#### AGENDA

# COMMITTEE ON PUBLIC SAFETY, HEALTH AND TRAFFIC

September 8, 2010 Aldermen Roy, Osborne, Long, Ouellette, Shaw 5:00 PM Aldermanic Chambers City Hall (3<sup>rd</sup> Floor)

- 1. Chairman Roy calls the meeting to order.
- 2. The Clerk calls the roll.
- 3. The Traffic Division has submitted an agenda which needs to be addressed:

#### RESCIND NO PARKING ANYTIME:

On Lincoln Street, east side, from Amherst Street to a point 120 feet north (Ord. 3233)
Alderman Roy

### **NO PARKING ANYTIME:**

On Beech Street, west side, from a point 100 feet north of Myrtle Street to a point 40 feet north

Alderman Ludwig

On Hanover Street, south side, from a point 308 feet east of Mammoth Road to a point 27 feet east

Laurel Street, north side, from Hall Street to Wilson Street Alderman Osborne

# NO PARKING ANYTIME – (EMERGENCY ORDINANCE):

On Central Street, south side, from Cass Street to Kenney Street Alderman Osborne

# HANDICAP PARKING ONLY – (EMERGENCY ORDINANCE):

On Dearborn Street, west side, from a point 117 feet south of Summer Street to a point 25 feet south
Alderman Osborne

#### ONE WAY STREET – (EMERGENCY ORDINANCE):

Monadnock Lane, from Union Street to Pine Street – Westbound Alderman Long

### STOP SIGNS - 4 WAY:

On North Adams Street at Appleton Street – SEC, NWC \*\*\*Review attached Alderman Craig

# RESCIND METERS – 2 HOURS:

Manchester Street, north side, from Elm Street to Chestnut Street Alderman Long ORD 9579

# METERS - 2 HOURS (EMERGENCY ORDINANCE):

Manchester Street, north side, from Elm Street to a point 567 feet easterly Alderman Long

## RESCIND METERS – 2 HOURS:

Manchester Street, south side, from a point 50 feet east of Elm Street to Chestnut Street
Alderman Long
ORD 9580

#### METERS - 2 HOURS (EMERGENCY ORDINANCE):

Manchester Street, south side, from a point 143 feet east of Elm Street to a point 424 feet easterly Alderman Long

## **RESCIND NO PARKING:**

Manchester Street, south side, from a point 50 feet east of Elm Street to a point 55 feet east of Nutfield Lane
Alderman Long
ORD 3289

#### NO PARKING (EMERGENCY ORDINANCE):

Manchester Street, south side, from Elm Street to a point 68 feet easterly Alderman Long

#### RESCIND NO PARKING LOADING ZONE:

Manchester Street, south side, from a point 20 feet east of Elm Street to a point 30 feet east
Alderman Long
ORD 6484

# NO PARKING LOADING ZONE MONDAY – FRIDAY 8:00 AM – 5:00 PM (EMERGENCY ORDINANCE):

Manchester Street, south side, from a point 68 feet east of Elm Street to a point 39 feet easterly

Alderman Long

ORD 6484

Ladies and Gentlemen, what is your pleasure?

4. Communication from Mitch Sawaya, Strange Brew Tavern President, requesting a one hour extension on the currently approved street closure time of 10:00 pm of West Franklin Back Street and extend the program to additional nights of the week.

(Note: The Committee approved a pilot program in April 2009 with the Committee to revisit the program in October of 2009.)

Ladies and Gentlemen, what is your pleasure?

- 5. Communication from Nicole Vailas, Manchester Monarchs, requesting permission to paint the Monarch's logo on the pavement at 555 Elm Street in front of the Verizon Wireless Arena as well as other locations.

  Ladies and Gentlemen, what is your pleasure?
- 6. Communication from Nicole Vailas, Manchester Monarchs, requesting permission to place yard signs at area businesses, major roads and rotaries throughout the city from October 1, 2010 through October 17, 2010.

  Ladies and Gentlemen, what is your pleasure?
- 7. Communication from Bo Ling, President & CEO of Migma Systems, Inc., requesting permission to install a pedestrian detector system at the Foundry Street and McGregor Street intersection.

Ladies and Gentlemen, what is your pleasure?

8. Communication from Samantha DePrima, Intown Manchester, requesting free parking at the Victory Garage, on Elm Street and adjoining side streets off of Elm Street (Orange Street to Lake Avenue) during their annual Taste of Downtown Manchester Event to be held between the hours of 5:00 pm and 8:00 pm on September 15, 2010.

Ladies and Gentlemen, what is your pleasure?

- 9. Communication from James Hoben, Deputy Traffic Director, requesting a moratorium be placed on handicap parking regulations in residential areas and further to grandfather in any existing regulations.

  Ladies and Gentlemen, what is your pleasure?
- 10. Communication from Brandy Stanley, Parking Manager, requesting a change in parking districts for Lake Avenue.Ladies and Gentlemen, what is your pleasure?

#### TABLED ITEM

A motion is in order to remove this item from the table.

- 11. Communication from Alderman DeVries requesting on behalf of an Olmstead Avenue resident that a directional sign placed on Brown Avenue before the Manchester-Boston Regional Airport intersection, to indicate to travelers that St. Francis Parish & School is three miles away.

  (Note: The Traffic Division has reviewed the request and a response is attached. Tabled 8/2/10, Alderman DeVries to present additional information.)
- 12. There being no further business, a motion is in order to adjourn.

# NORTH ADAMS STREET AND APPLETON STREETY CLERK'S OFFICE

#### **BACKGROUND**

Alderman Joyce Craig requested the Traffic Division to study the intersection of North Adams Street and Appleton Street. There were reports of speed on North Adams Street that prompted the request. This intersection is located in a residential neighborhood. North Adams Street runs north and south and is uncontrolled. Appleton Street runs east and west and is controlled by stop signs. Parking is not restricted on either street and visibility does not appear to be a problem. There are no pavement markings present.

### ACCIDENT HISTORY

2006 – 1 accident – failure to yield at stop sign – citation issued

2007 - No accidents

2008 - No accidents

2009 - No accidents

2010 - No accidents

The Manchester Police Department Traffic Unit provided the accident history. The accident history does not meet the minimum threshold criteria prescribed in the warrants.

#### **VOLUME AND SPEED**

The volume and speed summary, herein enclosed, indicates that the volume criteria are not met as the total intersection volume is below the minimum threshold level. In addition, it does not exceed the 85<sup>th</sup> percentile approach speed criteria.

#### **ANALYSIS**

The MUTCD warrant analysis provides several layers of criteria for recommending multi-way stop signs. This includes 1) Traffic accidents; 2) Traffic volumes and speeds; 3) Combination of accidents, traffic volumes and speeds. We are responsible for review and recommendation based on the industry established procedures and recognized standards. We, from a professional standpoint, are obligated to recommend against a permanent all-way stop sign installation as it does not meet the minimum threshold criteria prescribed in the warrants.

# **RECOMMENDATION**

• Periodically, increase police enforcement of speed limit

## **ATTACHMENTS**

2009 MUTCD Section 2B.07 Multi-way stop applications
Locus map
Intersection photos
Aerial photo
Speed and volume reports

Date: July 21, 2010

Prepared by: Jim Hoben – Deputy Traffic Director

Reviewed by: Kevin Sheppard – Public Works Director

- Except as provided in Section 2B.09, STOP signs and YIELD signs shall not be installed on different approaches to the same unsignalized intersection if those approaches conflict with or oppose each other.
- Portable or part-time STOP or YIELD signs shall not be used except for emergency and temporary traffic control zone purposes.
- A portable or part-time (folding) STOP sign that is manually placed into view and manually removed from view shall not be used during a power outage to control a signalized approach unless the maintaining agency establishes that the signal indication that will first be displayed to that approach upon restoration of power is a flashing red signal indication and that the portable STOP sign will be manually removed from view prior to stop-and-go operation of the traffic control signal. Option:
- A portable or part-time (folding) STOP sign that is electrically or mechanically operated such that it only displays the STOP message during a power outage and ceases to display the STOP message upon restoration of power may be used during a power outage to control a signalized approach.
- Section 9B.03 contains provisions regarding the assignment of priority at a shared-use path/ 15 roadway intersection.

# Section 2B.05 STOP Sign (R1-1) and ALL WAY Plaque (R1-3P)

#### Standard:

- When it is determined that a full stop is always required on an approach to an intersection, a STOP (R1-1) sign (see Figure 2B-1) shall be used.
- The STOP sign shall be an octagon with a white legend and border on a red background.
- Secondary legends shall not be used on STOP sign faces. 03
- At intersections where all approaches are controlled by STOP signs (see Section 2B.07), an ALL WAY supplemental plaque (R1-3P) shall be mounted below each STOP sign. The ALL WAY plaque (see Figure 2B-1) shall have a white legend and border on a red background.
- The ALL WAY plaque shall only be used if all intersection approaches are controlled by STOP signs.
- Supplemental plaques with legends such as 2-WAY, 3-WAY, 4-WAY, or other numbers of ways shall not be used with STOP signs.

- The use of the CROSS TRAFFIC DOES NOT STOP (W4-4P) plaque (and other plaques with variations of this word message) is described in Section 2C.59.
- Plaques with the appropriate alternative messages of TRAFFIC FROM LEFT (RIGHT) DOES NOT STOP (W4-4aP) or ONCOMING TRAFFIC DOES NOT STOP (W4-4bP) should be used at intersections where STOP signs control all but one approach to the intersection, unless the only non-stopped approach is from a one-way street.

#### Option:

- An EXCEPT RIGHT TURN (R1-10P) plaque (see Figure 2B-1) may be mounted below the STOP sign if an engineering study determines that a special combination of geometry and traffic volumes is present that makes it possible for right-turning traffic on the approach to be permitted to enter the intersection without stopping.
- The design and application of Stop Beacons are described in Section 4L.05.

# Figure 2B-1. STOP and YIELD Signs and Plaques



R1-1

R1-3P



TO ONCOMING **TRAFFIC** 

R1-2aP

**EXCEPT** RIGHT **TURN** 

**R1-10P** 

December 2009

Sect. 2B.04 to 2B.05

#### Section 2B.06 STOP Sign Applications

Guidance:

- At intersections where a full stop is not necessary at all times, consideration should first be given to using less restrictive measures such as YIELD signs (see Sections 2B.08 and 2B.09).
- The use of STOP signs on the minor-street approaches should be considered if engineering judgment indicates that a stop is always required because of one or more of the following conditions:
  - A. The vehicular traffic volumes on the through street or highway exceed 6,000 vehicles per day;
  - B. A restricted view exists that requires road users to stop in order to adequately observe conflicting traffic on the through street or highway; and/or
  - C. Crash records indicate that three or more crashes that are susceptible to correction by the installation of a STOP sign have been reported within a 12-month period, or that five or more such crashes have been reported within a 2-year period. Such crashes include right-angle collisions involving road users on the minor-street approach failing to yield the right-of-way to traffic on the through street or highway.

Support:

The use of STOP signs at grade crossings is described in Sections 8B.04 and 8B.05.

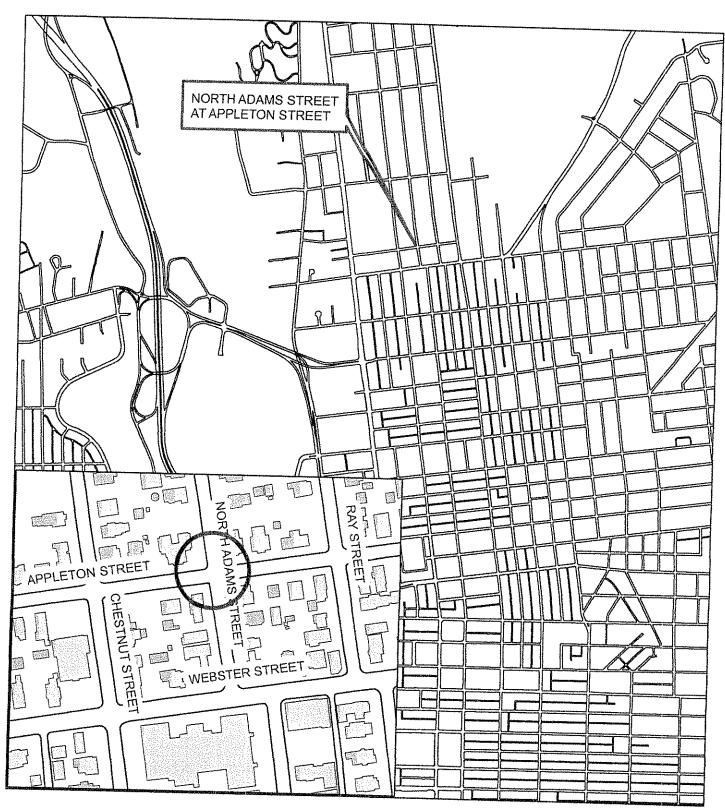
## Section 2B.07 Multi-Way Stop Applications

Support:

- Multi-way stop control can be useful as a safety measure at intersections if certain traffic conditions exist. Safety concerns associated with multi-way stops include pedestrians, bicyclists, and all road users expecting other road users to stop. Multi-way stop control is used where the volume of traffic on the intersecting roads is approximately equal.
- The restrictions on the use of STOP signs described in Section 2B.04 also apply to multi-way stop applications. Guidance:
- The decision to install multi-way stop control should be based on an engineering study.
- The following criteria should be considered in the engineering study for a multi-way STOP sign installation:
  - A. Where traffic control signals are justified, the multi-way stop is an interim measure that can be installed quickly to control traffic while arrangements are being made for the installation of the traffic control signal.
  - B. Five or more reported crashes in a 12-month period that are susceptible to correction by a multi-way stop installation. Such crashes include right-turn and left-turn collisions as well as right-angle collisions.
  - C. Minimum volumes:
    - 1. The vehicular volume entering the intersection from the major street approaches (total of both approaches) averages at least 300 vehicles per hour for any 8 hours of an average day; and
    - 2. The combined vehicular, pedestrian, and bicycle volume entering the intersection from the minor street approaches (total of both approaches) averages at least 200 units per hour for the same 8 hours, with an average delay to minor-street vehicular traffic of at least 30 seconds per vehicle during the highest hour; but
    - 3. If the 85th-percentile approach speed of the major-street traffic exceeds 40 mph, the minimum vehicular volume warrants are 70 percent of the values provided in Items 1 and 2.
  - D. Where no single criterion is satisfied, but where Criteria B, C.1, and C.2 are all satisfied to 80 percent of the minimum values. Criterion C.3 is excluded from this condition.

Option:

- Other criteria that may be considered in an engineering study include:
  - A. The need to control left-turn conflicts;
  - B. The need to control vehicle/pedestrian conflicts near locations that generate high pedestrian volumes;
  - C. Locations where a road user, after stopping, cannot see conflicting traffic and is not able to negotiate the intersection unless conflicting cross traffic is also required to stop; and
  - D. An intersection of two residential neighborhood collector (through) streets of similar design and operating characteristics where multi-way stop control would improve traffic operational characteristics of the intersection.



# **NORTH ADAMS STREET** AT APPLETON STREET

CITY OF MANCHESTER DEPARTMENT OF HIGHWAYS LOCUS MAP





APPLETON STREET EASTBOUND FACING SOUTH



# APPLETON STREET EASTBOUND FACING NORTH



APPLETON STREET
WESTBOUND FACING SOUTH



APPLETON STREET WESTBOUND FACING NORTH

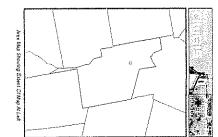


North Adams Street
South of Appleton Street Facing North



# NORTH ADAMS STREET NORTH OF APPLETON STREET FACING SOUTH





3-12

# SPEEDsentry Summary Information for N Admas SB at Appleton 2010.ssd

Speed Limit: 30

Avg Speed: 20

50% Speed: 20

10 MPH Pace: 18 to 27

Display Trigger: None

Maximum Speed Detected: 50

85% Speed: 27

Radar Pickup Distance: 925 ft



File size: 22,065 bytes File Version: SSD\_1\_1 File Created: 7/2/2010 11:24:46 AM

Data Points: 462,340

\* This File contains settings changes. Please see the Settings History tab for details.

# Speed Summary for N Admas SB at Appleton 2010 - Volume by Speed -

Time Start	Time End	1 to 10	11 to 20	21 to 30	31 to 40	41 to 50	51 to 60	61 to 70	71 to 80	81 to 90	91 to 100	<b>Total Vehicles</b>
12:00 AM	12:59 AM	1	0	0	0	0	0	0	0	0	0	11
1:00 AM	1:59 AM	1	2	0	0	0	0	0	0	0	0	3
2:00 AM	2:59 AM	1	2	1	0	0	0	0	0	0	0	4
3:00 AM	3:59 AM	3	4	1	1	0	0	0	0	0	0	9
4:00 AM	4:59 AM	0	1	5	0	0	0	0	0	0	0	6
5:00 AM	5:59 AM	3	12	2 3.4	2	0	0	<b>0</b> 5 6 4	0	0	0	19
6:00 AM	6:59 AM	2	9	12	1	0	0	0	0	0	0	24
7:00 AM	7:59 AM	3.	9	19	2	1	0	02/424	0 200	0	0	34
8:00 AM	8:59 AM		8	15	2	0	0	0	0	0	0	27
9:00 AM	9:59 AM	3	8	4	1 99-39	1	0	0	0	0	0	17
10:00 AM	10:59 AM		13	14		0	0	0	0	0	0	32
11:00 AM	11:59 AM	e el commune la constantación	15	16	2	0	0	0	0	0	0	35
12:00 PM	12:59 PM	3	14	10	0	0	0	0	0	0	0	27
1:00 PM	1:59 PM	3	14	13	2	0	0	0	0	0	0.55	32
	2:59 PM	lettur (averagence)	20	18	muunoumouunovuun	0	0	0	0	0	0	42
3:00 PM	Actor of the second second			25	2	0 0	0,000	0	0	0		53
4:00 PM				23	2	0	0	0	0	0	0	52
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6:00 PM	6:59 PM	6		21	3		0	0	0	0	0	52
7:00 PM	Commence of the second section of the second	4	15	17	153655	0	0	0	0	0	0	37
8:00 PM	8:59 PM	4	18	10	0	0	0	0	0	0	0	32
9:00 PM	9:59 PM		8	10	16.66	0	0	0	0	0	0	22
10:00 PM	10:59 PM		3	8	0	0	0	0	0	0	0	12
11:00 PM	11:59 PM	القرارية والمستحدد والمستحدد	the same of the same of the same	9			0	0:4:3:4	0 = = 5	0	05: 4:0: 3	20
Total		67	281	293	31	3		0	0	0	0	675
%		9.9%	41.6%	43.4%	4.6%	0.4%	0%	0%	0%	0%	0%	0%

# Approximate Vehicle Counts for N Admas SB at Appleton 2010

Time Start	Time End	6/29/2010	6/30/2010	7/1/2010	7/2/2010
12:00 AM	12:59 AM	*	1	0	0
1:00 AM	1:59 AM		3	0	0 3
2:00 AM	2:59 AM	*	0	2	2
3:00 AM	3:59 AM	🗷 Karabaran 🕸	3	4 182 18	2
4:00 AM	4:59 AM	*	2	2	2
5:00 AM	5:59 AM	• 35201775.245045	5	4	10
6:00 AM	6:59 AM	*	13	11	*
7:00 AM	7:59 AM		18	16	* 100 15005
8:00 AM	8:59 AM	*	14	13	*
9:00 AM	9:59 AM	*	9-20-20-20-20-20-20-20-20-20-20-20-20-20-	8	Seningan
10:00 AM	10:59 AM	Ħ	15	17	*
11:00 AM	11:59 AM		16	19	* 18/18/16
12:00 PM	12:59 PM	*	13	14	*
THE PARTY OF THE P	1:59 PM	11	8	13	<b>*</b> 3 2 3 3 3 3 5 5 5 5 5 5 5 5 5 5 5 5 5 5
2:00 PM		13	10	19	*
3:00 PM	3:59 PM	15	16	22	***************************************
4:00 PM	4:59 PM	21	15	16	*
5:00 PM	5:59 PM	28	24	31	to see the second
6:00 PM	6:59 PM	11	20	21	*
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Marines and an arrangement of the control of the co	8:59 PM	9	15	8	*
	9:59 PM	7	9-44-6	6	stanta de la como
10:00 PM	10:59 PM	3	5	4	*
11:00 PM	11:59 PM	9	5	6	*
Total		140	252	267	16
94		20.7%	37.3%	39.6%	2.4%

#### STRANGE BREW TAVERN

88 Market Street Manchester, NH 03101

CITY CLERK'S OFFICE

June 25, 2010

City of Manchester, NH Office of the City Clerk Attn: Matthew Normand City Clerk

Re: Pilot Program

Dear Sir:

As you are aware, over the last two years Strange Brew Tavern has been part of a pilot program consisting of closing the alley known as Franklin West Back Street Friday, Saturday, and Sunday until 10pm.

To the best of my knowledge this program has been quite successful. I am unaware of any neighborhood complaints. In fact, many of the people in the nearby neighborhoods have been taking advantage of the outdoor seating.

Due to the success of the program, I am asking that your office consider allowing us to keep the alley closed until 11pm. This would be a one hour extension from the currently approved closure time of 10pm.

In addition, I would like to extend the program to include the other nights of the week.

Please let me know if you have any further questions regarding this request. I can be reached in my office most days at (603)666-0293, or on my cell at (603) 670-3236.

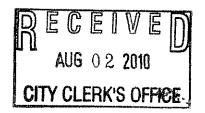
Thank you in advance for your assistance in this matter.

President

Strange Brew Tavern

August 2, 2010

Chairman William Shea Committee on Public Safety, Health & Traffic c/o Office of the City Clerk One City Hall Plaza Manchester, NH 03101



Dear Chairman Shea and Committee members:

In anticipation of our upcoming 10<sup>th</sup> Season in Manchester, we have begun formulating ideas for creating "buzz" for our Home Opener on Saturday, October 16, 2010. We would like to submit a request to have our lion head logo (pictured below) painted on Elm Street.



Our goal would be to have our logo painted at multiple locations, if possible, on the pavement in order to stir up anticipation and excitement in the Queen City as we approach this great milestone for both the Monarchs organization and the city of Manchester. We would request that one location be directly in front of the Verizon Wireless Arena at 555 Elm Street.

The painting of the logos would take place on October 1, 2010. It is our understanding that police detail must be coordinated to make the event safe and enjoyable for all parties involved.

We are aware that in the past, shamrock and fleur-de-lis designs have been painted on the city's main thoroughfare to honor heritages that are hugely a part of the city's history. The Monarchs and our mascot, Max, have in many ways become a representation of Manchester and the strong sense of community felt in the city. Our motto "You're in Monarchs Country" has become our organization's tagline and embodies our fans' bond with not only the hockey team, but their pride in Manchester.

With your permission, we wish to move forward with the project and extend the opportunity for local companies to bid on their involvement in the project.

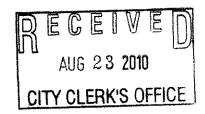
Thank you for your consideration.

Respectfully,

Nicole Vailas

August 23, 2010

Chairman William Shea Committee on Public Safety, Health & Traffic c/o Office of the City Clerk One City Hall Plaza Manchester, NH 03101



Dear Chairman Shea and Committee members:

In anticipation of our upcoming season, we are formulating ideas to create "buzz" for our 10th season's Opening Night on Saturday, October 16. One of our ideas involves placing well-designed signage elements in various locations throughout Manchester for a two-week period.

The example below is the design we used for last season's signage. We would do a similar design this season involving our specialty 10th season logo. It is our goal to encourage community pride in Manchester, while raising awareness of our Opening Night.



The Manchester Monarchs request permission to place yard signs at area businesses, major roads and rotaries throughout the city. These yard signs would be put up for the two weeks leading up to Opening Night – Friday, October 1 through Sunday, October 17. The Monarchs will be responsible for installing and removing the yard signs from all city locations.

The roads, intersections and rotaries to be targeted include:

- Brown Avenue
- Lake Massabesic Rotary
- East Industrial Drive
- Second Street
- Queen City Avenue
- Elm Street

- Bridge Street
- Mammoth Road
- Kellev Street
- Canal Street
- Commercial Street
- Granite Street

Your cooperation over the past two seasons in regards to our signage requests have been very much appreciated and have helped us to create the awareness throughout the city that we have sought for our Opening Nights.

Thank you again for your consideration.

Respectfully,

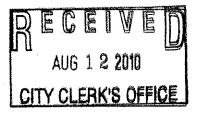
Nicole Vailas Promotions Coordinator, Manchester Monarchs



1600 Providence Highway Walpole, MA 02081 508-660-0328 508-660-0288 Fax www.migmasys.com

10 August 2010

Mr. Matthew Normand City of Manchester Office of the City Clerk One City Hall Plaza Manchester, NH 03101



Dear Mr. Normand:

Under Federal Highway Administration (FHWA) support, our company, Migma Systems, is working on a large field test project of a passive pedestrian detector. We have invited five States to participate – AZ, CA, MA, ME and NH. Installations at AZ, MA and ME are already underway.

I'd like to have the approval from City of Manchester for the installation at Foundry/McGregor Street intersection. I have attached the proposal with installation details. I also plan to attend the upcoming meeting to address any potential concerns.

Please let me know if you have any questions.

Sincerely,

Bo Ling, Ph.D.

President & CEO

CC: Jim Roy, Kevin Sheppard, Jim Hoben

# Proposal for Field Test at City of Manchester, NH

Migma Systems, Inc. 1600 Providence Highway Walpole, MA 02081

July 12, 2010

## Proposal for Field Test at City of Manchester, NH

#### 1. Introduction

Under FHWA funding, Migma Systems has developed a product suitable for the detection of pedestrians at midblock crossings and signalized intersections. This product has been fielded at Phillips Academy located in Andover, MA, since August 2009. The missed detection error rate is 0.4% and false detection error rate is 4%. This system is currently operational at Phillips Academy which is satisfied with the detector performance. FHWA has provided the additional funding for large scale tests at five States (AZ, CA, MA, ME, NH). APS (Accessible Pedestrian Signals) pushbuttons will be used at the signalized intersections.

The tests will last for 18 months. For the first six months, the system installed will not directly interact with the APS pushbuttons. Data will be collected and analyzed for the system accuracy estimation and pedestrian walking behavior study. The detection performance will be shared with participating local DOT personnel including City of Manchester, NH. If the performance is satisfactory, the system will be made functional by interacting with APS pushbutton directly.

At the end of test, local DOT can keep the equipment and Migma Systems will provide the technical support for any equipment related issues.

#### 2. Test Site at City of Manchester, NH

We plan to install the system at the intersection of Foundry/McGregor St, Manchester, NH. This site is shown in Figure 1.

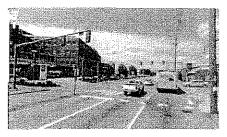


Figure 1. Test site at Foundry/McGregor St, Manchester, NH.

The installation schematic is shown in Figure 2. There will be eight stereo cameras installed at four traffic light poles and four single board computers (SBC) will be placed in the traffic controller cabinet.

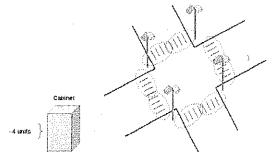


Figure 2. Schematic of site installation.

#### 3. Major Hardware Components

#### 3.1 Stereo Camera

Stereo camera is used as the optical sensor to capture pedestrians waiting in the curb ramp of the crosswalk. It is shown in Figure 3. There will be total eight stereo cameras installed, or two stereo cameras on each traffic light pole, aiming at two different directions (see Figure 2).



Figure 3. Stereo camera used in the installation.

#### 3.2 Single Board Computer

The single board computer (SBC) is shown in Figure 4. It is used to process the images acquired from the stereo cameras. One SBC can host two stereo cameras. For eight stereo cameras, four SBCs will be used for the intersection at Foundry/McGregor St. All of them will be placed inside the traffic controller cabinet.

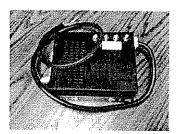


Figure 4. Single board computer hosting two stereo cameras.

#### 3.3 APS Pushbutton

APS (Accessible Pedestrian Signals) pushbuttons will be used in this installation. Figure 5 shows this pushbutton made by Campbell. An APS pushbutton is designed to help the visually impaired pedestrians to safely go across the crosswalk. In this installation, the pedestrian detection system will be used to control the APS pushbutton. All APS pushbuttons will be programmed onsite to announce the street names.



Figure 5. APS pushbutton to be installed at the intersection.

There are two different ways for the pedestrian detection system to control the APS pushbutton:

- (1) Activate the pushbutton When pedestrian(s) in the curb ramp is detected, the APS pushbutton will be automatically activated by the pedestrian detection system. In this setting, pedestrians including visually impaired are no longer required to push the button to go across the street.
- (2) Activate the locator tone When pedestrian(s) in the curb ramp is detected, the APS locator tone will be automatically turned on by the pedestrian detection system. In this setting, locator tone is off when there are no pedestrians near the curb ramp. However, to go across the street, pedestrians including visually impaired are required to push the button.

Since the system will not be connected to the pushbutton during the first 6 months, the configuration can be determined after the performance assessment.

#### 4. System Installation Plan

#### 4.1 Equipment

All equipment including stereo cameras, single board computers and APS pushbuttons will be provided by Migma Systems at no cost to City of Manchester, NH.

#### 4.2 Onsite Installation

City of Manchester is expected to have a professional traffic device installer onsite to install the cameras on the light pole and make the necessary wirings. Migma Systems will pay for the installation labor cost. Migma Systems will send its engineers to the site to help with the installation as well.

There will be no cost to City of Manchester for the installation at Foundry/McGregor Street. City of Manchester will keep all of the equipment after the test is done. Migma Systems will continue providing the technical support for any equipment issues at no cost to City of Manchester.

#### 4.3 Installation Schedule

Migma Systems will contact City of Manchester to schedule a site visit and the subsequent installation.

#### 5. Contact Information

#### Migma Systems, Inc.

Bo Ling, Ph.D. President & CEO Migma Systems, Inc. 1600 Providence Highway Walpole, MA 02081 Voice: 508-660-0328

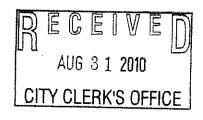
Email: bling@migmasys.com

#### Federal Highway Administration

David R.P. Gibson, P.E. FHWA Office of Operations Research 6300 Georgetown Pike McLean, Va. 22101-2296 Voice (202) 493-3271

Email: david.gibson@fhwa.dot.gov





August 30th, 2010

Brandy Stanley
Parking Division – City of Manchester
25 Vine Street
Manchester, NH 03101

Re: Request for free parking on Elm and adjoining side streets as well as Victory Garage between the hours of 5-8pm during the annual Taste of Downtown Manchester event on Wednesday, September 15th, 2010.

Dear Brandy,

This is a request for free parking on Elm and adjoining side streets off of Elm Street (Orange Street to Lake Avenue) during the annual Taste of Downtown Manchester event between the hours of 5-8pm on the evening of September 15th, 2010. We would also like to request that parking at the Victory Garage at 25 Vine Street be offered for free during these hours as well.

This is our seventh year running the cities best cross promotional event designed to spotlight the very best of what downtown Manchester has to offer. People will walk along Elm, Hanover, Lowell, Chestnut and Stark streets and will be going in and out of businesses enjoying great food inside of host retail locations. Musicians and artists will be set up at various locations along the route. We will again limit ticket sales to 1,000. This event sells out each year and is a crucial marketing tool for downtown.

Being able to offer our guests free parking would help them to better enjoy the event without fear of parking violation.

Please call me directly with any questions at 645,6285.

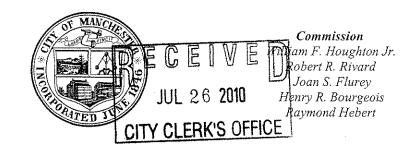
Thank you for your consideration of this request.

Samantha DePrima

Samantha DePrima
Director of Marketing & Public Relations
Intown Manchester
1000 Elm St. PO Box 659
Manchester, NH 03105-0659
(Office) 645-6285
sdeprima@intownmanchester.com

cc: Jeff Bolduc, City Clerks Office Mayor Ted Gatsas, Mayors Office Kevin A. Sheppard, P.E. Public Works Director

Timothy J. Clougherty Deputy Public Works Director



# **CITY OF MANCHESTER**

Highway Department

August 22, 2010

Chairman Jim Roy Committee on Public Safety, Health and Traffic City Hall One City Hall Plaza Manchester, New Hampshire 03101

Re: Handicap Signage

Dear Chairman Roy,

During the past several years, we have installed handicap signs in residential neighborhoods for individual properties. This type of restriction has a propensity to flourish as neighbors see the signage and want the same for themselves or loved ones.

We do not believe this signage should be used in residential neighborhoods for individual properties. We have avoided the use of handicap signs with the use of Loading Zone signs in some instances. Also, it is difficult to determine if the requestor is still living at the residence. We do survey existing regulatory signs, as time permits, but this only adds another dimension to our maintenance program. We are also hampered by the current Traffic Database, since it does not allow retrieval of categories, but only by street with all regulations listed.

Therefore, I respectfully request the Committee place a moratorium on Handicap Parking Regulations in residential areas and to grandfather-in the existing ones in place.

I will be available to answer any and all questions that you may have.

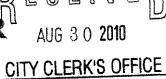
Very truly yours,

James P. Hoben Deputy Traffic Director

ec: Kevin Sheppard, P.E. - Public Works Director

# CITY OF MANCHESTER









Brandy Stanley
Parking Manager
bstanley@manchesternh.gov

August 30, 2010

Chairman Jim Roy Committee on Public Safety & Traffic 1 City Hall Plaza Manchester, NH 03101

Re: Request to Change Parking Districts for Lake Avenue

Dear Chairman Roy:

The Traffic Committee and the Board of Mayor and Aldermen recently approved a request to establish and lease the parking lot on Lake Avenue between Elm Street and Chestnut Street.

Our budgeted numbers included the purchase of one (1) Pay & Display meter which will be placed inside the parking lot. It was the intent of the Parking Division to allow parking lot patrons to use on-street meters adjacent to the parking lot to purchase receipts for vehicles parked in the lot.

This is current practice for the Middle Street Lot, the Arms Lot and the Bedford Lot, and has not only kept expenses down by reducing the number of meters purchased, but has also been logical for our customers.

Lake Avenue has two (2) Pay & Display meters on Lake Avenue adjacent to the parking lot, which we intend to use to supplement the meter inside the parking lot. In order to facilitate this use of the existing meters, we would like to change the rate and hours of enforcement on that block of Lake Avenue to match the rates previously approved for the Lake Avenue Lot by the Traffic Committee and the Board of Mayor and Aldermen.

We propose to remove Lake Avenue from District 26, which is currently \$.50 per hour Monday-Friday from 8am to 5:30pm. At the same time, we would like to add this block to District 27, which is \$.75 per hour Monday-Friday from 8am-8pm.

This change represents an increase in rate and hours of enforcement, however a week of hourly space counts revealed that almost 50% of the vehicles parked on this block have

on-street parking permits, which would not be effected by the new ordinance. Further analysis showed that 25% of the vehicles were parked on the block all day, for multiple days and would be excellent candidates for an on-street parking permit. Should the committee approve this change, we will reach out to those repeat customers to let them know of the change and that monthly permits are available.

Please let me know if you have any questions.

Sincerely,

Brandy Stanley

Parking Manager City of Manchester

CC: William Sanders

Brandy Starley

# City of Manchester New Hampshire

In the year Two Thousand and

Ten

## AN ORDINANCE

"Amending 70.54 Permit Parking in Lieu of Coin Deposit and Parking Districts of the Code of Ordinances of the City of Manchester by changing Lake Avenue between Elm and Chestnut from District 26 to District 27."

Page 1 of 5

BE IT ORDAINED, By the Board of Mayor and Aldermen of the City of Manchester, as follows:

I. Amend the Code of Ordinances by deleting language as stricken (----) and inserting new as bolded (**bold**). Sections of the following chapters that remain unchanged appear in regular type.

§ 70.54 PERMIT PARKING IN LIEU OF COIN DEPOSIT AND PARKING DISTRICTS.

- (A) The other provisions of §§ 70.76 through 70.82 of this chapter notwithstanding, vehicles may be lawfully parked in compliance with the requirements of this section, provided that the permit issued pursuant to this section is displayed by being hung from the rear view mirror or fully visible on the passenger side of the dashboard of said vehicle.
- (B) In accordance with policies and procedures as are approved by the Committee on Traffic and Public Safety, the Parking Manager or his/her designee is hereby authorized to issue parking permits at monthly fees, or school semester fees under contractual arrangement, as prescribed herein. Such permits shall allow parking in lieu of the deposit of the required coin in any metered parking space unless otherwise posted or in any parking space designated by posting "Permit Parking Only" located in any of the following districts during the times prescribed:

Parking District

Monthly Permit Rate Established

8:00 a.m. to 5:30 p.m. Monday through Friday Downtown On-Street area to include 10 hour metered spaces east of Canal Street, excluding Elm Street

\$45.00

5:30 p.m. to 10:00 p.m. Monday through Friday, and Saturday 8:00 a.m. to 10:00 p.m.

Civic Center Event decal -

\$35.00

any 10-hour meter in all districts not otherwise posted 8:00 a.m. to 5:30 p.m. Monday through Friday

# City of Manchester New Hampshire

In the year Two Thousand and

Ten

## AN ORDINANCE

"Amending 70.54 Permit Parking in Lieu of Coin Deposit and Parking Districts of the Code of Ordinances of the City of Manchester by changing Lake Avenue between Elm and Chestnut from District 26 to District 27."

Page 2 of 5

BE IT ORDAINED, By the Board of Mayor and Aldermen of the City of Manchester, as follows:

Other Parking Lots -

Hartnett Lot

Middle Street Lot

Pearl Street Lot

Pine Street Lot

Canal Street Lot

Lake Avenue Lot

10 Spaces for employees and customers of 33 Central

8:00 a.m. to 8:00p.m. Monday through Friday

1155 Elm Street Garage

\$75.00

24 hours, 7 days per week

Rines Center Parking Only

\$50.00

Rines Center (1528 Elm Street) area to include the Rines Center parking lot and garage. Parking restricted to Rines Center employees and visitors only.

24 Hours, Monday through Sunday

Transit Station Parking Lot

30 Minute Parking

For Transit Station Only

2 Spaces for Transit Employee Parking Only

8:00am-6:00pm Monday through Friday

City Hall Parking Lot

1 Hour on City Business Only

Area to include lot off Stark Street and 3 spaces off Hampshire Lane

8:00 a.m. to 5:30 p.m. Monday through Friday

District 20

\$45.00

Area: Commercial Street both sides, bounded on the north by Canal Street and on the south by Arms Street. Dow Street both sides easterly from Commercial Street to the railroad tracks. Bedford Street east side from Kidder Street to a point 272 feet southerly.

# Tity of Manchester New Hampshire

In the year Two Thousand and

Ten

## An Ordinance

"Amending 70.54 Permit Parking in Lieu of Coin Deposit and Parking Districts of the Code of Ordinances of the City of Manchester by changing Lake Avenue between Elm and Chestnut from District 26 to District 27."

Page 3 of 5

BE IT ORDAINED, By the Board of Mayor and Aldermen of the City of Manchester, as follows:

District 21 UNH Student rate by semester \$45.00

\$ 25.00

Area: Bedford Street both sides, bounded on the north by a point 272 feet south of Kidder Street and on the south by a point 855 north of Pleasant Street; Spring Street both sides bounded on the east by Bedford Street and on the west by Commercial Street; Commercial Street both sides bounded on the north by Arms Street and on the south by Waumbec Street; Arms Street, both sides bounded by Commercial Street on the east and Stark Street on the south; Stark Street both sides, bounded by Commercial Street to the east, and Mungalls Street to the west; Arms Lot, Arms extension Lot, Arms Outer Lot and Bedford Lot.

District 22 \$45.00

Area: Bedford Street both sides bounded by a point 855 feet north of Pleasant Street and Granite Street to the south; Commercial Street, both sides bounded by Waumbec Street to the north and Granite Street to the south; Phillippe Cote Street both sides bounded by Commercial Street at each end; Textile Court south side from Commercial Street to the dead end; Pleasant Street, both sides bounded by Bedford Street to the east, Commercial Street to the west; (to be added) North State Street, Mulsey Street and Payson Street.

District 23 \$45.00

Area: South Bedford Street west side bounded on the north by Depot Street and on the south to the dead-end; South Commercial Street both sides bounded on the north by Granite Street and on the south by South Bedford Street

# Tity of Manchester New Hampshire

In the year Two Thousand and

Ten

## AN ORDINANCE

"Amending 70.54 Permit Parking in Lieu of Coin Deposit and Parking Districts of the Code of Ordinances of the City of Manchester by changing Lake Avenue between Elm and Chestnut from District 26 to District 27."

Page 4 of 5

BE IT ORDAINED, By the Board of Mayor and Aldermen of the City of Manchester, as follows:

District 24

\$45.00

Area: Myma lot	Per-Ho	our	Rate
·	0-1	\$.75	
	1-2	\$1.50	
	2-3	\$2.25	
	3-4	\$5.25	
	4-5	\$8.25	
	5-6	\$11.25	
	6-7	\$14.25	
	7-8	\$17.00	Daily Maximum

District 26 (\$.50 per Hour Zone)

8:00 a.m. to 5:30 p.m. Monday through Friday:

Commercial Street; South Commercial Street; South Bedford Street; Bedford Street from Granite Street to Kidder Street; Pleasant Street from Bedford Street to Commercial Street; Textile Court; Stark Street from Canal Street to Mungalls Street; Elm Street from Langdon Street to Bridge Street; Dow Street from Elm Street to Canal Street; Myrtle Street from Chestnut to Elm Street; Fir Street from Elm Street to North Hampshire Lane; Orange Street from Chestnut Street to Elm Street; Hollis Street; Kidder Street; Bridge Street from Union Street to Elm Street; Chestnut Street from Myrtle Street to Auburn Street; East High Street from Union Street to Pine Street; Pine Street from Bridge Street to Lake Avenue; Lowell Street from Union Street to Chestnut Street; Concord Street from Union Street to Chestnut Street; Amherst Street from Union Street to Chestnut Street; Hanover Street from Union Street to Chestnut Street: Central Street from Pine Street to Chestnut Street; Lake Avenue from Union Street to Elm Chestnut Street; Spruce Street from Pine Street to Chestnut Street; Cedar Street from Pine Street to Chestnut Street; Auburn Street from Pine Street to Elm Street; Willow Street from Cedar Street to Valley Street; Elm Street from Auburn Street to Valley Street.

District 27 (\$.75 per Hour Zone)

8:00 a.m. to 8:00 p.m. Monday through Friday:

# City of Manchester New Hampshire

In the year Two Thousand and

Ten

## An Ordinance

"Amending 70.54 Permit Parking in Lieu of Coin Deposit and Parking Districts of the Code of Ordinances of the City of Manchester by changing Lake Avenue between Elm and Chestnut from District 26 to District 27."

Page 5 of 5

BE IT ORDAINED, By the Board of Mayor and Aldermen of the City of Manchester, as follows:

Elm Street from West Auburn Street to Bridge Street; Kosciuszko Street; Lowell Street from Elm St. to Chestnut Street; Concord Street from Elm Street to Chestnut Street; Amherst Street from Elm Street to Chestnut Street; Hanover Street from Elm Street to Chestnut Street; Manchester Street from Elm Street to Chestnut Street; Merrimack Street from Elm Street to Chestnut Street; Central Street from Elm Street to Chestnut Street; West Auburn Street from Canal Street to Elm Street; Depot Street from Canal Street to Elm Street; Old Granite Street from Canal Street to Elm Street; West Central Street; Pleasant Street from Canal Street to Elm Street; West Merrimack Street from Canal Street to Elm Street; Franklin Street from Pleasant Street to Market Street; Middle Street from Canal Street to Franklin Street; Market Street from Canal Street to Franklin Street; Lake Ave from Chestnut Street to Elm Street.

8:00 a.m. to 5:30 p.m. Monday through Friday:

Stark Street from Canal Street to Elm Street; Mechanic Street from Canal Street to Elm Street; Spring Street from Canal Street to Elm Street; Pleasant Street from Canal Street to Elm Street; Plaza Drive from Spring Street to Mechanic Street.

10:00 a.m. to 8:00 p.m. Saturday:

Elm Street from Granite Street to Bridge Street

District 28 (Arena Event Zone)

Elm Street from West Auburn Street to Valley Street; Willow Street from Cedar Street to Lake Avenue; West Auburn Street from Elm Street to Pine Street; Lake Avenue from Elm Street to Pine Street; Chestnut Street from West Auburn Street to Merrimack Street; Cedar Street from Chestnut Street to Pine Street; Spruce Street from Chestnut Street to Pine Street; Central Street from Chestnut Street to Pine Street; Pine Street from Lake Avenue to Merrimack Street.

District 29 (Stadium Event Zone)

South Bedford Street; Bedford Street from Granite Street to Middle Street; South Commercial Street; Commercial Street from Granite Street to Stark Street; Phillippe Cote Street; Pleasant Street from Commercial Street to Bedford Street; Textile Court.

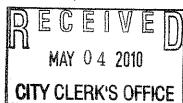
II. These ordinances shall take effect upon passage.



District 18

# The Senate of the State of New Hampshire

107 North Main Street, Room 302, Concord, N.H. 03301-4951



Office 271-2104 TTY/TDD 1-800-735-2964

April 29, 2010

Matthew Normand Office of the City Clerk One City Hall Plaza Manchester, NH 03101

RE: Directional Signage on Brown Avenue

Dear Mr. Normand,

A constituent of mine, who resides on Olmstead Avenue in Manchester, contacted me in hopes of getting a directional sign placed on Brown Avenue before the Manchester-Boston Regional Airport intersection. The sign would indicate to travelers that St. Francis Parish & School is 3 miles away (or approximates distance) and what direction it is in.

He feels there is confusion to people who are looking for the Parish and often gives directions to people who are unsure of the location. He believes this would be a great help.

If you have any questions, please do not hesitate to contact my office at 271.1403.

Thank you for your consideration in this matter,

zetsi DeVines (GA)

Betsi DeVries

Senator

BLD/epm

cc: Alderman Jim Roy, Chair of Committee on Public Safety, Health and Traffic

# Normand, Matthew

From:

Normand, Matthew

Sent:

Tuesday, May 04, 2010 10:26 AM

To:

Hoben, James

Cc:

Roy, James; Devries, Betsi

Subject:

Sign Request

Attachments: S75BW-110050410220.pdf

Jim,

I have attached a sign request from Alderman Devries received today for your review and recommendation to the Committee on Public Safety.

Matt

Matthew Normand City Clerk Office of the City Clerk One City Hall Plaza Manchester, NH 03101 T:(603) 624-6455 F:(603) 624-6481 www.manchesternh.gov/cityclerk

### Freeman, Heather

From:

Hoben, James

Sent:

Friday, June 25, 2010 6:50 AM

To:

Freeman, Heather; Sheppard, Kevin

Cc:

Roy, James

Subject: RE: Signage on Brown Avenue

It is at the discretion of the Committee to install these type signs.

Place it on the agenda for discussion. The Committee has placed a moratorium on this type signage. This type sign has not been installed in the city before – directions to a church in another town.

Jim

From: Freeman, Heather

Sent: Thursday, June 24, 2010 2:35 PM

To: Hoben, James

Subject: Signage on Brown Avenue

Jim,

On May 4, 2010 the City Clerk forwarded a request for signage from Alderman DeVries to you for review and recommendation. I do not see a recommendation from you in our records. Is that something you can forward to the Committee on Public Safety, Health and Traffic c/o the City Clerk? Attached is a copy of the request and the City Clerk's email.

Heather Freeman Vital & Legislative Records Supervisor Office of the City Clerk T: (603) 624-6455 F: (603) 624-6481