

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

**MUNICIPAL SERVICES, FACILITIES AND INFRASTRUCTURE COMMITTEE**  
**MEETING MINUTES**

**Wednesday, November 09, 2016**

**6:00 PM**

**Council Chambers**

**Members Present:**

Janis O. Manwaring, Chair  
Randy L. Filiault, Vice-Chair  
Stephen L. Hooper  
Gary P. Lamoureux

**Members Not Present:**

Robert J. O'Connor

**Staff Present:**

Medard Kopczynski, City Manager  
Thomas Mullins, City Attorney  
Kürt Blomquist, Public Works Director  
Jack Wozmack, Airport Director  
Donna Hanscom, Public Works Assistant  
Director  
Don Lussier, City Engineer  
Elizabeth Fox, Human Resources Director  
Rhett Lamb, Planning Director  
Will Schoefmann, Mapping Technician

Chair Manwaring called the meeting to order at 6:00 PM and explained the procedures of the meeting.

**1. Discussion – Airport Forest Management Plan**

Airport Director Jack Wozmak stated that he is here to give the MSFI Committee a sense of the work they have been doing at the Airport. He continued that when he began this job about eight months ago one issue was that for the past five years or so there have been trees in the area of the flight path causing a lot of discussion and disagreement. He said that his primary approach would be to encourage the development of an evidence-based, sustainable, forest management plan, a template for sustainable forest plans that the City should embrace for all of its forests. It is similar to when he was steward of the 450 acres of forest in Chesterfield and Westmoreland as the County Administrator. They will try to work the plan and balance the objectives against the operation of the airport and find a sustainable way to mitigate the damage and any issues they have with the forest. They had a public meeting on Saturday to gather input. They will produce a 100-page forest management plan, taking that information into account. The Airport is nearly 1000 acres. About a third is field, a third is pavement, and a third is forest. They mow most of the field and plow the paved areas. So far they have not done anything to manage the forest.

Mr. Wozmak showed the area in question on a poster on the easel. He noted that there are a lot of wetlands, 160 species of birds, and lots of other wildlife. It is important for

the City Council to understand that this is an amazing habitat. They need to understand what this land has on it, so they can balance the objectives of what is also an airport. The area of greatest concern of the Edgewood neighbors is the area with many white pine trees, some quite old. He will basically focus on that area and some other areas identified as future development sites for aviation-related activities. Aside from establishing a forest management plan he has also been asked to create a development plan to increase the utilization of the airport and derive more economic benefit from it, and define compatible uses that they can put into the Airport Master Plan to set the stage for what they will do and how and where the money will come from, and that sort of thing. The Airport Master Plan, development plan, economic development plan, and forest management plan will all come together in the next few months.

Mr. Wozmak showed the area of the trees that has been the “hottest spot,” politically, for the past four or five years. There are also other areas that had been identified as potential development sites. The acreage has a lot of white pines, extending from 3 to 15 feet into the glide path of the 2-0 runway. He continued that when he came into this position the disagreement was over the proposed clear-cutting of that area, with a little less sensitivity to the neighborhood than he would have preferred. That is why he is encouraging this forest management plan by balancing the objectives of the forested land – which, by deed, is supposed to be maintained as a sustainable forest – and the fact that it is at the end of the runway. The plan is to remove the tall white pines, open the forest floor, and let natural regeneration replace the forest. There is no question that that area will look a lot different. The good news, from a forest management view, is that the white pines constitute about 20% of the viable forest there. There is a tremendous amount of good oak and beech diversified understory there that would love to flourish for the next 100 years. He continued that he instructed the foresters that as they move forward to remove the white pines, it must be a very selective process, do minimal damage to the understory, leave the area with pathways to the trails to enhance the recreational use, make it look nice and not leave slash behind like as is common with clear cuts, and be respectful. They have an interest in operating the airport, but they also bump up against the neighborhood and have to maintain the forest. His goal and interest is to find a compromise.

Mr. Wozmak continued that they are waiting to receive information from the consultants with results of the noise study. In his view, as they go through this selective cutting, they need to be thinking about and expending resources on vegetation, hedges, or trees that repair or replace the initial impact that this might have on the surrounding neighborhood. He does not know yet exactly what those look like. There is a 20 foot berm at the edge of the airport. He is open to having a discussion with neighbors who want a visual screen. Some of the foresters who have been there think natural reforestation are the way to go, but they want to think about doing something to replace the visual screen that some neighbors have.

Mr. Wozmak continued that he does not expect that the tree thinning operation will require any public funds. The cost is anticipated to be covered by the value of the timber, turned into pulp or chips or lumber. He is does not believed that it will cost the taxpayers

anything. He hopes there is enough timber removed to create a fund to do the replanting. There will be a balance. This is a healthy forest underneath. It is good that they can let it reforest itself. He is trying to be as sensitive as he can be to the neighborhood concerns, but the obstructions are clearly a safety risk for aviation.

Councilor Hooper stated that he went to look at the forest and saw that the forest floor has a mass of deciduous leaves. He continued that he was expecting to see a mass carpet of pine needles. What that told him is that there is a healthy, smaller forest in there waiting to flourish once the pines are down. Yes, it will be a big change, but once the sun gets in there, there will be continual improvement over the years. It was a great tour and he appreciated seeing it. He echoes Mr. Wozmak's thoughts on looking for creative ways to soften the noise if the noise study says it is a concern there, and perhaps to have additional deciduous or conifers to help neighbors with the visual look. He thinks this is a several step plan and Mr. Wozmak has a good foundation of a plan. They can move very positively forward to maintain safety at the airport and be sensitive to the neighbors.

Chair Manwaring stated that she went on the tour as well. She continued that she was stunned when someone asked when the selective cutting would take place, Mr. Wozmak said by the end of the year. She thought they were not going to do anything until they have all of the reports in. It is not just visual, the forest has been protective – the neighbors have concerns about noise, air quality, and other issues.

Mr. Wozmak replied that the environmental assessment should be completed by the end of the year. He continued that the noise and visual impact will be addressed by the replanting of buffer material, whatever that is, regardless of the reports. When the reports come in they should be poised to that. He is eager to get the reforestation underway. If they wait until spring they would miss a strong growing season. He would hate to delay it by doing it mid-year when it is harder for the forest to recover. However, if there is something in the environmental assessment that says they should pause, they will pause. The reports will not say to not cut the trees and stop using the runway. The question is: if not now, when? To him, it is towards the end of the year when they have seen the environmental assessment and they have done the mitigating strategies that are feasible and practical. Time will not change anything. The issue with the trees, by now, is clear. They will have a clear 10-year forest management plan, and the results of the environmental assessment will be clear. Once they have all the information there is no reason to not move forward. Chair Manwaring replied that she is waiting for the information.

Chair Manwaring asked if any members of the public had questions.

John Dunnell, of 30 Linwood Ave in Keene, stated that he is a neighborhood resident but not along that back runway. He asked if the sustainable forest management plan exists right now, or if it is something being worked on. Mr. Wozmak replied that the plan is about 100 pages and he has seen a draft. He continued that it is not complete yet because they wanted to gather information from the public information session and use that as necessary. He thinks it will be done in November.

Mr. Dunnell asked if it will be part of the Airport Master Plan or separate. Mr. Wozmak replied that it might be in the Airport Master Plan or it may be on its own. He continued that it is integral to what the City Council does with respect to the airport and the events that take place. They want every decision to be taken into consideration by the City Council about the areas that surround it. For example, they would not want to engage in development that would interfere with the 160 species of birds on the southwest side of the airport. They want that sort of sensitivity. They want the City Council to clearly understand the impacts of the wetlands. The forest management plan is meant to be integral to decisions being made about the airport.

Mr. Dunnell asked, regarding planting a buffer after the fact, if part of the forest management plan will include further revenue so they could use those funds. He would think there is a lot of marketable timber on the airport property that does not affect neighbors like these white pines do. If the airport can provide money for the buffer, that would help. On the Internet he found information – a lot of communities are very proactive when it comes to the buffers, preparing for that in advance. He thinks that might have been the way to go. Mr. Wozmak replied that the selective tree removal operation should provide the resources necessary for the mitigation.

Mr. Dunnell stated that he was in the forest, too. He continued that the lower story is very immature. When you look up, it seems like 90-100% of that forest that will be gone. Many of the understory species are bushes. It will be quite a visual change. They should proactively look into the buffer.

Lindsey Cushing, of 7 Edgewood Avenue, stated that she was not at the forest meeting but she went to the meeting at the Airport. She continued that they are saying “selective cutting,” meaning all of the pine. At the Airport meeting there was more discussion of selective cutting of certain pines, in stages, so it would not be so dramatic, with less impact to the community. It sounds like that idea was taken off the table and she would like to hear about the reasons why. It sounds like more of a compromise. What Mr. Wozmak is now proposing does not sound like a compromise. It is decided as a forest and needs to remain a forest. It sounds like he wants to do the minimum to keep it as a forest.

Mr. Wozmak replied that if they wanted a forest management plan backed by the science of forestry, doing selective cutting and leaving the “loser trees” would not be helpful. He continued that she is right, he started down that road. The foresters’ response was, “You asked for our science-based, evidence-based forest management plan, and a partial cut like that would not be good forest management.” Good management would be taking out all the pines and allowing natural regeneration to take place. They talked him out of it. He hired them to do science-based work, not emotional- or political-based work. They said not to do it piecemeal. Removing certain trees makes others more unstable. He was originally thinking the same thing; maybe they could clear the trees over a number of years. He was strongly rebutted by the forest management professionals.

Ms. Cushing asked how that compares with planting the new trees. Mr. Wozmak replied that the newly-planted trees always grow at a slower pace than the natural forest floor regeneration. He continued that he is not against planting the trees. Their advice was, let the forest reforest itself, which is why he was talking about how to mitigate the visual impacts. The foresters suggested Hemlock hedges, Rhododendron, and that sort of thing, which would buffer without interfering with the natural reforestation.

John Mason, of 24 Linwood Avenue, stated that he and Brenda Dunn, another resident, had questions about noise, especially at night. He continued that currently the forest stops the noise. If the trees are gone and people can use the airport anytime they want, there will be much more air traffic than right now. Once in a while now he and others hear C&S jets at 4:00 AM, which is fine occasionally, but to have three or four per night would be unbearable. The forest does them a favor. They want to see regular hours so they are not always being disturbed by this. Noise is a quality of life issue. Maybe they could be given super quiet windows by the City. He got his property reassessed about a year ago and the value went down. He is wondering about easements. He is far up the street but his neighbors tell him they saw his name on the easement list. He does not know why he would be included in that. An easement would decrease the value more.

Mr. Wozmak replied that he has been working with the FAA regarding the language in the easements. He thinks they will find language for the removal of obstructions only. There was Federal overreaching, offensive (in his opinion) language that was scary to property owners, legitimately, and he does not blame them for objecting. They are working towards simpler language that says: if a tree is in the way, they have permission to cut it. He is only concerned about trees that are in the way. He does not anticipate talking to someone about easements if they do not have trees in the way. Regarding the hours of operation, they currently have preferred hours of operation that encourage people to land on 2-0 when the wind is less than 8 knots and most aircraft can do that. As they go forward and make a more formal structure for pilots, it is highly conceivable that they could establish hours and keep track of who violates the rules. Some airports establish a fine structure, so if a plane comes in at 11:00 PM unnecessarily they fine them to send a message that they want to protect the hours.

Mr. Mason asked how they will know who is violating the hours and when, since the camera was taken away. Mr. Wozmak replied that they are working towards monitoring the traffic better. He continued that yes, the FAA had them take down a camera because they did not like the position of it, but they relocated it. He thinks they should move towards hours of operation. In general, pilots are respectful of such guidelines. They need to establish hours and spread the word to pilots. They can look at digital footage to try to identify planes.

Mr. Wozmak continued that regarding windows, there are times when the noise is so great that the FAA is prompted to offer funding. They do not think noise at Keene will rise to the level of being eligible for Federal funding. If it goes above a certain decibel, yes, they will provide protective windows. He would be surprised if the noise study leads

in that direction. But they will do the mitigating plantings while forest regeneration takes place.

Dr. Ann Shedd, of 59 Greenwood Ave, stated that she appreciates the effort to come up with a comprehensive forest management plan for the whole airport property. She continued that she knows from her time on the Conservation Commission that there has been slow progress towards adding a conservation plan with forest management plans for many City properties. Many Conservation Commission members were present at the session on Saturday and found it helpful. She has a significant concern about the timing between the proposed operation and the completion of phase II of the environmental assessment. Vegetative obstructions were identified in the 2003 Airport Master Plan. The airport operated for 13 years without an issue. When the concerns arose about the 2012 proposal to do clearing, it kicked off a whole process that resulted in an environmental assessment. There was a public comment period in the spring of 2014, after which the New Hampshire Department of Transportation (NHDOT) said there needed to be a phase II of the environmental assessment to address noise impact, air quality, visual issues, and property value impacts. Stantec Consultants submitted a scope of work and said it would be completed by September 2015, which was over a year ago. The community did not hear anything until September 2016 when they were told the noise assessment would be done. The scope of work specifies that the noise assessment would be done in late winter or early spring with the leaves off, so it would be similar to the small, deciduous forest that would be left after the cutting. That was not fulfilled. It was done during a fully-leaved fall.

Dr. Shedd continued that her greater concern is air quality. Keene has had issues with air quality. A significant public health impact has been identified from micro-particulates, particularly PM 2.5. It can enter through the capillaries and into circulation and has significant health impacts. There is also documentation that jet take-offs and landings result in PM 2.5. Jet traffic is predicted to increase. There have also been studies from the US Forest Service's Northeast Division that urban forests filter PM 2.5. If the forest is not there for 10-30 years until when it regrows as a seasonal, deciduous forest, they will have a long interval of not having the PM 2.5 filtered. She thinks phase II of the environmental assessment should be done carefully and thoughtfully and she is not concerned with the work Stantec has done. She is concerned with the health of her neighbors. Vulnerable populations in the neighborhood include children and elderly people. Some people have lived there over 50 years. She would be dismayed if the clearing happened before phase II of the environmental assessment was completed with a thoughtful public comment period.

Mr. Wozmak replied that he does not disagree. He continued that however, it would be about 15 acres at most, out of the total acres. He is reluctant to wait when the right thing to do is clear. They should have done this work a long time ago and would have been a lot better off. They have to do this and will align it to the way it should be. The sooner they do it, the sooner they will have reforestation.

Councilor Hooper stated that it seems like small planes taking off are louder than jets, when they go over Boulder Street. He continued that the noise level is pretty disturbing. This is out of residents' control. Is there is any way to control planes' noise, like how cars have mufflers? Mr. Wozmak replied that he is not a pilot and he does not know the answer. He continued that he wants to clarify: there is now 15% more jet traffic and it is not C&S. Only about 40% of the jet traffic is C&S. That is just a note, to be fair to C&S.

Councilor Lamoureux stated that Mr. Mason talked about the property values decreasing. He continued that he knows there was a decrease in assessments across some neighborhoods. He wants to clarify that properties did not decrease due to the airport, it was just part of what had occurred throughout the city.

The City Manager stated that some properties remained the same, some increased, and some declined. He continued that many neighborhoods experienced a decline, not universally, and including ones nowhere near the airport. Calculating the tax rate is based on looking backwards when you do the assessment and trying to equalize it. It is based on physical assessment and going into the records to look at similar sales in areas they consider neighborhoods. In this sampling the neighborhood might be larger than Edgewood. They are looking backwards in time. The value they are setting in the assessment might not be what properties are selling for. The country has not totally climbed out of the recession. If you go backwards in time and think about what the real estate market has been like, recall that the residential properties have been assessing at 106% of sales value. That indicates a 6% drop in value. The actual experience will probably be less than that for people with properties that have dropped, although some have dropped more. It is not a value drop because it is near the airport. It is a value drop happening to some properties in many neighborhoods across the city.

Councilor Lamoureux made the following motion, which was seconded by Councilor Filiault.

On a vote of 4-0, the Municipal Services, Facilities, and Infrastructure Committee accepted the Airport Forest Management Plan as informational.

## **2. Discussion – Periodic Report - Bicycle Pedestrian Path Advisory Committee**

Linda Rubin, BPPAC Chair, distributed handouts to the MSFI Committee. She stated that she is excited to be here tonight to talk about the Bicycle Pedestrian Path Advisory Committee (BPPAC). She continued that they celebrate South Bridge – it has been a project a long time in the making. The BPPAC will be working with a Mayor-appointed committee to create a celebration and ribbon-cutting for the spring.

Ms. Rubin continued that the BPPAC is a dedicated group. Through their work and with the assistance of staff liaison Will Schoefmann, they are almost finished coming up with prioritized projects, in the BPPAC Master Plan. They have been engaged in a planning process, and these processes take a while. She is happy to report that there are some things in the draft plan that MSFI members have a copy of that are already happening. The Committee continues working on things in the City that support the development of

the bike and pedestrian network. The handout is a document that the committee worked on about 1.5 years ago, that has a vision and a big picture goal of increasing the accessibility, availability, and usage of a coordinated bicycle and pedestrian network for alternative transportation that is safe, convenient, and provides intermodal connections through a quality and well-maintained built environment. That is the goal of the plan.

Ms. Rubin continued that they came up with high level objectives, some strategies, and metrics to use to measure the implementation of the plan, and now they are in the process of taking what started out as about 40 projects that citizens thought were important to consider and prioritizing those. Shown in red font are the ones that are already happening. They have included some of the sample prioritized strategies that they have been working on for several months, such as a plan for making Main Street a Complete Street. The City adopted a Complete Streets set of guidelines that was followed by an ordinance that was passed not too long ago. Now part of the work is to start looking at the city's streets and see what needs to be done to make them more complete, particularly those that have more heavy foot traffic and/or safety issues for people using sidewalks or needs for other amenities to increase safety. They hope to return to the City Council with the updated plan that will have five priority projects. It does not mean losing any projects that are on the list, but coming up with five prioritized projects they hope to see completed in the next 3 to 5 years is something they feel would support alignment at community, City Council, and staff level for some of these active transportation projects.

Councilor Lamoureux thanked Ms. Rubin for the presentation. He continued that he was involved with Parking for a while and understands the issues of intermodal transportation. He asked if they have thought about bike lockers for the downtown area. Ms. Rubin replied that there are now more bike racks in the city because of a partnership between the City and the Southwest Regional Planning Commission (SWRPC). On their list is a plan for additional amenities, which would include bike lockers. She does not know where it would be on the priority list or if it would be in the top five. The more they can focus on amenities that make it possible for people to walk or bike, the better.

Chair Manwaring stated that she thinks the committee has someone from Pathways for Keene (PFK). Ms. Rubin replied yes, Charles (Chuck) Redfern and Emily Coey. Chair Manwaring replied that they are concerned with lighting some of the passages that are dark, especially at this time of year. She suspects PFK's priority will be lighting. Ms. Rubin replied yes, the BPPAC wants to have a plan for lighting and look at the high-need areas.

Chair Manwaring asked if they have had interns help them. Ms. Rubin replied that Keene State College (KSC) students have helped. Mr. Schoefmann stated that they have a student working with them, reviewing lighting questions on the trails. He continued that they try to work with the KSC Geography Department when they have junior/senior seminar projects. The City has had two other trails projects that students have produced valuable work on.

Chair Manwaring asked if any members of the public had questions. Hearing none, she thanked Ms. Rubin for her report and stated that they look forward to the next one.

Councilor Hooper made the following motion, which was seconded by Councilor Filiault.

On a vote of 4-0, the Municipal Services, Facilities, and Infrastructure Committee accepted the Bicycle Pedestrian Path Advisory Committee's report as informational.

**3. Discussion – Castle Street/Harper Acres Improvements – City Engineer and Keene Housing**

Don Lussier, City Engineer, stated that last week he and Josh Meehan, Executive Director of Keene Housing (KH) presented to the City Council on their proposed improvements to the Castle Street area. He continued that tonight the goal is to dig into the details. This project was included in the fiscal year 2017 CIP. It was envisioned as collaboration between the City and the KH, with the concept being that the City would make the necessary repairs to the roadway and the KH would make necessary repairs to the sidewalk and curb as part of their project. The KH has now advanced their design. Staff from the Public Works Department met with them and reviewed their plan. Editorially, he thinks there are a lot of desirable features, like low impact for storm water management, and the effort to improve functionality and accessibility. He thinks it is a good, solid plan, and well-thought through. Unfortunately, the plan as conceived is difficult for them to implement with the City street being there as a City street. The City has a three rod wide right-of-way, which triggers all the zoning and code regulations that they would have to consider, like setbacks and driveway widths. It would be difficult for them to implement the plan. Castle Street serves one property. It is surrounded on three sides by one lot: the KH Harper Acres project. That is important to keep in mind.

Mr. Lussier continued that having thought through this, staff thinks discontinuance is the best path forward for KH. That has some benefits for the City as well. It allows KH to pursue a development plan that they worked on and simplifies the City's responsibilities in coordinating the logistics of having a City construction project and KH construction project at the same time. Also, down the road it takes the City out of the responsibility of plowing and maintaining that road. Staff thinks it is the right approach. They would retain easements for utilities and drainage. Those details and legal requirements have to be sorted out. They are asking for the MSFI Committee's input and what they think is the right approach, and the authority to expend staff resources on getting survey documents and preparing legal documents.

Josh Meehan, the Executive Director of Keene Housing (KH), stated that KH supports the City's position. He continued that it makes sense for both entities. KH has been investing quite a bit in improving their properties all over the city. Harper Acres is sort of the last one on the list. The road desperately needs to be repaired. It has 112 units and many residents have mobility impairments and struggle to navigate this difficult road and curb. This is the right time. Having KH's contractors and engineers doing part of the work and the City's contractors and engineers doing other work would be hard. It is

really one project and that would not make sense. He continued that KH would be happy to take on the maintenance and plowing.

Chair Manwaring asked who would pave it. Mr. Lussier replied that KH would basically take lead on the project. He continued that along with the authority to prepare the legal documentation they are asking for the authority for the City Manager to negotiate with KH about how that would all play out.

Councilor Lamoureux asked if that means the City would be funding part of the project. Mr. Lussier replied that the City will still have a financial piece and how that gets determined is part of the details they need to sort out. \$114,000 of City money is already appropriated for this, to be used to fund the repairs on Castle Street. How it plays into the KH project is what they need to discuss.

Councilor Lamoureux stated that he saw the plan at last week's presentation. He continued that he is concerned with their intent to narrow the street a bit. Parking would be closer to the street than today. He is concerned that emergency vehicles would be blocking traffic and emergency service personnel would be walking in the road. He asked if they could make plans to accommodate that. Mr. Meehan replied that he would have to defer to KH's engineer. He continued that he is confident that the plan as it is put together is able to accommodate emergency vehicles. Councilor Lamoureux asked that they keep this in the back of their heads.

Mr. Lussier stated that when he was talking about nice features, he was being a little cryptic, and did not want to make it sound like staff had endorsed or approved the plan. He continued that it would still need to go through the normal site plan approval process. Public Works Director Kurt Blomquist replied that actually, because they are not changing the site, it is administrative, and it is not necessary to go through the Planning Board. But the road would no longer be a public way. Activities would be private activities. Emergency vehicles would not be in the way like they would be today with it being a public street. They are looking at 22-foot wide roadways. He does not think it would be an issue. They utilize emergency service people when designing projects; they would deal with any issues that come up. Mr. Lussier replied that staff has only seen a schematic plan. He continued that this would still be reviewed by staff in various departments.

Councilor Lamoureux asked if Castle Street will end at the beginning of that property, if they discontinue the road. Mr. Meehan replied that it would essentially become a big driveway.

Chair Manwaring asked if committee members or members of the public had questions or comments. Hearing none, she asked for a motion.

Councilor Lamoureux made the following motion, which was seconded by Councilor Filiault.

On a vote of 4-0, the Municipal Services, Facilities, and Infrastructure Committee recommends that the City Manager be authorized to do all things necessary to prepare and submit a Petition for the discontinuance of Castle Street and negotiate with the Keene Housing for the rehabilitation of Castle Street to be incorporated into the Harper Acres improvement project.

**4. Discussion – Driveway Code Review – Planning Department**

Planning Director Rhett Lamb stated that the MSFI Committee had questions about the nature of the status of a quasi-judicial process relative to the Driveway Code. He continued that at the last meeting they discussed three options, knowing that option one would be in conjunction with either of the other two. Option one is for abutter notification. Option two would leave the process the way it is today, with the Planning Board as the first grantor of an exception, and the City Council is an appeal body. The changes that would come under option two relate to establishing a process for a quasi-judicial review at the City Council level as is required by the nature of granting an appeal. Option three would establish the City Engineer as the primary permit grantor in the case of exceptions and the appeal process would go to the Planning Board.

Chair Manwaring asked for a review of the quasi-judicial process. She continued that it was clear that the MSFI Committee was not acting in a quasi-judicial manner when they considered the last appeal that came before them. The City Attorney, Tom Mullins replied that the MSFI Committee probably does not want to go with option two. He continued that part of the difficulty is that the City Council is a legislative body. Legislative bodies are not used to following a quasi-judicial procedure, like the Zoning Board of Adjustment (ZBA) and Planning Board are. Those two groups are used to not being able to talk about an issue outside of the meeting or collecting their own evidence or doing their own site visits. Legislative bodies are not set up like that.

The City Attorney continued that staff was careful in giving the committee three options to choose from, but he will tell them to please pick option three, because the process is much clearer. The statute says the Planning Board should and can consider these driveway issues. Option three would have the City Engineer look at it. Technical issues might come up and the Planning Board is used to listening to that technical information. The City Engineer makes a decision and goes to the Planning Board, and they are used to abutter notification and doing these hearings. They do most of these driveway petitions in the first place. The City Council does not get these appeals very often and it would require that every time these come before the City Council the City Council members would have to go through the re-training. It sets up the possibility of having arbitrary decisions because it becomes a political process and it is intended to not be that. In the State-level through the Department of Transportation there was interesting case law that just came from a Superior Court decision. They have this kind of process. It goes to the Commissioner and then to an agency that is set up to weigh all the competing issues and make the technical determinations. That gets to the other point – because there is a State board created there is a very clear appeal process through the Administrative Procedures Act into the courts. Option three is centered within the Planning Board. He has to be cautious. It is not entirely clear under the Planning Board statutory authority with respect

to the appeal of a driveway decision, but there is at least an appeals process laid out in the statute for decisions from the Planning Board, which takes it into the Superior Court. Then everyone has the opportunity to provide their evidence and testimonies and witnesses again. The Superior Court is used to this.

He continued that the bottom line is that the City Council is the legislative body and they make this decision (about which option to go with), but as the City Attorney he thinks the cleanest approach is option three. It provides everyone with a clear set of standards and a process for appealing to the Superior Court. The appeal process from a legislative action is much murkier. The courts do not like to second guess decisions from a legislative body, but because the City Council would be using a quasi-judicial process in this context, the court would have to make a determination (if there was some kind of action brought into the Superior Court) as to whether the legislative body acted appropriately under the standards that are associated with a judicial action. That becomes more problematic because the City Council is not used to it and it is easier to make procedural or substantive errors that the court can latch on to, like doing their own site visits or talking outside of the meetings. He suggests the MSFI Committee recommend to direct staff to develop the option three process.

Chair Manwaring asked if selecting option three means letting go of the concept of having a second driveway. The City Attorney replied no, they are choosing an option for how a decision is reviewed. He continued that option three does not prevent someone from applying for a permit for a second driveway. It takes the City Council out of the role of being the final step in the appeals process. Chair Manwaring stated that she thinks the MSFI Committee was unanimous that it was okay for the individual to have a second driveway. She asked if the person applying would still have a chance. The City Attorney replied yes, it just puts the process into the Planning Board and potentially into the Superior Court from there.

Councilor Filiault stated that he favored option two but he understands what the City Attorney is saying and has no problem with option three. He continued that the whole process for the Baker Street residents was very intimidating. The Planning Board process can be formal and intimidating for people who have never experienced it before. They did not know what to say and what to do. He would at least like to see, if a situation like that happens again, that someone from City staff sit down with the person and explain the situation, before they get there with the bright lights and attorneys and a room full of people who know what is going on when they do not. A staff member should explain what will happen, meet them at the door and help them find a seat, and so on and so forth. The reason these residents called the City Council is because they had no idea what was going on. He wants to see a better, smoother transition.

Mr. Lamb replied that he totally agrees. He continued that in this situation staff met with the individual from Baker Street three or four times. Staff made a strong effort and was surprised that the person was uncomfortable with the Planning Board process. There was a miscommunication somewhere. But he understands the point and they will continue to

try and reach out to people. The City Attorney stated that they could easily put together a procedures form that staff can go over with when they meet with citizens.

Councilor Hooper stated he favors option three. Councilor Lamoureux stated that last time he was in favor of option three and he just heard more reasons why it is the best. He continued that it is important for City Council members to not have to say to a citizen, as they would have to in option two, "Sorry, I can't talk to you about this." He does not like to shut down anyone who wants to speak to them. Councilor Filiault agreed. The City Attorney replied yes, option three preserves the ability for the legislative body to have that kind of communication with their constituents. He continued that it helps people not feel shut down.

Mr. Lamb stated that staff has a recommended motion for the committee, as presented at the last meeting. It also covers a point he forgot to bring up tonight – the temporary driveways. The motion includes the revisions staff would bring forth for the MSFI Committee's review to include the provision for staff to grant driveways for activities that are temporary and for a temporary duration, such as logging activities.

Councilor Lamoureux asked, doesn't the Planning Board process already have the abutter notification in place? Mr. Lamb replied actually, no. He continued that they will include the requirement for abutter notification, which would be additional to the process as it exists today. Chair Manwaring asked if it would come back to this committee. Mr. Lamb replied yes, it would come back as a revision to Chapter 70 Section 135, through this committee.

Councilor Hooper made the following motion, which was seconded by Councilor Filiault.

On a vote of 4-0, the Municipal Services, Facilities, and Infrastructure Committee recommends moving forward with option three as presented in the memorandum and that City staff is authorized to draft revisions appropriate to the selected option for the driveway permits and standards in the City Code, Chapter 70, Sections 135 through 137, related to the issuance and review of exceptions and appeals, notification of abutters, and temporary driveways.

Councilor Lamoureux stated that he did not hear anything about option one. Mr. Lamb replied that the last line of the motion specifies abutter notification (which is option one).

##### **5. Impact of Area Drought on Keene's Water Supply – Public Works Department**

Donna Hanscom, Public Works Assistant Director, introduced George Holt, Senior Hydrogeologist from Aries Engineering. Mr. Holt stated that the Public Works Department asked Aries Engineering to evaluate Keene's water system relative to the 2016 drought. He continued that they looked at existing data that Keene has collected over time. He continued that he will give a slide show presentation, starting with slides of the well fields' locations and then go into existing data about pumping rates and the

conclusions of Aries' work. Conclusions are to reduce pumping rates slightly in one well field and substantially increase in another, to reduce the amount of surface water used, to provide more storage through the winter so they might accumulate more surface water.

Mr. Holt showed a slide of a map of Keene, and pointed out the aquifer, which can be up to 100 feet or more in depth. He showed the wells on Court Street and West Street. He continued that around each well is a wellhead protection area, WHPA, which is an area in which any drop of rain that lands in it would potentially flow towards the well. In Court Street it is a 5 square mile area with an aquifer in it that is 1.2 square miles. The majority of water that flows in there flows into the little streams and then into the aquifer. The same is true for the West Street WHPA of 1.4 square miles, and 1.4 square miles of aquifer.

Mr. Holt showed the Court Street well field and the monitoring wells. He continued that the Ashuelot River also runs north/south in this area and encompasses an approximately 34-square mile water shed. The West Street well field has one well near the Ash Swamp Brook, which flows in a southeast direction and there are a series of monitoring wells on West Street. Aries looked at the results that Keene has been monitoring since 1998. They have good data. There is information about the average usage rates since 1998. The total water use peaked in about 2004 and has slowly declined to the present. The peak was 2.7 million gallons per day. It is about 2.1 million gallons per day now. Surface water use averaged about 1.6 million gallons per day. The Court Street well was pumping high from 2004 to 2008 and has reduced to about .1 million gallons per day. The West Street one has been pumping about .4 million gallons per day. It may not be a surprise that July through September is when the most water is used.

Mr. Holt continued, what does this all mean relative to the wells? There is a box of water that gets recharged through precipitation that comes from the sky, and it either runs off into the surface water and leaves the box of water, or it hits the ground and evaporates or gets transferred out of the ground by the plants, giving off water vapor. Water ends up in the ground water wells through recharge, from the precipitation down into the ground water, and you have your pumping. It is a balance. If you pump more water than is coming into the system you will empty your storage. If you have a lot of stream flow you will pump water out of the system and if you have a lot of precipitation the water will recharge and fill the system back up. You will have a constant pumping rate on wells but the recharge rate will vary through the seasons. He showed a hydrograph for the monitoring wells at the Court Street wells. He continued that there are annual spikes of groundwater elevations; there are wet seasons then dry seasons, and it goes back and forth. The chart shows 1998 to 2015. The average trend for the wells during that period is fairly neutral. In 2016 the groundwater elevation decreased in the wells. It might be in part to pumping but it is more likely related to the loss of precipitation coming into the system. The West Street monitoring wells had more of a decrease in 2016, also likely due to the decrease in the water level.

Mr. Holt continued that they look at how much available precipitation will come into that box versus how much that can be pumped out. With the Court Street well there is a small

fraction of water that is being pumped out, on average, relative to the amount coming into that WHPA. In the West Street well, about 35%, on average, of the water coming in gets pumped out. So it seems that they are pumping at the maximum rate for that aquifer. If they over-pump the water levels will go down over time and that is a condition they want to avoid. In 2016 there was a drought with about 25% less rain than usual. Comparing the anticipated amount of recharge to the wells, Court Street is still doing well but West Street is pumping about 50% of its WHPA recharge (during the 2016 drought conditions). Aries recommends reducing that pumping slightly. They have excess capacity in the Court Street system and they recommend increasing there.

Mr. Holt showed a graph from 1930 to the present for annual precipitation. There are low periods, which are droughts. There was a substantial one in the 1960s and the one in 2016 is even lower. They are mostly balanced by recovery the following year. The overall trend is upwards, which is an interesting statistic. Climate change scientists discuss that. They anticipate more precipitation over time, but it will be warmer and that will cause problems. You would think that having more precipitation would recharge the groundwater but if it is warmer it might evaporate more. They will end up with warmer weather, more mini-droughts in the summers, less snow pack in the winter. They predict that the intensity of storms will increase significantly. Storms wash the water down the river and wells do not recharge.

Mr. Holt showed a hydrograph for the Ashuelot River. He showed a photo of low water conditions at Ash Swamp Brook. He continued that over the years since 1930, what this gauging station (which is at the foot of the water shed in West Swanzy) shows is that the water flow peaks in about April. This year it peaked in February or March because they did not have enough snow pack. The average flow in the summer is about 100 cubic feet per second (CFS) and they were down about 20 or 30 CFS. It means less water is flowing out of the system but at the same time they are not getting any recharge back into it. Aries recommends that they reduce the pumping rate in the West Street well field by about 25%, from .4 million gallons per day to .3 million gallons per day. They also recommend increasing the rate from the Court Street well field from an average of .1 million gallons per day to about .2 million gallons per day. That will offset the surface water use and allow that to accumulate during the winter in case it is a dry season again, and allow that reservoir to recover.

Mr. Holt continued that they also looked at the drought monitoring program. The NH-USDA has a program that monitors and calculates the drought risk. They have different categories. He showed Keene on October 11, when it was classified as “abnormally dry.” They were in that category for much of the summer. Then it dropped into “moderate drought” on November 1. The City has a drought monitoring ordinance that has certain stages of action. It would be easy to enact those stages concurrent to whatever stage of drought happens. For example, a moderate drought would call for enacting stage one, the water conservation alert.

Mr. Holt continued, what does the future predict? It is hard to say. He showed the short term forecast from NOAA: in the northeast, there will be about average rain, more rain in

the northwest, less in the south. The Old Farmer's Almanac says it will be wetter and colder this winter, but no one really knows. The takeaway is: long-term rain forecasts are for more storms, of higher intensity, but not retaining much groundwater. Water conservation will not go away. They will have to work on it continuously. They recommend an ordinance to protect and prevent the water from being contaminated. If there was a contamination at one well they would lose a fraction of the system and then if they lose another one, they would be relying on surface water.

Chair Manwaring thanked Mr. Holt. She asked if committee members had questions or comments.

Councilor Lamoureux asked if construction affects the West Street well field. Ms. Hanscom replied no. Councilor Lamoureux asked if they are looking at adding another well to their system. Ms. Hanscom replied that they have been looking at that and maybe will talk about it in a couple months. She continued that they thought they were in good shape with surface and ground water supplies and thought their future was in good shape but as they look at extremes in weather, they do not just look at averages. They own the Robertson Field. It is more or less the same area as the West Street well. They have been talking about other areas to add wells. They have preliminary information and will talk about it more with the MSFI Committee at another time.

Councilor Filiault asked what percentage would they guesstimate the water level was at during the lowest point of the drought. Mr. Holt replied that the water levels came up a foot in the Court Street well system after that last rain event. He continued that there is a fair amount of interconnectivity between the surface water and the aquifer in that location. They will still be lower by a couple feet than they were in the spring. There is seasonal fluctuation that they will see on average. If there is another drought year it will stay low and eventually it will come back up again.

Councilor Filiault made the following motion, which was seconded by Councilor Lamoureux.

On a vote of 4 to 0, the Municipal Services, Facilities, and Infrastructure Committee accepted the report on Keene's water supply as informational.

Ms. Hanscom stated that they have seen the average daily water demand dropping. In August there was a fairly high demand. She continued that it came down from about 2.9 million gallons per day in August to 1.8 million gallons last week. That is a significant decline. They hired Aries Engineering to look at this information. They can measure the elevation of the water and know approximately how many gallons they have stored based on that elevation. There is no gas gauge on the aquifers; it is not that simple. As they have been measuring the groundwater level it has been giving them an idea of what is going on and an understanding of how quickly levels come back after they get rain. There is enough water for what they are doing now and probably for what they will do in six months. Last year's winter was relatively dry, without a lot of snow. If that happens this year they are concerned that they would not have the surface water volume to make

up for the lack of recharge in the well. The demand has gone down so they can juggle the supplies to stay in the recharge amount, but they thought it would be good to bring this to the community's attention. The State has been encouraging water conservation. The City has talked about ways to conserve water. They have about 140 days of water in Keene's water supply, or more, as the ordinance talks about, but this is a good time to talk about the stage 1 alert – voluntary water conservation. It means asking people to try using 10% less water. The Public Works Department has ideas about how to do that, a list of suggestions that they are ready to send to the community. They are asking the MSFI Committee to be the leader in this and ask the community to voluntarily reduce by 10%. They have been talking about how to help people understand what that volume is for them, because it is not always apparent on the water bill.

Chair Manwaring stated that she is willing to reduce her water consumption. She asked how people can understand what 10% per day is. Ms. Hanscom replied that that is the guidance they are putting together now. She continued that it might mean doing one less load of laundry, or reducing one minute of your shower. Ten percent is not a lot, in the grand scheme of things. If the City Council makes this formal next week they will have the recommendations/guidance.

Councilor Filiault made the following motion, which was seconded by Councilor Lamoureux.

On a vote of 4-0, the Municipal Services, Facilities, and Infrastructure Committee recommends that the City Council declare a Stage 1 Water Conservation Alert and request that persons connected to the City water distribution system reduce water use by ten percent through water conservation measures.

## **6. Adjournment**

Hearing no further business, Chair Manwaring adjourned the meeting at 7:53 PM.

Respectfully submitted by,  
Britta Reida, Minute Taker