

**City of Keene**  
**New Hampshire**

**WINCHESTER STREET RECONSTRUCTION PROJECT**  
**MEETING MINUTES**

**Tuesday, November 29, 2016**

**6:30 PM**

**Council Chambers**

**Members Present:**

Thomas Powers, Chair  
Gary Spykman, Vice Chair  
Frank Mazolla  
William Hope  
Tom Bogar  
Joseph Bendzinski  
David Souther

**Staff Present:**

Don Lussier, PS, City Engineer  
Kürt Blomquist, Public Works Director

**Others Present:**

Gene McCarthy, MacFarland Johnson  
Bryan Colburn, MacFarland Johnson  
Don Minnery, Saratoga Associates  
Emily Gardner, Saratoga Associates

**Members Not Present:**

April Buzby  
Kate Jennings

**1) Call to Order and Roll Call**

Chair Powers called the meeting to order at 6:32 PM and Mr. Lussier conducted roll call.

**2) Approval of Minutes – August 2, 2016**

Mr. Bendzinski made a motion to approve the minutes of August 2, 2016, which was seconded by Mr. Bogar and carried unanimously.

**3) Committee Business**

Chair Powers noted this meeting is to hear from the consultants and the final objective is to leave this meeting prepared to make final considerations at the next meeting. In the long-term, the goal is to move this project to the Municipal Services, Facilities and Infrastructure Committee in February 2017 for them to begin action to move it to Council.

**a. Overview of September 13 Listening Session**

Mr. McCarthy said more than 60 people attended the public listening session and had an interesting discussion. He listed several of the highlights of identified challenges and opportunities which were similar to those identified by the Committee. The public focused more on the Pearl/Island intersection.

- Public Identified Challenges in the Corridor (numbers represent amount of public working groups who identified the challenge)
  - Pearl Street Traffic – Left turn is a problem (6)
  - Pearl/Island Intersection is blocked/difficult to get through (4)
  - Inattentive Pedestrians (4)
  - Not Good for Bikes (3)
  - Key Road Traffic (3)
  - Jaywalking (3)
  - Long Trucks Must be Maintained (3)
  - Heavy Right Turn for SB into Key Rd (2)
  - Left Turns onto Key Rd and Pearl (2)
  - Left Turns into Sunoco (2)
  - McDonalds is a Cut Through (2)
  - Left Turns Out of KSC Lot (2)
  - Why Replace Island Street Bridge? (2)
  
- Public Identified Opportunities in the Corridor (numbers represent amount of public working groups who identified the opportunity)
  - Key road to Rt. 9 Connection (4)
  - Tear Down Goodnow House or Move (4)
  - Right Turn into Walmart from Rt. 101 (3)
  - Landscaping (like Washington St) (3)
  - Bike Lanes Along Winchester St (3)
  - 2<sup>nd</sup> Exit from Key Road (Meadow)(Rt. 9) (3)
  - Another Crosswalk across Winchester (2)
  - Pedestrian Signal at Island (2)
  - Pedestrian Access along Winchester (2)
  - Put Wire Underground (2)

b. **Development of Project Purpose and Needs**

Mr. McCarthy noted the need to develop a project purpose and needs statement. The consultants developed a draft statement to review with the Committee. They will be iterative statements, succinct and broad, which say what the Committee and community want out of this project.

Proposed Purpose Statement: *The purpose of the project is to provide a Complete Street that accommodates cars, trucks, buses, bicycles, and pedestrians while addressing daily congestion issues along the Winchester Street corridor and providing an aesthetically appealing gateway into the City of Keene. Maintaining the safety, integrity, and continuity of Island Street will be accomplished by addressing deficiencies in the bridge that carries Island Street over the Ashuelot River.*

Mr. McCarthy asked if this statement captures what the Committee wants out of this project. Chair Powers noted that complete streets means accommodating everything

within the right of way – a loaded statement – but consistent with the City’s vision. Mr. McCarthy said the goal is to provide for all modes of transportation, traffic, and ability levels. Mr. Mazolla asked if complete streets mean underground utilities. Mr. Lussier replied no, just access for different users. Mr. McCarthy noted that moving utilities underground during construction is an opportunity though.

The Committee agreed this purpose statement reflects the goals of the project and suggested the following additions:

- Add language to note complete streets intend to accommodate the capacities of all users – clarify the City’s policy of what a complete street means.

Mr. McCarthy next presented a draft needs list intended to demonstrate the perceived need throughout the community.

- Need for Project
  - The high volume of turning traffic at the Winchester Street/Key Road/Riverside Plaza signalized intersection causes excessive queues and delay
  - The high volume of traffic on Winchester Street makes left turns from Island and Pear Streets difficult causing excessive queues and delay
  - The Winchester Street/Island Street/ Pearl Street Intersection has poor geometry that creates safety issues for all users
  - Many pedestrians cross Winchester Street without a crosswalk or signal
  - Bicycle facilities do not exist in the corridor
  - Poor aesthetics for a Gateway into Keene
  - The Island Street Bridge over the Ashuelot River is on the State’s “Redlist” as it is considered a temporary bridge, has been down posted to 15 tons, is too narrow, and has sub-standard bridge and approach rail

The Committee agreed this needs list reflects the community identified need for the project with the following additions:

- Need to address the multitude of pedestrians crossing within the corridor, the lack of crosswalks and signals, and that pedestrians currently cross without using the existing infrastructure

c. **Background Information**

Next, Mr. McCarthy reviewed traffic data which informed the proposed alternatives. They got a good coverage of data on the whole corridor and counted during peak hours (AM/PM/SAT) in December 2015. They counted all traffic on Winchester for an entire week to see peaks and valleys throughout the corridor. Finally, they used that data to make predictions for 20 years beyond the project start, 2038. Mr. McCarthy provided comparisons of traffic today and traffic 20 years from now if no action is taken in the corridor. This is measured in the Level of Service (LOS) – graded A to F – and average overall delay.

- Key Road Intersection 2015
  - AM – 24.2 sec delay, LOS=C
  - PM – 49.8 sec delay, LOS=D
  - SAT – 56 sec delay, LOS=E
- Key Road Intersection 2038 (if no action taken)
  - AM – 23.2 sec delay, LOS=C
  - PM – 54.8 sec delay, LOS=D
  - SAT – 81 sec delay, LOS=F
  
- Pearl/Island Intersection 2015
  - AM – 29 sec delay, LOS=D
  - PM – 121.3 sec delay, LOS=F
  - SAT – 130.1 sec delay, LOS=F
- Pearl/Island Intersection 2038 (if no action taken)
  - AM – 45 sec delay, LOS=E
  - PM – 364.4 sec delay, LOS= F
  - SAT – 433.8 sec delay, LOS=F

Mr. Colburn noted this does not mean every car experiences these delays, each car gets weighted into an average daily delay – some will be longer and some shorter. Mr. McCarthy said this shows how much worse things will be in 20 years if no action is taken. Anything over 60 seconds receives an F – failed level of service. He said a lot of these patterns develop over time so it is good for the Committee to know the peak times of traffic (Saturday Middy, 8AM-9AM at Island, 4:30PM-5:30PM at Key) so they can observe when out driving.

Mr. Lussier asked if the traffic data matches the Committee’s experiences of the intersection. Mr. Bogar noted the worst really is the left turn at Key Road; Mr. McCarthy agreed the LOS there is an F. Mr. Bogar added that while volume may not increase significantly in the future to the Riverside Plaza, if the Key Road plaza was to reach capacity of businesses in the future, use of that intersection will increase 10-12%. Mr. McCarthy noted the 2038 projections are at 1% annually for primary streets and 0.5% annually for side streets. Those projections are linear and based on other NH projections as well as consultations with the Traffic Bureau.

Mr. McCarthy continued to crash data compiled from eight years of Keene PD accident reports. There were 301 crashes at the main Rt. 101 roundabout – that number is high because it includes the first two years of the roundabout. In those eight years there have been 25 crashes at the Key Road intersection and 20 crashes at the Pearl/Island intersection. These numbers are not alarming, and crashes were not a major public concern.

Mr. McCarthy continued to the environmental resources in the corridor. He noted the Ashuelot River and the fact that portions of the corridor are in the 100 year floodplain. The road is out of the floodplain but widening it could have an impact. Wetland evaluations have concluded and found no significant wetlands that will be impacted. The

Goodnow house on Winchester is eligible for the National Historic Registry because it has some unique architecture not commonly found in this area. The public did not seem too concerned about this resource but there are City appointed committees concerned with the historic nature of the City. If the City decides to move or relocate it, there is a significant federal process to go through which requires time and research. He still advised trying to avoid impacting it to defer the permitting processes and costs involved. Mr. Spykman said he is in favor of moving it because it creates a pinch point in the corridor which limits development. Mr. McCarthy said it is not a top level historic resource. Mr. Mazolla from KSC said they have four buildings on the registry and are sensitive to it. KSC does not have long-term plan for the building and it is in bad shape on the inside. He thinks the idea of relocating or reusing it is great. Mr. Souther said it is better to deal with it now during construction than down the line when it gets worse.

Mr. Blomquist asked if the Hickey Desilets Park was considered a resource. Mr. McCarthy replied that he did not think it qualified for 4F or 6F status, but he will look into it further.

d. **Alternatives Development**

**Alternative 1- The Signal Concept**

This alternative involves implementing signals at both intersections in the corridor. Mr. McCarthy showed the footprint necessary for this alternative – which would provide an acceptable level of service and delay in 20 years. It is a large footprint because this alternative requires enough lanes and capacity.

Mr. McCarthy presented the present vs. future delays and LOS for the intersections under this alternative.

- Key Road Intersection 2015
  - AM – 24.2 sec delay, LOS=C
  - PM – 49.8 sec delay, LOS=D
  - SAT – 56 sec delay, LOS=E
- Key Road Intersection 2038 if Alternative 1 is chosen
  - AM – 26 sec delay, LOS=C
  - PM – 30.5 sec delay, LOS=C
  - SAT – 48.8 sec delay, LOS=D
- Pearl/Island Intersection 2015
  - AM – 29 sec delay, LOS=D
  - PM – 121.3 sec delay, LOS=F
  - SAT – 130.1 sec delay, LOS=F
- Pearl/Island Intersection 2038 is Alternative 1 is chosen
  - AM – 42 sec delay, LOS=D
  - PM – 85.7 sec delay, LOS=F
  - SAT – 56 sec delay, LOS=E

### **Signal Concept 1 – Key Road Intersection**

Mr. McCarthy addressed Signal Concept 1 for the Key Road Intersection. The Goodnow house would be impacted with this alternative. It would increase the number of lanes through the intersection from five to six in addition to bike lanes and paved shoulders/sidewalks. The width of the intersection from sidewalk to sidewalk would increase from 62 feet to 82 feet. Mr. Bogar noted this does not improve the pedestrian situation and could actually exacerbate it with even longer crosswalks. Mr. Souther agreed and added the frequency of pedestrians pushing the signal button could also be a problem.

### **Signal Concept 2 – Pearl/Island Intersection**

Mr. McCarthy noted the layout for this concept is challenging because there are two streets providing left turns onto Winchester in addition to those trying to make left turns onto those streets from Winchester. This concept would involve one through lane onto Winchester which means the bridge would have to be widened to three lanes to accommodate those turns. Even with all this work, though, the delays and LOS are not projected to perform as well in 20 years as preferred.

### **Alternative 2 – The Roundabout Concept**

This alternative involves implementing a hybrid roundabout at each intersection. Mr. McCarthy presented the present vs. future delays and LOS for the intersections under this alternative.

- Key Road Intersection 2015
  - AM – 24.2 sec delay, LOS=C
  - PM – 49.8 sec delay, LOS=D
  - SAT – 56 sec delay, LOS=E
- Key Road Intersection 2038 if Alternative 2 is chosen
  - AM – 6.2 sec delay, LOS=A
  - PM – 16.7 sec delay, LOS=B
  - SAT – 23.8 sec delay, LOS=C
- Pearl/Island Intersection 2015
  - AM – 29 sec delay, LOS=D
  - PM – 121.3 sec delay, LOS=F
  - SAT – 130.1 sec delay, LOS=F
- Pearl/Island Intersection 2038 if Alternative 2 is chosen
  - AM – 6.5 sec delay, LOS=A
  - PM – 11.4 sec delay, LOS=B
  - SAT – 14.3 sec delay, LOS=B

This alternative would feature the following changes to the corridor:

- The size of a two-lane roundabout but with only a single lane for certain movements – like the Marlboro Street roundabout
- At Key Road
  - Two-lane approaches and departures
  - A single lane entering into Walmart and two lanes exiting
  - Right turns still use roundabout, no slip lanes
  - 170-180 foot diameter (comparable to Marlboro Street at 160 feet)
  - Large enough to accommodate large trucks, but only one at a time
  - 1-3 inch lip between road and apron to discourage cars from driving on it
- At Pearl/Island
  - Trucks will not be able to turn as easily, but that it okay because they should not be turning there anyway
  - This will impact the park a little

Mr. McCarthy said these alternatives are preliminary and still require a great deal of refinement. This is to allow the Committee to see the difference between the two concepts delays and LOS in 20 years.

Mr. Spykman asked about access to businesses like the Sunoco in the roundabout concept. Mr. McCarthy replied it will impact the Chipotle driveway and will be a particular challenge for the gas station. They have three curb cuts and in an effort to improve bicycle and pedestrian access, the sidewalks around the roundabout will be wider and go onto gas station property. He said those kinds of details will be refined as the process continues. This alternative will include pedestrian crosswalks on all approaches and there can be further discussion about where they should be because with two-lane approaches, it is harder to cross. There will be refuge islands for pedestrians at all approaches.

Mr. Bogar asked the cost difference between the two alternatives. Mr. McCarthy replied there is no cost estimate for construction right now but each plan has its own more expensive points and signal infrastructure is particularly expensive.

Mr. Bendzinski asked about having a roundabout at one intersection and a signal at the other. He is familiar with the traffic because he lives on Island and it is worst during the weekend. He said the traffic overflow from Key Road causes issues. He also asked if the accidents on the main roundabout will increase with the new roundabouts. Mr. McCarthy replied it could be possible to have one roundabout and one signal. As far as the accidents, he does not think so. Mr. Benzinski added a problem with the Island Street Bridge is the unsafe corrugated sidewalk.

Mr. Spykman said as much as he likes how roundabouts work, it is a lot in a small area. He asked if there is any concept to allow traffic to flow more past that point without a roundabout. Mr. Colburn replied 60% of traffic continues on Winchester and 40% turn left (on Saturdays 316 left turns and 480 through). Those are significant left turn volumes from a traffic engineering perspective. If trying to turn left from Island onto Winchester right now there is no chance. The signal option introduces delays everywhere to balance

timing appropriately. The roundabout relies on the volume mix and creates necessary gaps for people to access. The balance projected is very good.

Mr. McCarthy reviewed additional miscellaneous public mentioned concepts.

- Route 101 access to Riverside Plaza – the public suggested creating a driveway from 101 into the plaza to avoid Winchester. The challenge is that the NHDOT right-of-way there is a “limited access highway” meaning driveways are not allowed. There are situations when they are allowed but it is a long, hard process with the Federal Highway Department. It might be a good idea but will not be popular to try
- Right in/out for Key Road/Plaza Drive – this was suggested to have no roundabout at Island/Pearl and have only right turns into Key Road and Riverside Plaza, no left turns. This would be difficult with the high volume of left turns and would force out of the way U-turns to reverse direction.
- No connection to Winchester from Island or Pearl – the idea was proposed to make Island and Pearl connect, but shut off the connection to Winchester. Mr. Blomquist suggested just eliminating Pearl’s access to Winchester, making it a dead end. Mr. McCarthy said that has not been modeled but can be if there is interest but has been mentioned as less attractive to non-residents. Mr. Colburn noted that option would improve the signal option and not affect the roundabouts. Mr. Spykman instead suggested opening the end of Key Road. Mr. Blomquist replied the City looked at that option five years ago and considered connecting Key Road to the Monadnock Marketplace or opening the gate at the end of Meadow Road to Pearl. There are significant issues in implementing either option. Mr. Lussier said nothing discussed as part of the Winchester Street project would preclude the Key Road option, those options can be explored. Mr. McCarthy will bring back a basic assessment of these miscellaneous concepts.

Ms. Gardner spoke on streetscape character. The Committee has noted the desire for this corridor to be a Gateway to Keene. It is a transition zone with a lot of pavement and, moving north, a narrow median that eventually becomes a two lane road. She discussed ways to make that transition into the City more seamless. Thoroughfares, instead of wide-open pavement, introduce a wider median that could be planted, and separate bike lanes and bus platforms if wanted. She showed what different options would look like with medians paved or planted and noted the options vary depending on the space available from the alternative chosen. Elements to consider are lighting and furnishings (benches), pavements and sidewalks, medians (width), bump-outs and crosswalks, bus stops and bicycle lanes, and density of landscape plantings. She demonstrated how the increased width west of Key Road in the roundabout concept will allow more space for wider medians and plantings than the signal concept. The roundabouts would likely be less developed with some plantings with different edge treatments. Clear line of sight is necessary to be aware of where cars are; but carefully chosen so drivers do not use it to shoot gaps in the intersection. Permanent vertical elements like signs should be avoided for safety. It is in these decisions that Saratoga Associates will be important.



Mr. Bogar said the roundabout option provides more opportunities for aesthetic improvements than the signal option. Mr. Mazolla said a way to differentiate the areas north of Key Road is with light fixtures. The corridor could become more decorative closer to Main Street as part of that transition. Mr. Bogar agreed and added that lighting for pedestrian traffic is critical.

Mr. McCarthy noted issues can arise over the type of landscaping for a center island. Mr. Blomquist said he will send information on the situation at Base Hill Road to the Committee. The landscaping height was raised there because people approach the intersection at such a high rate of speed and look across the circle to gauge if they can go; as that visibility is reduced, accidents lessen. Mr. Bendzinski asked, in making this decision, what determines a paved median over landscaping. Mr. McCarthy replied treatment of the median depends largely on what the City is willing to maintain; trees are great but can be problematic in a median. Smaller medians are harder to landscape than larger and are also problematic for snow plowing.

Mr. Hope asked if the Island Street Bridge would also have to be widened with a roundabout. Mr. McCarthy replied not from a lane perspective – it would remain two lanes with bike lanes, shoulders, and sidewalks – so, it will still have to be wider than what it is now. They are trying to mitigate as many impacts on the park as possible so moving forward will need to develop more detailed plans for the bridge.

Mr. Lussier asked the consultants if they have enough feedback from the Committee to continue refining and developing more. Mr. McCarthy replied yes, everyone seems to understand the concepts and the consultants will check other refinements, especially at Island/Pearl to see if something less can be done there.

Mr. Bogar said that signal concept does not seem like an option to him. Mr. Souther agreed and said it is not an aesthetic gateway; the roundabouts are the perfect way to delineate the transition from highway to downtown. The Committee decided to move forward exploring the roundabout concept and to end research on the signal option.

Chair Powers asked about utilities. Mr. McCarthy replied that is a side issue that will be determined once construction gets closer. There are a lot of utilities on the west side of the corridor which do not necessarily have to be relocated in the alternative. The desire to move utilities underground will be further evaluated moving forward. Mr. Bendzinski noted the conduits near the college that Council decided not to place underground. Mr. Blomquist said Council approved underground there but a challenge was there was no requirement to place them underground and there was no legitimate reason to move them. He said it is a different situation when putting in new wires. The costs and logistics will have to be evaluated. Ms. Gardner said the City can design guidelines to help steer the streetscape in any way.

- e. **Public Comments on Proposed Alternatives**
- 4) **New Business**
  - a. **Next Steps – Steering Committee Meeting – December 13, 2016**

b. **Other Items**

5) **Adjourn**

Hearing no further business, Chair Powers adjourned the meeting at 8:45 PM.

Respectfully submitted by,  
Katie Kibler, Minute Taker