

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

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

**Wednesday, January 24, 2024**

**6:00 PM**

**Council Chamber,  
City Hall**

**Members Present:**

Mitchell H. Greenwald, Chair  
Randy L. Filiault, Vice Chair  
Andrew M. Madison  
Catherine I. Workman  
Laura E. Tobin

**Staff Present:**

Elizabeth A. Dragon, City Manager  
Amanda Palmeira, Assistant City Attorney  
Duncan Watson, Assistant Public Works  
Director  
Harry McKelvey, Transportation and  
Stormwater Operations Manager  
Jesse Rounds, Community Development  
Director  
Don Lussier, City Engineer  
Brett Rusnock, Infrastructure Project Manager

**Members Not Present:**

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

**1) Councilor Remy – Enforcement of Winter Parking Ban**

Chair Greenwald asked to hear from Councilor Remy.

Councilor Mike Remy stated that he submitted his letter to start a conversation. He continued that he has received a ticket for parking on a 50-degree November night. Keene's overnight parking ban went into effect on November 1. When he wrote his letter on December 9, 2023, there was no snow and it had not snowed yet that season, but the overnight parking was in effect for Main St. He wants a conversation about whether this process still makes sense. This could also apply to summer parking bans, or the patio permits and how those are managed, associated with how warmer weather is occurring further into the year every year. They could talk about how to manage that in the right way. His suggestion was, at least for the winter parking ban, to think about whether a winter advisory or warning, released by the government or weather services, could determine when overnight parking is banned or not, as opposed to just a blanket ban all winter. He makes this suggestion as a way to open the conversation, and to think about how the City could do this in a way that is more convenient for the public.

Chair Greenwald asked if the Committee members had any questions. Hearing none, he asked for questions from the public or other Councilors. Hearing none, he recognized Duncan Watson, Assistant Public Works Director.

Duncan Watson stated that he is not prepared to comment on this tonight. He continued that he suggests the Committee refer this back to the Public Works Department so they can research this idea and come back and present some ideas that might work.

He continued that as this thought is being worked on through the City Manager and staff, he would add that there is also an all-year ban on overnight parking on Main St and he has often wondered why. Just because it was that way does not mean it has to be. He thinks it would be worth thinking about as well.

Councilor Madison made the following motion, which was seconded by Councilor Workman.

On a vote of 5-0, the Municipal Services, Facilities, and Infrastructure Committee recommends Enforcement of Winter Parking Ban be referred to the City Manager for further review and consideration with a report back to the MSFI Committee.

## 2) **PowerPoint Presentation – Winter Operations**

Harry McKelvey, Transportation and Stormwater Operations Manager, gave a PowerPoint Presentation about winter operations. He stated that winter operations includes plowing, salting, sanding, and picking. He continued that they are responsible for 123 miles of roadway, 52.8 miles of sidewalks, six parking lots, and many metered parking spaces. He showed a slide with the GIS map of the plow routes. He continued that they assign different trucks to do plow routes, with each truck having a number and numbered route. For example, Plow Route #5 has 22 streets. If they give the plow route to another driver, then at least they have a list to follow. Many times truck drivers know the plow routes so they do not need a list every time.

The Highway Division has 25 full-time employees, three foremen, five Maintenance Aides (laborers), one Operations Manager (himself), three Equipment Operators, the Maintenance Aide II (downtown person), 12 Motor Equipment Operators (truck drivers, CDL-level), and a Sign Maker. Their equipment includes 18 trucks, 5 sidewalk plows, and skid steers. They assign people to the sidewalk plows, and there are salt routes and truck routes. They sometimes borrow laborers from Water/Sewer or other Public Works divisions. They do not necessarily have a full staff for Winter Operations.

Mr. McKelvey showed the list of the routes for plowing the priority sidewalks first, mostly to accommodate the schools, and then move out into the general areas. He showed the list of the parking lots and garages, and a list of the Metered Parking Spaces. He continued that normally after their winter operations of getting the streets and main sidewalks opened up, they go and pick the metered parking spaces, so people can make it to the meters and get onto the sidewalks.

Salt is purchased through a contract with Concord, NH, and negotiated with Morton Salt. When the City orders salt, it is delivered by truck from Portsmouth, NH. The Salt Shed is located at 560 Main St. This year, their rate for salt is \$82.32 per ton. “Magic” is a treatment Public Works uses, a liquid mixture sprayed on salt. It contains magnesium chloride. Its freezing point is much lower than just salt, negative 30 degrees. It sticks to roadways and surfaces and provides ice melting in colder temperatures. It contains other ingredients, like brewer’s yeast, to help it stick. Public Works provides salt in coordination with other community organizations, such as Keene State College, Keene School District, Keene Housing Authority, and Dartmouth Hitchcock.

Mr. McKelvey continued that everything that the Highway Division does has something to do with weather. They are either building something or treating something, or reacting to something. Weather forecasting is a big part of what they do. They use a weather forecasting application on the web and on their phones. They use other sources as well, such as WMUR Weather. The Highway Division does its best to make a forecast each time based on the information they have so they can better treat the storms. It is fairly high tech, but it is weather forecasting, not perfection.

Mr. McKelvey continued that they use Cartegraph data for storm tracking. The Cartegraph application shows the cost of the labor Highway used, and of the equipment they used, and of the materials they used. After, staff debriefs, to discuss improving how they conducted operations, whether it was freezing rain or snow, if they had to plow, and so on. They keep the data for historical tracking as well.

Mr. McKelvey stated that the City’s snow plowing and salting process is unique in New Hampshire. He continued that regarding how they are triggered for their storms, they do not have someone in the office or driving around Keene all night. They use the Keene Police Department to trigger the Winter Operations’ staff’s call-ins. When patrol officers see that it is starting to snow or they witness a slick road or situation that makes them think it is time for Winter Operations staff to come in, dispatch reaches out to the person on call. At that point, Winter Operations staff has already made an executable plan for the storm, and the call from dispatch starts it. That saves them from having to have an overnight staff person, for example.

Councilor Workman stated that she wants to start by thanking Mr. McKelvey and his crew. She continued that it cannot be easy, and they do a fantastic job. She has a couple questions about the salt. Her first question is how much the City uses each year, and the second question is whether there is a more sustainable solution between the salt and the magic.

Mr. McKelvey replied that the other option is a liquid brine they can put down, which they used to have. He continued that he does not know how effective it was as this was in use before he was hired as the Operations Manager. It was still salt water or some mixture of salt and other chemicals in the water. It helped keep the roads from icing and prevented snow from building up. He believes that in the NH environment, with public safety in mind, salt and magic is

probably the best choice. Berlin, NH, has tried having thermal streets, which would be awesome if it could be done [in Keene] but he cannot imagine a way to do it. Historically, he thinks Keene uses about 3,000 tons of salt per year. Magic is just a treatment of the salt.

Councilor Filiault asked what triggers the plows going out. He continued that he knows that slippery roads trigger the need for salt, but his question is whether it is a certain number of inches of snow that triggers the use of plows.

Mr. McKelvey replied that it depends. He continued that they are not actually measuring the amount of snow. They have usually already applied the salt and they are watching how the snow is building up and reacting to that salt. Keene has different environments, such as the hillsides and the downtown. Main St., for example, has a higher use than something like Greenbriar Road. Traffic makes the salt work better, too. This is a tough question. When they realize there are side roads that need plowing, they put the plows out. It is not based on the amount of snow, but on what staff thinks the conditions will be and what they need to do to keep the roads open and as safe as possible.

Chair Greenwald stated that he himself has plowed parking lots, and (knows that) it is exhausting and difficult. He continued that he waves to all the plow drivers when possible, knowing they are doing a difficult job and have to do it carefully, being sensitive to not pile snow in someone's driveway unnecessarily. He asked how Mr. McKelvey staffs the shifts and hours.

Mr. McKelvey replied that it depends. He continued that each plow route can take six to eight hours, depending on the route and conditions. That is one pass. That is why they try to treat the storm with salt as well. For example, two years ago was a Christmas storm that was not plowable, as it was freezing rain. Those staff members worked about 27 hours on Christmas. They did not go home. They did their routes and then came back in, whether they could rest until they had to go back out and treat again. Public Works feeds them and does all kinds of things to try to keep them operational. They have salt routes versus plow routes, and he might divide the staff members up or send some people home for a couple hours while others do spot plowing or salting. It depends on the situation. This is what these people do. They are professional, licensed CDL drivers. They all do their best and sometimes they are exhausted, working too long, but Public Works tries to give them rest in between routes, and if someone has trouble, Public Works can replace them.

Chair Greenwald stated that he encourages other Councilors to contact the City Manager and ask if they can ride along, just to get a glimpse of how difficult this work is and how dedicated the staff members are. He continued that he definitely appreciates their work and he knows they do the best they can.

Councilor Tobin stated that she thanks Mr. McKelvey and his crew for all of their hard work. She continued that this season, from her perspective, seems to be a lighter year. Her question is how the coordination between the plowing of streets and sidewalks works so that sidewalks are

not being blocked. Another question is about where snow is piled and how that is decided, and what barriers and blind spots that might create.

Mr. McKelvey replied that snow, when piled up, does create conflicts with pedestrian walks and roads versus sidewalks. He continued that West St. is a great example. There is no grass belt for the sidewalk to put snow on. If they put snow on the sidewalk of private property, they have to come back to pick that snow up as soon as possible. They try to minimize those conflicts, but when they get into parking areas, like downtown, you will see big piles of snow in the corner of five or six spaces, for example. They try to get the spaces open during the storm event, and then at night or the next day they will come and pick the snow out of there to minimize those conflicts.

Chair Greenwald stated that to add to what Councilor Tobin was saying, the “Spirit of Place” concept encourages individuals to take a bit of ownership in the city and actually pitch in. He continued that he would challenge downtown property owners to get a shovel and clear the sidewalks in front of their buildings, to assist Public Works. He encourages the same for residential areas – if there is a pile of snow, do not wait for the City to clear it. Clear the fire hydrants, for example. This is how it is done in other cities. The City is very generous in having Public Works do these activities.

Mr. McKelvey replied that there are people who clear the fire hydrants in front of their houses, and help in ways like that. He continued that some people do assist Public Works, and they appreciate it. Public Works works with everyone that they can.

Chair Greenwald asked for public comment.

John Marcheski of 6 Birch St. stated that he is a transplant from another state. He continued that in the city he is from if you had a sidewalk in front of your house or business, you were the one responsible for clearing it. He assumes that would cut down on the cost for the City and reduce the property taxes.

Chair Greenwald asked if members of the public had any further comments. Hearing none, he asked for a motion.

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

On a vote of 5-0, the Municipal Services, Facilities, and Infrastructure Committee accepted PowerPoint Presentation – Winter Operations as informational.

**3) PowerPoint Presentation - Neighborhood Parking Program - Community Development**

Chair Greenwald asked to hear from Community Development staff.

Jesse Rounds, Community Development Director, stated that the Neighborhood Parking Project grew out of a suggestion that came from the housing needs assessment done last year. He continued that one suggestion was to look at parking as a tool to help with increasing density, particularly in the downtown neighborhoods. This is an Invest NH program, 100% funded by the State. It is a study. They are looking at various options, and looking at a couple of neighborhoods to try to figure out their options to change how they look at parking in the neighborhoods. The idea is that if they can change things in the short term for residents now, that is great, and if they can change things in the long term to increase density and increase the number of housing opportunities downtown, that is also great. They find that many of the solutions that are out there might not be workable right now, but might be workable in the future. They are in the information-gathering phase now. This is staff's chance to hear from the Committee, take that feedback back, and return in the future with a presentation.

Greg Strangeways from Walker Consultants introduced himself. He stated that as Mr. Rounds said, this project is grant-funded and came out of a needs assessment. These neighborhoods are adjacent to downtown, areas where Zoning already allows more density than exists today. The City has seen some interest from developers to do housing. They will not be giant housing projects, but parking was identified as a barrier to building housing, in a couple of different ways. One is providing all of the parking off street, which can take a lot of money and a lot of land, leading to some developments never being built, or being built with fewer units than they might otherwise have. The idea is to put some of that parking supply on street to reduce the requirements to have it off street.

Mr. Strangeways continued that the first two agenda items were a perfect set up for this, (in that) the winter parking ban was also identified as a barrier. If the street parking is part of the supply but you cannot use it six months of the year overnight, it will not be as useful to people. The project team starting to look at what some of Keene's peer cities do, which can inform what the City of Keene might want to do with the winter parking ban. Perhaps there is a way to have it only when there is a snow emergency.

Mr. Strangeways stated that the slide shows a list of related topics they were also doing research on while looking at the issue of on-street parking, which will be part of the recommendations. He continued that some were in the original City plan for this project, and some came from (Walker Consultants') work around New England and around the country, and they thought they could fit it in within the budget supplied by the grant. The first topic is determining what the parking supply is that is needed, what the projections of growth is for these areas, and how much parking supply would be needed over the next five or ten years. If on-street parking will be added, they need to think about whether that would mean some two-way streets would need to become one-way, and the impacts of that from a traffic network perspective. Another topic is "ops and enforcement," that is, what this looks like and what peer cities are doing. If there will need to be more permit programs, perhaps even paved markings in areas where there are not any today, they need to determine how much staffing that would take, to make sure this is all

financially sustainable. They need to look at snow clearing; they certainly want to alleviate problems instead of create them. There are tradeoffs to everything, but the project team hears about winter operations and wants to make sure that can proceed, knowing that no matter what, cars need to get off the street when the snow comes. They are also looking at demand. Most likely, not many households can be completely car-less in Keene, but if there are other transportation options, maybe households could have one less car than they would otherwise. The team is also looking at lighting, such as looking for areas where lighting could be improved, which could help people park farther away. At this time of year it gets darker earlier, so even if they want people to use alternatives to driving and parking, lighting can be a factor. Not many vehicles on the road today are electric, but that is projected to increase. Cities mostly in this first wave try to put chargers in off-street lots and garages, but more and more, the technology and methods to do that on street are improving. The team wants to look at what that could look like as they get a blueprint here for the future. Regarding Zoning and policy, he knows the City has made some recent changes about parking requirements, and the team will keep that in mind and look at what the City's peers are doing. They also want to look at funding options for this, (such as) user fees for parking, developers contributing as they build something, and State or Federal grant or formula funding.

Mr. Strangeways continued that regarding the timeline, the grant requires them to be done by June 30. They are just getting started. They did some fieldwork already. As Mr. Rounds mentioned, the team is in the listening and learning phase. Then, they will come back to the Committee. They expect to have draft recommendations by April to get feedback on. They will have two big rounds of outreach and will be talking with people all the way through. They had an open house earlier today at Heberton Hall and will have another in April when they have recommendations. They did a FlashVote survey, which was a new tool for them, and received over 300 responses. They are talking with all kinds of stakeholders, such as people who are building housing, people from businesses, and other community members. The Technical Advisory Committee includes City staff from Police, Fire, Public Works, and other departments, to make sure all perspectives are considered. This project is on the City's website, and there has been other outreach through mailings and social media.

Mr. Strangeways stated that so far, the team has found that not many people need overnight on-street parking currently, but as they heard from tonight's first agenda item, for the people who do need it, the winter parking ban can be really inconvenient. The fact that there are not many cars overnight today helps in a few ways, in that they are not trying to address an immediate parking crunch or a need to do something quickly. In addition, if they switch to a snow emergency type system for the winter, there are not many cars that need to be moved off street. Maybe they could fit in municipal lots or garages; the team will look at that. It does help that a lot of this change can happen as the City is redoing a roadway anyway or as a private development comes along so they can phase this in over a number of years.

Mr. Strangeways continued that the team wanted to look at how much on-street parking could be created. Some streets have informal on-street parking, with vehicles half on the grass and half on

the road. If it will be formalized, they want to think about how much parking could be created. The minimum is likely to be 20 feet, to have a 12-foot one-way travel lane and an 8-foot parking lane. They also need to account for what is in the Code – 30 feet from intersections, and 20 feet from a crosswalk. The setback from driveways is not specified, but they want to make sure people can get in and out and to think about sightlines. He continued that the slides show concepts, not actual streets, but the team is starting to test these concepts with actual streets. They may not be able to diagram every street but want to get an idea of what is feasible. They are making sure they are not moving light poles or trees and protecting the landscaped areas, but the City might want to do some of these things as they are re-doing the roadways anyway, including the sidewalks. Referring to one of the PowerPoint slides which shows a 20-foot street, which could have one-way traffic and on-street parking on one side. With a 25-foot width, that extra five feet does not give enough space for an additional parking lane or travel lane, but it could be a bike lane if that makes sense as part of a network, or an additional sidewalk or landscaped area. With a 28-foot width, there are more options, such as two-way traffic plus parking on one side, or one-way traffic with parking on both sides.

Mr. Strangeways continued that they have been looking at what other cities do and getting ideas from City staff and others. Sometimes politically, if there is going to be more paid parking than there was before, whether through permits or people paying by the hour or day, there could be Parking Benefit Districts. The idea is for some or all of the revenue collected to go back to that same area, so people do not feel that the money is “going into a black hole.” It is used for improvements to the streetscape. Another idea is a Residential Permit Program. If they have more on-street parking they probably want to have something so that residents can use it, so if there are time limits or fees, maybe residents do not have to abide by those, so they can use the parking right near their house. Those types of programs are getting easier for everyone. With online applications, people can scan their documents. It is easier for residents, or employees in some cases, and easier for City staff because people would not have to come in person. In addition, in many places you do not need a sticker or placard anymore, because the credential is just your license plate. New Hampshire is an outlier. The whole parking industry around the country has moved to the license plate being the credential, and only Maine and New Hampshire restrict that. Even in Maine, it is now becoming widespread. The law in NH restricting the use of automated license plate recognition is due to sunset automatically in January 2027. Things take time to implement anyway, and hopefully that can be part of the future enforcement.

Councilor Tobin stated that Mr. Strangeways mentioned the automobile inventory. She continued that she is curious whether they have explored what that will be in, say, ten years, when today’s 15-year-olds will be 25. She wonders if there is any difference in the projection in the need of parking inventory.

Mr. Strangeways replied that Walker Consultants does a lot of its own research and looks at what others are doing, including the autonomous vehicles. The increase in Uber and Lyft, which he does not think Keene has much of but could come; trends in people getting their drivers licenses; and using cars or other options. There has been some hype about parking demand going down

over time but Walker Consultants does not really see that, overall. Jobs and population continue to grow, and most places will need the parking inventory they have now. It might grow slower than it would otherwise. Also, there is almost always parking supply being removed, either to turn into a housing development or whatever it is, or by a garage reaching the end of its life, so generally, you do not have to worry about having “too much parking,” if that is what Councilor Tobin was getting at.

Councilor Tobin replied that anecdotally, she heard that realtors said people want two-car garages, and when she mentioned this to several people under the age of 30, they laugh. She was curious about how that factors into measuring what will be needed 10 to 20 years from now.

Mr. Strangeways replied yes, to some degree they hear people say that in their 20s but then when they have children and families they wind up driving and getting vehicles because they need to carry all their stuff around. He continued that however, he thinks Councilor Tobin is right that overall, parking demand will grow slower than they have seen it grow in the past decades. Certainly, there are some cases of overbuilding parking, but overall, most places will need the parking inventory they have now. It just might grow more slowly.

Chair Greenwald asked if there were any further questions from the Committee or public.

Stephen Bragdon of 51 Railroad St. stated that his communication is next on the agenda, and he is sure this study could be very helpful to the issues in it. He continued that he would like to see a little more emphasis on the *safety* on the parking spaces. He and his wife submitted a communication to the City Council a few weeks because their driveway gets a lot of use and they want to extend the distance (where parking is not allowed) so they can see going out of the driveway. He is not sure a “one rule fits all” is the right process, regarding how many feet from a driveway cars can be parked. What is more important is what is safe.

John Marcheski of 6 Birch St. stated that in the state he is from, there might be one or two weeks during the entire winter when the police department declares an on-street parking ban, not six months. He continued that he was unaware of the fact that Keene has a six-month (overnight, on-street) parking ban. It seems to him that they would only need a parking ban during inclement weather or something like a road race, when the police could issue a parking ban for certain streets, or the entire town when trucks will be plowing or salting. Anyone violating the parking ban could be towed and ticketed, increasing the revenue for the City so they could lower property taxes.

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

On a vote of 5-0, the Municipal Services, Facilities, and Infrastructure Committee recommends that the PowerPoint Presentation - Neighborhood Parking Program be accepted as informational.

**4) Stephen Bragdon – Safety Issues Associated with the Driveway at 82 Court St. and Staff Response to No Parking Request – 82 Court St.**

Chair Greenwald asked if Stephen Bragdon wanted to address his communication. Mr. Bragdon replied no, he did not think he has anything more to say. Chair Greenwald asked to hear from City staff regarding Stephen Bragdon’s communication.

Don Lussier, City Engineer stated that for the benefit of the new MSFI Committee members, he will begin with a recap of the last time the MSFI Committee addressed this. He continued that this was up for discussion before the Committee a couple of months ago, and at the time, the Public Works Director, Kürt Blomquist, reminded them about the similar request that the Committee had received earlier in 2023 about parking on Washington St. The result of the discussion regarding the Washington St. request was that Public Works come up with a set of guidelines for delineating individual parking stalls for on-street parking. The guidelines were based on factors such as the volume of traffic on the roadway and the uses of adjoining land use. Staff recommended that parking stalls be delineated where there is predominantly commercial or institutional uses or a mix of residential and commercial uses, rather than just residential neighborhoods.

Mr. Lussier continued that much of this discussion stems out of something the consultant, Greg Strangeways, alluded to. City Code discusses the general parking prohibitions related to certain things. You cannot park within 30 feet of an intersection, 20 feet of a crosswalk, or 15 feet of a hydrant. Regarding driveways, the Code says that you cannot park “*in front of or close to a public or private driveway if it inhibits the use of the driveway.*” That wording lends itself to some interpretation, obviously. When developing guidelines for delineating individual parking stalls, staff used five feet as a reasonable metric, that is, having a five-foot setback from the edge of the driveway to the first parking stall, as a minimum. Taking the amount of curb line between two adjacent driveways and dividing by 20, depending on how many spaces you can fit, you might end up with more than five feet, or as a little as five feet, but not less. That was staff’s recommendation, based largely on an informal survey they did about other communities’ rules. The NH communities they found that had specific distances to set back were between two and five feet. Staff thinks five feet is a reasonable measure.

Mr. Lussier continued that at the previous MSFI Committee meeting, staff showed graphics that had options at either five feet or thirty feet, which is what was requested by Mr. Bragdon. The Committee asked him to come back with some alternatives, some sort of compromise position. Tonight, he has similar graphics and will show the differences for setbacks of 10 and 20 feet, and what those would look like. The slide shows and labels the different lengths of curb lines on Court St. and the number of spaces. He continued that within the area that fits the criteria for delineating individual parking stalls, from Central Square up to School St., they would delineate 70 parking stalls with a five-foot setback. If they look at an alternative with 10-foot setbacks, the number goes down to 63 parking stalls. If they are setting back further, obviously, fewer cars would fit. At 20 feet, that reduces to 55 parking spaces, and at 30 feet, it is 45 parking spaces.

Out of curiosity, he had staff member Will Dourdounas look at Washington St. and did the same sort of analysis. The chart shows, for Court St. and Washington St., what the different options would give them. The two streets are remarkably similar. The range for Court St. would be 70 to 45 parking spaces, and for Washington St. it is 73 to 44.

Chair Greenwald stated that his question is not so much a Public Works question, but he wants to know if they have any information about accidents. Mr. Lussier replied that they did not specifically look at accident records for this corridor. He continued that he does not know of any driveway-specific accidents, but he did not specifically ask the KPD for that data.

Chair Greenwald stated that he has closely paid attention going in and out of streets, such as Mechanic St. and High St., and he is back to the same basic question of this setback from the driveway. He continued that his conclusion is that he has to be careful. Unless they want to eliminate all parking on the streets, people have to be careful when they are driving and pulling out of driveways or streets. This is his observation. He does not think they are prepared to eliminate parking on the streets or lose the parking. He thinks they would hear more from residents and businesses if the parking were cut back.

Councilor Workman asked if they have any authority to, instead of changing setbacks, implement “economy-sized cars only” at the corners. She asked what that would look like logistically. Mr. Lussier replied that he does not know if they are allowed to have vehicle-specific parking prohibitions.

Chair Greenwald asked Assistant City Attorney Amanda Palmeira if she had any wisdom to share on the subject. Ms. Palmeira replied no, just what the City Attorney said when this came up before, which is to keep “discretionary function immunity” in mind. She continued that that is where they started the conversation about a policy. Having discretionary function immunity is extremely important for City functions when they have developed a policy in an area that is left rather open. Traffic is one of those areas the City has a lot of control and discretion in as a City department. It is important that when you establish a policy, you stick to it. That is where your immunity lives. When you start shifting it the policy almost every time it comes up or almost every time it is going to be applied, then it is not going to be consistent anymore and you start losing that immunity. That is the concern here that the City Attorney’s Office has.

Chair Greenwald stated that what he also took away from the City Attorney’s comments was the importance of consistency. The Assistant City Attorney replied that that is exactly right.

Mr. Lussier stated that to reiterate that from a Public Works perspective, the Public Works Department’s recommendation is for the City Council to memorialize the decision they make, whichever option they decide to go with. It could be an update to the Ordinance, or just an amendment to the guideline developed last year. They can talk about how to do it, but they do want to set that standard and make it uniform.

Councilor Filiault stated that they just heard from the Neighborhood Parking Program that team will look at this and bring it back to the MSFI Committee. He would think that this (request from Mr. Bragdon) would be part of the Neighborhood Parking Program and the Committee should accept Mr. Bragdon's communication as informational and move it into that PowerPoint they just heard, and have the whole thing come back to the Committee, because it obviously will have an impact. He continued that he thinks the request is reasonable, but he is not sure how to do it in a way that is fair to all of Court St. or all of Washington St. or both.

City Manager Elizabeth Dragon replied that the presentation they heard about the Neighborhood Parking Program is to create parking in neighborhoods that do not currently have on-street parking. Thus, it is looking at how large the parking stall would need to be and how many spaces they might be able to create and then what sort of system they might create. It was not specifically looking at the City's on-street parking that already exists, although he (consultant Greg Strangeways) did talk about safety in general. She thinks there is some information they could gather, but this is not the focus of the Neighborhood Parking Program.

Chair Greenwald asked for public input.

Stephen Bragdon of 51 Railroad St. stated that he thinks what is being missed here is that it is dangerous at their particular space at 82 Court St. He continued that there have been two accidents that he is aware of, plus many screeching brakes. Regarding this desire to say "everything has to be 5, 10, or 15 feet," he does not think it has to be that way. He thinks they can make decisions based on a specific driveway. He agrees that there needs to be criteria for it, but to just say "I want to simplify this," he does not think is doing the public a service, especially if someone gets seriously hurt coming out of his driveway or for someone else who has particular complaints. He thinks they can be treated differently.

Councilor Filiault stated that as Mr. Bragdon mentioned, there have been a couple of accidents at that location. He continued that his question for the City Attorney's Office is whether they could take that specific area and say that they are reducing the area of parking because in that area there have been confirmed accidents. Ms. Palmeira replied that that probably would start getting into what the City Attorney's Office has been cautioning against, making exceptions to the policy. She continued that she hears what Mr. Bragdon is saying, and it makes sense to aim for safety, but again, this is left in the control of the departments that have expertise in handling safety in traffic. As they learn information, they can adjust the policy. For example, if all streets with that specific criteria end up needing to be changed, they can adjust the policy for all streets like that. It is when they start carving out specific areas and changing things that it becomes a problem.

Chair Greenwald stated that his concern is that across the street is a funeral home, and further up the street there used to be a chiropractor, and there may be an attorney moving in there with a bustling business, so unless they determine that an office of so many square feet with so many patrons, etc...will be in this location, it's difficult to determine what is safest along this corridor.

Chair Greenwald continued that what he is hearing is that if the City makes a rule, and then it is not universally applied, the City is put in the line of liability for not providing whatever amenity a business feels it needs.

Ms. Palmeira replied that she hears what he is saying, and it is not so much universal city-wide. She continued that Public Works could speak to how it is applied, but there is definitely nuance; they look at more criteria than just it being a street.

Chair Greenwald stated that if the Committee accepts this conversation as informational, they could come back and revisit it. He continued that if they instead voted it up or down, then it would be done for the year.

Councilor Tobin stated that she appreciates the number of people who have commented on safety. She continued that she lives in this area, which is highly residential with a lot of foot traffic. Even if the area was protected or parking was restricted, she imagines increased foot traffic could actually present a problem. While crossing the street in this area, she uses the cars for shelter.

Chair Greenwald asked if there were any further comments from the Committee or the public. Hearing none, he asked for a motion.

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

On a vote of 5-0, the Municipal Services, Facilities, and Infrastructure Committee accepted the communication regarding Safety Issues Associated with the Driveway at 82 Court Street as informational.

**5) Downtown Project Timeline - City Manager**

**a. Councilor Greenwald – Design Issues to be Considered in the Downtown Improvement Project**

Chair Greenwald stated that he has been invited to sit in on the pre-MSFI meetings with City staff so he can be better prepared for what is coming to the MSFI Committee. He continued that the goal of the Downtown Improvement Project is to get it done. He hopes the City Council and the public will be communicating to either himself or the City Manager ahead of the consultants so they are not working against any kind of proposal and all parties are working together. This is a cooperative project. There has been much angst about it. He feels for the City staff and the Councilors, because it has been tough, but this is a big reset. They are coming in with open minds. There has been conversation about how there might be a second MSFI Committee meeting this month, perhaps in advance of the Planning, Licenses, and Development Committee meetings, so they can do their regular business at one meeting and focus on the Downtown Improvement Project on the other. They need input from the City Council and the public so they all work together.

Chair Greenwald continued that there will not be any decisions tonight. Tonight is a presentation of the timeline and a basic plan for moving forward. To allay some of the public's concerns, nothing discussed in the past will be thrown out or changed. This is just the beginning of the new start to the project.

Don Lussier, City Engineer, stated that tonight his goal is to give an oral update and let the Committee know what has been happening in the background and what to expect over the next few months. The consultant is working feverishly on a grant application to submit to the US Department of Transportation's RAISE Program (Rebuilding American Infrastructure with Sustainability and Equity). That is due February 28 and there is quite a bit to it. They are looking at environmental concerns they need to document, such as threats to endangered species, wildlife habitat, archeological resources, and architectural resources. The Federal NEPA, National Environmental Policy Act, has detailed requirements. The consultants are now going through the process of documenting what the City has. They are also working on a benefit/cost analysis that will demonstrate to the Federal government that this project will return more benefits to the community than it is going to cost the Federal government.

Mr. Lussier continued that at the same time that the consultants are working on that grant application, the planning staff are also working on the actual design. Over the next three months or so, there will be a series of public design review sessions/workshops, each followed by an MSFI Committee meeting. They broke the project into three focus areas. The first is Main St. and the Streetscape Improvements, which will include topics such as what they want the bike lanes to look like, where they want sidewalk commerce located, how they want to do street tree plantings, and those sorts of questions, in a lot more detail than they have gotten into so far. They will have a public workshop, show alternatives, talk about different ways of doing things, and gather feedback. That public feedback will be summarized and presented to the MSFI Committee. They will ask for the MSFI Committee's feedback on that. After those three meetings, the team will do some sort of workshop or presentation to the City Council, to summarize the process and where they are and where they think they are going. It will be an opportunity for the City Council, if they think the team is heading in the wrong direction, to tell them. Tonight's agenda packet has a draft of a workshop flyer, and it will have changes, at least to the dates and to the design to make it more like Keene. Understanding that this is all still up in the air, they are hoping to nail that down over the next week or so and then will start advertising those dates. That process will probably take until late April or early May, getting through those three public meetings, three MSFI Committee meetings, and a City Council session.

Mr. Lussier continued that then things will slow down a bit, in terms of public engagement. The updates will probably be staff giving updates to the MSFI Committee. At that point, they hope the consultant will have all of the guidance, direction, and input from the community so they can complete the preliminary design documents. Then, the phasing construction planning will start. Right now, they are budgeted for four separate meetings with different constituent groups, residents and businesses in the downtown that will be affected by the construction. They want to

find out what they can do to make this construction project as tolerable as possible. It will be inconvenient, noisy, and dusty, and traffic will be disrupted, but there are ways the team can try and make life a little easier, which they want to talk through with people who live and work in the area. That will start in May.

Mr. Lussier continued that Councilor Greenwald submitted a letter with a number of different considerations that he wants to make sure are at the front of the team's mind moving forward. Staff created a list of those Q&As as a running document they are using internally to make sure those things do not get lost or forgotten. Some, they will be able to answer rather quickly, while others will be fleshed out over the next three months as they go through these design meetings. One question was the location of and quantity of trees in the planting beds, which is very much a question they want public input on, and they will be doing that through this process over the next few months. Mostly the answer is "stay tuned," but he has a question of clarification for Chair Greenwald. His letter mentions "including the slip lane at Central Square." Mr. Lussier requested that the Chair expand on that point. Chair Greenwald replied that he means where you can drive around the Square. Mr. Lussier asked if he means at the southern end of the Square. Chair Greenwald replied yes. Mr. Lussier replied was he referring to a vehicle coming down Court St., and being able to do a U-turn, and go north on onto Washington St. Chair Greenwald replied yes.

The City Manager stated that they did discuss today, and will discuss more on Friday, what the schedule might look like in terms of the MSFI Committee updates and whether the dates work that are currently being held by the PLD Committee for an earlier start. That will inform this timeline, and then staff will be able to give them a more up-to-date timeline. She continued that they also discussed how to engage the full Council, utilizing the MSFI Committee and being able to hold a workshop with the Council but still having Councilor Greenwald chair that meeting. They will talk with the Mayor about that as well, regarding how to get some additional feedback before they get too far into the process.

The City Manager continued that as part of these technical review committees, they talk about how to engage people at different levels during the project, and one of the things they have heard a lot about is trees. The Conservation Commission is very interested in trees, so today they talked about including the Commission on a walkabout in the downtown, looking at all of the trees, when they get to that stage, as they look at trees that are going to be preserved, high value trees, and what sort of trees are going to be replaced. They also talked about how when they get to the stage related to lighting, they will look to engage the Bicycle and Pedestrian Path Advisory Committee (BPPAC), the Heritage Committee, and others. There have been commissions and committees interested in being involved, so the team is looking at how to plug them into the process as it moves forward.

Chair Greenwald replied that it is great to get everyone involved before pen goes to paper, so they are not revising and changing and wasting a lot of time and money. He asked if the

Committee had questions or comments. Hearing none, he asked for public comment on the status report. Hearing none, he asked for a motion.

Councilor Madison made the following motion, which was seconded by Councilor Workman.

On a vote of 5-0, the Municipal Services, Facilities, and Infrastructure Committee accepted the update on the project as informational.

Chair Greenwald asked for a motion regarding his communication.

Councilor Workman made the following motion, which was seconded by Councilor Madison.

On a vote of 5-0, the Municipal Services, Facilities, and Infrastructure Committee recommends referring Councilor Greenwald's letter to the City Manager.

Chair Greenwald stated that he urges his fellow Councilors to send in letters of their own.

**6) PowerPoint Presentation - Transportation Heritage Trail, Phase 1 – Proposed Action**

Brett Rusnock, Infrastructure Project Manager, introduced himself and David McNamara, Project Manager from Stantec Consulting Services, which is managing the design of this project. He continued that he would begin with a recap of the Transportation Heritage Trail project and the City's grand scheme to connect the current southeastern limits of the Cheshire Rail Trail in Keene, which ends at Eastern Ave. The plan is to extend it to the northern limit of Rt. 101, over route Rt. 101, over the historic Stone Arch Bridge, over Swanzey Factory Rd. with a re-used bridge, and eventually connecting to the existing trail network in the town of Swanzey.

Mr. Rusnock continued that tonight's presentation is about Phase 1 of the Transportation Heritage Trail, which extends from Eastern Ave. to the northern edge of Rt. 101. In 2021, the City applied for and received a Transportation Alternatives Program (TAP) grant from the Federal Government for this work. That grant program is specifically focused on providing alternatives to vehicle use for transportation. In 2022, the City applied for and received a Congressionally directed spending grant, which used to be called "earmarks," for the same project. Those two grants are the majority of the budget for this project. It is an 80% Federal cost share with a 20% local match.

David McNamara stated that he will go through the public process they have been through to date and walk through the alternatives they have been reviewing based on that process. They started the project in early December with a "local concerns" meeting where they presented the project purpose and need to the public. They talked about the overview of the process they have to follow because of the Federal funds, then broke into small group sessions and talked through the project, listening to the abutters and other stakeholders to get feedback on their issues and

concerns. It was a successful meeting, with over 60 people. They talked about what people were going to use the trail for, and biking and walking for exercise were the top two. The two main concerns that stood out were drainage and the security and privacy of the abutting parcels along the trail corridor.

Mr. McNamara continued that following that meeting, Stantec started to put some alternatives together and started the design process. They met again a couple weeks ago and presented alternatives on a few different elements of the project – alignments, screening, the trailhead and crossing of Eastern Ave., and the surface of the trail. He will walk through most of that in tonight's presentation, the feedback that Stantec received, and their recommendations for some of those different elements.

Mr. McNamara stated that regarding project alternatives on the alignment side, they looked at three different locations. Referring to a PowerPoint slide, Mr. McNamara pointed out the multi-use trail along Chapman Rd., and the trail along the rail corridor, and went on to describe suggested alignment options utilizing Marlboro St. and reconstructing Marlboro St. into a Complete Street to allow the trail users to access Marlboro St. and then connect back to the trail corridor as it approaches Rt. 101. Mr. McNamara continued that starting with the railroad corridor, the slide shows a couple of typical sections and a snippet of the trail below. The drainage issue is that it kind of “acts as a bathtub right now.” The water ponds at the bottom of the trail. The slide shows bringing the trail up a little bit, to create some swales on the side, to allow the water to run down and get to the drainage systems that do exist out there but just do not function anymore. Similarly, with the trail at grade, you can see a bit of a cut to create those same swales in some different areas of the trail. They would use a combination of these, based on the grading, to get that water to move as it flows into the trail area. The green in the image shows what would be disturbed for that work.

Mr. McNamara stated that looking at the Chapman Rd. alternative, you can see there is a lot more green there (indicating what would be disturbed). He continued that for a large part of Chapman Rd., if they were to build that multi-use trail, it would hang out over that existing slope. That would push that slope further out, and they would have to clear all of those existing trees. Much of that is on private property. Thus, there would be many impacts to build the multi-use path off the edge of Chapman Rd.

Mr. McNamara stated that regarding the Marlboro St. alternative, it would be trying to turn Marlboro St. into a Complete Street that met the City guidelines. It would have a bike path on either side and one 5-foot sidewalk, as opposed to the 10-foot wide multi-use trail that is proposed along the corridor. There are a couple of concerns here. There is a steep drop-off on the left side and some stone retaining walls on the right side along the private property. Thus, to fit the widening through there they would need to push into the walls and into some of the landscaped features on some of these properties, or they would have to push out onto that slope, and start to create similar slope impacts as they go on the other side. The other issue with Marlboro St. is they would have to get up, to get back on the rail corridor to where the Prowse

Bridge will cross Rt. 101. The only way to do that would be to cut through existing private property, and even that would be a rather steep slope for the trail. Everywhere else, it would be 1 or 2%, and it would be 5 or 6% to be able to get that slope to work. It would hurt the accessibility of the trail and have private property impacts.

Mr. McNamara continued that the team created rating criteria for each of the alignment alternatives, including a “no build” alternative. (As shown on the slide), the railroad corridor alignment clearly rose to the top, based on the rating criteria. It has the accessibility, keeps people out of traffic, and minimizes the right-of-way impacts and the clearing impacts. The team found it to be the best of the three options, the most suitable for the City and to accomplish the purpose and need of the project. With the Chapman Rd. alternative, the impacts would be more significant, and Marlboro St. has some constraints within the corridor and within some existing landscaping features as well as the need to get back up to the trail at the end and make that grading work.

Mr. McNamara continued that next the team looked at screening. The slide shows precedent images for some of the screening alternatives they considered. One is a chain link fence with privacy slats, which could be black or another color. Others show two different ways to use landscaping to create screening as well as some buffer, and as a way to keep people from crossing into the (private) properties. Two other photos show fences that do not really give privacy but delineate where the properties are and where the public right-of-way ends. Two other photos show stockade and shadow box fences, which give privacy and security. The team used rating criteria to evaluate the four alternatives, along with the “no build” alternative. They found that chain link fence with privacy slats was the best fit for the City, largely from a cost and maintenance standpoint. The landscaping does not necessarily provide the security that the others would. The stockade and shadow box fencing provide the security and the screening but at a higher cost and would require much more maintenance. The split rail and post rail fences would not really provide security or screening.

Mr. McNamara continued that next, the team looked at alternatives for the trailhead and crossing. The existing parking lot is at the end of the Cheshire Rail Trail, off Eastern Ave. Based on being out there and laying it out, the team figures that probably seven or eight cars could fit in the lot today. They looked at a couple of different ways to configure that, to see if they could gain some more parking as well as integrate that with the extension of the trail and how everything will cross Eastern Ave. Option 1 is to create a multi-use trail on the edge of Eastern Ave., bring the existing Cheshire Rail Trail along that, along the back of the parking, and having a one-way circulation pattern through with the parking lot with some angled spaces, and then there is the crossing of Eastern Ave. Option 2 would be to pull the trail back in front of the parking, so you are not interacting with vehicles coming in and out of the parking lot, with a similar crossing of Eastern Ave. The problem here is it pushes the parking closer to Eastern Ave., so you are not able to maneuver in and out of those parking spaces without backing into Eastern Ave. There are concerns about that. Option 2A is similar, except it has angled spaces, which creates a little more room, but it still is not enough to get out of the Eastern Ave.

interaction with parked vehicles. Option 3 would be to have the crossing come straight through where the existing trail ends, a little closer to the corner of Chapman Rd. That shrunk the parking layout a bit, leading to fewer parking spaces. The other concern with this option is the high point as you come over the intersection. The crossing puts you out of the sightlines for traffic coming up Eastern Ave., which is a safety issue.

Mr. McNamara continued that again, they used rating criteria to assess the alternatives. They found Option 1 to be the most beneficial. It gives the most parking, allows better vehicle access, and keeps the vehicles out of the road. It does not get pedestrians outside of the vehicle area, but it does keep everything in the parking lot.

Mr. McNamara continued that finally, they looked at the different trail surface alternatives, which would be stone dust or pavement. The City has both, at various points within the trail system. Cost is one of the bigger considerations. There is probably a 15-20% premium for the pavement over the stone dust. Other considerations are topography and drainage, maintenance, and trail use. There are certain things you can do on a paved trail but not stone dust, and vice versa. Another consideration is pedestrians and ADA accessibility. The team looked at the two surfaces, noting that in this case, along the rail corridor the trail will be flat. They are not particularly concerned about erosion and such issues with the stone dust. From a money perspective, stone dust seems to be a better option instead of pavement.

Mr. McNamara continued that the team hopes to get concurrence on a recommendation for moving forward with a proposed action on the different elements, and they will be able to wrap up the engineering study. That will allow them to move into preliminary design in the spring and summer, with permitting next fall, with the intention of having the final design and bid documents around this time January next year for 2025 construction if all goes well.

Mr. McNamara continued that to summarize the different elements they talked about, for the trail alignment, the team recommends the rail corridor. For screening, they recommend the chain link fence with the slats. For the trailhead, they recommend Option 1, which is the angled parking and one-way circulation through the parking lot. For the surface materials, they recommend stone dust.

Chair Greenwald asked the Committee and the public for their thoughts on the alignment, screening, trailhead, and surface materials.

Councilor Filiault stated that a constituent who is an abutter called him, and could not be here tonight. He continued that this abutter is in favor of the project but still has concerns about the screening. He will not let that hold back his vote tonight, but he will give the abutter's name to the City Manager so that his issues can hopefully be rectified.

John Marcheski of 6 Birch St. stated that he also has a property on Marlboro St. that abuts the trail. He asked if the chain link fence would be six feet or eight feet tall. Mr. McNamara replied

six feet. Mr. Marcheski asked if they would consider eight feet. Mr. Rusnock replied that they have not yet established how tall the fence needs to be. He continued that generally, the City tries for six-foot fences, which are easier to maintain and less expensive. If there were an identified need to make it higher for security, they would certainly consider that. Chair Greenwald stated that he anticipates this will not be a very heavily traveled area. He continued that if it turns into a problem it could be dealt with. He himself was looking at the vegetation screening options, but he is hearing from Councilor Filiault and Mr. Marcheski that apparently the chain link is important, to keep folks off of private property.

Richard Bergeron of 564 Marlboro St. stated that he is down at the end where everything tightens up. He continued that his bedroom window is probably 20 feet from the delineation markers that are there now. There is always an element of people you do not want near your property walking through your property, and loose dogs, and everything and so forth that comes with it. That is his concern. He would like the chain link fence with the slats. He does not care if it is eight feet or six feet.

Mr. Lussier stated that he did not hear the team mention it, but something they talked about internally is that the fencing they recommend and propose is not going to be needed in all areas the same. He continued that at the western end of the corridor near Eastern Ave., the rail trail is well below the elevation of the surrounding homes. It is almost like a berm of earth between the folks on the pathway and the homes, to the point where you cannot actually see the residents nearby. At the eastern end where Mr. Bergeron lives, absolutely, the rail bed is at the same elevation of his house, and fencing would be needed. They are looking to determine where the fencing is needed to provide the security and privacy that people clearly expressed they want.

Chair Greenwald asked if there were any further comments from the Committee or the public. Hearing none, he asked for a motion.

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

On a vote of 5-0, the Municipal Services, Facilities, and Infrastructure Committee recommends authorizing the City Manager to do all things necessary to implement the proposed action as presented for the Transportation Heritage Trail Phase 1 project to include:

- Trail alignment along the Rail Corridor;
- Screening consisting of chain link fencing with slats;
- Implementation of Trailhead Alternative 1 including angled parking and one way traffic circulation through the parking lot, and;
- Surface Materials consisting of stone dust

Chair Greenwald asked that when this comes to the City Council, they have the four bullets delineated. It would be helpful.

**7) PowerPoint Presentation – Project Update – Thompson Road Reconstruction project**

Don Lussier introduced Steve Lanne from John Turner Consulting, the consultant doing the design work and planning for this project. He continued that this project has been in the works for a couple of years. It first came forward with a request from the residents, who raised a concern about the stability of the roadway. Staff looked at it and made some recommendations at the time, saying it was a concern but could go into the Capital Improvement Plan (CIP) and be programmed through the normal channels. About a year later, staff returned to tell the MSFI Committee that the deterioration of the road had accelerated and was ongoing, and staff recommended moving the project up. They now have designs ready to go, and want to show the Committee those plans tonight. He knows folks from the neighborhood want to talk about what will be built.

Steve Lanne, Vice President of Engineering with John Turner Consulting, stated that as Mr. Lussier said, the team's involvement began with concerns about ground loss on one side of the roadway. He continued that the slide shows a photo of the concrete berms on the left side that were installed by the City in response to some ground loss. The photo shows some movement of the guardrail, which was compromised by the ground loss on the roadway. Those concrete barriers were put in place to reestablish a safe travel lane and to restrict traffic from going off the side of the road. After the initial placement of those barriers, there was still some further ground loss, which you can see in the photo in the unevenness of the barriers. The City again came through and put bituminous concrete berm there to help direct stormwater runoff and prevent it from causing more erosion. Another photo shows a significant slope upward on the west side of the road, which became significant as the team got into the project design.

Mr. Lanne continued that as part of the design process, the team did a geotechnical investigation that included soil borings within the roadway. They drilled deep to identify and do a strength assessment of the soils. They also did some test bits using an excavator off to the side, to get an idea of the soils near the surface. They did some topographic survey and had an engineer walk the slope and assess the conditions of the ground loss on the east side. From that, the team concluded that there was no reason to believe that that portion of the roadway was any more unstable than any other portion of the slope. What they identified as the primary cause of the ground loss was grading in the roadway allowing stormwater runoff to come down the road and dump off the edge of the pavement into the slope. That water eventually caused some erosion on the surface of the slope and then once erosion starts, the whole slope becomes more susceptible to erosion and it got worse and worse. Overall, there have been about 160 feet of roadway affected by that erosion. That is the primary driver of the project. As they got into the design, they implemented a few other things that should help improve the roadway overall.

Mr. Lanne continued that the next slide depicts a generic section view from the design drawings. Again, the primary issue with the 160-foot range of roadway is the loss of ground on the east side. The team will handle that by excavating out any loose soils into soils they think have not

been affected and reestablish that grade using a high strength crushed rock riprap. That material will allow them to reestablish the grades and put the guardrails back to the original alignment. Since they determined that stormwater runoff was the primary reason this happened, they worked with the City to develop a plan to regrade the roadway so it pitches back to the west. Thus, any stormwater that runs off from adjacent properties, on the roadway, or further up the hill, instead of now running down the road and dumping down the slope, will be directed toward the opposite side of the street. To collect and handle that properly and avoid other issues down the road, they will implement new drainage structures and piping on the west side. That will keep the stormwater from running uncontrolled as it does now.

Mr. Lanne continued that another concern was, coincidentally, where that section of roadway is, it bottlenecks and is very narrow - just over 11 feet wide at its narrowest point. The team talked about how if they are going to do this project, they should attempt to improve that roadway overall, so they will push the western edge of the roadway further west into the slope that is there now. That necessitates a retaining wall, as depicted in the slide. The height of the wall will range from two or three feet to eight feet, changing depending on the curves, the grading, and exactly where they are in the roadway.

Mr. Lanne continued that the next slide shows that section overlaid onto a photo to give an idea of what this might look like on the roadway. Sample photos show what it generally will look like once the riprap is in place on the east side. He knows the retaining wall is of great interest to everyone. They decided to use a top-down building method that should be more cost effective and prevent the need for any kind of temporary support to put a more conventional wall in. The contractor will use a piece of equipment with a vibratory, pile-driving camera attached and install steel beams vertically in the ground, spaced about eight feet along the alignment of the retaining wall. Once the beams are in place, they will excavate soil out in front of the steel beams, in lifts, and install timber boards horizontally between the beams to help retain the earth. When they finish excavating to grade and getting the wall to the needed elevations, they will apply a spray-on concrete to the wall's face. Once applied and cured, it is just like conventional concrete; it is just the application process that is different. He showed photos that are similar to what they propose for Thompson Road.

Mr. Lanne continued that a concern are the homes at the top of the hill between Marlboro St. and where this work has to go. They figured out a phasing plan, to keep drive-up access for residents and for emergency services. The project will be conducted in phases split east and west. They will do that with concrete barriers down the center of the roadway and with traffic lights at both top and bottom, synced so that traffic only goes one way at a time. He showed a photo of roughly what that might look like. He continued that the first phase will be the western side, primarily driven by getting more space on the job, because as he said, it is very bottlenecked in this area. Pushing the open, accessible area further to the west by installing that retaining wall gives the contractor more room to work in. The slide depicts roughly where the tree clearing and brush clearing would be as well. Phase 1 is the bulk of the work – the retaining wall, the drainage installation, and the excavation that pushes the roadway west. Once that is complete,

the team will open up the west side for traffic, and do the east side. That will primarily be the slope restoration and pavement restoration.

Mr. McNamara stated that the last slide is a list of items that have to be done to complete the job. They worked with local contractors to get budget estimates, and put together an engineer's estimate pre-bid. With contingency, the estimate is about \$1.1 million to construct the project.

Chair Greenwald asked, regarding the concrete retaining wall, if they can get a texture; that is, if it could be carved, or stone bricks, or something other than just (flat concrete). Mr. McNamara replied that it is possible, but there are cost implications. He continued that the simplest, most cost effective is a smooth finish, but there are multiple ways of doing it. For example, initially doing that travel finish and then before it is completely hardened, going back to "flash" it a little, which gives an appearance similar to a "popcorn ceiling." Or it could be carved to look like brick or rock, but those carving techniques tend to drive the price up quite a bit. Chair Greenwald replied that he would like more information about those options, if the team could look into it.

Councilor Filiault asked about the divider down the middle of the road during construction. He continued that he assumes that would be after excavating on one side, because as it is right now, there is barely (room for) one lane anyhow. He is concerned about emergency vehicle access.

Mr. McNamara replied that the barrier will be centered more to the finished road, not to the current road. He continued that it will be almost all the way to the west of the existing road, during construction. Councilor Filiault replied that the existing road is extremely narrow. He asked how they will accommodate traffic during the beginning of construction, for residents. Mr. McNamara replied that there will be a nine-foot travel lane on the east side and the contractor will be able to access from both the north and south sides to come in and excavate and provide his own space to put the retaining wall in and build his construction area going west. Mr. Lussier added that they basically are going to have to carve out room to work.

Councilor Madison asked Mr. McNamara to talk more about the stormwater structures. He continued that one of his concerns is about capacity, because they have been seeing an increased frequency of heavy storms and flood events. His concern is that the steep gradient will see a lot of velocity towards the lower reaches of Thompson Rd. and where it reaches Rt. 101. He is curious to see what the stormwater structures will look like and what the outfall will look like, and what will be done to prevent erosion on this new wall on the west side.

Mr. Lussier replied that he does not think Mr. McNamara mentioned it, but included the design is a granite curb two or three feet from the face of the wall. He continued that they are creating a curb and gutter on the uphill side of the roadway, so the water will collect along that curb line and get intercepted by traditional stormwater catch basins periodically. He thinks there are five or six along the length. Mr. McNamara replied that he thinks it is seven or eight. Mr. Lussier stated that every couple of hundred feet there is a catch basin to get the water down into the

pipes. That water continues in the pipes until it discharges parallel to and near Rt. 101, very close to the Branch River. Mr. McNamara stated that they have an outfall in there designed to prevent erosion at the discharge point.

Chair Greenwald asked for public input.

Pat Walker of Thompson Rd. stated that the first time the flags were put up, they (were confusing) and she could not tell what they were doing. She continued that she wants to know if they can set up another meeting and have more detail for (residents) to be able to see everything. She requests another meeting, and for the PowerPoint to be emailed to residents. Mr. Lussier replied that they can share the presentation, and he would be happy to sit down with Ms. Walker and anyone who wants to join them, to go over the plans and answer questions.

Ms. Walker stated that she has another question. When this first started, the plan was to do pilings on the river side/the steeper side, but now they are saying riprap. She continued that she understood that the pilings would be a lot more secure. Riprap was tried before and it lasted a few years. She knows there is a big cost difference between the pilings and riprap. She has researched this, but some of it is confusing to those who do not work with it.

Mr. McNamara replied that the team concluded that the primary driver of the ground loss on that side of the road has been erosion. He continued that a retaining wall on that downhill side is an option they looked at, but ultimately, coupled with the expansion of the roadway and the need to do a retaining wall on the west side anyhow, it became unnecessary to do a retaining wall on the lower side because it is an erosion issue. Typically, they do a retaining wall when there is a geotechnical slope stability or strength issue. They do not see any reason to believe that there is a global stability issue here. Thus, it just became a matter of cost. The most cost effective solution is riprap. He is not aware of what riprap solutions might have been done in the past, but he has seen in other cases similar to this that if you just dump some riprap on the surface, essentially you are putting quality material on top of disturbed material and the stuff underneath washes away. That is why they are cutting into the roadway, using crushed rock riprap, and having it as a wider section so it locks in place. It will not just be sitting on the surface of material that has been disturbed.

Ms. Walker stated that they will be removing several trees, and trees are what hold up the wall going to the river. She asked if he is saying the riprap will replace the trees' support. Mr. McNamara replied that he thinks there are two trees on the south side. The trees being removed from the wall side are in order to get the wall in. Ms. Walker asked about the ones on the east side. Mr. McNamara replied that those are in the way of doing the grading and excavating. Ms. Walker replied that she hopes the riprap can support all of this.

Ms. Walker asked what the height is on the west side, where they will be putting in a wall that will have piles. Mr. McNamara replied a maximum height of about eight feet; that is the exposed height that you will see above ground when it is complete. The steel beams will extend

deeper into the ground. Ms. Walker replied that she would like more detail about what effects this will have on her property.

Chair Greenwald stated that it would be wonderful if Ms. Walker, Mr. Lussier, and Mr. McNamara had a meeting, if the City Manager could arrange such and invite the neighbors. He continued that perhaps it could be held in the Blastos Room, or another convenient location like someone's living room, so the residents can be comfortable with what is going on. Ms. Walker is asking many specific questions that do have answers. He asked Mr. Lussier if he can set up something through the City Manager. Mr. Lussier replied absolutely.

Jessica Pierannunzi of 67 Thompson Rd. stated that she is at the top of the hill. She continued that her biggest questions/concerns are that she has young children and they go up and down the road to and from school and activities, many times a day. Her question is what they anticipate as the longer end of interruption when the phases including the (excavating) happen, and what they anticipate for actual shutdown. Mr. McNamara replied that on the long end, they expect about six months. Ms. Pierannunzi asked what periods of time she can expect to be unable to access the road, such as a day or two or hours at a time. Mr. Lussier replied that the general rule will be that the contractor has to maintain one lane of traffic during the duration of the project. He continued that there may be occasions, such as one or two days when they are setting up the traffic barriers, when they may not be able to get anyone by for a couple of hours. They made it clear in the contract documents that the contractors are expected to maintain one lane of traffic throughout. Regarding the topic of emergency services, he anticipates that once those barriers are set up, they will have Fire Department staff come look at it and make sure they are comfortable providing emergency access.

Bob Ball of Thompson Rd. stated that Mr. Lussier was on Thompson Rd. the other day to put some poles in, but did not put them on "the other side." Mr. Lussier replied that is correct, because those stakes were put in to delineate where the retaining wall will be. He continued that there will not be a retaining wall on the other side. Mr. Ball replied he knows, but just wants an idea of where the road will go. Mr. Lussier replied that they can mark it. Mr. Ball continued that he is still concerned about near the bottom where you cannot see around the corner. He wants to see more of that land chunked off so you can see up the hill. Mr. Lussier replied that some of that corner will be removed, but at the same time, they do not want to take any of Ms. Walker's land, so they cannot cut too much. And it will be brought back to where the retaining wall is marked. It will be improved. Mr. Ball stated that it drops right off where the cement blocks are, so he does not know how they will put stone in there. Mr. Lussier replied that this has been a source of confusion with the riprap concept. He continued that admittedly, in the past Public Works dumped riprap over the embankment as an attempt to control the erosion. What they are talking about (now) is a similar material but a completely different solution. They propose excavating down about six feet, eight feet wide, and removing all of that soil to replace it with a quantity of riprap that is interlocked and embedded properly. It is not just a surface layer of material; it is a mass of material they will put in.

Chair Greenwald asked if there were any further questions or comments. Hearing none, he stated that Mr. Lussier will, through the City Manager, set up a meeting with the residents and Mr. McNamara, and this topic will be back on the MSFI Committee agenda for an update.

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

On a vote of 5-0, the Municipal Services, Facilities, and Infrastructure Committee recommends that the PowerPoint Presentation – Project Update - Thompson Road Reconstruction Project be accepted as informational.

Chair Greenwald stated that one final comment is that he just received a text message from Mayor Jay Kahn, who requests that with the trail project, lighting at the parking area be considered.

There being no further business, Chair Greenwald adjourned the meeting at 8:14 PM.

Respectfully submitted by,  
Britta Reida, Minute Taker

Additional Edits by,  
Terri Hood, Assistant City Clerk