

To: Mr. Lincoln Daley, Milford, NH Town Administrator Date: April 17, 2023

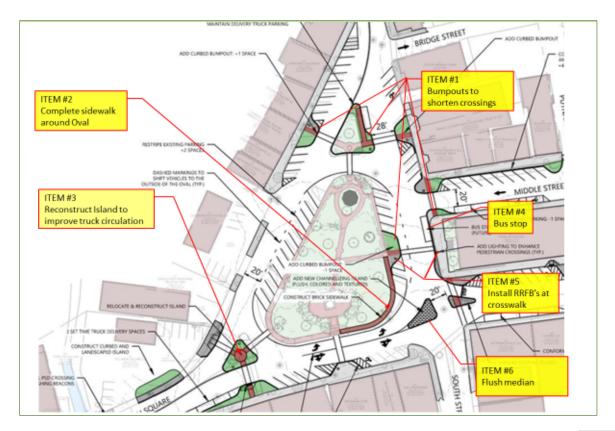
Project #: 52852.00

From: Gregory L. Bakos, PE

Re: Milford #42470 LPA Project

The following is a summary of the proposed Oval improvements that are depicted in the accompanying images.

# MILFORD OVAL IMPROVEMENTS



# Item 1 – Curb bumpouts to shorten pedestrian crossings everywhere shown

\$ 327,000

# Description

Install curb extensions at the crosswalks surrounding the oval as shown on the plans. The curb extensions provide opportunities for plantings, lighting, and crossing signs.

### **Benefits**

The curb extensions will improve pedestrian safety by shortening crossing distances and by making pedestrians more visible before they enter the roadway to cross.

### Concerns

The curb extensions will require drainage modifications since they will obstruct water flowing along the curbline in some areas. They also make snow and leaf removal more difficult, but they do not impeded traffic since fall in line with the adjacent parking bays.

# Item 2 – Complete brick sidewalk around the southeast side of the Oval \$29,000

### Description

The intent is to complete the sidewalk that is missing around the southeast quadrant of the oval park.

### **Benefits**

This will provide better opportunities for pedestrians to reach the crossing locations on the south and east side of the Oval park.

### Concerns

There is a hydrant that may need to be relocated to make room for the sidewalk.

### Item 3 – Reconstruct delta island in southwest corner to improve truck circulation \$61,000

### Description

The island would essentially be moved further to the southwest to make room for circulating trucks.

### **Benefits**

The large truck cabs would be able to swing wider to allow their rear tires to avoid clipping the Oval park curbing.

### Concerns

The tree in the island would be lost and the granite and brick work will be expensive.

### Item 4 – Define a bus stop location for future bus service

### Description

A bus stop would be marked on the pavement and designated with a sign. There may also be space for a bench.



\$ minimal

### **Benefits**

This would be a logical location for a bus stop if service is expended to the downtown.

### Concerns

Parked buses would slightly impeded trucks from swinging wide before turning to go south around the Oval

# Item 5 – Install Rectangular Rapid Flashing Beacons (RRFB's) at the Town Hall / Oval crosswalk

### Description

Not Approved

RRFB's would enhance pedestrian safety at the heavily used crosswalk that leads from City Hall to the Oval park. The RRFB's would be pedestrian actuated, and the expectation is they will improve the rate of motorists yielding to pedestrians in the crosswalk. (The rapid flashing beacons do not stop traffic, they only draw attention to the fact that there are pedestrians attempting to cross. They are known to improve compliance with yield laws.)

### **Benefits**

Improved yielding to pedestrians.

### Concerns

Visual impact at a prominent location in front of Town Hall and the park.

# Item 6 – Install a flush textured median to help orient circulating traffic

### Description

This would include installing colorized and textured pavement in a configuration to help reinforce the use of the left and right eastbound lanes. The material may be similar to the colorized stamped material on the South Street approach, or it could be a concrete or cobblestone material.

### **Benefits**

Low cost low impact measure to improve operations.



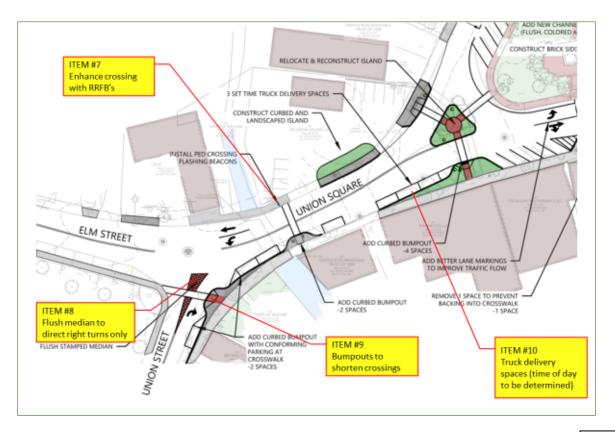


\$ 35,400



### Concerns

Long term maintenance of the material, depending on what materials is selected.



# Item 7 – Enhance crosswalk with RRFB's and bumpout across Union Square

\$ 93,400

# Description

This crosswalk was identified as an important location and the bumpout and RRFB's would improve yielding to pedestrians at a location where vehicles may otherwise be speeding up to leave the Oval.

# **Benefits**

Improved yielding to pedestrians.

### Concerns

Visual impact. Potential need for an easement on the north side.

# Item 8 – Install flush median to reinforce new right turn only designation

# Description

A flush median would be installed similar to the one in #6 above t o help reinforce a new right turn only designation.

# **Benefits**

Reduced congestion and conflict at the Elm/Union intersection, making it easier to get out of Union Street and reducing stacking back into the oval.

### **Concerns**

This change would shift some traffic to Cottage Street and the Cottage Street / Elm Street intersection.

# Item 9 – Construct bumpout to shorten Union Street crosswalk

### Description

This bumpout would shorten the crosswalk distance and make pedestrians more visible to motorists.

### **Benefits**

This bumpout would shorten the crossing distance and it would also improve pedestrian visibility since there are cars parked in advance of the crosswalk.

### **Concerns**

As with the other bumpouts, the curb extension may require drainage modifications, and may make snow and leaf removal slightly more difficult.

# Item 10 – Designate parking for truck delivery during specific hours

### **Description**

There is a concern that delivery trucks currently park in a lane along the south side of the Oval. This action would designate parking spaces for delivery trucks during specific hours so the trucks will have an alternative to parking in a lane.

### **Benefits**

Improved traffic operations and improved safety for the delivery staff.



Not Approved

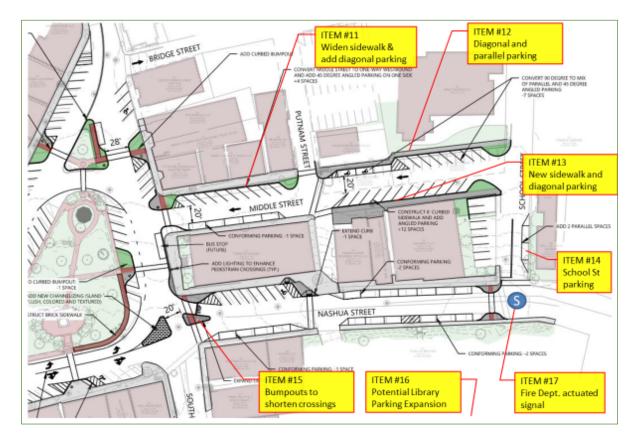
\$ minimal

Not Approved



### Concerns

The delivery hours, presumed to be morning, could impact an adjacent restaurant that serves breakfast. That is not to say there are not three parking spaces available around the Oval during those hours. The selection of the truck parking hours may warrant further discussion.



# Item 11 – Make Middle Street one-way westbound, and convert north side of Middle Street to diagonal parking west of Putnam Street

### Description

Middle Street would be converted to One-way westbound to allow additional parking along the sides. The work includes pavement and sidewalk rehabilitation.

### **Benefits**

The configuration would add 4 spaces on the north side between Putnam Street and the Oval.



### Concerns

The Fire Department requires a minimum clear width of 20-feet between the parking spaces, which this configuration provides. Diagonal parking will result in bumper overhangs but the sidewalk is relatively wide in that area.

# Item 12 – Convert a portion of the north side of Middle Street parking to parallel and a portion to diagonal east of Putnam Street

Not Approved

### Description

The 90-degree parking would be converted to parallel and diagonal parking since there is not sufficient room to accommodate 90-degree parking when parking is added to the south side of the street. A portion of the parking would be parallel to stay off the 30 Putnam Street property and apportion would be diagonal to maximize the number of spaces.

### **Benefits**

This configuration would allow new spaces to be added on the south side of the street.

### Concerns

There would be property impacts to the former school property on the north side.

There would be a loss of 7 spaces on the north side.

# Item 13 – Construct sidewalk on south side of middle Street and add diagonal parking

### Description

\$ 54,500

This would be a curbed sidewalk where none exists today, and diagonal parking would be added.

### **Benefits**

This would provide a new walkway for pedestrians and 12 new parking spaces.

### Concerns

The small surface lot that fronts on Middle Street would be closed off and reoriented to School Street with a loss of 2 spaces.

# Item 14 – Add two parking spaces on School Street

\$ minimal

### Description

Two spaces would be marked where none exist today. The 8-foot wide parking spaces would leave two 11-foot wide travel lanes.



### **Benefits**

Two new spaces.

### Concerns

Concern has been expressed that the spaces may impede vehicles turning into School Street from Nashua Street, however the spaces are set in approximately 30-feet from Nashua Street.

# Item 15 – Expand the Nashua Street delta island at South Street slightly to improve pedestrian refuge \$ 11,400

### Description

The existing island is 8-feet wide at its widest pint and the expansion would make it 14-feet wide at its widest point.

### **Benefits**

Shorter crosswalks and more space for pedestrian refuge.

### Concerns

Truck turning would be tighter from South Street.

# Item 16 – Reconfigure and expand the Library parking lot to add approximately 49 spaces

Description

\$ 460,000 (placeholder pending more information)

This is a City initiative to greatly expand the Library parking area.

### Benefits

This would add greatly to the downtown public parking supply as well as adding parking for the Library.

The lot is convenient to Town Hall and the Oval.

### Concerns

Initial cost of approximately \$400,000 is a concern.

It may be necessary to designate specific parking spaces for general public parking so the library gets priority.



# Item 17 – Add a fire station actuated traffic signal at the School Street / Nashua Street intersection

\$ 108,200

# Description

This signal would help fire trucks enter Nashua Street, especially during peak hours when traffic queues across School Street. There reportedly was a signal at this intersection in the past.

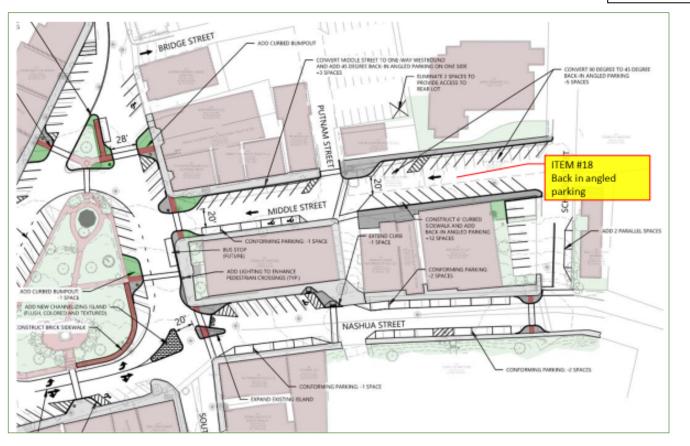
### **Benefits**

The signal would be expected to improve fire department response times.

### Concerns

Initial cost.





# Item 18 – Make the diagonal parking on Middle Street back-in instead of head-in

Not Approved

# Description

The diagonal parking spaces that are proposed on Middle Street would reoriented such that vehicles would back into them instead of pulling into them head first.

### **Benefits**

Back-in angled parking greatly improves motorist's ability to pull out from parking spaces safely when compared to backing out. The expectation is the benefits of pulling out with good visibility of oncoming traffic and bicyclists would outweigh the added challenge of backing into the spaces.

### Concerns

Rear bumper overhangs tend to be longer than front bumper for some vehicles such as pickup trucks, so wider sidewalks may be needed to counter that effect.

Public education and acceptance on how to use back-in parking can be a challenge.



# Item 18 – Mill and overlay the roadways within the project limits

### Description

\$ 206,300

The intent is to resurface and re-stripe the roadways within the project limits since the other improvements will leave the roadways with scars and joints along new curbing.

### **Benefits**

The work will leave the Oval area looking new and riding smoothly.

### Concerns

Initial cost.