



CITY OF KEENE LAND USE CODE AD HOC COMMITTEE

Friday, June 7, 2019
4:00 pm
2nd Floor Conference Room
Keene City Hall
3 Washington St, 03431

AGENDA

1. Call to Order
2. Minutes of May 17, 2019
3. Review of Draft Land Development Code Chapters
 - a. Draft Parking Regulations
 - b. Draft Floodplain Regulations
4. Next Meeting – June 21, 2019
5. Adjourn

City of Keene
New Hampshire

LAND USE CODE STEERING COMMITTEE
MEETING MINUTES

Friday, May 17, 2019

4:00 PM

**2nd Floor Conference Room,
City Hall**

Members Present:

Douglas Barrett, Acting Chair
Councilor David Richards
Councilor George Hansel
Councilor Maggie Rice
Gary Spykman
Jim Phippard
Katie Cassidy-Sutherland (Arrived Late)

Staff Present:

Medard Kopczynski, Economic Development
Director
John Rogers, Health & Code Official/Zoning
Administrator
Tara Kessler, Senior Planner
Mari Brunner, Planner Technician

Members Not Present:

Mayor Kendall Lane

1) Call to Order

Mr. Barrett acted as Chair of this meeting, which he called to order at 4:00 PM.

2) Downtown Form Based Zoning Update

Ms. Kessler said there were few updates since the last meeting. Still pending is the next phase of concepts for the Committee to understand more about the proposed Form Based Zoning district and sub-districts. Ms. Kessler should have a draft of how the districts could look on the ground, considering setbacks and uses, in June.

Mr. Kopczynski recalled upcoming public engagements, which Ms. Kessler described. She said it is important for the Committee to be confident of the proposed districts before conducting widespread outreach on them. Once finalized, the public will engage with the drafts at meetings within the sub-district areas affected and there will be one larger community forum when the meetings are complete.

3) Approve Minutes of May 3, 2019

Mr. Spykman recalled meeting minutes to approve that were not agendized. Mr. Barrett adjusted the meeting agenda to hear a motion.

Councilor Richards moved to approve the minutes of May 3, 2019, which Mr. Spykman seconded and the motion carried unanimously.

4) Review of Draft Land Development Code Chapters

a. Hillside Protection Overlay District

Ms. Kessler referred to page six of the meeting packet and recalled there are change forms included before the draft of each section of code the Committee has been working on. She recalled that Council adopted the Hillside Protection Ordinance in 2009 with the intent to protect against flooding in the community. Impacts to steep slopes could lead to increased runoff and drainage impacts. Over the course of a year, the City worked to adopt this Ordinance, which addresses precautionary (15-25%) and prohibitive slopes (> 25% grade) specifically.

Staff does not propose changing the Ordinance significantly from the current ordinance. The majority of work proposed is reorganization of the existing language and streamlining it for reader comprehension. During a previous discussion, the Joint Planning Board-Planning, Licenses & Development (PB-PLD) Committee proposed eliminating the requirement that all prohibitive and 50% of precautionary slopes be subtracted from the calculation of minimum lot size.

Mr. Kopczynski asked if the code form works and provides enough information. Councilor Hansel said yes and for this one especially because it is consistent with the intent of what the minimum lot sizes are supposed to do, which is to determine density.

Mr. Barrett and Mr. Spykman agreed that the addition of graphics, as Ms. Kessler suggested, in the “clearing for views” section would help their comprehension. Ms. Kessler agreed the section is complex and she continues working to simplify it, which includes developing an illustration.

Mr. Phippard noted an issue that arose with two abutters of an existing house on Jordan Road. Under the terms of this Ordinance, they were clearing trees to open their view of the City and he thought they complied with the Hillside Protection Ordinance. However, the property owners left the felled trees, which abutters feel is unattractive and disrupts their views. He asked if there is a standard requiring removal of felled trees. Ms. Kessler said it is not required today so it is something to consider and might require more time to evaluate the pros and cons of this potential requirement. For example, there may be benefits to leaving those trees behind for wildlife habitat. Mr. Phippard thought the trees were left because of the extreme slope steepness and it would have been expensive to get equipment in to remove the trees. There were nearly 100 trees felled on this property and Mr. Phippard said it looks like a terrible mess. He thinks it is appropriate to consider requiring removal and if the cost is too much to remove trees on a slope, then perhaps they should not cut the trees.

Mr. Spykman asked if any parts of the City Code require timber cleanup. Ms. Kessler recalled the Hillside Ordinance states that logging must be conducted using best management practices (BMPs). Mr. Phippard said there are BMPs for timber management and the state requires leaving stumps on steep slopes but he is unsure if they require removing those trees. He cited wildlife studies that assert it is good to leave felled trees in the woods because they enhance habitat for small animals and insects. He said it is a different situation, though, when clear-cutting a piece of land. Ms. Kessler stated she would report to the Committee with more information on this request.

Mr. Phippard said that Conditional Use Permits (CUP) require topographic mapping and he cited a website that provides photography resources called Light Detection & Ranging (LIDAR); he would like that technology listed as acceptable for CUPs because it is less expensive than a survey and relatively accurate. Ms. Kessler thinks it is a reasonable source today based on the aerial photogrammetry listed under one of the CUP requirements. There is also data available from the City to determine 2-foot contours.

b. Telecommunications Overlay District

Ms. Brunner said this information was also presented to the Joint PB-PLD Committee. The City adopted the current Ordinance, Chapter 102, Article 7, “Telecommunications Towers and Antennas,” in 2001. At the time, most telecommunications facilities mounted on towers were visible due to their height, if not camouflaged or concealed. In response to this trend, the 2001 Ordinance focused mainly on mitigating the aesthetic impact of large towers; it aimed to protect “viewsheds” within the City with the establishment of a “view preservation overlay” map in zoning that had different classes of view area. This Ordinance also changed some restrictions in the Historic District and along Main Street. However, the current Ordinance inadequately addresses changes in federal and state law as well as advancements in telecommunications technology since 2001. Staff updated the proposed Ordinance to be more consistent with state and federal law (see meeting packet page 13/43), modernized to take into account newer technologies, and reorganized to make it easier and simpler for users to find the necessary information. The updates to state and federal laws also included definitions for: collocation, modification, substantial modification, and utility pole. Ms. Brunner said the process for collocation and modification applications only require a building permit per state law but historically the City also required an additional CUP for these applications. The proposed Ordinance reflects this change to eliminate the requirement of CUPs for collocation and codification.

Staff also drafted a license process to allow small cell facilities in the public right-of-way under the authority of the Public Works Director. Ms. Brunner clarified that staff proposes prohibiting new small cell facilities in the right-of-way on Main Street because there are already so many structures there. On Main Street, there are more opportunities to add equipment to existing structures and there may be opportunities for new facilities along Gilbo Avenue where there is more space.

Councilor Hansel asked how the new telecommunications small cell facilities are similar to electrical infrastructure in the right-of-way. Mr. Kopczynski said state and federal laws reduce the City’s ability to prohibit facilities. He said typically these facilities are boxes on top of a pole with some electrical transmission, which is a limiting factor required for small cell facilities. He was unsure how much downtown Keene will use but he has no doubt the City will have to use its own stimulus to provide some of the technology. Overall, casual observers will not likely notice the small cell facilities.

Councilor Hansel asked if the process for installing small cell facilities would be similar to an electrical company placing a small transformer on one of their poles. Mr. Kopczynski said the City will require a permit to install facilities but the telephone and electric companies do not need a permit. He said state law prohibits the municipality from adding small cell facilities to existing poles, which is why the newer definition defines utility poles. The City cannot prohibit a cellular company from installing on their existing pole. Most small cell facilities are cylinders on top of the pole that increase height by 5’ with a smaller box that comes down the pole for electrical services. Ms. Brunner said some towns are working with Historic Districts to ensure the facilities blend in and look nice, which is easily accomplishable with historic light poles.

Mr. Barrett commented on Section 5: Design Standards, and specifically the Aesthetics subsection. He noted a bullet that says antennas should be narrow in profile, which is vague and thus could lead to enforcement difficulty. Mr. Rogers said that is a good point. Ms. Brunner said that is the current standard language, which staff preserved for Committee discussion. She cited recent work on a Verizon Wireless application, for which she tried to determine if their antennas are narrow in profile and she was told to say they are consistent with what we have approved in the past. She said the Mr. Barrett’s point is a good one and she is unsure how to measure narrowness.

Mr. Barrett referred again to Section 5: Design Standards and specifically the Screening subsection, which refers to underground vaults. His understanding was that Eversource has been removing equipment from underground vaults due to maintenance and flooding, for example. Mr. Kopczynski agreed and said it is a safety issue. The Mr. Barret's questioned if the language that suggests putting things in underground values will be problematic if the trend is moving away from that. Ms. Brunner said camouflaged facilities are not visible, which is why she thinks the requirement existed. Ms. Kessler said Eversource day lighted aboveground transformers in downtown Keene because the water table poses concerned for underground utilities. Ms. Brunner thought this standard was geared more toward camouflaged facilities on a building with equipment inside or constructing a camouflaged structure to house the equipment. Mr. Barrett noted that he wants to ensure that the City is not requiring people to do something that is unfeasible.

Continuing the discussion on camouflaged facilities, Councilor Hansel asked if requiring underground infrastructure would discourage people from doing camouflaged facilities. Ms. Brunner said no, based on the requirements for non-camouflaged facilities.

Mr. Spykman also referred to the Screening subsection, which says, "All equipment for a camouflaged facility shall be in an underground vault." He thinks this is redundant with the following bullet. The bullets in question are:

- Telecommunication facilities mounted on the roof of a building shall be concealed behind existing architectural features of the building or shall be located so that it is not visible from public roads.
- All mechanical and electrical equipment associated with any facility located inside a structure or building, must be concealed inside the structure or building or must be shielded from view from public roads.
- All equipment for a camouflaged facility shall be in an underground vault.
- All equipment for new ground mounted towers and antennas shall be in an underground vault or equipment shelter that is designed to be of an appearance and design consistent with the buildings in the area of the facility or camouflaged behind an effective year-round landscape buffer equal to the height of the proposed building.

Mr. Spykman said the third bullet can be eliminated and the fourth bulled conveys the same information without the added confusion of an underground value. Ms. Kessler agreed that staff should revisit this subsection because to determined if the third bullet is specific to camouflaged facilities and the fourth is specific to new ground-mounted towers and antennas. Ms. Brunner thinks that equipment for a camouflaged facility could possibly be an equipment shelter as long as it is screened of camouflaged.

Ms. Cassidy-Sutherland asked the difference between camouflaged and ground-mounted facilities. Ms. Brunner replied there are a few types of facilities. A concealed telecommunications facility itself is in another structure and completely invisible from view. An example is the Colony Mill smokestack, which contains a telecommunications facility that most would never know. Camouflaged facilities cannot extend above the tree line more than 20'. Most examples of camouflaged facilities are towers in wooded areas, some of which use fake tree branches to better blend with surroundings. Building-Mounted facilities are painted to match the surrounding structure.

Ms. Cassidy-Sutherland asked if there were technical definitions. Ms. Brunner referred to the definitions and said, "Camouflaged means a telecommunication facility that is disguised, hidden,

part of an existing or proposed structure, or placed within an existing or proposed structure. Camouflaged facilities include man-made trees.”

The Committee agreed to strike bullet three from the Screening subsection and to remove the words *underground vault* from bullet four.

Ms. Brunner referred back to the change form that demonstrates design standards were reduced significantly. Many sections on design criteria were condensed into one concise section.

Mr. Barrett referred to the standard for security fencing, which says that, “New ground-mounted facilities shall be enclosed by security fencing not less than 6 feet high or equipped with an appropriate anticleimbing device, if applicable.” He wondered if that standard applies more to monopole structures. He recalled seeing a pole disguised convincingly as a fake palm tree while on vacation recently and said it would have been ruined if a 6’ fence were around it instead. Ms. Brunner said there is a blanket prohibition on monopoles. New towers must adhere to a fall zone with a certain setback distance from streets and residential structures. She thinks security fencing is common because these towers are usually off the beaten path where people cannot be safely in the fall zone. As written, Mr. Barrett said it only mentions height dimensions and he would not have understood that the restrictions are in the fall zone, which is a significant difference. Ms. Brunner was unsure if the intent is to fence the fall zone. She said the fence is for security to keep people from getting too close to the equipment.

Mr. Barrett provided an example of a project for a municipal wind power turbine (100’-150’ monopole) from where he lived 18 years ago. The city’s typical requirement was a 10’-20’ fence around the equipment. The group installing the turbine said it is a secure, unclimbable metal pole with no exposed equipment and they thought a fence would be an eyesore and actually entice kids more to want to get inside the fence. Mr. Barrett said those installing equipment are most apt to determine security needs for equipment and should be the ones to decide.

Mr. Kopczynski said the City Code was based originally on a model that was prevalent in the state at the time. He agreed that the fence requirement is illogical if there is no safety or security need for a fence

In line with the Mr. Barrett’s thinking, Mr. Rogers agreed with striking the first bullet in the Security Fencing subsection. He thinks the second bullet alone makes it clear that security fencing is at the Planning Board’s discretion. Councilor Hansel said, however, that not all facilities may be reviewed by the Planning Board. Mr. Kopczynski said the Ordinance was written historically to create a series of steps for new tower installations. No new towers have been built in 15 years because the technology has changed. When discussing camouflage, location, or hidden towers the process is reduced significantly to only require a building permit. The proposed revisions to this Ordinance will make any new tower go through the Planning Board process.

Ms. Brunner said staff thought a table would be useful to demonstrate the path a developer must take depending on the facility type and zone proposed. Staff renamed the map “Telecom Overlay Map” and renamed *areas* as *zones* for consistency. Ms. Brunner provided examples for the Committee of how that table would work. She said this Ordinance was really designed to push people as much as possible to conceal, camouflage, or reduce visual impacts of facilities. She said according to the Community Development Director, this Ordinance has done well since adopted and there have not been new towers on hillsides.

Mr. Phippard referred to the third bullet of the Lighting Subsection of Section 5: Design Standards. He said he could demonstrate that on a clear night when the moon is out that there is not a zero footcandle measurement anywhere; he said it is not possible to meet that standard always. Mr. Phippard went on to say that a compliance hearing after the project is built may be a better approach. If changes are apparent at the compliance hearing, then the developer must add shields to light sources to cut off light to certain areas of adjacent properties. He participated in this process recently in Chesterfield, NH and he found it easier to comply with than a certain number. He said that lighting photometric plans now generate a photo plan as if the light source is the only one; it shows the added ambient light on each project, which is never a completely accurate representation of what the resulting light levels will be when the project is complete.

Ms. Kessler wondered if it may be possible to change the language to clarify that the installed lighting cannot trespass across the property lines. Mr. Barrett thought this idea was reasonable. Mr. Kopczynski agreed but said any changes have to be consistent with the City's general lighting standards.

Mr. Phippard said that zoning regulations are challenging to comply with and he cited examples from Marlboro Street and the Kingsbury property, where regulations such as footcandles, property lines, and other requirements often conflict. Ms. Kessler replied to Mr. Phippard's examples saying the current regulations allow two footcandles in the public right of way. When the Committee discusses lighting development standards, they can decide if this issue of footcandles is too onerous a standard to meet. Mr. Kopczynski thought footcandles are more about the safety of pathways and walkways at night. He agreed with Ms. Kessler that when the Committee discusses lighting in depth they will see how staff tried to balance these issues; but the Committee will need to make more decisions.

c. Surface Water Protection Overlay District

Ms. Kessler said the Surface Water Protection Overlay District was adopted initially in August 2013. The City intended the district to preserve water quality and protect the functions and values of wetlands and surface waters as recommended in the 2010 Comprehensive Master Plan. In 2015, the Conservation Commission formed a subcommittee to review the Ordinance for inconsistencies and make recommendations to City Council for addressing these inconsistencies. The subcommittee proposed amendments to the Ordinance in 2016. These amendments were presented to the PLD Committee in December 2016, at which time the PLD Committee recommended that the City should review and consider these changes as part of the Land Use Code Update. Most significant changes outlined in this draft are from the subcommittee's proposed edits, which were incorporated for consideration.

Ms. Kessler said staff significantly streamlined the purpose statement, which is very lengthy, while trying to maintain the overall intent. She directed the Committee to a possible substantial change. The subcommittee proposed removing this phrase from the buffer definition, "in an undisturbed and natural condition."

Councilor Hansel said the Surface Water Protection Ordinance has been around a long time. He asked if there is any way to prove it has accomplished what intended. He noted that Keene goes beyond the state mandated protection of surface waters and he is interested in what that has done for the City. Ms. Kessler said staff has talked internally about the challenges of measuring the Ordinance's impact. The intent of the Ordinance is to prevent activity in the buffer and if people are not submitting applications to affect the buffer, the City cannot quantify benefits. She thinks it will be hard to demonstrate a success rate but staff can brainstorm ways to measure outcomes

moving forward. Councilor Hansel said he understands the complications but it is challenging to put an Ordinance in place if its efficacy is unknown. He cited nuances of the Ordinance with tax ditches and natural waterways; valuing different waterways and treating them differently is difficult. Mr. Kopczynski said quantifying the Ordinance's efficacy might be hard. However, he does think it is possible to judge if the Ordinance is fair.

Ms. Kessler brought forth a question of process. The goal is to make it easier for applicants to meet the intent of the Ordinance without having to go through the Planning Board. She said there are challenges, however, regarding the difference between waterways. For example, when the Ordinance was adopted, the City intended to inventory, classify, and prioritize wetlands. Ms. Kessler cited the current exemption of tax ditches as the subcommittee's greatest concern. The City's tax ditch system are essentially areas today that were established historically with farming and became an important part of the City's drainage network. The National Resource Conservation Service (NRCS) required that the City maintain the banks of those tax ditches to preserve their function. That requirement from NRCS has expired the City is no longer obligated to maintain and manage those areas. However, the City has continued maintaining those tax ditches because of flooding concerns on surrounding developments if they are unmaintained. The City worked out a plan with the state to inventory streams and developed a course of action to retire management for some tax ditches and continue management for others.

Ms. Kessler referred to the recommendation highlighted in this draft to eliminate tax ditches from the list of surface water exemptions. There was also an addition to the list of permitted uses to allow vegetative maintenance and control of the buffer area. Councilor Hansel said this has major implications for downtown around Beaver Brook and many areas will deal with surface water protection on almost every project, which seems impractical to him. He said some portions of tax ditches in densely developed areas are man-made and some are channelized with concrete; it would be almost impossible to maintain these banks. Councilor Hansel recalled that this is problematic because it strays from the original intent of the Ordinance, which is to protect natural resources. He questioned how much activity on the other side of the channel's concrete wall is really effecting those natural resources. With this change, he said the City would have to regulate activity outside that concrete channel, which is impractical.

Councilor Rice quoted the exemption, "The follow surface waters shall not be subject to this article. A) Man-made ditches, swales," etc. Therefore, she said that would exempt sections of Beaver Brook, or because some parts of Beaver Brook are not man-made then all of it has to be subject to the article; she noted confusion.

Mr. Phippard recalled that the Army Corps of Engineers did not construct new ditches in the 1960s. Existing streams meandered through properties and the Army Corps of Engineers straightened and deepened channels to lower ground water on adjacent properties, which benefitted primarily agriculture. Mr. Phippard noted legal implications of the proposed Ordinance changes. He recalled a C&S project that caused the EPA to consider visiting Keene because of tax ditches maintenance. For most properties where the Army Corps of Engineers did this work, they purchased easements from the landowners and paid small amounts of money. The easement deed's language specified that the City would maintain the ditches after construction. Over time, the landowners abandoned agricultural uses and the land has developed for industry and residences since. C&S released the City from their obligation to maintain ditches throughout corporate property, which was part of their mitigation for some wetland impacts. Now, the channels are filling in well with vegetation and meandering in locations, which will continue. He said sediment is starting to build in ditches and the effects will become apparent on adjacent land areas that will be wetter with higher ground water for longer periods. Mr. Phippard was unsure how to avoid this in the future and if the City

discontinues maintenance, someone will sue for damages. A previous landowner granted the easement and the City guaranteed maintenance, which the current landowner will want as well.

Ms. Kessler recalled the Public Works perspective at a previous Conservation Commission meeting that they intend to continue maintaining tax ditches banks in a number of areas. She thanked Mr. Phippard for clarifying the difference between man-made ditches and the original Ordinance that specifically described tax ditches as: ditches for purposes of managing drainage and flooding better under a maintenance agreement with a federal agency or the state.

Ms. Kessler said the Conservation Commission subcommittee recommended eliminating tax ditches from the list of exemptions, although it poses some problems. Mr. Kopczynski said that staff's recommendation is consistent with the subcommittee's recommendation, but noted apparent Committee hesitation. Ms. Kessler was unsure staff recommended eliminating tax ditches from exemption; staff wants to be true to the process and Mr. Kopczynski agreed that staff is only presenting the recommendation of the Conservation Commission.

Councilor Hansel said now is the time to measure effectiveness of this Ordinance. He knows that staff is in a difficult position, but if the goal is to streamline the process and make regulations more effective, the Committee and staff will have to dive deeper into the Ordinance and rearrange it. Mr. Spykman was unsure the Ordinance is old enough to have a record of effectiveness, which Councilor Hansel said is fair. Mr. Spykman added that Keene is not booming with development so it will take longer to see effects.

Mr. Kopczynski asked what the Committee needed to see to evaluate proposed changes. Councilor Hansel was looking for any information to show efficacy; he also wants to keep moving the Ordinance change along because there is merit to Mr. Spykman's last point. Councilor Hansel said continued maintenance of tax ditches is a no brainer to him; Mr. Kopczynski agreed that the ditches exist and the City must control flooding.

Mr. Rogers said staff could try to determine the number of properties this Ordinance change would effect. He said it sounded like Councilor Hansel's biggest concern is if changes to exemptions on man-made ditches will effect the number of properties that abut the tax ditches. Councilor Hansel agreed he is concerned with the number of properties effected if tax ditches are no longer exempt. Mr. Kopczynski said as proposed currently, man-made waterways are still exempt and therefore parts of Beaver Brook that are clearly man-made are exempt. Mr. Kopczynski suggested exploring a definition of man-made.

Mr. Barrett said this question of tax ditch exemption is tricky because Beaver Brook has been there since the last ice age and though it was moved slightly, he said it is not man-made, it is channelized. Mr. Kopczynski said history shows that Beaver Brook was dug-up and relocated, and in that sense, it is channelized. Mr. Barrett was not okay with the intent to say Beaver Brook is a channelized concrete waterway relocated over time; he said the definition language needs more work. Ms. Kessler will spend more staff time on this and evaluate properties impacted to bring back for further discussion.

Ms. Kessler said the current Ordinance talks about preexisting uses of lots but the language is confusing. Essentially, the Ordinance states that construction of single-family and two-family residential structures and associated accessory structures, on preexisting unimproved lots are all allowed in the buffer. Also allowed is the expansion of a legally preexisting use on a lot that existed before adoption of the Ordinance. Ms. Kessler stated that staff have proposed rewriting this section to be clear that these uses are allowed in the buffer if certain criteria are met.

In addition, Ms. Kessler suggested that instead of requiring a Conditional Use Permit (CUP) from the Planning Board for certain uses in the buffer, these could possibly be reviewed administratively, provided they do not encroach within 30' of the edge of a surface water in the districts that require a 75' buffer and 10' in the districts that require a 30' buffer. A CUP would still be required for activities that are allowed via CUP today if they take place between 0-30' or 0-10' from the edge of a surface water. Mr. Spykman said this would be consistent with the process of Code rewrite, which from the start was about simplifying the process and reducing the number of cases that need to go before the Planning Board; by just meeting requirements applications will be approved more readily.

Ms. Kessler noted that the Conservation Commission weighs in on the applications currently and provides feedback to the Planning Board in a meeting that would be a noticed public hearing. While an element of transparency is lost, she thinks it would streamline the process for a number of people and perhaps make property owners willing to adhere to regulations. This Ordinance applies to single and two-family homes, which do not go to the Planning Board for site plan review.

Councilor Hansel asked if the Conservation Commission would still be alerted to NH Department of Environmental Service (DES) permits. Ms. Kessler replied in the affirmative and said the Conservation Commission is always notified of Wetland and Shoreland Permits issued by the state. Councilor Hansel said it is valuable to notify the Conservation Commission because they often notice and consider aspects of a project that can be overlooked. Ms. Kessler said the CONS does not currently vote on CUPs, they only provide comments and feedback to the Planning Board.

Ms. Kessler said that if the Committee is interested in trying to increase administrative review, staff could return to the Committee with a revised section; Mr. Koczynski agreed.

Mr. Phippard asked if under the existing Ordinance's permitted uses he is allowed to construct a drainage feature like a rain garden in the buffer or if he would need a CUP; this is unclear to him in the current Ordinance and the proposed amendments. He is working with DES and three property owners in Chesterfield to address problems occurring with runoff crossing their properties into Spofford Lake. Everything around the lake is governed by shoreland protection regulations but especially the first 50' of the buffer where DES is trying to correct for erosion problems with rain gardens and other techniques. Ms. Kessler said she would consult the Community Development Director on Mr. Phippard's question. Currently, she said it appears he would need a CUP to do that in Keene but Ms. Brunner will look into a possible distinction for green infrastructure. Mr. Phippard said he has been talking with DES to consider a new rule that if one generates increased runoff, they must do something to correct it and preferably close to the source. Ms. Kessler thinks that seems reasonable and it is possible green infrastructure could be allowed in the buffer zone. Staff will consider it.

Ms. Kessler said it seems like this Ordinance needs more work and staff will return to Committee with updates; she thought she had sufficient information to continue staff work. Regarding tax ditches, she will produce a map to show how properties will be impacted by that change. She will also consider rewording to be clear about what portions of tax ditches would be included if they are no longer exempt. She will also evaluate or create language for an administrative review option versus a CUP. Finally, she will evaluate possibilities for green infrastructure in the buffer zone.

d. Subdivision Regulations (including Conservation Residential Development)

Ms. Kessler said the Planning Board reviewed the initial draft of these regulations, not including the Conservation Residential Development (CRD) standards. Mr. Kopczynski said this is important because it is the first Planning Board regulation going into the UDO. Ms. Kessler said that currently there are no specific subdivision standards separate from the Planning Board's 19 development standards. Within the UDO, staff proposes a subdivision regulations chapter separate from development standards and site plan review. Currently the regulations related to CRD, which is a type of subdivision, are in the Zoning Ordinance as well as the Planning Board Regulations. There is also a CUP process in the Planning Board regulations that spell out a number of standards and requirements for CRDs.

Ms. Kessler explained that developing a subdivision with three or more lots and a road requires a CRD, which today means the applicant would have to navigate between the lengthy Zoning Ordinance and Planning Board regulations.

Ms. Kessler said staff moved CRDs out of the Zoning Ordinance and into the subdivision regulations so they are all in one place. Regarding general subdivision standards, the Planning Board discussed the concept of major (4 lots or a road) and minor (3 lots or less) subdivisions. In NH, all subdivisions must have Planning Board approval. There might be an opportunity to streamline through the application process. Staff also discussed reducing timeframes for minor applications as an advantage. Ms. Brunner said the idea is for two different application forms and the one for minor subdivisions could be simpler. Mr. Kopczynski said the intention is to get minor projects streamlined and into the Planning Board as quickly as possible, with as little staff effort and applicant time as possible. Ms. Brunner agreed and said there would be a longer review time for major projects.

Regarding general subdivisions, Ms. Kessler recalled a question about excluding condominiums from the subdivision regulations. Mr. Phippard asked about industrial condominiums and when an owner wants to divide an existing building into two units as a condominium. Ms. Kessler said staff discussed this because in most instances it would not affect the site but rather division of space within a structure, it may not warrant the full review of the Planning Board. Specific documents and declarations have to be recorded for condominiums and that would be the mechanism to distinguishing the ownership of units. Mr. Phippard said a condominium site plan would still be necessary, with designated parking spaces and common areas, whether the City of Keene looks at it. The Registry has to record all documents, which the Attorney General's office must also approve.

Ms. Kessler noted the current definition of subdivision includes condominiums and thus need subdivision approval; still, she cannot recall a condominium going through the subdivision application in her tenure. Mr. Rogers said a condominium coming forward as a subdivision would be splitting the building and therefore need a building permit. Any change of use will trigger site plan review. Mr. Kopczynski said condominiums are related to ownership and many kinds of condominiums are possible. Ms. Kessler agreed with Mr. Rogers that any delineation of condominiums would trigger site plan review. Ms. Brunner spoke of a contract partner working with the City who has experience working in many New England towns and who said making condominiums go through the subdivision process only accomplishes ensuring they are recorded. Because condominiums are already required to be reported, going through the subdivision process seems redundant. Mr. Spykman said he was in favor of not including condominiums in the definition of subdivision.

Mr. Phippard referred to page two of the draft Ordinance and said Keene is now at a point where many people are looking to build houses on lands on the perimeter of the City's utility network. At

these farther properties, water supplies are inadequate perhaps based on elevations, pressure, flow, or size of infrastructure; Mr. Phippard was unsure but said the water pressure at these locations is less than 20 psi. Because the water does not reach these properties, he has to apply to the Zoning Board for a variance to build a single-family homes on a lot not connected to City water. He said the City will not improve infrastructure to serve these areas even though the water lines run adjacent to the properties. He does not think it is fair to landowners in these situations. He cited Whitcombs Mill Road and Base Hill Road as examples, among others. Mr. Kopczynski said the question is more closely related to the body of the Code itself in the Zoning District, which says single-family homes must be served by City water and sewer; he suggested tabling this conversation until the Committee discusses these issues with the Public Works Director.

Ms. Kessler said the remaining comments on this Ordinance are noted on the change form and are related to CRDs (starting on page three of the draft). Staff proposes eliminating the Low Density I District, which is only three parcels. Staff still has questions on this section and more work is needed regarding setbacks and dimensional requirements. Mr. Phippard said Low Density I was intended originally to be a transition between Low Density and Rural, which made sense at the time. Staff reiterated that this is just a proposal.

Ms. Kessler said the regulations related to CRDs are confusing. Three or more lots and a road require a CRD. When discussing tracts of land, she said the parent parcel is considered; 10 acre minimum in the Rural zone and five acre minimum in Low Density and Low Density I zones. For example, she said someone in the Rural District trying to subdivide a 10-acre lot needs to designate at least 50% of that tract as open space and allocate the remaining land into lots with one-acre minimum lot sizes. Ms. Kessler explained that the number of units allowed within the 10 acres is based on dividing the 10 acres by a density factor. Currently, the density factor is 1 unit for every 5 acres. Staff are proposing to change this to 1 unit for every 3 acres. This would allow more units to be located in a CRD. Staff went to explain this concept in more detail and to discuss the proposed changes to the regulations that would allow for more density through CRDs while still preserving the intent. This may be a way to incentivize doing CRDs. The group worked through an example to understand the calculations behind the yield analysis for CRDs.

A question was raised about whether it would be better to reduce the minimum lot size required for CRD. Staff noted that the intent for preserving the minimum lot sizes is to ensure that the character of the zoning districts is not impacted. Ms. Kessler added that the reason is also to ensure there is adequate space for wells and leach fields in areas without City water and sewer.

Mr. Phippard noted there is also a 100' buffer requirement along the external road, so an additional acre of land would be necessary beyond that buffer before building is possible. He thought the Rural Zone would allow duplexes, which Ms. Kessler confirmed that it would if done as a CRD. In reality, Mr. Phippard said CRDs are alright and he cited a project he is working on that can benefit from the changes to the 100' buffer requirement because the most usable strip is 130' along that road. Mr. Kopczynski agreed that it would have to be a narrow house with the current regulations; he noted internal discussions about the 100' buffer, especially in the Low Density District. Ms. Kessler said there was discussion to reduce the perimeter buffer in the Rural zone to 50'. The Committee discussed challenges of a 100' buffer restriction, which could leave someone with an undevelopable lot. Staff will continue working to clarify these numbers.

The Committee agreed the density factor needs significant reconsideration. Staff is trying to increase incentive for CRDs but it is hard to communicate the requirements in simple language.. Mr. Barrett requested an example that excludes the density factor regulation and still constrains





minimum lot size. Councilor Richards suggested diagrams with pictures that compare different components with equations on each to help the Committee visualize.

- 5) **Next Meeting – June 7, 2019**
- 6) **Adjourn**

Hearing no further business, Mr. Barrett adjourned the meeting at 6:06 PM.

Respectfully submitted by,
Katryna Kibler, Minute Taker
May 27, 2019

2020 Building Better Together (UDO)

 <p>BUILDING BETTER TOGETHER KEENE NEW HAMPSHIRE</p>	 <p>SIMPLE New regulations will be easy to navigate & will include graphics to outline a clear process, from start to finish.</p>	 <p>EFFICIENT The updated structure will provide a set of clear procedures for development queries, & will create a more streamlined application process – eliminating the need to navigate multiple points of contact.</p>	 <p>THOUGHTFUL Although our regulations have worked in the past, they can be outdated & confusing. This update will help guide us into the future, while protecting the crucial elements that make this a great place to live, work, & play.</p>	<h3>Parking and Driveway Regulations</h3> <p>Draft as of June 3, 2019</p>
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BACKGROUND:

The City's current regulations related to parking and driveways on private property span multiple chapters of the City Code of Ordinances (including Chapter 18, 70, and 102) and the Planning Board Regulations/Development Standards. These regulations address multiple aspects of parking including the minimum requirements for off-street parking, the size and dimensions of parking areas and lots, pavement setbacks, landscaping requirements, design standards such as surface materials and grading, as well as safety considerations. In an effort to simplify the current regulations, staff have drafted a Parking and Driveway chapter that will be included in the Zoning Ordinance. This draft chapter consolidates the majority of the regulations related to parking and driveways in one section. A major change with respect to this draft chapter is the introduction of flexibility with respect to parking requirements, recognizing that a "one-size-fits-all" approach is not always adequate, depending on the site and/or use.

SUMMARY OF MAJOR CHANGES & REASONS:

- Staff consolidated the City's regulations related to parking and driveways into one chapter that will be in the Zoning Ordinance. This reorganization required the introduction of new language including a purpose statement, revised applicability section, and an alternate parking requirement section.
- Staff updated the minimum parking requirements table, the current version of which is significantly outdated. Staff utilized the current version of the ITE Parking Generation Manual and a review of existing uses/sites as a basis for these updated parking ratios.
- In the current regulations, whenever there is a change of use, a site must become compliant with the parking regulations. In addition, there is no option for reductions in the required parking minimums. The proposed draft introduces the following options:
 - An alternate parking requirement section grants the Zoning Administrator the authority to grant up to a 10% reduction in the required number of parking spaces and includes a process by which the Zoning Administrator would make a determination on granting this reduction. This section also grants the ZBA the authority to issue a reduction in the minimum parking requirements between 10 and 50% through the Special Exception process. Additional Special Exception criteria are included as well as information that would need to be submitted by an applicant.
 - There is a new section on parking credits, which states that a new use proposed for a site that requires that same or more parking as the previous use can "credit" any existing parking deficiencies to the new use at the discretion of the Zoning Administrator.
- A section on remote parking has been added, which increases the current distance allowed for offsite parking from 300' to 750' walking distance.
- The landscaping standards in the Planning Board Development Standards related to parking lots have been incorporated into this draft chapter and removed from the Development Standards.
- Standards related to parking lot landscaping along public rights of way has been renamed to Parking Lot Screening and amendments have been made to these standards to improve consistency and clarity.
- The design standards for driveways and parking lots have been organized to differentiate between single and two family parking areas and multi-family and nonresidential parking lots.
- The draft chapter states that when any existing parking area is expanded, the design standards shall apply only to the new parking but where the proposed expansion is more than 50% of the existing number of parking spaces, the design standards apply to the entire lot.

REMAINING ISSUES/QUESTIONS

- Add a section on driveway design standards that would incorporate driveway design standards currently in Chapter 70 of City Code.

- Continued work is needed on the Landscaping Standards, including the incorporation of graphics to illustrate landscaping options.
- Staff are evaluating existing uses/sites to test the updated/proposed minimum parking requirements.
- With the creation of Form Based Zoning subdistricts in the Downtown, the Central Business District boundaries are likely to change. With this change, the City must address the question of whether to reduce or expand the current allowance in the Central Business District for no on-site parking being requirement.

ATTACHMENTS:

- A. Proposed Parking and Driveway Chapter dated June 3, 2019

PARKING & DRIVEWAYS

PURPOSE

The intent of this section is to:

- Ensure the provision of off-street vehicle parking for individual sites that supports the needs of existing and future uses
- Promote safe and efficient circulation of pedestrians, motorists, and bicyclists into, within, and out of parking areas.
- Allow flexibility in addressing vehicle parking, loading and access issues, recognizing that both too little and too much parking can create negative impacts.
- Ensure appropriate site location and design features that mitigate the impact of parking on other land uses and surrounding neighborhoods
- Promote parking designs that minimize runoff and incorporate infiltration of stormwater into the ground

APPLICABILITY

General

- The standards in this section shall apply to any changes or modifications that affect the need for, calculation of, or changes to a parking area or lot.
- No application for a permit for the erection of a new structure, development of a land use, change or expansion in use, or expansion of a structure shall be approved unless the requirements of this Article are met

Expansion of Existing Structure

- When the floor area of an existing structure is increased, additional parking spaces shall be provided on-site as required by this Article for the additional floor area.

Renovations or Repairs

- An existing building or site may be repaired, maintained or modernized without providing additional parking, provided there is no increase in gross floor area, improved site area or additional parking demand.

Expansion of existing parking

- When any existing parking area is expanded, the design standards in this Article shall apply to the new parking. Where the proposed expansion is more than 50% of the existing number of parking spaces, the design standards shall apply to the entire lot.

Change in Use

- When the existing use of a structure or land is changed to a new use, parking spaces must be provided as required by Table 1 for the new use, except as allowed under Section X – “Alternative Parking Requirements” of this Article.

MINIMUM PARKING REQUIREMENTS

Calculation of Required Parking

- The minimum number of off-street vehicle parking spaces to be provided for each primary use or uses located on a lot is listed in Table 1: Minimum Off-Street Parking Requirements, except as allowed under Section X – “Alternative Parking Requirements” of this Article.
- The minimum requirements included in Table 1 are general and are intended to include all similar uses. Where the classification of use is not determinable from Table 1, the Zoning Administrator shall determine the appropriate off-street parking requirements. The Zoning Administrator shall consider all factors entering into the parking need of such a use, including the most current version of the ITE Parking Generation Standards.

- Additional parking requirements for specific zoning districts or specific uses may apply in addition to the requirements of Table 1.
- In determining the required number of parking spaces, fractional spaces are rounded to the nearest whole number with one-half or more counted as an additional space.
- Where multiple primary uses with different parking requirements occupy the same structure or lot, the required minimum parking spaces is the sum of the requirements for each use computed separately, except as allowed under Section X – “Alternative Parking Requirements” of this Article.
- Space(s) designated for off-street loading may not be used to satisfy the requirement for any off-street parking space or access aisle or portion thereof.
- Spaces reserved for accessible parking, car-share facilities, and/or electric vehicle charging may count toward the minimum parking requirements of this LDC.

Location of Required Parking Spaces

- All required parking spaces shall be located on the site, unless approval for remote parking has been obtained by the Zoning Administrator per Section X.

Zoning District Specific Requirements

- No parking is required in the Central Business District. When sites do elect to provide parking in the Central Business District, all design standards and specific limitations in this section shall apply.

TABLE 1. MINIMUM OFF-STREET PARKING REQUIREMENTS

LAND USE TYPE	MINIMUM SPACE REQUIREMENT
RESIDENTIAL	
Dwelling Unit	2 spaces / unit
Congregate Living Facility	0.5 space / bed
Lodging House	1 space / bed
LODGING	
Hotel, Motel, Bed and Breakfast/Inn	1 space / sleeping room
OFFICE	
Offices	4 space / 1,000 sf GFA
Clinic	6 spaces / 1,000 sf GFA
INDUSTRIAL	
<i>General Industrial & Manufacturing</i>	0.5 space / 1,000 sf GFA
WHOLESALE & STORAGE	
Wholesale & Warehousing	0.5 spaces / 1,000 sf GFA
Self Storage (Mini Warehouse)	0.2 spaces / 1,000 sf GFA
RETAIL	
Retail Store	4 space / 1,000 sf GFA
Grocery Store / Supermarket	4 spaces / 1,000 sf GFA
Restaurant	1 space / 4 seats
Convenience Market with Fueling Pumps	5-6 spaces / 1,000 sf GFA?
Convenience Market without Fueling Pumps	
INSTITUTIONAL	

Indoor Assembly	
<i>With Seats</i>	1 space / 4 seats
<i>Without Seats</i>	2 spaces / 1,000 sf GFA
Day Care Center	0.2 spaces / student and 1.5 spaces / employee

ALTERNATE PARKING REQUIREMENTS

Recognizing that the ratios provided in Table 1 may not be adequate for all uses or sites, the number of parking spaces required in Table 1 may be reduced in accordance with the requirements in this Section.

- In determining the total number of required vehicle parking spaces that may be reduced through any one or combination of this Section's permitted reductions, calculations shall be based on the minimum number of parking spaces required in Table 1.
- The number of required accessible parking spaces shall be calculated based on the minimum number of parking spaces required in Table 1, not including any reduction. In no circumstance, shall the number of required accessible parking spaces be reduced.

Reduction of Required On-Site Parking

Upon request, the Zoning Administrator may grant up to a 10% reduction in the number of required parking spaces for the primary use or mixture of primary uses on a lot where it can be demonstrated that:

- a specific use or site has such characteristics that the number of required parking spaces is too restrictive; and,
- the requested reduction will not cause long term parking issues for adjacent properties or anticipated future uses.

In granting a reduction, the Zoning Administrator shall take into consideration whether the following site conditions are applicable or present on the lot where the primary use or uses is located:

- Reserve Area - An area of land suitable for the development of a parking facility and equal in size to the area of land needed to provide the parking spaces for which a reduction is granted will be reserved as undeveloped open space on the lot.
- Proximity to Alternative Modes of Transportation - The main entrance to the building of the proposed use is located within a 750' walking distance to an operating transit route or there is direct access from the lot to a multi-use bicycle pathway.
- On-Street Parking - Located contiguous to the lot there is on-street public parking that meets all the requirements for on-street parking in accordance with this LDC.
- Shared Parking - The required parking is for a use or uses that share a parking lot with other uses that have different peak parking demands or operating hours (e.g. a movie theatre and a bank).

A request for parking reduction shall be filed with the Zoning Administrator and shall include, at a minimum, information on the size and type of the proposed use or uses, the anticipated rate of parking turnover, the anticipated peak parking and traffic loads of all uses, and a description of any of the site conditions listed in Section X. The Zoning Administrator may request additional information and/or technical studies at the applicant's expense.

Requests for reductions in required parking that exceed 10% and are less than 50% shall be considered by the Zoning Board of Adjustment through the Special Exception process. In determining whether to grant a Special Exception, the Zoning Board of Adjustment shall make the following findings in addition to those listed in Section X of this LDC for Special Exceptions.

- The specific use or site has such characteristics that the number of required parking spaces is too restrictive; and,
- The requested reduction will not cause long term parking issues for adjacent properties or anticipated future uses.

The applicant for a Special Exception shall submit a parking study conducted by a NH Licensed Engineer that clearly demonstrates the need for a reduction in required parking. The parking study shall at a minimum address:

- A description of the proposed use or uses;
- Days and hours of operation of the uses;
- Anticipated number of employees and number of daily customers or clients;
- The anticipated rate of turnover for proposed spaces;
- The availability of nearby on-street parking or alternative modes of transportation such as transit, and bike paths;
- The anticipated peak parking and traffic loads for each of the buildings, structures, or uses on the site(s); and,
- Total vehicle movements for the parking facility as a whole.

Parking Credit

- When a new use proposed for a site requires the same or more parking than the existing use according to Table 1, and there is an existing parking deficiency on the site, the new use shall be responsible only for the additional parking required. Any existing parking deficiencies of the required parking for the previous use may be credited to the new use at the discretion of the Zoning Administrator, provided that the previous use was legally established and the number of spaces has not decreased.

Remote Parking

If the required number of parking spaces for any land use cannot be reasonably provided on the same lot on which the principal use is located, the Zoning Administrator may permit all or part of the required parking to be located on a separate lot, provided it complies with the following:

- The remote parking spaces shall be within a 750-ft walking distance of the property on which the principal use is located. This distance is measured from the nearest point of the remote parking area to the primary entrance of the use served. The path of travel from the remote parking to the principal use must have adequate pedestrian facilities such as crosswalks and sidewalks for pedestrians to safely access to the two sites.
- Remote parking spaces shall not be allowed in any residential zoning district.
- All required accessible parking spaces have been provided on site.
- Where remote parking spaces are under separate ownership from the principal lot, a parking agreement between the record owners guaranteeing the use and operation of remote parking areas for the life of the principal use shall be submitted on a form acceptable to the Zoning Administrator and shall be recorded in the County Registry of Deeds. Change of ownership or use of either parcel shall require a renewal of the agreement.
- The remote parking spaces shall not be counted toward the minimum parking requirements for the primary use or uses of the lot where the remote parking is located.

PARKING & DRIVEWAY DESIGN STANDARDS

SINGLE AND TWO FAMILY DRIVEWAY AND PARKING AREA DESIGN STANDARDS

- Prior to installing a new or modifying an existing curbcut or driveway, a Curb Cut Permit shall be obtained according to the standards and processes outlined in Section X of this LDC.

- A driveway shall be a minimum of 12 feet wide per lane and shall correspond to the Driveway Connection Permit issued for the parking area.
- Each vehicle parking area shall be a minimum dimension of 8 feet x 18 feet and shall be located to the rear of the front setback or building line.
- The driveway and associated parking area shall be a minimum of 3 feet from the side property line.
- The surface of the driveway and associated parking area shall be of concrete, gravel, paving or other suitable materials to prevent erosion and raising of dust.
- The driveway and associated parking area shall be graded to prevent drainage across sidewalks and curb cuts or onto adjacent property.

MULTI FAMILY AND NON-RESIDENTIAL DRIVEWAY AND PARKING LOT DESIGN STANDARDS

Surface Material and Grade:

The surface of parking lots and associated driveways shall be designed as follows:

- Have a surface of concrete, gravel, paving or other suitable materials to prevent erosion and raising of dust.
- Be graded to prevent drainage across sidewalks and curb cuts or onto adjacent property.
- If paved, or of concrete, be striped to delineate parking spaces.
- Have a substantial wheel stop of concrete, masonry, steel or heavy timber placed at or near the end of each parking space to prevent vehicles from damaging nearby buildings, lawns, trees or shrubs, or from creating a hazard to pedestrians on any sidewalk or walkway.
- Accessible spaces and routes shall be paved or of concrete and meet all standards required by the State Minimum Building Code.

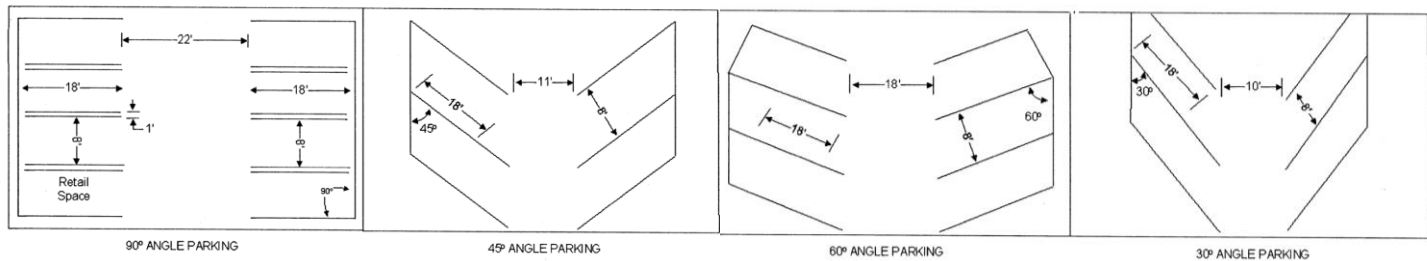
Dimensions:

- Parking spaces shall not be less than 8 feet by 18 feet.
 - Spaces designed primarily to serve retail establishments shall either provide a 1 foot separation between adjacent spaces or shall be not less than 9 feet wide.
- A driveway shall be a minimum of 12 feet wide per lane and shall correspond to the Driveway Connection Permit issued for the parking area.
- The width of travel lanes within the interior of a parking lot shall be as listed in Table 2 and illustrated in Graphic 1.

Table 2. Required Internal Travel Lane Dimensions

Angle of Parking Space	Width of Internal Travel Lane
90-degree	22-ft
60-degree	18-ft
45-degree	11-ft
30-degree	10-ft

Graphic 1. Internal Travel Lanes Dimensions



Setbacks:

The setbacks for paved and unpaved parking lots and travel surfaces associated with multifamily and/or nonresidential uses in all Zoning Districts are listed in Table 3.

Table 3. Setbacks for Paved and Unpaved Parking and Travel Surfaces

Parking Lot Size	Setbacks (measured in feet)		
	Front	Side	Rear
Small lot (parking lots ≤ 10,000 sf)	5	5	5
Medium lot (parking lots > 10,000 sf and ≤ 30,000 sf)	10	5	5
Large lot (parking lots > 30,000 sf and up to and ≤ 2 acres)	15	10	10
Very large lot (parking lots > 2 acres)	20	15	15

Parking Lot Screening:

All parking lots of 50 spaces or more which abut a public road, sidewalk or a residential zone shall provide a landscape buffer along at least 75% of the length of the right of way or portion abutting the residential zone(s), at least six (6) feet wide.

All parking lots that abut public rights-of-way must be landscaped or screened along the border of the public right-of-way using one or more of the following options:

- A minimum of 1 shade tree per 35 linear feet or portion thereof and 10 shrubs per 35 linear feet excluding curb cuts; An earthen berm, minimum 2½ feet in height, and 1 shade tree per 35 linear feet or portion thereof and 5 shrubs per 35 linear feet excluding curb cuts;
- If there is a minimum 3 foot drop (average) from the street to the parking lot, 1 shade tree per 35 linear feet or portion thereof and 5 shrubs per 35 linear feet excluding curb cuts;
- A minimum 3 foot high fence of brick, stone or finished concrete (cannot be concrete block) with a minimum 4 foot vegetated buffer strip between the fence and street and one shade tree per 35 linear foot or portion thereof excluding curb cuts;
- If the area abutting the street is an existing woodland, a 25 foot woodland buffer may be left in lieu of landscaping; or
- A plan approved by the Planning Board that incorporates modifications to the above options or combinations of the above options.

In any of the options listed in Section X, 2 ornamental or 2 evergreen trees may be substituted for 1 shade tree for no more than 50 percent of the required shade trees.

Landscaping within a Parking Lot

For parking Lots of 10 or more spaces the following landscaping standards apply in addition to any landscaping required screening:

- 1 tree at least 3 inches in diameter, as measured 24 inches from the ground after planting shall be required at the ratio of 1 tree per 10 parking spaces.
- Tree groupings of 3 or more trees at least 6 feet tall or 2 inches in diameter as measured 12 inches above grade after planting may be substituted.

For parking lots of 50 spaces or more the following landscaping standards apply in addition to any landscaping required for screening:

- The interior of the parking lot shall include landscaping covering not less than 10 percent of the total area of parking spaces.
- More than half of the required parking lot landscaping shall be either in continuous landscape strips or in large planting islands located entirely within the paved area of the parking lot, in order to break up the visual expansiveness of the lot.
- More than half of the planting areas shall be at least 8 feet wide. Curbs, setbacks or other protection must be provided to prevent damage to trees and shrubs from vehicles.




Landscaping equal to a minimum of 10 percent, or 5 percent for lots 10,000 sf or smaller, of the area of parking spaces within a parking lot shall be provided in or adjacent to the *parking* lot as follows:

- A landscaping island (paving surrounding four sides) or peninsula (paving surrounding three sides) within the parking lot. The island or peninsula shall be a minimum of 160 square feet with no dimension less than 8 feet;
- Landscaping on the parking lot side of the paving setback line;
- A large landscaped area/berm along the street frontage either in front of the building or between the paving setback line and the parking lot or building, or in front of the building, that is a minimum area of 1,000 sf and has a minimum depth of 10 feet.
- A combination of subsections (a)(1) through (3) of this section; or
- A parking lot landscaping plan approved by the planning board.

Within a parking lot, trees shall be located so there is never more than 150 feet between trees, or all parking spaces shall be within 75 feet of a tree, or a combination of the 2 may be used.

DRAFT

2020 Building Better Together (UDO)

 <p>BUILDING BETTER TOGETHER KEENE NEW HAMPSHIRE</p>	 <p>SIMPLE New regulations will be easy to navigate & will include graphics to outline a clear process, from start to finish.</p>	 <p>EFFICIENT The updated structure will provide a set of clear procedures for development queries, & will create a more streamlined application process – eliminating the need to navigate multiple points of contact.</p>	 <p>THOUGHTFUL Although our regulations have worked in the past, they can be outdated & confusing. This update will help guide us into the future, while protecting the crucial elements that make this a great place to live, work, & play.</p>	<p>Floodplain Ordinance Draft as of May 15, 2019</p>
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BACKGROUND:

The current Floodplain ordinance sits in the City’s Code of Ordinances under Chapter 56 Natural Resources. The regulations apply to lands in the City that are designated as special flood hazard areas (floodplain, floodway) by the Federal Emergency Management Agency maps. The intent of the floodplain ordinance is to ensure that any development in the floodplain is done to preserve function and capacity of the resource and also to limit any new construction within the high hazard floodway.

The New Hampshire Office of Strategic Initiatives Floodplain Management Program developed a model floodplain ordinance that contains the minimum regulations that communities must adopt to participate in the National Flood Insurance Program for which Keene does participate in order to receive affordable insurance rates for properties within the flood hazard areas of Keene.

SUMMARY OF MAJOR CHANGES & REASONS:

Move Chapter 56 into the LDC.

Adopt the NH’s model ordinance in part but maintain the parts of the City’s current ordinance that deal with the floodway and compensatory storage.

- The floodway must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than a designated height.
- Compensatory storage is a way to replace any loss of existing flood storage caused by development within the floodplain.
- Remove the three foot lower elevation limitation on compensatory storage which will allow for more location options for developer to create the required storage while still maintain that it is within the same hydraulic reach.
- Remove construction details that are repetitive in the floodplain ordinance and the State Building Code and just reference the State Building Code with in the ordinance.
- Remove the reference to the Ash Swamp Brook flood area, which was removed from the FEMA maps in 2006.
- Included a 5-year time period in the definition of Substantial Improvement.

ATTACHMENTS:

- A. Proposed/revised Floodplain Ordinance dated May 15, 2019

DRAFT FLOODPLAIN MANAGEMENT ORDINANCE

5/15/19 draft

1. AUTHORITY

This Article is adopted pursuant to the authority of RSA 674:16, RSA 674:17, and 674:56.

2. PURPOSE

The floodplains and floodways of the City represent a substantial public interest. Collectively, they are an essential component of the City's natural resource infrastructure, and their capacity and function must be protected and, when possible, enhanced. The regulations in this article have been established to ensure that no construction takes place in high hazard floodway areas and that any development within the floodplain is done so as to preserve the full function and capacity of this essential resource system. It is the specific purpose of this article to:

- a) Reduce flood hazard threats to the health, safety and general welfare of city residents.
- b) Protect occupants of floodplain or floodway areas from a flood which is or may be caused by their own land use.
- c) Protect the public from the burden of extraordinary financial expenditures for flood control or flood damage repair.
- d) Protect and when possible enhance the capacity of the floodway and floodplain areas to absorb, transmit and store floodwaters.
- e) Minimize prolonged disruption of commerce and public services.
- f) Minimize damage to public facilities; utilities such as water and gas mains, electric, telephone and sewer lines; streets; and bridges located in special flood hazard areas.
- g) Avoid increases in flood intensity, height, extent, or duration.
- h) Ensure that those who occupy or develop in flood hazard areas recognize the risk to themselves, adjacent property owners and the general public.

3. APPLICABILITY

- a) Certain areas of the City are subject to periodic flooding, causing serious damages to properties within these areas. Relief is available in the form of flood insurance as authorized by the National Flood Insurance Act of 1968. Therefore, the City of Keene has chosen to become a participating community in the National Flood Insurance Program (NFIP), and agrees to comply with the requirements of the National Flood Insurance Act of 1968 (P.L. 90-488, as amended) as detailed in this Article.
- b) These regulations shall apply to all lands designated as special flood hazard areas by the Federal Emergency Management Agency (FEMA) in its "Flood Insurance Study for the County of Cheshire, New Hampshire", dated May 23, 2006 or as amended, together with the associated flood insurance rate maps (FIRM) dated May 23, 2006, or as amended, which are declared to be part of this Article and are hereby incorporated by reference.
- c) This Article establishes a permit system and review procedure for development in a special flood hazard area of the City of Keene.

4. ADMINISTRATIVE PROVISIONS

- a) In accordance with RSA 676, the Floodplain Administrator shall enforce and administer the provisions of this Ordinance.
 1. The Building and Health Official or their designee is hereby appointed to administer and implement these regulations and is referred to herein as the "Floodplain Administrator."
- b) The duties and responsibilities of the Floodplain Administrator shall include, but are not limited to:

1. Ensure that permits are obtained for proposed development in a special flood hazard area.
2. Review all permit applications for completeness and accuracy, and coordinate with the applicant for corrections or further documentation, as needed.
3. Interpret the special flood hazard area and floodway boundaries and determine whether a proposed development is located in a special flood hazard area, and if so, whether it is also located in a floodway.
4. Provide available flood zone and base flood elevation information pertinent to the proposed development.
5. Make the determination as to whether a structure will be substantially improved or has incurred substantial damage as defined in this Ordinance and enforce the provisions of this Ordinance for any structure determined to be substantially improved or substantially damaged.
6. Issue or deny a permit based on review of the permit application and any required accompanying documentation.
7. Ensure prior to any alteration or relocation of a watercourse that the required submittal and notification requirements in this Ordinance are met.
8. Review all required as-built documentation and other documentation submitted by the applicant for completeness and accuracy and verify that all permit conditions have been completed in compliance with this Ordinance.
9. Notify the applicant in writing of either compliance or non-compliance with the provisions of this Ordinance.
10. Ensure the administrative and enforcement procedures detailed in RSA 676 are followed for any violations of this Ordinance.
11. Submit to FEMA, or require applicants to submit to FEMA, data and information necessary to maintain FIRMs, including hydrologic and hydraulic engineering analyses prepared by or for the City of Keene, within six months after such data and information becomes available if the analyses indicate changes in base flood elevations, special flood hazard area and/or floodway boundaries.
12. Maintain and permanently keep and make available for public inspection all records that are necessary for the administration of these regulations, including: local permit documents, flood zone and base flood elevation determinations, substantial improvement and damage determinations, variance and enforcement documentation, and as-built elevation and dry floodproofing data for structures subject to this Ordinance.
13. Delegate duties and responsibilities set forth in these regulations to qualified technical personnel, inspectors, or other community officials as needed.

5. FLOOD ZONE AND FLOODWAY DETERMINATIONS

- a) The Floodplain Administrator shall determine whether any portion of a proposed development is located in a special flood hazard area and if so, whether it is also located in a floodway, using the effective FIRM. If the development is located wholly or partially in a special flood hazard area, the Floodplain Administrator shall determine the flood zone and the applicable requirements in the Ordinance that shall apply to the development.
- b) Where it is unclear whether a site is in a special flood hazard area and/or in a floodway, the Floodplain Administrator may require additional information from the applicant to determine the development's location on the effective FIRM.
- c) If any portion of a development including a structure and its attachments (e.g, deck posts, stairs) is located in multiple flood zones, the flood zone with the more restrictive requirements documented in this Ordinance shall apply.
- d) Where a conflict exists between the floodplain limits illustrated on the FIRM and actual natural ground elevation, the base flood elevation(s) in relation to the actual natural ground elevation shall be the governing factor in locating the regulatory floodplain limits.
- e) Within a riverine special flood hazard area designated **as Zone A**, the Floodplain Administrator shall obtain, review, and reasonably utilize any floodway data available from Federal, State, or other sources. If floodway data is available, the applicant shall meet the floodway requirements in **Section 14 of this Ordinance**.

6. SUBSTANTIAL IMPROVEMENT AND DAMAGE DETERMINATIONS

- a) For all development in a special flood hazard area that proposes to improve an existing structure, including alterations, movement, enlargement, replacement, repair, additions, rehabilitations, renovations, repairs of damage from any origin (such as, but not limited to flood, fire, wind or snow) and any other improvement of or work on such structure including within its existing footprint, the Floodplain Administrator, in coordination with any other applicable community official(s), shall be responsible for the following:
1. Review description of proposed work submitted by the applicant to determine if the proposed work would be considered to be a Substantial Improvement based on any combination of repair, reconstruction, rehabilitation, addition, or other improvement of a building or structure, taking place during a five-year period, the cumulative cost of which equals or exceeds 50 percent of the market value of the building or structure before the improvement or repair is started. If the structure has incurred "substantial damage," any repairs are considered substantial improvement regardless of the actual repair work performed.
 2. Use the community's current assessed value of the structure (excluding the land) to determine the market value of the structure prior to the start of the initial repair or improvement, or in the case of damage, the market value prior to the damage occurring. If the applicant disagrees with the use of the community's assessed value of the structure, the applicant is responsible for engaging a licensed property appraiser to submit a comparable property appraisal for the total market value of only the structure.
 3. Review cost estimates of the proposed work including donated or discounted materials and owner and volunteer labor submitted by the applicant. Determine if the costs are reasonable for the proposed work, or use other acceptable methods, such as those prepared by licensed contractors or professional construction cost estimators and from building valuation tables, to estimate the costs.
 4. Determine if the proposed work constitutes substantial improvement or repair of substantial damage as defined in this Ordinance.
 5. Notify the applicant in writing of the result of the substantial improvement or damage determination. If the determination is that the work constitutes substantial improvement or substantial damage, the written documentation shall state that full compliance with the provisions of this Ordinance is required.
 6. Repair, alteration, additions, rehabilitation, or other improvements of historic structures shall not be subject to the elevation and dry floodproofing requirements of this Ordinance if the proposed work will not affect the structure's designation as a historic structure. The documentation of a structure's continued eligibility and designation as a historic structure shall be required by the Floodplain Administrator in approving this exemption.

7. FLOODPLAIN PERMITTING REQUIREMENTS

- a) All proposed development within a special flood hazard area shall require a permit from the City of Keene, prior to the commencement of any development activities. Development, as defined in this Ordinance, includes both building and non-building activities.
- b) To obtain a permit, the applicant shall first submit a completed application in writing on a form furnished by the City of Keene, for that purpose. Every application shall include, but is not limited to:
1. The name, address and phone number of the applicant, owner, and contractor(s);
 2. A map indicating the location of the proposed development sufficient to accurately locate property and structure(s) in relation to existing roads and waterbodies;
 3. A description of the proposed development and the use or occupancy for which the proposed development is intended;
 4. If the development involves proposed work on an existing structure, a description of the total costs of the proposed work including all materials and labor;
 5. In a Zone A, for proposed developments either greater than 50 lots or greater than 5 acres, the base flood elevation(s) established for the area, including any data such as hydraulic and hydrologic analyses, used to determine the elevation(s);
 6. Submittal of evidence that all necessary permits have been obtained from those Federal, State, or local government agencies from which prior approval is required; and

7. Such other material and information as may be requested by the Floodplain Administrator to determine conformance with, and provide enforcement of, this Ordinance.
- c) The Floodplain Administrator shall review all permit applications for completeness and accuracy, and coordinate with the applicant for corrections or further documentation, as needed. If the proposed development will comply with this Ordinance, the Floodplain Administrator shall approve the application and issue a permit. If the proposed development will not comply with this Ordinance, the Floodplain Administrator shall deny the permit application and return to the applicant with a written explanation of denial.
- d) Following completion of new construction of a structure or an existing structure that was substantially improved or replaced, or that incurred substantial damage, or the placement or substantial improvement of a manufactured home, the applicant shall submit the following to the Floodplain Administrator:
1. A completed and certified copy of an Elevation Certificate that includes the as-built elevation (in relation to mean sea level) of the lowest floor of the structure and whether or not the structure has a basement.
 2. If a non-residential structure includes dry floodproofing, a completed and certified copy of the Floodproofing Certificate for Non-Residential Structures that includes the as-built elevation (in relation to mean sea level) to which the structure was dry floodproofed and certification of floodproofing.
- e) The Floodplain Administrator shall review all required as-built documentation and other documentation submitted by the applicant for completeness and accuracy and verify that all permit conditions have been completed in compliance with this Ordinance.

The Floodplain Administrator shall either:

1. Issue a Certificate of Occupancy to the applicant if it has been determined that full compliance with this Ordinance has been met; or
2. Notify the applicant in writing of any violation of this Ordinance and the actions required to bring the development into compliance with this Ordinance if it has been determined that full compliance with this Ordinance has not been met.

8. FLOOD ELEVATION DETERMINATIONS

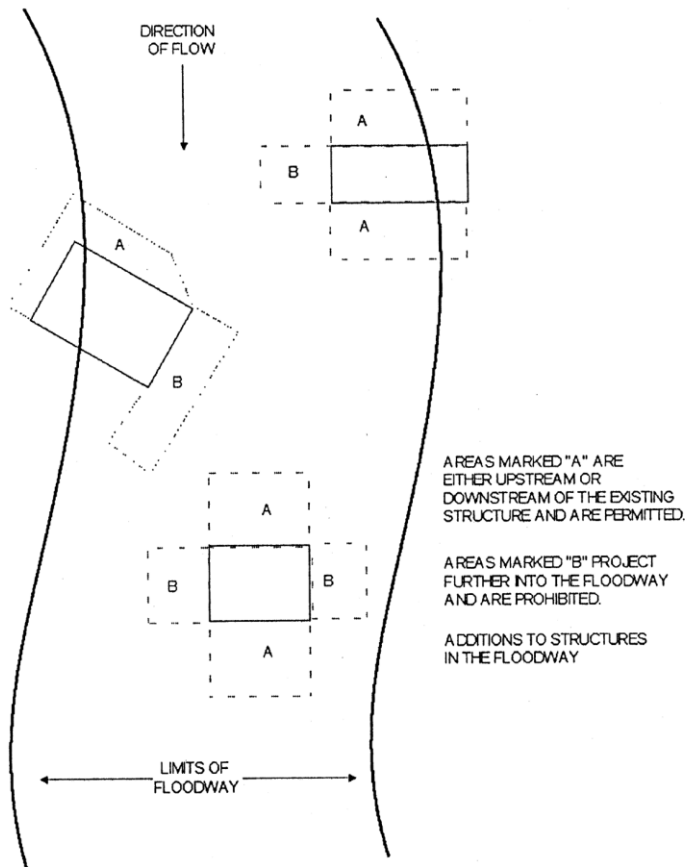
- a) The Floodplain Administrator shall determine the flood elevation for a structure as applicable for each permit application in the following flood zones:
1. For Zone AE, the base flood elevation is determined from the data provided in the community's FIS and accompanying FIRM.
 2. For Zone A with no base flood elevation shown in the FIS or on the FIRM:
 - a. The Floodplain Administrator shall obtain, review, and reasonably utilize any base flood elevation data available from any Federal, State or other source including data submitted to the community for development proposals (i.e. subdivisions, site plan approvals).
 - b. Where a base flood elevation is not available or not known, the base flood elevation shall be determined to be at least 2 feet above the highest adjacent grade.
 - c. For a development either greater than 50 lots or greater than 5 acres, the applicant shall develop a base flood elevation for the site and provide it to the Floodplain Administrator with their permit application.
- b) If a structure is affected by multiple base flood elevations, the highest base flood elevation shall apply.

9. FLOODPLAIN DEVELOPMENT REQUIREMENTS

- a) *Floodway*. All development, including new construction or substantial improvement, within any floodway within the City shall be discouraged and shall require a floodplain development permit from the Floodplain Administrator.

The Floodplain Administrator shall not issue a building permit for any construction or substantial improvement within any floodway unless such permit has been granted. Such permit shall only be issued under the following conditions, in addition to the requirements for development in the floodplain:

1. New freestanding buildings are not permitted in the floodway.
2. Additions to existing buildings in the floodway are permitted, but only in the direction of the flow of water, either upstream or downstream. Additions are not permitted to project further into the floodway. See the illustration in this section entitled "Additions to Structures in the Floodway" for examples of how additions to an existing building in the floodway may be built.
3. Any addition must have the lowest floor level, including basement, one foot above the 100-year flood elevation. Floodproofing is not permitted in the floodway below the 100-year flood elevation.
4. Applicants must provide flood storage compensation either in the floodway or floodplain using the same rules for compensation as when building in the floodplain. Flood storage compensation is allowed off site with the property owner's permission.
5. Plans for any additions in the floodway must show the limits of the floodway and floodplain in the area of the proposed addition, and the plan must be certified by a registered hydraulic engineer that the addition will not change the floodway or floodplain so as to affect any other properties.



Floodway Additions to Structures in the Floodway

- b) *Floodplain.* All development, including new construction or substantial improvement, within any special flood hazard area within the city shall be discouraged and shall require a floodplain development permit from the Floodplain Administrator. The Floodplain Administrator shall not issue a building permit for any construction or substantial improvement within special flood hazard areas unless such permit has been granted.
- c) All development located in a special flood hazard area shall be:
 - 1. Reasonably safe from flooding;
 - 2. Designed and constructed with methods and practices that minimize flood damage;
 - 3. Designed (or modified) and adequately anchored to prevent flotation, collapse, or lateral movement (including structures and above ground gas or liquid storage tanks);
 - 4. Constructed with flood damage-resistant materials;
 - 5. Constructed with electrical, heating, ventilation, plumbing, and air conditioning equipment, and other service facilities that are designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding;
 - 6. Adequately drained to reduce exposure to flood hazards;
 - 7. Compliant with the applicable requirements of the State Building Code and the applicable standards in this Ordinance, whichever is more restrictive.

10. STRUCTURE REQUIREMENTS

- a) New construction of a residential structure, or an existing residential structure to be substantially improved or replaced, or that has incurred substantial damage, located in a special flood hazard area shall have the lowest floor elevated at least one foot above the base flood elevation.
- b) New construction of a non-residential structure, or an existing non-residential structure to be substantially improved or replaced, or that has incurred substantial damage, located in a special flood hazard area shall:
 - 1. Have the lowest floor elevated at least one foot above the base flood elevation; or
 - 2. Together with attendant utility and sanitary facilities:
 - a. Be floodproofed at least one foot above the base flood elevation so that below this elevation the structure is watertight with walls substantially impermeable to the passage of water;
 - b. Have structural components capable of resisting hydrostatic and hydrodynamic loads and the effects of buoyancy; and
 - c. Be certified by a registered professional engineer or architect that the dry floodproofing design and methods of construction are in accordance with accepted standards of practice for meeting the provisions of this section. Such certification shall be provided to the Floodplain Administrator in the form of a completed and signed Floodproofing Certificate for Non-Residential Structures.
- c) A fully enclosed area for new construction of a structure, or an existing structure to be substantially improved or replaced, or that has incurred substantial damage located in a special flood hazard area that is below the lowest floor of a structure, below the base flood elevation, and therefore subject to flooding, shall meet the following requirements:
 - 1. Be constructed with flood damage-resistant materials;
 - 2. Be used solely for the parking of vehicles, building access, or storage;
 - 3. Be constructed with the floor of the enclosed area at grade on at least one side of the structure; and
 - 4. Be constructed with flood openings installed in the enclosure walls so that they are designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwater. Designs for meeting this requirement must either be certified by a registered professional engineer or architect or must meet or exceed the following minimum criteria:
 - a. A minimum of two flood openings on different sides of each enclosed area having a total net area of

not less than one square inch for every square foot of enclosed area subject to flooding shall be provided;

- b. The bottom of all flood openings shall be no higher on the enclosure wall than one foot above either the interior or exterior grade, whichever is higher; and
 - c. Flood openings may be equipped with screens, louvers, or other coverings or devices provided that they permit the automatic entry and exit of floodwaters.
- d) A fully enclosed area that has a floor that is below grade on all sides, including below-grade crawlspaces and basements are prohibited for new structures, existing structures to be substantially improved or replaced, or that have incurred substantial damage located in a special flood hazard area.

11. DETACHED ACCESSORY STRUCTURES

- a) In a special flood hazard area, new construction or substantial improvement of a small, detached accessory structure of 500 square feet or less does not have to meet the elevation or non-residential dry floodproofing requirements as detailed in **Section 10 of this Ordinance** if the following wet floodproofing standards are met:
1. The structure has unfinished interiors and is not used for human habitation;
 2. The structure is not located in the floodway;
 3. The structure is not used for storage of hazardous materials;
 4. The structure is wet floodproofed and designed to allow for the automatic entry and exit of flood water as detailed in **Section 10.c)(4)**;
 5. The structure shall be firmly anchored to prevent flotation, collapse and lateral movement;
 6. When possible, the structure shall be constructed and placed on the building site so as to offer the minimum resistance to the flow of floodwaters and be placed further from the source of flooding than the primary structure; and
 7. Service facilities such as electrical, mechanical and heating equipment shall be elevated or dry floodproofed to or above the base flood elevation.

12. MANUFACTURED HOMES AND RECREATIONAL VEHICLES

- a) A new manufactured home to be placed, or an existing manufactured home to be substantially improved or replaced, or that has incurred substantial damage, located in a special flood hazard area shall:
1. Have the lowest floor elevated at least one foot above the base flood elevation;
 2. Be on a permanent, reinforced foundation;
 3. Be installed using methods and practices which minimize flood damage;
 4. Be securely anchored to an adequately anchored foundation system to resist flotation, collapse and lateral movement. Methods of anchoring are authorized to include, but are not to be limited to, use of over-the-top or frame ties to ground anchors. This requirement is in addition to applicable state and local anchoring requirements for resisting wind forces; and
 5. Comply with the requirements of **Section 10.c) of this Ordinance** in cases where fully enclosed areas are present below an elevated manufactured home, including enclosures surrounded by rigid skirting or other material attached to the frame or foundation. Flexible skirting and rigid skirting not attached to the frame or foundation of a manufactured home are not required to have flood openings.
- b) A recreational vehicle located within a special flood hazard area shall meet one of the following requirements:
1. Be on a site for fewer than 180 consecutive days; or
 2. Be fully licensed, on wheels or jacking system, attached to the site only by quick disconnect type utilities and security devices, and have no permanently attached additions; or
 3. Meet the requirements for "manufactured homes" as stated in **Section 12.a) of this Ordinance**.

13. WATER SUPPLY AND SEWAGE DISPOSAL SYSTEMS

- a) The following standards shall apply to all water supply, sanitary sewage, and on-site waste disposal systems

located in a special flood hazard area:

1. All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the systems;
2. New and replacement sanitary sewage systems shall be designed and located to minimize or eliminate infiltration of flood waters into the systems and discharge from the system into flood waters; and
3. On-site waste disposal systems shall be located and constructed to avoid impairment to them or contamination from them during flooding.

14. FLOODWAY REQUIREMENTS

- a) Within a floodway, for any development, including fill, new construction, substantial improvements and other development or land disturbing-activity the applicant must, prior to a permit being issued by the Floodplain Administrator, submit certification prepared by a registered professional engineer, along with supporting technical data and analyses, that demonstrates that such development will not cause any increase in the base flood elevation at any location in the community.

If the analyses demonstrate that the proposed activities will result in any increase in the base flood elevation, the applicant must obtain a Conditional Letter of Map Revision (CLOMR) from FEMA prior to permit issuance by the Floodplain Administrator. The Floodplain Administrator reserves the right to deny a permit for the project if concerns about the development being reasonably safe from flooding remain following issuance of the CLOMR. If a permit is issued and the project completed, the applicant must also obtain a Letter of Map Revision (LOMR) from FEMA. CLOMR and LOMR submittal requirements and fees shall be the responsibility of the applicant.

- b) Within a riverine special flood hazard area where a base flood elevation has been determined but a floodway has not been designated, for any development, including fill, new construction, substantial improvements and other development or land disturbing-activity, the applicant must, prior to a permit being issued by the Floodplain Administrator, submit certification prepared by a registered professional engineer, along with supporting technical data and analyses, that demonstrates that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the base flood elevation more than one foot at any point within the community.

If the analyses demonstrate that the proposed activities will result in more than a one (1) foot increase in the base flood elevation, the applicant must obtain a Conditional Letter of Map Revision (CLOMR) from FEMA prior to permit issuance by the Floodplain Administrator. The Floodplain Administrator reserves the right to deny a permit for the project if concerns about the development being reasonably safe from flooding remain following issuance of the CLOMR. If a permit is issued and the project completed, the applicant must also obtain a Letter of Map Revision (LOMR) from FEMA. CLOMR and LOMR submittal requirements and fees shall be the responsibility of the applicant.

15. WATERCOURSE ALTERATIONS

- a) Prior to a permit being issued by the Floodplain Administrator for any alteration or relocation of any riverine watercourse, the applicant shall:
1. Notify the Wetlands Bureau of the New Hampshire Department of Environmental Services and submit copies of such notification to the Floodplain Administrator, in addition to the copies required by RSA 482-A: 3; and
 2. Submit to the Floodplain Administrator certification provided by a registered professional engineer, assuring that the flood carrying capacity of an altered or relocated watercourse can and will be maintained.
- b) Prior to a permit being issued for any alteration or relocation of any riverine watercourse, the Floodplain Administrator shall notify adjacent communities and the State NFIP Coordinating Agency, and submit copies of such notification to FEMA's Federal Insurance Administrator.

16. COMPENSATORY FLOOD STORAGE.

- a) No floodplain development permit shall be issued unless it can be demonstrated to the satisfaction of the city that the project will result in no reduction in the net flood storage capacity of the floodplain.
- b) Compensatory storage will be allowed where it can be demonstrated that properties adjacent to the compensatory storage site and the fill site will not experience increased flooding as a result of a 25-year storm event or as a result of drainage characteristics of the subject site(s) and/or adjoining properties. Such storage compensation must be in close proximity to the area where flood storage capacity is being reduced and in the same hydraulic reach and the same watershed. The conclusion that adjacent properties will not experience increased flooding shall be confirmed by a report which is stamped by a registered professional engineer.
- c) Unless otherwise approved, compensatory storage must be done on a foot-by-foot basis. Compensatory storage will not be accepted at a higher elevation, but may be provided at a lower elevation if approved by the Floodplain Administrator and if the applicant provides written certification from a qualified hydrologist or qualified licensed engineer that the proposed compensation will meet the objective of 100-percent compensatory storage as well as the other objectives and requirements of this article. The city may require the applicant to pay the city for an independent third-party review of any compensatory storage proposal that does not meet the foot-by-foot rule.
- d) Extra compensatory flood storage that is created on a site through construction or restoration may, on a case-by-case basis, subject to review and approval by the Floodplain Administrator, be "banked" for future credit within the same hydraulic reach of the floodplain. It should not be assumed that "extra" storage can be used at another site, and credit will not be granted if the receiving site is not in the same hydraulic reach and in close proximity to the donor site. Transfer of storage credit from one site to another shall require formal written approval by the Floodplain Administrator and must provide the permanent protection specified in this section.
- e) Compensatory excavation must be within the same hydraulic reach of the same water body and the same watershed. Such compensatory excavation must have an unrestricted hydraulic connection to the same waterway or water body. Compensatory excavations must avoid disruption of wetlands whenever possible, must comply with any **city wetlands regulations**, and obtain any required federal and state permits. Compensatory storage that is located in an adjacent community may be permitted when:
 1. There is an intermunicipal agreement between the city and the adjacent community pursuant to which the adjacent community has agreed to enact and enforce an ordinance which incorporates the terms and conditions of the city's compensatory storage ordinance with respect to properties within its corporate boundaries. Said permit shall be issued only upon adoption of said ordinance; or
 2. The owner of the property in the adjacent community imposes a covenant upon the land which is pledged to provide compensatory storage for the fill occurring in the city, which incorporates by reference the terms and conditions of the city's compensatory storage ordinance and which restricts the use of said property in a manner which is consistent with and bound by the provisions of said ordinance, and which specifically confers upon the city the legal right and standing to enforce said restrictions. Said covenant and related documents shall be subject to the reasonable approval of the code enforcement department as to form and content; or
 3. The adjacent community has acquired the necessary property rights in the land which is pledged to mitigate the filling in the city and pursuant to which it has imposed sufficient restrictions to ensure that any storage capacity pledged to offset the effects of filling in the city will remain viable and in place in perpetuity and which confers upon the city the legal right and standing to enforce said restrictions. The form and content of said restrictions and the documentation in support thereof shall be subject to the reasonable approval of the code enforcement department.
- f) For any proposed compensatory storage, the applicant must demonstrate that wetlands will not be disturbed. This shall require a wetlands delineation or high intensity soil survey, unless otherwise approved. If wetlands will be disturbed, the applicant must demonstrate that such disturbance is unavoidable, that the disturbance has been minimized as much as possible, and that all disturbed wetland values and functions will be fully replaced on or adjacent to the site.
- g) A high intensity soil survey must be submitted as part of any proposed compensatory excavation, and a full

wetlands delineation in accordance with federal standards shall be required, if the high intensity soil survey indicates the probability of wetlands.

- h) The applicant must identify the height of seasonal high groundwater as part of the design of any compensatory storage proposal. This shall normally require the installation of one or more observation wells, although the city may accept other sources of this information. The bottom of a compensatory storage basin shall not come in contact with or go below the seasonal high groundwater elevation unless approved by the Floodplain Administrator. Those portions of a compensatory basin which will be below seasonal high groundwater elevation may not be counted as storage, and calculations submitted by the applicant must demonstrate that this requirement has been taken into account. The city may allow and in some instances will encourage compensatory basins at levels below seasonal high groundwater elevations in order to create additional wetlands. However, the applicant must demonstrate to the satisfaction of the Floodplain Administrator that compensatory basins at elevations below seasonal high groundwater levels will not result in groundwater contamination. The city may require the applicant to pay for an independent qualified third-party review to ensure that this standard is met. Snow storage shall normally not be allowed in compensatory basins which come into contact with or go below seasonal high groundwater levels, and the city may require that stormwater be diverted or isolated from the bottom of such basins. If wetlands are created as part of a compensatory basin, the city encourages and for larger basins may require that the wetland system be designed and planted so as to ensure high wetland values and functions.
- i) With respect to off-site compensation, whether in Keene or an adjacent community, compensatory excavation must be permanently reserved for that purpose.
- j) The applicant must provide certification and documentation from a qualified registered engineer with training and experience in the field of hydrology that the project, in combination with proposed compensatory storage will result in no net loss of flood storage capacity.

17. DEFINITIONS

The following definitions shall apply only to this Floodplain Management Ordinance, and shall not be affected by the provisions of any other Ordinance.

Accessory Structure means a structure which is: 1) detached from and clearly incidental and subordinate to the principal use or structure on a lot, 2) located on the same lot as the principal structure or use, 3) clearly and customarily related to the principal structure or use, and 4) only used for vehicle parking, storage, or primarily building access. Examples include garages, garden and tool sheds, and playhouses.

Base Flood or 1 Percent Annual Chance Flood means the flood having a one-percent possibility of being equaled or exceeded in any given year.

Base Flood Elevation (BFE) means the elevation of the base (one-percent annual chance) flood referenced to a specified vertical datum (National Geodetic Vertical Datum of 1929 or North American Vertical Datum of 1988).

Basement means any area of a structure having its floor subgrade (below ground-level) on all sides.

Building - see "Structure".

Conditional Letter of Map Revision (CLOMR) means FEMA's comment on a proposed project that would, upon construction, affect the hydrologic and/or hydraulic characteristics of a flooding source and thus result in the modification of the existing floodway, base flood elevation, or the special flood hazard area. CLOMRs do not revise an effective FIRM since they do not reflect as-built conditions.

Development means any man-made change to improved or unimproved real estate, including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavating or drilling operations or storage of equipment or materials.

Elevation Certificate means a form developed by FEMA to collect surveyed elevations and other information about a building, which can be used for the purposes of compliance with a community's floodplain regulations, flood insurance rating, and Letters of Map Amendment applications.

Enclosed Area means an area created by a crawlspace or solid walls that fully enclose an area below an elevated building.

FEMA means the Federal Emergency Management Agency.

Flood or Flooding means a general and temporary condition of partial or complete inundation of normally dry land areas from:

- a. the overflow of inland or tidal waters, or
- b. the unusual and rapid accumulation or runoff of surface waters from any source.

Flood Boundary and Floodway Map (FBFM) means the official map on which FEMA has delineated the Regulatory floodway. This map should not be used to determine the correct flood hazard zone or base flood elevation. The FIRM will be used to make determinations of flood hazard zones and base flood elevations.

Flood Damage-Resistant Materials means any building product (material, component or system) capable of withstanding direct and prolonged contact with floodwaters without sustaining significant damage. See FEMA "Technical Bulletin 2, Flood Damage-Resistant Materials Requirements."

Flood Insurance Rate Map (FIRM) means the official map incorporated with this Ordinance, on which FEMA has delineated both the special flood hazard areas and the risk premium zones applicable to the community. The FIRM is a graphic representation of the data contained in the accompanying Flood Insurance Study.

Flood Insurance Study (FIS) means a compilation and presentation of flood risk data for specific watercourses, lakes, and coastal flood hazard areas within a community. The FIS report contains detailed flood elevation data in flood profiles and data tables.

Flood Opening means an opening in a foundation or enclosure wall that allows automatic entry and exit of floodwaters. See FEMA "Technical Bulletin 1, Openings in Foundation Walls and Walls of Enclosures."

Floodplain or Flood-prone Area means any land area susceptible to being inundated by water from any source (see definition of "Flooding").

Floodplain Administrator means a person responsible for administering and implementing the community's local floodplain ordinance and ensuring that the community is complying with minimum NFIP standards and enforcing any locally imposed higher standards.

Floodproofed or Floodproofing means any combination of structural and non-structural additions, changes, or adjustments to structures that reduce or eliminate flood damage to real estate or improved real property, water and sanitation facilities, structures and their contents.

Floodproofing Certificate for Non-Residential Structures means the form developed by FEMA for use in the certification of non-residential dry floodproofing designs.

Floodproofing, Dry means making a structure watertight below the level that needs flood protection to prevent floodwaters from entering.

Floodproofing, Wet means permanent or contingent measures applied to a structure and/or its contents that prevent or provide resistance to damage from flooding by allowing flood waters to enter the structure.

Floodway means the channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than a designated height.

Highest Adjacent Grade means the highest natural elevation of the ground surface prior to construction next to the proposed walls of a structure.

Historic Structure means any structure that is:

- a. Listed individually in the National Register of Historic Places (a listing maintained by the Department of Interior) or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register;
- b. Certified or preliminarily determined by the Secretary of the Interior as contributing to the historical significance of a registered historic district or a district preliminarily determined by the Secretary to qualify as a registered historic district;
- c. Individually listed on a state inventory of historic places in states with historic preservation programs which have been approved by the Secretary of the Interior; or
- d. Individually listed on a local inventory of historic places in communities with historic preservation programs that have been certified either:
 - (i) by an approved state program as determined by the Secretary of the Interior; or
 - (ii) directly by the Secretary of the Interior in states without approved programs.

Letter of Map Change means an official document issued by FEMA that revises or amends the flood hazard information shown on the FIRM without requiring the FIRM to be physically revised and/or re-published. Letters of Map Change can include Letters of Map Amendment, Letters of Map Revision, and Letters of Map Revision Based on Fill.

Letter of Map Revision (LOMR) means FEMA's modification to an effective FIRM, usually as a result of physical changes to the flooding source and floodplain that result in the modification of the existing Regulatory floodway, base flood elevations, or special flood hazard area. LOMRs are a cost effective way to keep FIRMs up to date without republishing an entire map panel or panels. The LOMR is generally accompanied by an annotated copy of the affected portions of the FIRM and/or FIS report.

Lowest Floor means the lowest floor of the lowest enclosed area (including basement). An unfinished or flood resistant enclosure, usable solely for parking of vehicles, building access or storage in an area other than a basement area is not considered a building's lowest floor; provided, that such an enclosure is built in compliance with the applicable non-elevation design requirements in this Ordinance.

Manufactured Home means a structure, transportable in one or more sections, which is built on a permanent chassis and is designed for use with or without a permanent foundation when connected to the required utilities. For floodplain management purposes the term "manufactured home" includes park trailers, travel trailers, and other similar vehicles placed on site for greater than 180 consecutive days. This includes manufactured homes located in a manufactured home park or subdivision.

Manufactured Home Park or Subdivision means a parcel (or contiguous parcels) of land divided into two or more manufactured home lots for rent or sale.

Mean Sea Level means the National Geodetic Vertical Datum (NGVD) of 1929, North American Vertical Datum (NAVD) of 1988, or other vertical datum to which base flood elevations shown on a community's FIRMs are referenced.

National Flood Insurance Program (NFIP) means the program created by the Congress of the United States in 1968

through the National Flood Insurance Act of 1968 (P.L. 90-448). The program enables property owners in participating communities to purchase insurance protection, administered by the government, against losses from flooding.

Natural Grade means the grade unaffected by construction techniques such as fill, landscaping or berming.

New Construction means structures for which the *start of construction* commenced on or after the effective date of a floodplain management regulation adopted by a community and includes any subsequent improvements to such structures.

Recreational Vehicle means a vehicle:

- a. built on a single chassis;
- b. 400 square feet or less when measured at the largest horizontal projection;
- c. designed to be self-propelled or permanently towable by a light duty truck; and
- d. designed primarily **not** for use as a permanent dwelling but as temporary living quarters (less than 180 consecutive days) for recreational, camping, travel or seasonal use.

Special Flood Hazard Area (SFHA) means the land in the floodplain subject to a one-percent or greater possibility of flooding in any given year. The area is designated on the FIRM as Zones A, AO, A1-30, AE, or VE.

Start of Construction includes substantial improvements, and means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, placement, or other improvement was within 180 days of the permit date. The actual start means either the first placement of permanent construction of a structure on site, such as the pouring of slab or footings, the installation of piles, the construction of columns, or any work beyond the stage of excavation; or the placement of a manufactured home on a foundation. Permanent construction does not include land preparation, such as clearing, grading and filling; nor does it include the installation of streets and/or walkways; nor does it include excavation for a basement, footings, piers, or foundations or the erection of temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or part of the main structure.

State Building Code means the current codes adopted by the state of New Hampshire.

State NFIP Coordinating Agency means the agency of the state government (or other office designated by the Governor of the state or by state statute) that, at the request of the Federal Insurance Administrator, assists in the implementation of the National Flood Insurance Program (NFIP) in that state.

Structure means a walled and roofed building, including a gas or liquid storage tank that is principally above ground, as well as a manufactured home.

Substantial Damage means damage of any origin sustained by a structure whereby the cost of restoring the structure to its before-damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred. The market value of the structure should equal the appraised value of the structure prior to the damage occurring.

Substantial Improvement means any combination of repair, reconstruction, rehabilitation, addition, or other improvement of a building or structure, taking place during a five-year period, the cumulative cost of which equals or exceeds 50 percent of the market value of the building or structure before the improvement or repair is started. If the structure has incurred "substantial damage," any repairs are considered substantial improvement regardless of the actual repair work performed. The term does not, however, include either:

- a. Any project for improvement of a structure to correct existing violations of state or local health, sanitary, or safety code specifications which have been identified by the local code enforcement official and which are the minimum necessary to assure safe living conditions; or

- b. Any alteration of a “historic structure,” provided that the alteration will not preclude the structure's continued designation as a “historic structure”.

Violation means the failure of a structure or other development to be fully compliant with the community's floodplain management regulations.



BUILDING BETTER TOGETHER
Land Use Code Steering Committee

2019 SCHEDULE

All meetings will take place on Fridays at:

4:00 pm

in the

2nd Floor Conference Room

Keene City Hall

3 Washington St, 03431

MEETING DATES:

- June 21, 2019 (Friday)
- July 26, 2019 (Friday)
- August 2, 2019 (Friday)
- August 16, 2019 (Friday)
- September 13, 2019 (Friday)
- September 27, 2019 (Friday)