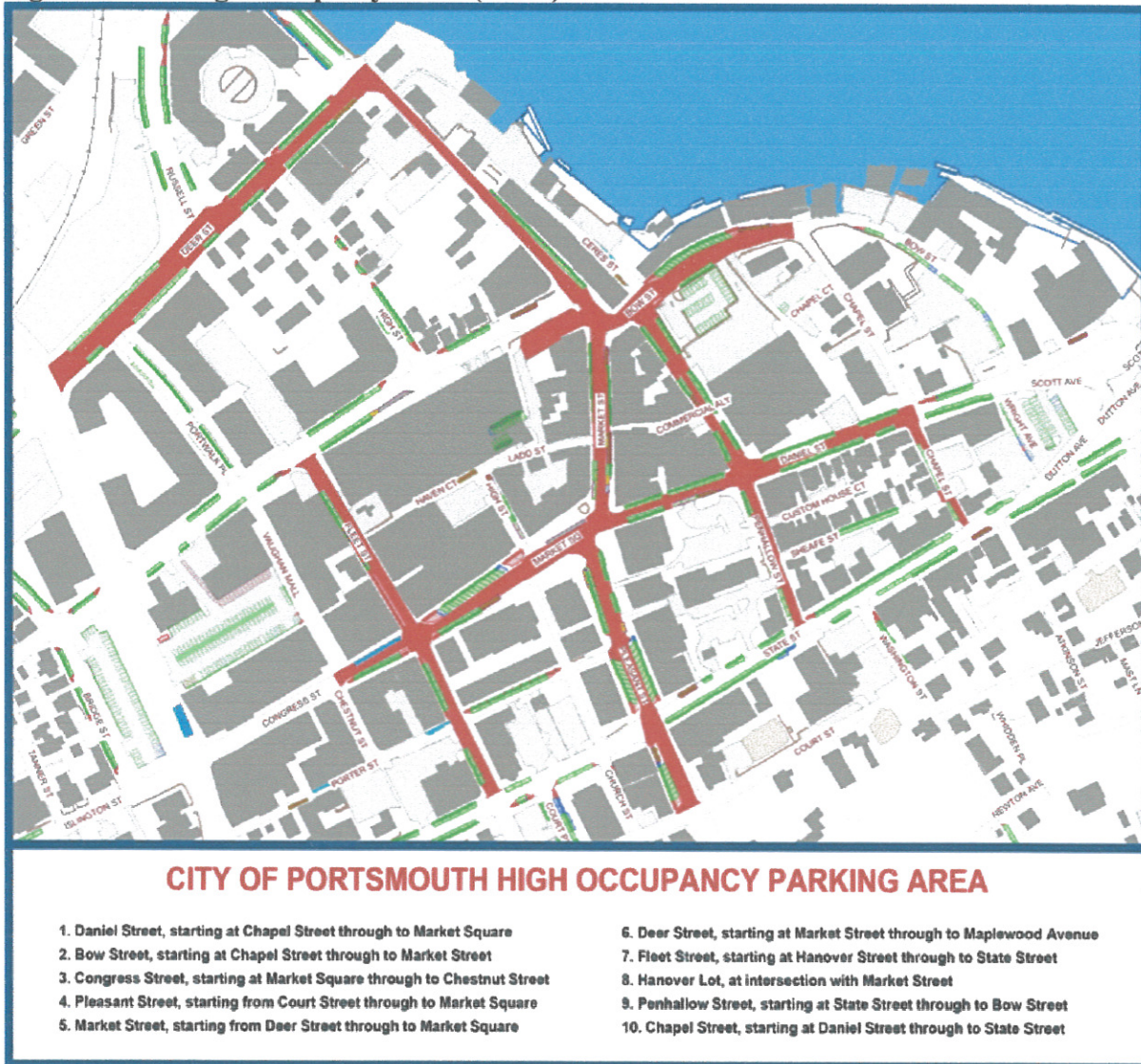
Following a Parking Supply and Demand Analysis Report prepared by Nelson-Nygaard in 2011, the City advanced an Omnibus approach to parking for the purpose of integrating supply side improvements with demand based pricing and land use/zoning strategies to achieve a more balanced and efficient parking system. In 2012, based on annual payment data from its parking kiosks, the City increased pricing at high-use on-street meters in and around Market Square to \$1.50/hr., set all other on- and off-street meters at \$1.00/hour and the parking garage at \$0.75/hr. with a new first-hour-free promotion in the garage. In January 2013, the City made it free for residents to park in the garage on Sundays.

In March 2014, based on heavy demand and daily closures of the High-Hanover Parking Garage the City Council increased the hourly rate in the garage to \$1.00 and ended the first-hour free promotion. This resulted in a two-tier pricing structure with the City's High-Occupancy Meter (HOM) Zone remaining at \$1.50/hour and all other paid public parking (on-street and off-street) set at \$1.00/hour. On-street posted time limits were extended from 2-hours to 3-hours.

Later that year, parking occupancy counts were conducted on the public parking supply downtown to assist in evaluating the effectiveness of the parking rate structure. Surveys were conducted on an hourly basis from 8 a.m. to 8 p.m. on a weekday and Saturday in June and October. Because the counts were also to be used for making adjustments to year-round parking prices, they were intentionally collected just outside the peak tourist months of July and August.

In September 2015, based on results of the survey, the City expanded its HOM Zone to include Fleet, Penhallow, Chapel and Deer Street (Market St. to Maplewood Ave.) as well as the Hanover Street Lot. All of these parking areas exceeded effective capacity during most of the paid parking period. The City also increased the hourly rate of the HOM Zone to \$1.75 and the standard metered parking and garage rate to \$1.25. The current HOM Zone is depicted in Figure 1 below.

Figure 1: 2015 High-Occupancy Meter (HOM) Zone



2015 Parking Utilization Survey

For the 2015 utilization survey, count locations were expanded to include the High-Hanover Parking Garage, other public and private parking lots and several non-metered streets and lots located on the fringe of downtown. The City requested that a peak summer month (July or August) count for the weekday and Saturday condition be added to evaluate seasonality of use. Spot duration-of-stay and turnover counts were also requested for the purpose of reviewing the effectiveness of on-street parking time limits and enforcement.

Parking occupancy counts were conducted by Precision Data Industries (PDI) of Berlin, MA. The downtown was divided into four (4) sections for counting purposes as depicted in **Exhibit 1** of the Appendix. Surveys were conducted on an hourly basis between 8 a.m. and 8 p.m. for both the weekday and Saturday condition on the following dates:

- Thursday, May 28
- Saturday, May 30
- Thursday, July 16
- Saturday, July 18
- Thursday, October 15
- Saturday, October 17

Thursday was selected as a good representative weekday downtown to be surveyed. The counts were conducted on good weather days - free of rain and any major special events that could skew results. It is important to note that the October counts were conducted only a few weeks after the City's 25 cent increase to meter rates. Therefore, the impacts of the rate changes on parking use and behavior had not been fully realized. The tabulated raw hourly counts for each day were presented to the City under separate cover.

Annual Parking Rate Adjustments: Methodology, Analysis & Findings

Prior to 12 noon most days, there are few street segments or lots where parking is approaching capacity conditions. The highest occupancy rates during paid parking hours occur between 12 noon and 7 p.m. Therefore, average occupancy rates for this time period were calculated for each surveyed day in May and October and then averaged over the 4-day count period as presented in the Appendix as **Exhibit 2**. The table also compares 4-day average occupancy rates from 2014 to 2015.

Consistent with the 2014 study methodology, we considered streets and lots with 7-hour average occupancy rates above 85% to be exceeding effective capacity and those under 40% to be significantly underutilized. Those street segments and lots whose 7-hour occupancy rates exceeded 85% on average over the 4-day count period in May and October, would be considered for a rate increase (shown in red in Exhibit 2). Those with average rates under 40% would be considered for a rate decrease (shown in blue).

Capacity Constraints: Overall, the City's occupancy rates are extremely high and have increased significantly from 2014 to 2015. There is a well-documented shortage of long-term parking downtown. The 900-space High-Hanover Parking Garage is at effective capacity and continues to fill and close routinely. The City's other large supply of long-term public parking is also at effective capacity – namely, the 300 (+/-) free, all-day spaces in the Parrott Avenue Lot and on Parrott Avenue itself (combined) – as well as the 100 (+/-) free, all-day spaces on Vaughan St., Raynes Ave. and Maplewood Ave. between Vaughan St. and Raynes Ave. There is very little remaining supply within a 5-minute walk to downtown either on the free streets leading into downtown (Middle St., State St., Maplewood Ave., etc.) or in the lots peripheral to downtown (South Mill Pond, Masonic and Vaughn). To address the shortage, the City Council in May approved bonding for the design and construction of a new public parking garage.

HOM Meter Zone Exceeding 85% Use (4-day Average) – Currently \$1.75/hour: All current HOM Zone metered streets and lots were at or exceeded the 4-day average occupancy rate of 85%. These facilities would normally be considered for a rate increase, however, because the last 25 cent rate increase occurred just a few weeks prior to the October counts being conducted more time is needed to adequately evaluate its impact.

Standard Meter Zone Exceeding 85% Use (4-day Average) – Currently \$1.25/hour: While no street segments in the standard meter zone exceeded the 4-day average occupancy rate of 85%, the following four (4) parking lots did:

- Worth Lot (91.3%)
- Wright Ave. Lot (91.2%)
- Ladd St. Lot (89.0%)
- Bridge St. Lot (86.7%)

The increasing shortage of long-term parking may be in part responsible for sharp year-over-year increases in use of these off-street parking locations. These lots would typically be considered for a rate increase and inclusion into the HOM Zone, however, because the last 25 cent rate increase occurred just a few weeks prior to the October counts being conducted more time is needed to adequately evaluate its impact.

Metered Streets/Lots Below 40% Use (4-day Average): Only one street segment and one lot were below the 4-day average occupancy rate of 40% as follows:

- Deer St. – Maplewood Ave. to Bridge St. (39.1%)
- Vaughn St. Lot - (37.1%)

Both Deer Street and the Vaughn St. Lot at \$1.25/hr. would typically be considered for a rate decrease. However, Deer St. use was negatively impacted by construction of a new building abutting the street. Once that building is fully occupied, utilization should be re-evaluated.

High-Hanover Parking Garage Use: The 900-space parking garage filled three out of the four days counted with weekday peaks between 1 and 2 p.m. and Saturday peaks between 5 and 6 p.m. The garage continues to fill routinely and close both in the peak and off-peak seasons.

Free Streets/Lots Exceeding 85% Use (4-day Average) – Three free parking lots and two unmetered streets exceeded the 4-day average occupancy rate of 85%:

- Parrott Avenue Lot – (99.2%)
- McIntyre Lot (Saturdays) – (90.9%)
- Prescott Park Lot – (90.4%)
- Islington Street – Bridge Street to Summer Street – (86.4%)
- Parrott Avenue – Junkins Avenue to Richards Avenue – (85.4%)

These facilities would typically be designated for paid/metered parking given the high utilization/strong demand and close proximity to demand centers downtown.

Parrott Avenue and the Parrott Avenue Parking Lot, which have no time limits, provide a combined 300 (+/-) free parking spaces serving the Downtown Core District. These spaces, which are at effective capacity most days, turn over infrequently as they are primarily being used for free, long-term employee parking. The same can be said for the combined 90 (+/-) free, all-day on-street parking spaces on Vaughan St., Raynes Ave. and Maplewood Ave. between Vaughan St. and Rayne Ave.

Free Streets/Lots Below 40% Use (4-day Average) – The following two remote parking lots were below the 4-day average occupancy rate of 40%:

- CCC Lot, outer Market St. – (25.0%) – free parking w/shuttle bus connection to downtown.
- Rock Street Lot – (24.5%) – based on Saturday counts since only weekend public use is allowed.

Review of Peak Period Utilization and Seasonality

As stated earlier, the City requested that peak period (July) counts be collected to help better understand the effect of seasonality on parking occupancy. A comparison of average 4-day, 7-hour occupancy rates from July to those in May/October for select street segments and lots is presented in the Appendix as **Exhibit 3**. As expected, most street segments and lots have higher use for the two-day average in July than they do for the four-day average during the “shoulder” months of October and May.

In fact, many more of the \$1.25/hr. street segments that were below the 4-day average effective capacity rate (85%) for the May/October counts, are above it for the average 2-day July counts, including State Street, Hanover St. (Market to Maplewood), Bow Street (Chapel to Daniel) and Daniel St. (Bow to Chapel). If we were using the peak period of July for setting annual parking rates, the HOM zone would include nearly all of the paid parking area set at a single rate.

With regard to the City’s supply of free fringe and remote parking, utilization is generally higher in July than the shoulder seasons as would be expected. With additional summer visitation, the paid parking areas reach capacity and parking “spreads outward” from the Downtown core to the free parking areas located within walking distance of downtown. However, increases in use of the remote CCC lot in July compared to October/May was modest and there was actually a decline in (Saturday) use of the Rock Street lot.

Duration-of-Stay, Turnover and Time-Zone Compliance Checks

The term “duration-of-stay” is simply defined as the amount of time parked at a given space. “Turnover” is the number of cars that park in a given space over a specified time period. Average duration-of-stay and turnover counts along with time zone compliance checks are useful in determining parking efficiency and appropriate time regulations and enforcement levels. A license plate based survey, conducted at regular time intervals, allows one to calculate average stay lengths, turnover rates and time zone violation rates.

Hourly duration-of-stay and turnover counts were conducted on Thursday, September 24, 2015 between the hours of 9 a.m. and 5 p.m. on select street segments downtown including: State Street, Fleet Street, Congress Street, High Street, Daniel Street, Bow Street, Market Street, Deer Street, Bridge Street and Islington Street. Vehicles parked in excess of posted time limits were noted as were the number of parkers who moved their vehicles to nearby spaces to potentially avoid receiving a time limit citation.

Average duration of stay, turnover and time-zone violation rates for each street segment surveyed are provided in the Appendix as **Exhibit 4**. Rates were only calculated for 2-hour, 3-hour and 4-hour regulated parking. Given the one-hour survey intervals, 15-minute parking spaces on these street segments were noted but not used in calculating duration and turnover rates. Exhibit 5 also shows the number of vehicles moved on the same block face to potentially avoid receiving a time limit citation.

Duration of Stay: All the street segments surveyed had average duration-of-stays of under 2 hours. The overall average duration of stay for the downtown streets counted was 1 hour, 34 minutes, which is within a range typically found in mixed-use, downtown business districts. All streets had average stays well within their posted time limits with the exception of the 2-hr. zone on Islington St. (1 hour, 47 minutes).

Turnover: As expected, parking turnover rates are highest in the retail areas leading into and through Market Square and lowest at the edge of the paid parking area. In general, the higher turnover rates corresponded to streets with higher parking rates and lower posted time limits.

Compliance to Posted Time Limits: The percentage of vehicles parked in excess of posted time limits was quite low at 3.9% although there are a couple of exceptions including Islington Street (13.1%) and Fleet Street (9.5%). Many of those parking longer than allowed were vehicles with handicapped placards, veteran's plates or Easy Park tags. A few appeared to be merchants but very little employee "shuffling" of cars was observed. The fact that Islington Street is non-metered contributes to its higher rate of time-zone non-compliance. Metered streets typically exhibit higher compliance to posted time limits than non-metered streets. It should be noted that the City began enforcing posted time limits on handicapped parking spaces in October 2015.

The number of people who parked between two and three hours was roughly the same as the number of vehicles parked over 3 hours – meaning that if time limits were two hours instead of three, the number of time limit violations would be approximately double. Also, based on the license plate survey, there was not a single instance of a vehicle parking at any of the 15-minute spaces for one hour or longer.

Summary Finding: Overall, the street segments surveyed exhibited healthy levels of turnover with a relatively low number of time limit violations despite extremely high average occupancy levels and a shortage of long-term parking – which is an indication of consistent enforcement and appropriate rates. By extending on-street time limits from two hours to three hours in 2014, the City was able to reduce the number of time-zone citations issued without driving turnover rates out of an acceptable range.

Recommendations

As previously discussed, the 25-cent across-the-board rate increase in September, 2015 occurred after the May and July counts and just a few weeks prior to the October counts. Therefore, its impact on parking use and behavior could not be fully measured by the 2015 survey. As such, no additional rate adjustments are recommended at this time. However, the City should continue monitoring utilization rates in 2016 and adjust HOM and standard meter zone parking pricing accordingly.

With future rate adjustments, it is recommended that the City consider widening the pricing gap between the HOM Zone and standard meter zone, which is currently 50 cents or a $\$0.50/\$1.75 = 28.6\%$ discount. A larger discount between zones will provide a greater incentive for people to seek and find lower cost parking outside of the HOM Zone, which will in turn increase the use of fringe parking meter areas.

The City is encouraged to investigate the feasibility of implementing a more dynamic, demand-based pricing system – one that could vary by time period (i.e. by season, weekday versus weekend, or time-of-day). Occupancy counts show wide variability in demand between months, weekdays and time-of-day - yet parking pricing is static. For example, there is plenty of parking available downtown virtually any day before 11 a.m., yet the rate is the same in the morning as it is during the afternoon peak period when the parking supply is often at effective capacity. Parking technology has advanced through the use of space sensors that communicate with the meter to allow rates to adjust with actual demand.

With regard to the long-term parking shortage, there are still a few parking areas with some long-term parking availability on a consistent basis. Most of these areas offer free parking such as the South Mill Pond and Masonic lots, as well as free arterial streets leading into downtown such as Middle Street. Additionally, paid lots like the Vaughan Street Lot and Sheraton Harborside Lot have excess capacity. It is recommended that the City actively promote these parking areas to long-term parkers. Promotional efforts could include establishing a parking page on the City website showing available long-term parking locations; providing directional street signage to long-term parking areas; distributing employee flyers to businesses promoting the free and paid lots that have long-term parking availability; and offering a discounted monthly parking pass for the Vaughan St. Lot (see recommendation below).

It is also recommended that the City consider the following modifications to the 2016 parking program:

1. **Change time limits on Deer and Russell Streets from 4-hours to 3-hours:** the 4-hour time regulation on Deer and Russell Street was recommended in the City's *1998 Downtown Parking Study* due to low utilization rates. The intent was to lengthen the time limit to entice customers to park there and walk into downtown. This was, of course, prior to the Hilton Gardens and Portwalk Development. Today, Deer Street has one of the highest parking use rates in the City. The emphasis now for these streets should be on customer turnover and minimizing the occurrence of employees parking on the street. The time-zone compliance check showed a relatively high violation rate (7.4%) for Deer Street and it was noted that some employees within abutting stores/restaurants were "meter feeding".
2. **Meter Islington Street between Bridge and Summer Street and change 2-hour time limit on Islington Street and 4-hour time limit on Bridge Street to 3-hours for consistency:** This section of Islington Street is primarily commercial/retail and would benefit from improved turnover and time limit compliance through metering and enforcement. Utilization rates on Islington Street are consistent with those found in the downtown meter zones and time limit violation rates are quite high (13.1%). Standardizing the hourly rates of the two streets with the rest of the downtown is recommended.
3. **Replace all remaining coin-only parking meters with credit card-enabled meters in the \$1.25/hour meter zone:** With hourly parking rates now over \$1.00/hour, credit card-accepting meters are needed to maximize use of these spaces. For someone parking three hours in this zone, they would need to have a whopping \$3.75 in coins on hand. Many of the parking spaces served by these coin-only meters are underutilized and the inability to use a credit card, given the rate, is a contributing factor.
4. **Eliminate the six parking meters on outer State Street just east of Summer Street:** These six meters located in front of the Appledore Engineering Building are far from the downtown meter zone and surrounded by plenty of free on-street parking. On the day of the duration and turnover survey these six metered spaces were empty virtually the entire day. If the business requires a few short-term spaces for visitors, they should be designated, signed and enforced without requiring meters, which have to be maintained, repaired and periodically emptied of coin.
5. **Offer discounted monthly parking in the Vaughan Street Lot and install 3-hour metered parking on Vaughan Street, Raynes Avenue and Maplewood Avenue between Vaughan Street and Raynes Avenue.** The 90-space Vaughan Street parking lot (\$1.25/hour) is significantly underutilized. At the same time, approximately 90 (+/-) free, all-day, on-street spaces next to the lot on Vaughan Street, Raynes Avenue and Maplewood Avenue between Vaughan Street and Raynes Avenue are at capacity. Employees are parking all day on these streets rather than in the off-street paid lot. This is because, at \$1.25/hour, an employee working 40 hours per week would have to pay about \$200/month to park in the lot, which is not cost competitive with the parking garage or other long-term parking options.

If a discounted monthly permit was offered in the lot, the streets could then be posted 3-hour metered parking (\$1.25/hour) consistent with other streets in the commercial district, to provide visitor and customer parking for nearby businesses and planned future development. It is recommended that the Vaughan Street lot monthly permit be priced lower than monthly permits in the High-Hanover Parking Garage. The City could consider offering the Vaughn St. lot

monthly permits to individuals on the waiting list for monthly permits at the High-Hanover Parking Garage.

Since the Vaughan Street Lot is privately owned and under a short-term management agreement with the City, and because it will ultimately be commercially developed, this recommendation would be a transitional strategy until the long-term parking supply is expanded via a new public parking garage.

Please let me know if you have any questions or would like to meet to discuss. Thank you.

Sincerely,

A handwritten signature in cursive script that reads "John M. Burke".

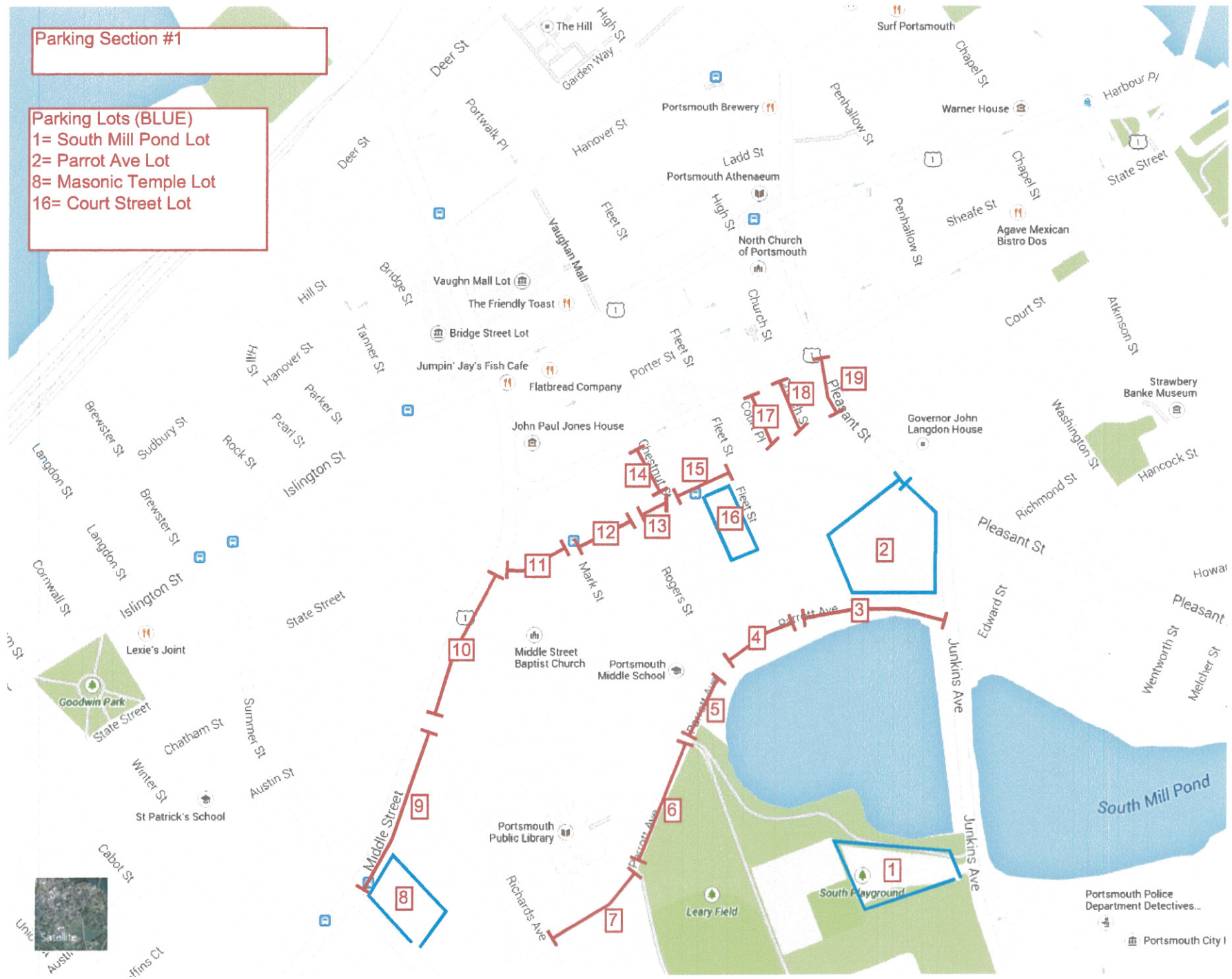
John M. Burke, P.E., CAPP

APPENDIX

Exhibit 1: Parking Count Maps

Parking Section #1

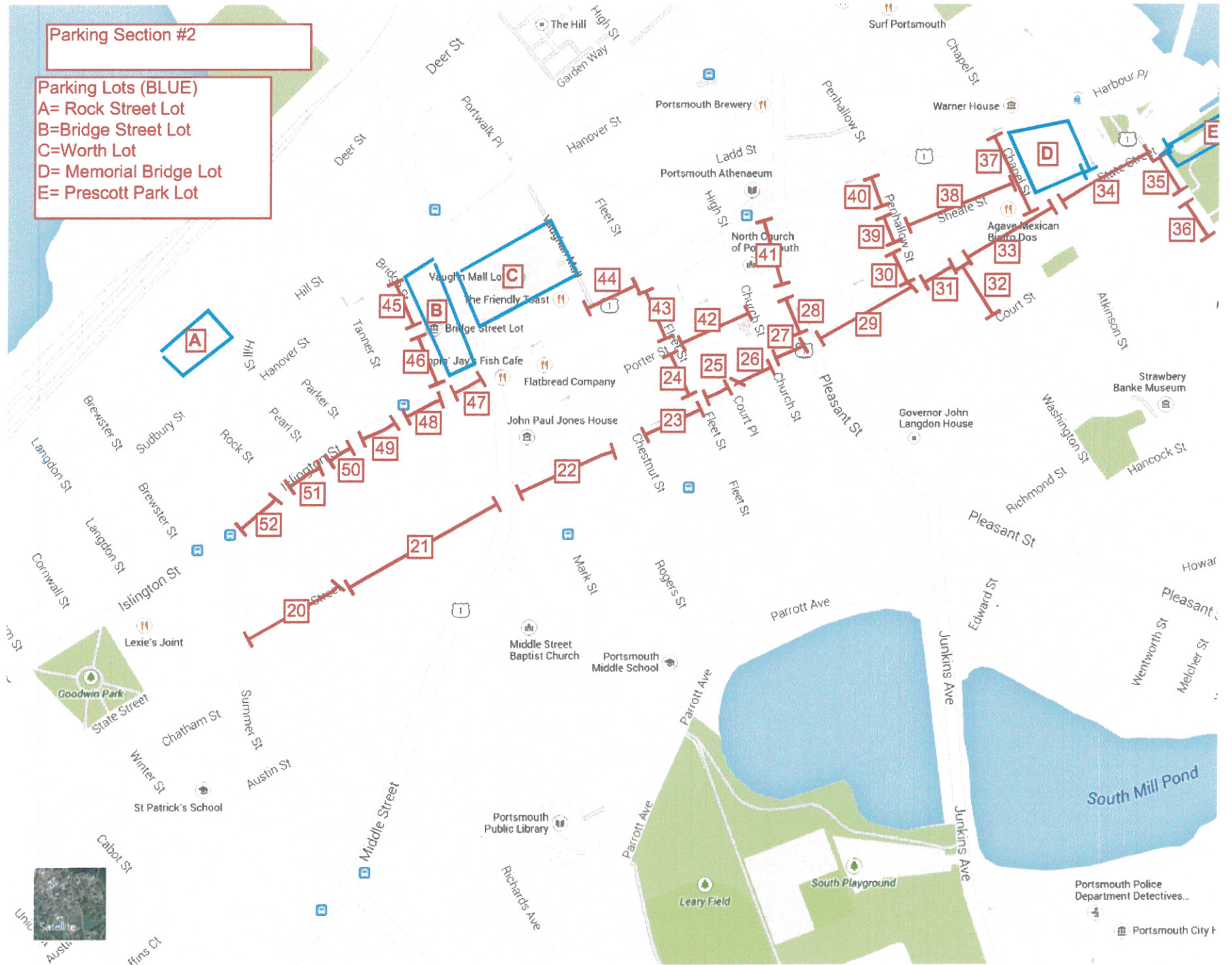
- Parking Lots (BLUE)**
1= South Mill Pond Lot
2= Parrot Ave Lot
8= Masonic Temple Lot
16= Court Street Lot



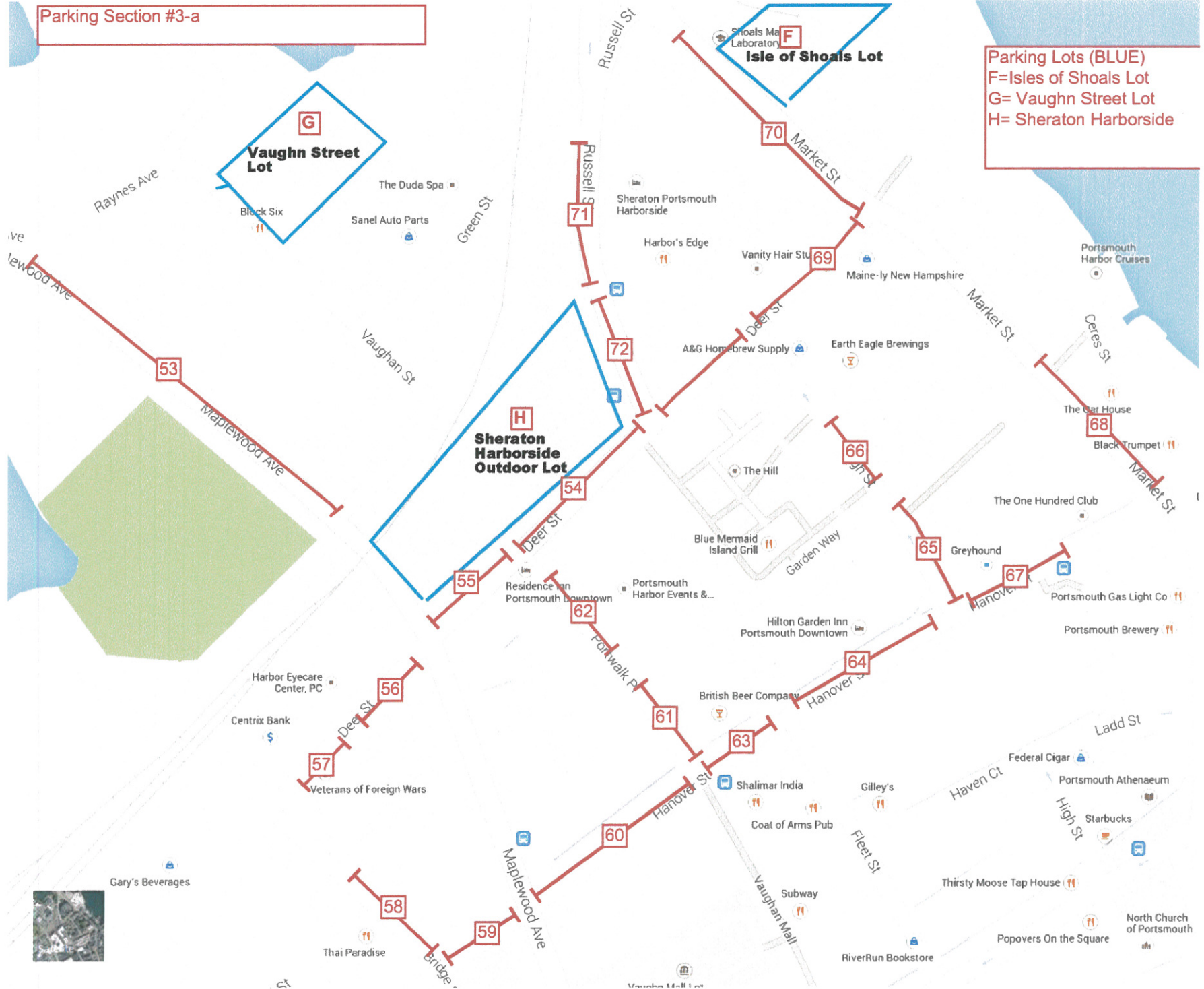
Parking Section #2

Parking Lots (BLUE)

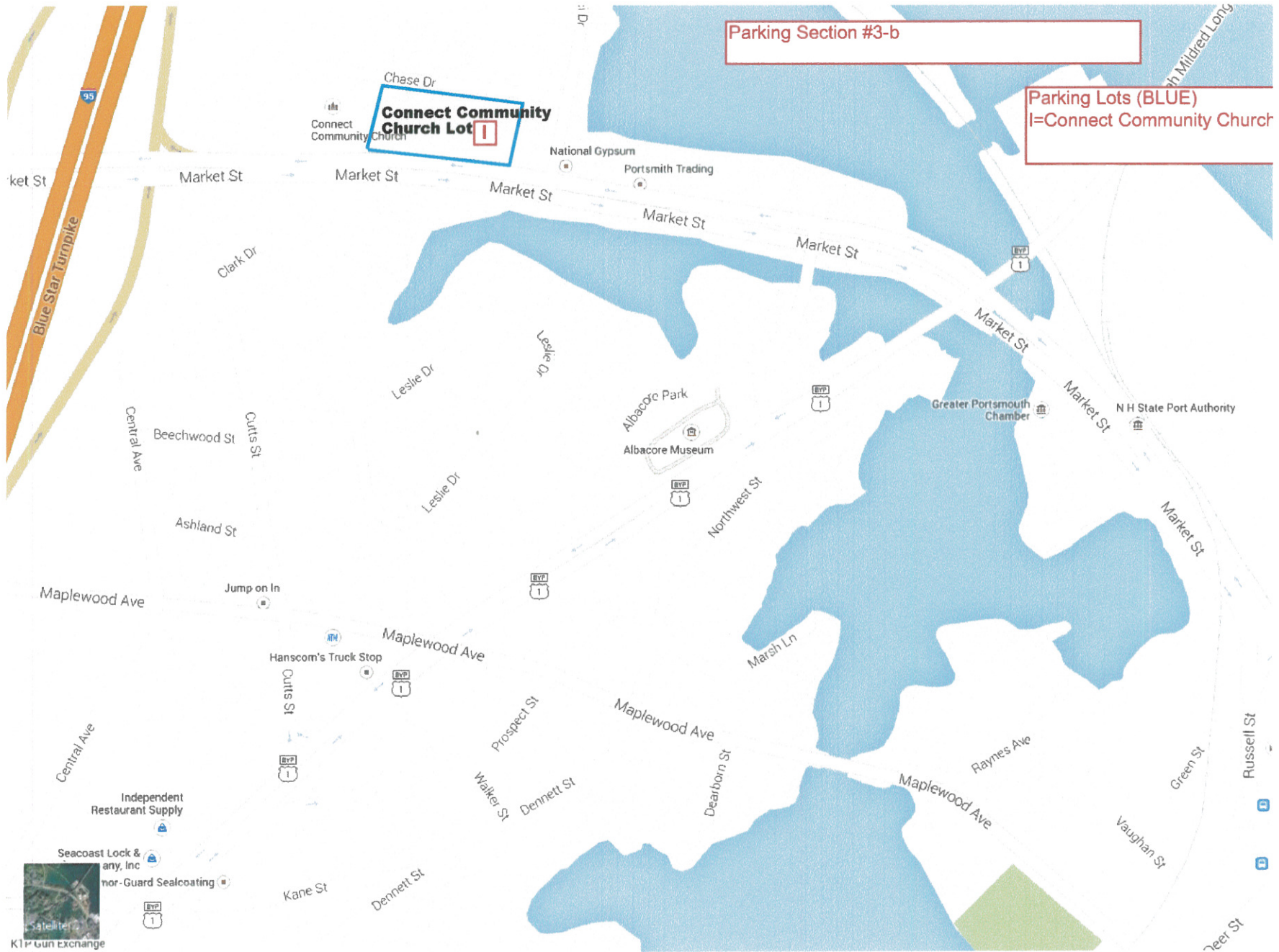
- A= Rock Street Lot
- B= Bridge Street Lot
- C= Worth Lot
- D= Memorial Bridge Lot
- E= Prescott Park Lot



Parking Section #3-a



Parking Lots (BLUE)
F= Isles of Shoals Lot
G= Vaughn Street Lot
H= Sheraton Harborside



Parking Section # 4

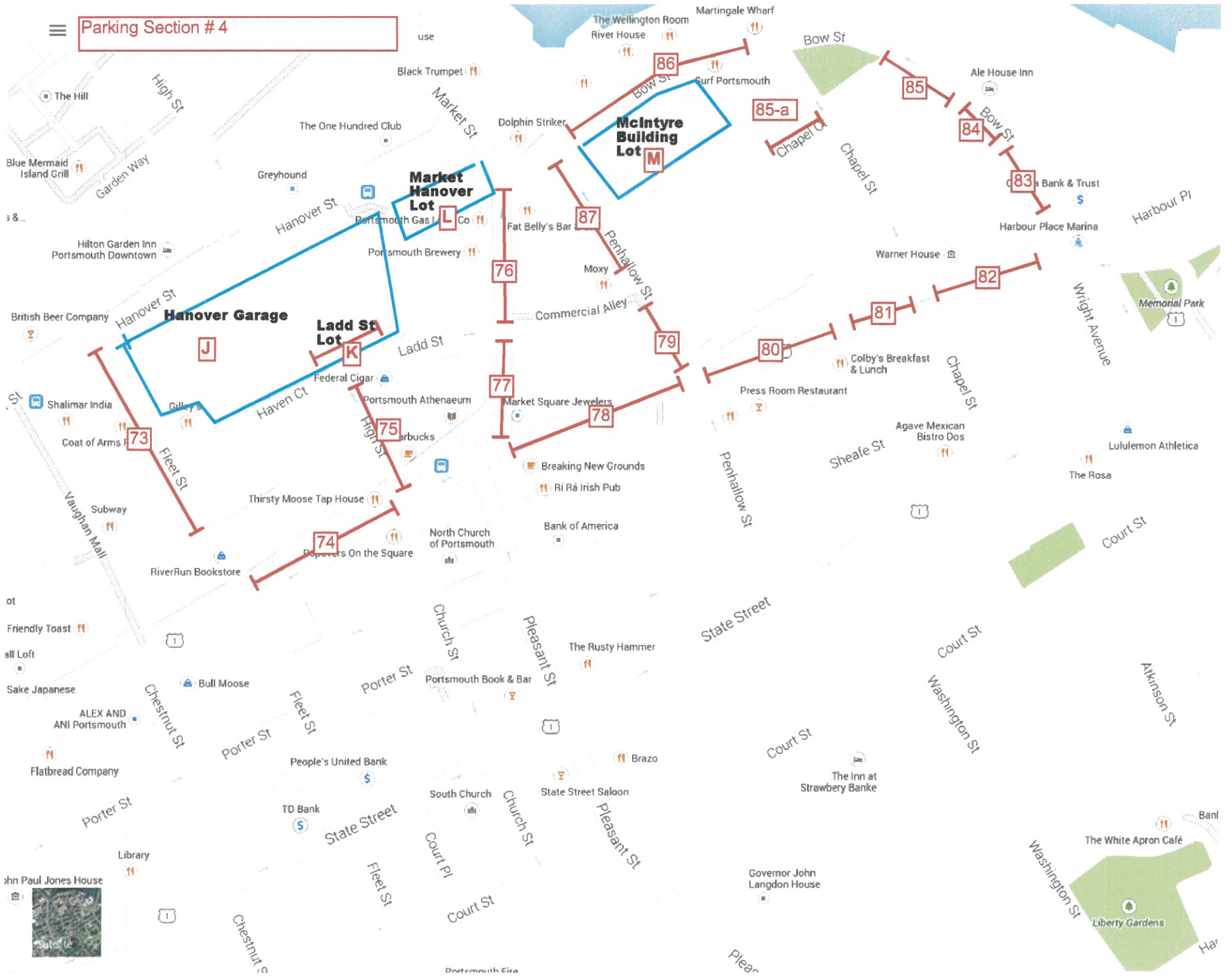


Exhibit 2
2015 Average 4-Day Weekday/Saturday Occupancy Rates

City of Portsmouth
2015 Average 4-Day Weekday/Saturday Occupancy Rates
12 Noon to 7:00 p.m.

Street/Lot	Segment	Thursday (5/28/15)	Thursday (10/15/15)	Saturday (5/30/15)	Saturday (10/17/15)	2015 4-day Avg.	2014 4-day Avg.	Current Hourly Rate
Market St.	Deer to Hanover	93.9	84.3	95.9	99.0	93.3	90.0	\$1.75
Market St.	Hanover to Market Sq.	-----	92.5	95.5	92.5	93.5*	93.0	\$1.75
Congress St.	Market Sq. to Chestnut	87.5	92.3	91.7	100.0	92.9	90.8	\$1.75
Pleasant St.	Market Sq. to State	90.1	99.1	88.8	100.0	94.6	86.2	\$1.75
Pleasant St.	State to Court	85.7	93.9	93.9	95.9	92.3	79.9	\$1.75
Bow St.	Market to Chapel	94.0	91.0	100.0	91.7	94.2	85.0	\$1.75
Daniel St.	Market Sq. to Chapel	81.9	90.0	80.8	87.8	85.0	82.4	\$1.75
Hanover St. Lot	Parking Lot	96.1	93.5	98.7	98.7	96.8	94.4	\$1.75
Penhallow St.	Bow to State	90.8	90.8	90.3	98.6	92.6	90.0	\$1.75
Chapel St.**	Daniel to State	-----	-----	-----	-----	-----	109.2	\$1.75
Fleet St.	Hanover to State	87.4	100.8	84.9	102.5	93.9	91.0	\$1.75
Deer St.	Market to Maplewood	76.8	88.5	90.0	99.5	88.7	89.3	\$1.75
Bow St.	Chapel to Daniel	66.1	73.2	67.8	78.6	71.4	65.6	\$1.25
Daniel St.	Chapel to Bow	73.0	92.1	50.8	92.1	77.0	75.4	\$1.25
State St.	Fleet to Penhallow	83.0	76.6	80.9	92.1	83.2	82.5	\$1.25
State St.	Penhallow to Marcy	69.9	85.4	83.3	96.8	83.8	75.9	\$1.25
Wright Ave. Lot	Parking Lot	88.9	87.6	90.8	97.7	91.2	79.0	\$1.25
Marcy St.	Court to State	10.7	66.1	82.1	85.7	61.2	68.4*	\$1.25
Market St.	Russell to Deer	62.8	72.4	70.4	89.8	73.8	67.6	\$1.25
Russell St.	Market to Deer	44.6	51.0	34.5	87.6	54.4	62.2	\$1.25
Hanover St.	Market to Maplewood	61.6	83.6	78.0	90.6	78.5	81.7	\$1.25
High St.	Hanover to Deer	71.4	76.6	90.9	93.5	83.1	81.8	\$1.25
High St.	Congress to Haven Ct.	97.1	80.0	71.4	82.8	82.8	83.6	\$1.25
Ladd St. Lot	Parking Lot	83.3	90.5	88.1	94.0	89.0	-----	\$1.25
Worth Lot	Parking Lot	87.3	88.6	94.4	100.0	91.3	80.3	\$1.25
Bridge Lot	Parking Lot	61.9	94.6	88.4	100.0	86.7	80.8	\$1.25
Porter St.	Pleasant to Fleet	73.2	62.5	89.3	82.1	76.8	81.7	\$1.25
State St.	Fleet to Middle	66.7	97.8	70.0	97.8	83.1	75.2	\$1.25

Street/Lot	Segment	Thursday (5/28/15)	Thursday (10/15/15)	Saturday (5/30/15)	Saturday (10/17/15)	2015 4-day Avg.	2014 4-day Avg.	Current Hourly Rate
Court Place	State to Court	78.6	72.5	58.9	59.3	67.3	72.4	\$1.25
Fire Station Lot	Parking Lot	74.7	76.2	74.7	74.7	75.1	72.8*	\$1.25
Vaughn St. Lot	Parking Lot	5.6	21.3	44.9	76.7	37.1	-----	\$1.25
Bridge	Hanover to Islington	61.9	66.7	66.7	90.5	71.4	72.3	\$1.25
Court	Fleet to Middle	72.3	83.0	58.9	67.2	70.4	56.3	\$1.25
Deer	Maplewood to Bridge	14.3	36.4	7.1	59.5	39.1	12.1	\$1.25
Bridge	Deer to Hanover	30.2	63.5	28.6	93.6	54.0	38.4	\$1.25
Hanover**	Maplewood to Bridge	-----	-----	-----	-----	-----	28.6	\$1.25
S. Mill Pond Lot	Parking Lot	87.7	88.0	46.1	47.9	67.4	-----	FREE
Parrott Ave. Lot	Parking Lot	98.1	99.7	99.7	99.1	99.2	-----	FREE
Parrott Avenue	Junkins to Richards	81.5	86.5	79.5	94.3	85.4	-----	FREE
Masonic Lot	Parking Lot	69.2	51.3	60.3	69.9	62.7	-----	FREE
Middle Street	Court to Summer	67.4	67.3	55.4	47.6	59.4	-----	FREE
Prescott Park Lot	Parking Lot	78.6	94.3	92.8	95.7	90.4	-----	FREE
State Street	Middle to Summer	66.9	62.3	65.0	71.0	66.3	-----	FREE/Meter
Rock Street Lot	Parking Lot (weekends)	-----	-----	18.0	31.0	24.5	-----	FREE
Islington Street	Bridge to Summer	86.7	80.2	81.4	97.3	86.4	-----	FREE
Maplewood Ave.	Raynes to Vaughn	73.8	83.6	70.1	90.4	79.4	-----	FREE/Meter
McIntyre Lot	Parking Lot (weekends)	-----	-----	93.9	87.9	90.9	-----	FREE
CCC Lot	Parking Lot	9.8	13.2	45.0	31.8	25.0	-----	FREE
Peak-Hour Count in Parking Garage								
High-Hanover	Parking Garage(900sp.)	766	831	899	809	826.2	-----	\$1.25
Count conducted between:		(1-2pm)	(1-2pm)	(5-6pm)	(5-6pm)			
Garage reported full by City at:		Did not fill	12:50 pm	6:30 pm	5:30 pm			

* Based on 3 days of counts.

**Parking spaces unavailable to customers during survey due to construction impacts.

Exhibit 3

Comparison of 2015 Peak (July) vs. Off-Peak (May/October) Occupancy Rates Thursday/Saturday 12Noon to 7 p.m. Averages

Street/Lot	Segment	May/Oct. 2015 4-day Avg.	July 2015 2-day Avg.	Current Hourly Rate
Market Street	Deer to Market Square	93.4	99.2	\$1.75
Congress Street	Market Square to Chestnut	92.9	92.9	\$1.75
Pleasant Street	Market Square to Court	93.4	94.3	\$1.75
Daniel Street	Market Square to Chapel	85.0	83.5	\$1.75
Bow Street	Market to Chapel	94.2	97.0	\$1.75
Deer Street	Market to Maplewood	88.7	94.8	\$1.75
Fleet Street	Hanover to State	93.9	87.0	\$1.75
Bow Street	Chapel to Daniel	71.4	91.5	\$1.25
Daniel Street	Chapel to Bow	77.0	96.8	\$1.25
State Street	Middle to Marcy	83.5	89.0	\$1.25
Hanover Street	Market to Maplewood	78.5	91.2	\$1.25
Worth Lot	Parking Lot	91.3	92.1	\$1.25
Bridge St. Lot	Parking Lot	86.0	93.8	\$1.25
Market Street	Russell to Deer	73.9	84.7	\$1.25
Russell Street	Market to Deer	54.4	80.4	\$1.25
Vaughn St. Lot	Parking Lot	37.1	49.6	\$1.25
Parrott Ave. Lot	Parking Lot	99.2	99.5	FREE
McIntyre Lot	Parking Lot (weekends)	90.9	97.8	FREE
Prescott Park Lot	Parking Lot	90.4	92.8	FREE
Islington Street	Bridge to Summer	86.4	72.4	FREE
Parrott Avenue	Junkins to Richards	85.4	89.4	FREE
Maplewood Ave.	Raynes to Vaughn	79.4	81.8	FREE
S. Mill Lot	Parking Lot	67.4	81.2	FREE
State Street	Middle to Summer	66.3	78.6	FREE
Masonic Lot	Parking Lot	62.7	72.4	FREE
Middle Street	Court to Summer	59.4	64.3	FREE
CCC Lot	Parking Lot	25.0	28.7	FREE
Rock Street Lot	Parking Lot	24.5	17.1	FREE

Exhibit 4

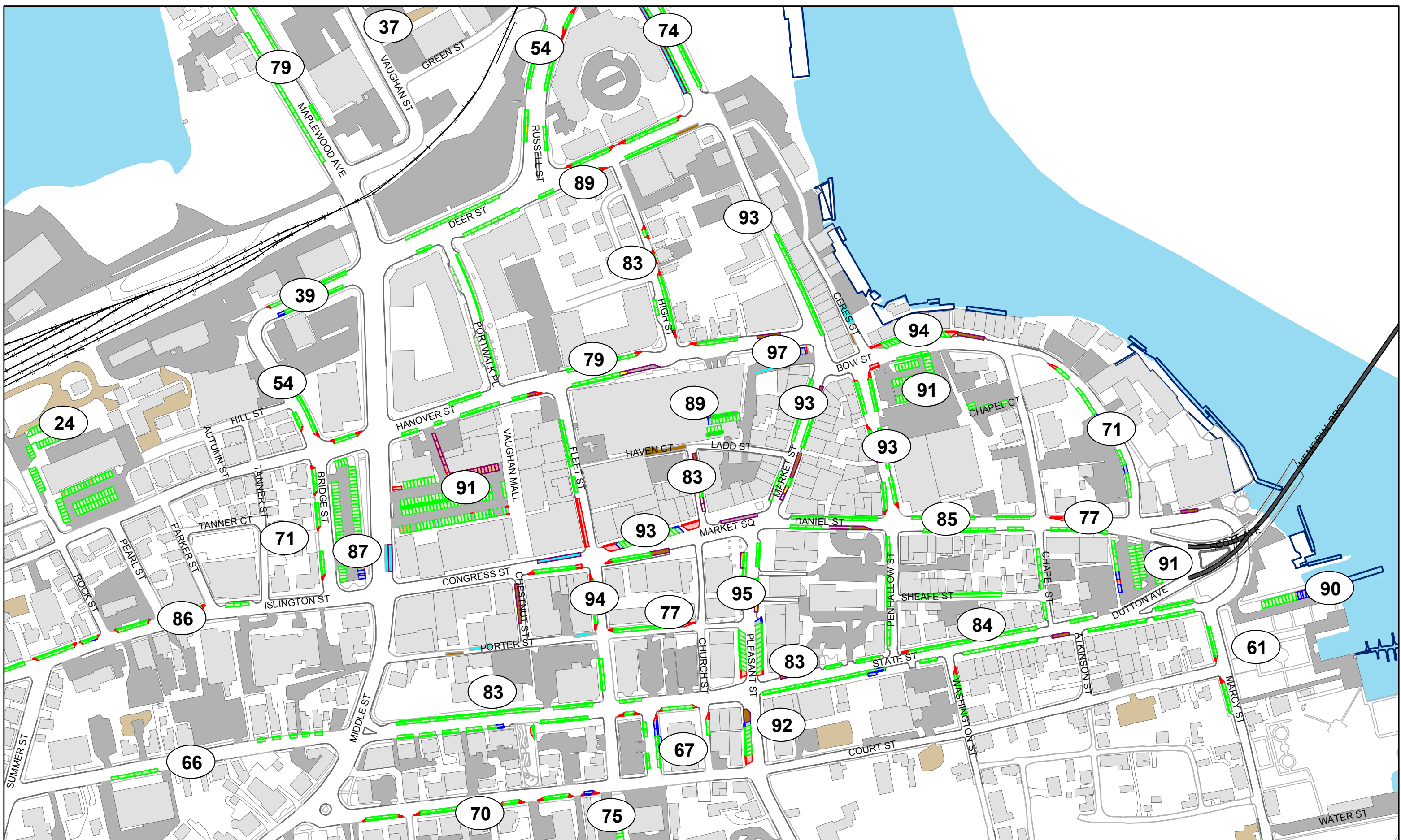
Average Duration-of-Stay, Turnover and Violation Rates
 Select Downtown Portsmouth Street Segments
 Thursday, September 24, 2015

Street	Segment	Time Limit/ Hr. Rate	Avg. Duration of Stay	Turnover Rate (veh./sp./hr.)	% Exceeding Time Limit	# Moving a Space to Avoid Ticket
State	Maplewood to Fleet	3 hr./ \$1.25	1 hour 35 min.	0.40	4.4%	1
Fleet	State to Congress	3 hr./ \$1.75	1 hour 56 min.	0.47	9.5%	1
Congress	Fleet to Market Square	3 hr./ \$1.75	1 hour 20 min.	0.73	1.3%	2
Daniel	Market Square to Bow	3 hr./ \$1.25-\$1.75	1 hour 18 min.	0.74	0.0%	3
Bow	Daniel to Market	3 hr./ \$1.25-\$1.75	1 hour 57 min.	0.41	5.1%	1
Market	Bow to Deer	3 hr./ \$1.75	1 hour 32 min.	0.60	0.0%	3
Deer	Market to Maplewood	4 hr./ \$1.75	1 hour 35 min.	0.52	7.4%	2
Bridge	Deer to Islington	4 hr./ \$1.25	1 hour 45 min.	0.31	0.0%	0
Islington	Bridge to Summer	2 hr./ FREE	1 hour 47 min.	0.45	13.1%	1

Avg. Total

**1 hour
34 min.**

3.9%



Draft On-Street Parking Utilization Data
Data Compiled by Precision Data Consultants

Map prepared by Portsmouth Department of Public Works
 U:\Projects\0263 Parking Data\Precision Data Consultants\2016\01\20.pdf

Average Occupancy Rate
 For Seven Hour Period (12PM to 7PM)
 Thursday, May 28, 2015, Saturday, May 30, 2015,
 Thursday, October 15, 2015, Saturday, October 17, 2015 ,

1 inch = 220 feet

01/20/2016

City of
Portsmouth
Department of Public Works



MEMORANDUM

TO: John P. Bohenko, City Manager

FROM: Eric Eby, P.E., Parking and Transportation Engineer

DATE: March 29, 2016

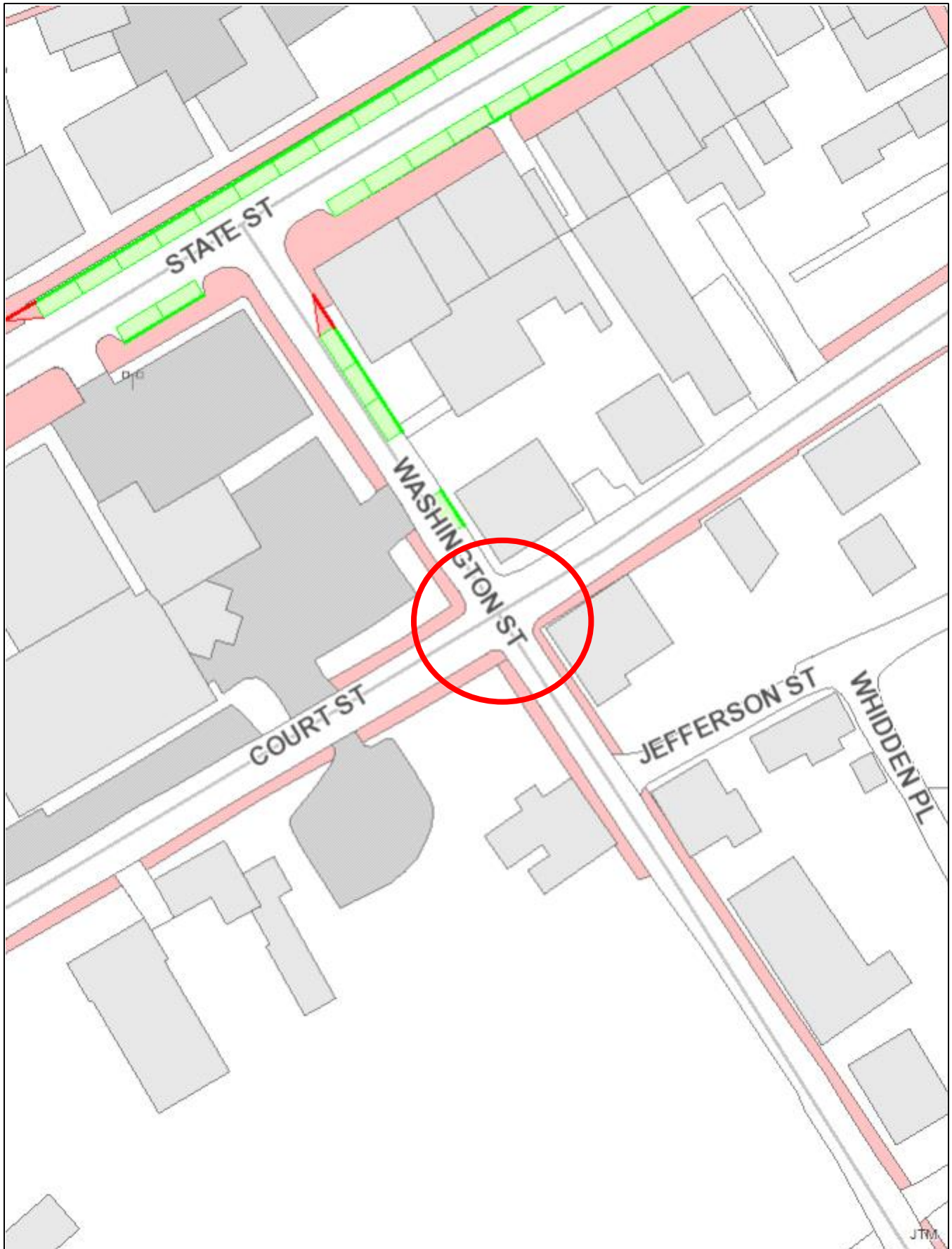
SUBJECT: Recommendation – Court Street at Washington Street Intersection

In response to concerns regarding the existing all-way STOP control at the intersection of Court Street and Washington Street, City staff conducted an analysis of the intersection to determine if the four-way stop is warranted. Residents and businesses have complained of the noise caused by vehicles braking and accelerating on Court Street, and the exhaust fumes that are generated at the intersection.

Observations of traffic flow and sight lines at the intersection were conducted. Peak hour traffic volumes on both streets are well below the 200 to 300 vehicles per hour needed to meet the minimum volume levels to warrant all-way STOP control. Court Street carries less than 200 vehicles during the summer peak hour, while Washington Street carries less than 60 vehicles during the summer peak hour. Sight lines are restricted by the buildings on the east side of the intersection. However, when a driver pulls forward to see around the building, their vehicle is still not sticking out into Court Street traffic. Based on the observed conditions at the intersection, and taking into consideration the very low volume of traffic on Washington Street, the all-way STOP is not required.

It is recommended that the two STOP signs on Court Street be removed, while retaining the STOP signs on the Washington Street approaches to the intersection.

VI.B. Court Street at Washington Street



VI.B. Court Street at Washington Street



Location where driver has unobstructed view of Court Street

VI.B. Court Street at Washington Street



Location where driver has unobstructed view of Court Street

City of
Portsmouth
Department of Public Works



MEMORANDUM

TO: John P. Bohenko, City Manager

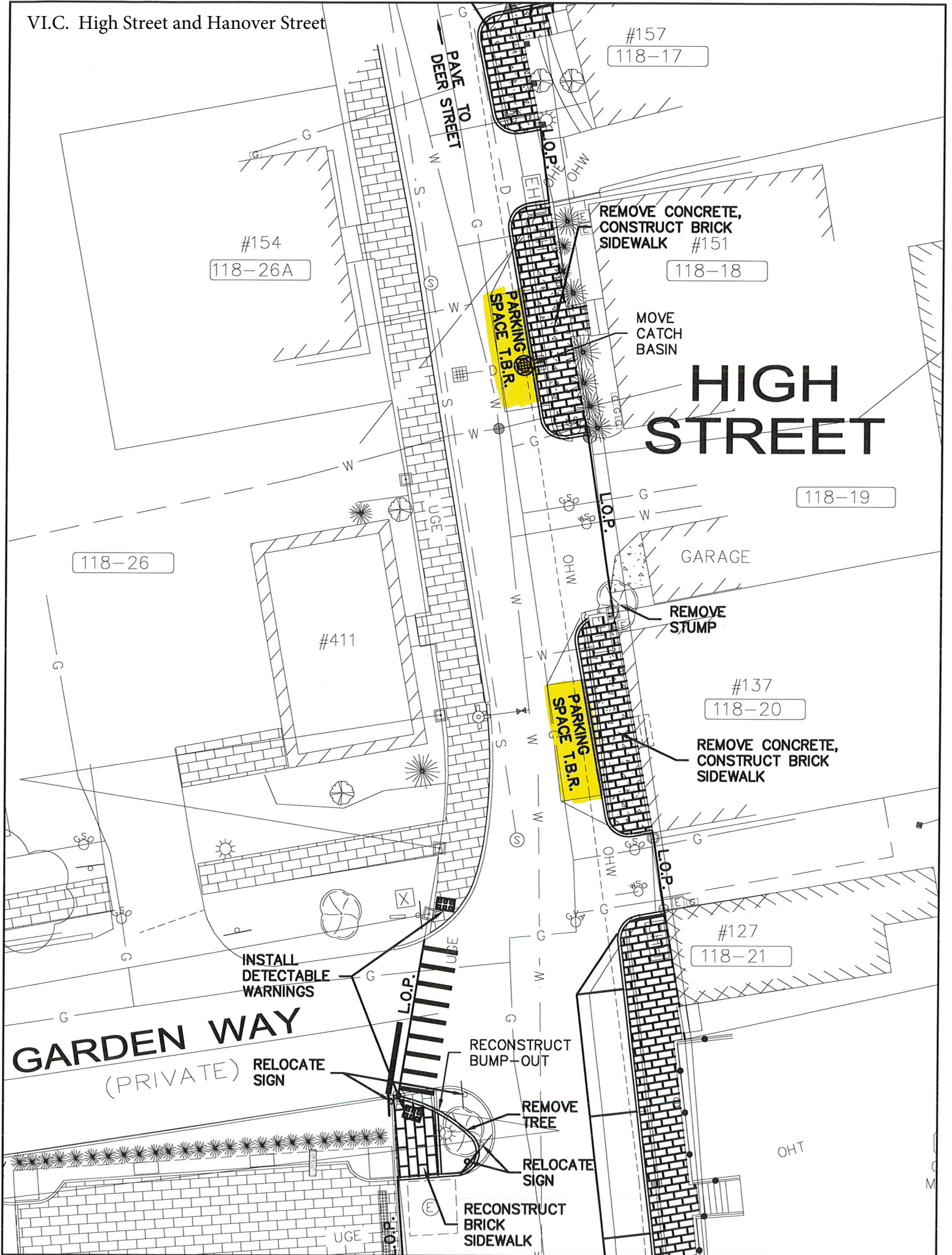
FROM: Eric Eby, P.E., Parking and Transportation Engineer

DATE: March 29, 2016

SUBJECT: Recommendation – High Street and Hanover Street parking space removal

The DPW is currently working on the redesign of the sidewalks in the area of High Street and Hanover Street. As part of the project, the sidewalks on High Street between Hanover Street and Deer Street are proposed to be widened to make them safer and more accommodating for pedestrians. However, the wider sidewalk will reduce the width of the street for motor vehicles. It is recommended that two parking spaces on the narrowest section of High Street be removed to allow sufficient width for motor vehicles, especially emergency vehicles and delivery vehicles, to travel the street safely and efficiently.

At the intersection of Hanover Street and Fleet Street, where a crosswalk was approved by PTS last July, a single parking space needs to be removed to make room for the sidewalk extension and crosswalk. It may be possible to provide a motorcycle parking space in the remaining portion of the former parking space.



HIGH STREET

GARDEN WAY (PRIVATE)

#154
118-26A

#157
118-17

#151
118-18

118-19

118-26

#411

#137
118-20

REMOVE CONCRETE,
CONSTRUCT BRICK
SIDEWALK

#127
118-21

INSTALL
DETECTABLE
WARNINGS

RECONSTRUCT
BUMP-OUT

REMOVE
TREE

RELOCATE
SIGN

RECONSTRUCT
BRICK
SIDEWALK

REMOVE CONCRETE,
CONSTRUCT BRICK
SIDEWALK

MOVE
CATCH
BASIN

REMOVE
STUMP

PAVE STREET
TO
DEER STREET

PARKING
SPACE T.B.R.

PARKING
SPACE T.B.R.

LO.P.

LO.P.

LO.P.

LO.P.

O.H.T.

M

