

**CITY OF NEWARK
DELAWARE**

**PLANNING COMMISSION
GREEN BUILDING CODE WORK GROUP
MEETING MINUTES**

November 27, 2018

3:30 p.m.

Present at the 3:30 p.m. meeting were:

Chairman: Will Hurd

Members Present: Jeremy Firestone
Tim Poole
Ben Prettyman
Reid Rowlands

Members Absent: George Irvine
Rob Jadick
Stacy McNatt
Katherine Sheedy

Staff Present: Mary Ellen Gray, Planning and Development Director

Mr. Will Hurd called the Green Building Code Work Group meeting to order at 3:49 p.m.

1. INTRODUCTIONS

Mr. Hurd: Hello, we're going to start with introductions, so everybody knows who everybody is, although I think everybody knows who everybody is, but now the record will know. I'll start. I'm Will Hurd, Planning Commission and Chair of the work group.

Mr. Tim Poole: Tim Poole, Code Enforcement Officer, City of Newark.

Ms. Mary Ellen Gray: Mary Ellen Gray, Planning and Development Director for the City of Newark.

Mr. Jeremy Firestone: Jeremy Firestone, Newark citizen and professor of the School of Marine Science and Policy at the University of Delaware and former Planning Commissioner.

Mr. Ben Prettyman: Ben Prettyman, landlord and developer.

Mr. Reid Rowlands: Reid Rowlands, World Class Supply, Passive House consultant.

Mr. Hurd: Okay, we are missing Stacy McNatt who is our other Planning Commissioner, George Irvine and Kass Sheedy from the Conservation Advisory Commission, and Rob Jadick who is a contractor, he's a project manager with Bancroft Construction. So that's all the people.

2. CHAIR'S REMARKS

Mr. Hurd: Just so we're all on the same page about why we're here, I'm just going to do a brief, bringing everything up-to-speed here. Back in 2009 and 2010, the City of Newark enacted amendments to the ICC Energy Code to add an assorted list of LEED credits as requirements to large buildings and developments. And the history of that process was in the packet that we sent out, so you guys could get a sense of what was the dialog around it, what were the

intentions that were being addressed, formed and concerns from Council. As part of that, you'll see that the codes were selected to be both easy to enforce and to provide a higher level of performance than sort of baseline IECC without burdening the development process with the full-on LEED approval system. And then there is a sub-piece of that where there is a requirement to reach a LEED-certified level for projects seeking site plan approval. Or at least that's one aspect, one criteria, I think. I don't know if it's required. That was something we might be discussing.

Over the last year or so, staff and the Planning Commission, through various projects that have come to us and conversations we've been having, have felt that the current list of credits aren't really pushing the performance to the levels that it was intended to be at now that standards are rising, Code levels are rising, and everything else. And so, we started the process of examining whether we should increase the number of credits, change the credits, shift to the new LEED system. We discussed this over several meetings, realized it was really a larger topic that required more specific knowledge than we could sort of bring to the table and formed a work group, which is us. And much like the Parking Subcommittee, we're bringing together a group of people who have varied expertise in the areas that green building touches – materials, development, research, design, implementation, enforcement – so that we can all bring our areas of expertise to bear on the real issue of updating the Code.

For me, just for some personal, I see this as an opportunity to reexamine the intention of the Code now that eight years have passed to see if there is a better system that would allow us to meet the new goals that we as a City are starting to understand through the work for the sustainability plan, and, if we can, to push more back into a leadership position on this issue, which we had been when we first enacted this in 2010. We were one of the first sort of pushing that out there, and I think we need to push that again more.

The intention is to keep this process to six months and the meetings to two hours. We are following in Frank's wonderful footsteps on that. He was very strict on that. And just an outline of how I see the process going, which is more of a road map than details, the first question that I think we have to address is where are we and what are we doing? And that's sort of looking at the current Code and understanding that. Then we have to ask the question of what's the goal of the Green Building Code? What areas of green building are we trying to affect change in? Then we need to decide what system or systems are best suited to support those goals, and answer the question what should a site plan approval level project require? If there's a baseline, what's the step beyond that where we're going to be pushing, and what are we trying push in that? How do we apply that system to projects? A discussion of the report we're going to prepare, the presentation of that report to the Planning Commission, and a discussion with the Planning Commission about the report, possibly a public workshop if we feel there needs to be more public input on the final product, possibly a presentation to Council just to keep them abreast of where we are, then staff has to do the work to actually implement the recommendations into written Code language, then the Planning Commission will discuss them as Code amendments, and then they go on to Council for their final approval. So, a number of steps. So, we're that first half and then the rest of it is kind of, just like with parking, it's an ongoing process that has to get into the stream for that. So, that's that.

3. DISCUSSION: GOALS OF GREEN BUILDING CODE

Mr. Hurd: Alright, so the first point of discussion is the goals of the Green Building Code and for that I have . . . I guess I don't. I thought I had outline notes on that but I guess maybe we could, maybe I should pass the mike on this one and just sort of get people's opinions on what they see as the goals of the Green Building Code in the context of the City of Newark and their expertise. Thank you.

Mr. Poole: Tim Poole. I view this as what the original LEED-based amendments to increase energy efficiency and environmental-friendly design, and also to increase the end-use quality of

life by increasing, by providing for more energy efficient dwellings, spaces, and also to provide better indoor air quality, and to provide guidelines for designers to complete those principles.

Ms. Gray: I'm Mary Ellen Gray. I would concur with Tim's comments. There was something else I was, the word sustainable, and hopefully, Jeremy, you can expand on this, has a lot of definitions, but I think what Tim just articulated, the goals, that does head towards buildings have a minimal footprint, if you will on energy and the use of materials.

Mr. Firestone: Jeremy Firestone. I think the issues, sort of like the present standards, is that they allow too much of a catchall approach rather than meeting individual goals. So, I sort of look at Green Building, first and foremost, about energy and energy use. And that would be efficiency, overall use, and then renewable. Ultimately, going along the lines of sort of where the City's sustainability plan might be going, towards sort a mid-century net zero. So, that's sort of one aspect and then there are these other sort of lines of dealing with water use and then really more on the sort of design and landscaping issues, which I think have really, unfortunately, somewhat come to dominate present practice and there's been less on what I consider to be the core, which is energy use efficiency and renewable.

Mr. Prettyman: Ben Prettyman. From a developer's aspect, what I perceive the Green Building Code to really emphasize is actions today that are kind of like consequence-free or have no impact in the future. So, whether it be on energy conservation or quantity or indoor air quality, but it's a matter of putting into practice certain standards that will impact others at a later time less is how I view it. And when we see the trickle-down effect in different things, whether it's through manufacturers or whatnot, it not only increases the quality of life for people that are in these types of structures, but it also impacts others in various ways, that their project that they're building, it impacts others indirectly meaning you recycle materials, you are using something that breaks down less, you're using something that when made uses less of something else. So, you're impacting, kind of like full circle, you're using less. And then when the whole thing comes to end of life, you've essentially used less or impacted less than you would have on other building practices.

Mr. Rowlands: When I hear the term sustainable in our guidelines and our goals, I guess, I think of climate change and trying to mitigate climate change. That, to me, should be the sustainable goals. Buildings, they're a huge component of that aspect. And if we can control the amount of energy usage in buildings, we have a good chance of winning that battle. I'm a big proponent of Passive House Certification, not so much LEED, which Passive House is all about the envelope. Putting it all into that envelope and your energy consumption will be down. There's a lot more to it. It adds to indoor air quality quite a bit. So, I would say that one of the biggest goals should be climate change mitigation. How we get to there is up for discussion, but I'll be pushing Passive House.

Mr. Hurd: Will Hurd. Those are all some really great things and some of those cross into the focus of our conversation. I want to just bring a couple more things to issue. I think to Reid's point about energy use, the statistic that gets thrown around a lot is that buildings use like 60% of the world's energy in terms of construction, operation and such.

Ms. Gray: What? Sixty percent?

Mr. Hurd: Exactly. And this is why way, way back people started pushing for architects in the building industry to start making changes because that's where they saw the biggest effect could take place. You know, you can do something with car efficiencies, you can do some things with [inaudible] but if every building uses half as much energy, we start seeing a big change. Locally, and I haven't seen a whole lot in terms of a plan for this, but the State of Delaware has enacted an energy code goal, something I'm not sure exactly what the title is, but with a goal of making all commercial buildings by, I think, 2024 or 2020-something net zero energy capable, and all residential by like 4-5 years later, the same, net zero capable.

Ms. Gray: What does net zero mean?

Mr. Hurd: So, net zero means, in a nutshell, a building that's net zero produces as much energy as it consumes. So, a net zero capable building is a building or house that consumes as much energy as can be produced onsite through whatever renewable energy means are available. So, from sun, wind . . . that's really the only two choices, I think, at this point. And that, you know, if that goal is truly what the state is looking for and that's sort of an overarching goal, Passive House, if my memory, as a concept, is a way to do that because they set an energy budget for a building, like this many watts per square foot. And if you're looking at the net [inaudible] and you're sort of going I can generate this many watts from the sun and that's how many I'm going to consume, and that's it. There's no trade-offs, that's the number.

The other, I think, critical goals that was really prevalent in the first round on this, and I want to make sure we keep an eye on, is enforcement. Because we don't want a system that's going to require, necessarily, and we can have this further conversation, but any sort of defined system, LEED, Passive House, and EnergyStar less, but some other ones would typically require a third-party verification system which costs money, which kind of cuts into that other goal of trying to not have this have too much of a financial impact on the construction of buildings. Because I guess I would say that while we're trying to push forward and make Newark step forward on this, we don't want to push so hard that people go, maybe I'm going to build 500 feet down the road in New Castle County because they're not so picky. So, you don't want to push people too hard, you want to balance it where if, you know, people want to build something in Newark, we don't want to make it too challenging, but we also want to raise the bar. And that's sort of that push/pull. And then I think the flip side of enforcement is understanding sort of how this impacts the design process and in some ways the construction process, and I think that's to Jeremy's point that right now the Code is kind of, well the LEED credits were picked for ease of enforcement and use, and maybe not with an overarching theme to them. I'm not positive but I think if we said we want to work in this broad area and we want to make sure that things are integrated and kind of working together, that's one way of sort of pushing that goal to make it so that the designers can go it's all about the envelope, or it's all about the material selection or something. And that's where we're, that's the area we're working in.

Anyone want to add anything on their thoughts on goals?

Mr. Rowlands: Speaking to the cost increases, I guess, or the need for a third-party audit to prove, there are countless studies now on examples on Passive House. On a single-family house probably not. But on a lot of your projects, large multi-family projects, student housing projects, you can build them to Passive House for approximately the same price, counting the third-party verification. And that's partially due to all about the envelope, increasing your costs there. You're increasing your costs, you get better windows, but your mechanicals have been downsized so much, which is an all win-win because your \$10-15 thousand HVAC system for a unit is down to \$2-3 thousand, which is in ten years you replace at \$2,000, not \$7,000 or whatever. Anyway, it's all good. You can build large-scale commercial for roughly the same price.

Mr. Hurd: Alright, so to try to sum up, and maybe we'll have to do that in a bit, clearly energy is a big piece of this, so I think the goal, both the goal of the Code and the focus area is going to have to be on energy. And I think a lot of people will understand that's the biggest piece of it. There's . . . making sure it's sustainable, mitigating climate change, I think we can talk about mitigating climate change as another definition for sustainable in the sense that we can maintain life on the planet by not constructing and burning things up so much that we can't live here anymore. But you are right that sustainable and green have sort of lost a specific maybe and they're more broad terms for a philosophy or a mindset. I will just sort of say that I think for enforcement, we want to keep in there, given the energy, the net zero capable, just so that we're in compliance with the state's intentions. That's, as I was digging into some of this, there's so many people working on different parts of things like this that it's kind of hard to know where we fit in. Because the state's got an overarching energy/climate kind of goal and

the candidates when we're redoing this thing, it's like, trying to make sure we don't come up with something that is counter to what other people are trying to enforce or do is key. Cost factor, just being conscience of that, and designability and constructability. Did I miss any?

Mr. Poole: Resource management.

Mr. Hurd: Resource management, okay.

Mr. Rowlands: [inaudible]

Mr. Hurd: I don't know if that counts as a goal or that counts as a focus area.

Mr. Rowlands: [inaudible] I'd like to keep that in the conversation.

Mr. Hurd: Sure. Indoor air quality. Okay. Alright, so the next sort of bigger topic and maybe it will be easy because we're [inaudible], so those that don't know, the City of Newark is in the process of developing a sustainability plan with money from DNREC. And I've sat in on one of their meetings, and Jeremy is a member of that for the working group, or steering committee, I guess. They had come up with a number of, about seven, themes that they got the public to rank at the Community Day event and discussing, and out of those themes and the breakdown stuff, and that's in the packet for you to look at, there are some specific items within there that are things we can address through Building Code changes. Number one is reduce energy usage, number two is increasing renewable onsite energy production, number three is reducing water usage, number four is reducing material usage and/or responsible sourcing of materials, and number five is reducing and recycling construction waste. The next level beyond that in terms of Zoning Code kind of development characteristics and possibly in the site plan approval process, because we're looking usually at a local development community, is the reduction of land development footprint, and the conservation of natural resources, promoting multi-modal transportation access, and improving stormwater management. There's no big surprises there and, from what people were talking about, that's kind of what people are looking at, too, all of those areas. And I may be clear on the list of things that we see on the Planning Commission, as well as issues that come up like stormwater and transportation in the larger scheme of things.

Is there anything that people want to add to that list or even discuss removing from that list?

Mr. Firestone: The list you gave was a list for the Sustainability Committee, so I don't quite know what you mean by add or remove to their list.

Mr. Hurd: Let me go back. So, the steering committee for the Sustainability Plan had come up with themes. So, they had themes like advance clean energy and reduce the City's fossil fuel dependence. But within that there are opportunities and specific sort of tactics like reduce energy use in buildings, support and encourage renewable energy and storage. So, those, that's what I mean by those are specific things that are grouped under the larger theme of, you know, energy use. You know, green and sustainable buildings, infrastructure, and land development is a broader theme and within there were specific items that I felt could be addressed through Building Code or Zoning Code amendments because some of them are using green words for green infrastructure benchmarking is like well that's not something we're . . . so there are things from the Sustainability Plan Steering Committee that aren't going to be within our purview. I guess that's what I mean.

Mr. Firestone: Okay. I mean I think we have one thing that we ultimately will need to decide is whether we want to be as broad as the existing Code is, or whether we want to focus more on coming up with an energy code for buildings. Or whether we also want to include some of these other aspects, as well. And obviously those other things are important. The question is how well, you know, stormwater issues otherwise addressed in the Code for building, without regard to the LEED standards that are in the Code now.

Mr. Hurd: That's . . .

Mr. Poole: One of the concerns with making a building more passive or to seal the envelope becomes indoor air quality, which is one of the more areas of emphasis that's in the current Code, reducing volatile organic compounds in sealants, in paints, in flooring, because when you seal off that building, so now those contaminants don't escape through air exfiltration. So, therefore all those contaminants are still locked in that building. So, that's one of the reasons that those were included in the previous regulations.

Mr. Firestone: It seems that something like that with indoor toxins, there should just be standards that, you know, they shouldn't really be optional for developers to opt in or opt out if something is a true health hazard to people who might live in their buildings. It seems like they should be eliminated or, short of that, minimized to the maximum extent possible. We really shouldn't be trading off people's health.

Mr. Rowlands: It happens, though. If a product is cheaper, they'll sometimes use it. Now there are certain guidelines throughout the government that you just can't produce oil-based paints and things like that anymore. But regardless . . . Tim, is there an ASHRAE, I know there is, code on how tight your building is and then you are required to put an ERV or HRV in?

Mr. Poole? There are requirements based on the volume of air an exhaust system or fresh air intake and returns that when you reach a certain point, you're required to include an Energy Recovery Ventilator.

Mr. Rowlands: And once you do, your indoor air quality is better than without one. I mean better than a leaky building without one because you are filtering that air 24/7 as it comes in. I'll keep preaching Passive House, and I do not expect it to become Code by any means, through this group, but we are required to have one. Our buildings are so tight that we have to have them. And our indoor air quality is better than most. At what point do you keep pushing the codes, the air-tightness of these buildings? I think ASHRAE has whether it's two ACH maybe . . .

Mr. Poole: Three.

Mr. Rowlands: Well, that's Code. But at three are required to have an ERV or HRV?

Mr. Poole. At three, you're required to provide outside air and mechanical ventilation.

Mr. Rowlands: But that could be a hole in the wall, not an Energy Recovery Ventilator.

Mr. Poole: No, but you're required to have mechanical ventilation, not necessarily . . .

Mr. Rowlands: Filtered . . .

Mr. Poole: Filtered or anything like that.

Mr. Rowlands: So, that's not helping the indoor air quality. Well, I guess it would be, but not as much as . . .

Mr. Poole: Fresh air helps with indoor air quality.

Mr. Rowlands: Yeah, yeah, it does. Depends on what you're next to. I'd like to see this group move more towards energy and some of that, like if you did happen to magically require Passive House, your indoor air quality is going to be right there with it anyway. So, at what point or thinking along those lines of how far we push this code down the road, it may automatically be a better indoor air quality.

Mr. Hurd: Right. And that's, I mean, indoor air quality wasn't something that came up in the Sustainability Plan because sustainability is generally less about that than material usage, energy, and water. So, that's why I wanted to be sure we're all talking about the same things. Because I'm looking at the list and going, you know, I think in some ways it has brought up usage in that sense in the indoor air quality aspect, and either we, you know, there's a single line in the Building Code saying that everyone has to be, you know, there's probably some sort of certification standard out there and we can say it has to meet this standard. And then they're not saying, well, I put I in low VOC carpets so now I don't have to do water-efficient plumbing because I got my point. I think that's you're alluding to somewhat, Jeremy, is sort of, and I think what I've seen is that a lot of times . . . sorry, Ben . . . that are cases where developers are throwing in the very easy stuff that's almost off-the-shelf, because we let them. But and sort of high level LEED kind of goes, these are well done. We hit those points without having to really push things. And I think we're talking about how do we push things, and one way is by taking away some of the easy stuff and either making that, you know, setting that baseline, which the newer version of the IECC is going to do, for some performance, but not for air quality or materials. And then I'm looking at the list going water usage may be a way to take that out of sort of a band of credits and just, you know, there's a baseline AHRAE standard . . . not ASHRAE, it wouldn't be ASHRAD . . . but maybe there's a baseline standard that maybe we can put in that just says everything has to be, I mean it already is, everything is sort of low-flow, low-volume fixtures already, and that's good enough and we don't need to give credits for that, using LEED terms, of course.

And the other one that didn't seem to come up a whole lot in general conversation was about waste, construction waste. And I don't know how much of that is a factor in peoples' minds these days about sustainability, or if that's getting handled already because it's economically beneficial.

Mr. Prettyman: Yeah, as far as like recycling building materials, it is a benefit, it just comes down to a lot of time, particularly in the City of Newark, size and space for dumpsters and how much stuff you can have and store onsite, and how much, you know, you can separate things. But on, like, South Main Street right now, we're separating all the concrete and all the block material. At the Heights, I know we were recycling all the scrap steel from the framing and that kind of things. And on a lot of our wood frame stuff, unfortunately with depending on your framer, would depend on how much waste you have, and then at that point in the project, it starts off and you have all wood, and then you start to mix in some other materials in there. But, it's fairly easy. My only caution with taking out the, quote, the easy things are that you may actually need to lower the number of credits just, or be cautious that you're going to then possibly make it too hard, depending on what else is put in its place, or what takes the places of a, quote, easy thing. I don't know what the term is for it, but if you make one thing harder and then you make the other thing, you know, a little bit easier, you know, they're just going to kind of steer around it. So, if everyone is putting sod down because it's a LEED point for turf lawn or whatever it is and then all of a sudden you take that away and you put, I don't know, something else in its place, then the building practice may not be to put sod down and everyone just starts seeding and strawing. You know what I mean? You have to be careful that you're not taking away something that seems easy but actually does get taken away in the building process and replaced with a different practice.

Mr. Firestone: I think that's pretty easily solved by just being more prescriptive on certain things. So, you can just say you have to put in sod and then you don't have to worry about people not putting in sod. And we certainly could be more prescriptive even on some of the energy things. I mean it doesn't all have to be a points system. That may make sense on sort of the efficiency standpoint and you're going to want to think about some of these things if we're being more prescriptive of perhaps not being completely mandatory in the beginning. Maybe having some rebuttable presumptions. So, you know, there's a rebuttable presumption you'll put up so much solar whenever you build a building. It doesn't mean that you always have to but then the burden is on the developer to show why it doesn't make sense in a particular case. You know, you can be more prescriptive on EV charging systems, that you've got to put these in

your buildings. You just have to do that. And similarly, I mean ultimately to get to net zero, the most likely pathway on heating is through electric heat. And so, you know, you get a good furnace and it's going to be a 20-25-year furnace, so I mean we have to think about these things. Something like that, you've got to really think about, well, it's going to be around for . . . you put in a gas furnace now and it's around 20 years, then you've got 20 years of burning gas. So, before you can even think about, people are going to think about switching over to electric. So, you know, we might want to be more prescriptive on putting in electric heat pumps and just moving in that direction now on new construction. And maybe it's not right away. Maybe you put it in the Code and it says, you know, anything that goes in 2023, this is what it is. It gives people sort of a chance to figure out how to do it. You don't have to have things take effect immediately. And if you give people notice, they can plan for it and figure it out as they're going, and we'll ultimately be able to implement these solutions more cheaply than otherwise.

Mr. Poole: One of the things that I wanted to mention is that just because something is easy, doesn't mean it's not beneficial.

Mr. Hurd: Right.

Mr. Poole: Just because something is inexpensive, doesn't mean that there aren't benefits associated with an inexpensive solution to a problem. If we're here about being green, which includes energy efficiency and environmental friendly which, again, goes back to our construction management, our things like that, that are easy on some sites. It's very easy to get construction waste management to over 50% on a redevelopment site. It's pretty hard to do it on a site that is virgin land.

Mr. Hurd: Right.

Mr. Poole: It's pretty easy to get some beneficial points for mass transit if you're in a downtown location. It's pretty hard if you're not. So, while there's, we want to have some flexibility for, if we're going to have these requirements throughout the City, we need to be responsible in allowing different pathways and some flexibility in the guidelines to be able to meet them.

4. DISCUSSION: FOCUS AREAS FOR GREEN BUILDING CODE

Mr. Hurd: All true. I think we generally started onto a point, an area, that we hadn't really looked at here, [inaudible] increase renewable which is, as a focus area, a reduction of fossil fuel usage. Because that's where you get into things where you say I have a gas-fired furnace. Well, where's that gas coming from? It's, you know, a non-renewable source for the most part. So, that's a focus area that we could also have in there. I think to your point, too, one of the things I see that we can try to do here is sort of reset the Building Code baseline for sort of with an eye toward the redevelopment project but also to new construction but leave out the items relating to transportation or land usage for the site plan approval level of stuff. Because I think, well, because we see it now with people coming to do a redevelopment, they're like, I'm near a bus stop, tick, you know, because I'm in town. You know, of course you are, so there's three points already. And it's sort of like I want to put those, want to take those off the baseline and put those in the pushing it up level to say, alright, you want to build over here, you're going to think about how close are you to transportation because that's more crucial than if I'm just building a 20,000 square foot office building, let's talk about the office building.

Mr. Poole: But aren't those properties more expensive if they're downtown?

Mr. Hurd: True.

Mr. Firestone: Presumably, but not that they're near a bus stop.

Mr. Poole: Yes, but the bus stops are downtown. They're not out far in the suburbs so, again, when you're talking about having those credits, you love those credits when you're spending less on your property is my point.

Mr. Hurd: Okay. Alright, so circling back to the focus areas. Let me see what we still have. We've got reducing energy which I think there's a general agreement that that's #1. Okay, we can handle that. Increasing renewable onsite energy production, I'm not sure, I think in terms of the state's goals, in terms of sustainability, I think that that's up there. Reducing water usage. Is there a sense that that's something that we need to be addressing? I should back up. Is that something we feel we need to be addressing through a system that allows, any system is going to do this, some sort of ranked system of incremental improvement over baseline Code standard?

Mr. Poole: If you're talking about resource management.

Ms. Gray: [inaudible].

Mr. Hurd: Okay, so there's water in the general sense of maybe water and material usage together are sort of resources. Does that work?

Mr. Rowlands: As long as it doesn't take away from the energy.

Mr. Hurd: I'm looking less at points and more at I don't want us to try to come up with a system and a Code that's trying to address like 18 areas. Because basically what we're trying to do here today is to say this is the circle, this is the stuff that we're going to be focusing on. So, next month when we sit down, we're going alright, here is, for example, Passive House, here is LEED, here is EnergyStar, here's something else, and here are the areas of their focus, and is there a system out there that overlaps with the areas of focus that we think are important. Or is there stuff that's hanging out or not addressed? So, I'm just trying to make sure that we're not too broadly focused. That we're sort of saying, you know, we can really address only, I don't know what a reasonable number is, but three to five areas of focus in the Code effectively. So, that's what I'm trying to sort of say. Are we looking at the right things?

Mr. Rowlands: If you're looking at more than just energy, than you're looking at broader resource material and things like that, you're going to be stuck with the LEED points system, I believe because of how LEED designed it. Personally, I'd rather move away from the LEED points system. To what system, I don't know yet. But how would you, if we did move away from using LEED points, how would you rate all these various water usage and things like that?

Mr. Hurd: So, off the top of my head, there is the newly released 2018 International Green Construction Code which I haven't read all the way through but does hit on some of these areas. It has the advantage of being written like a building code so it's a little more understandable to the industry. EnergyStar, people told me to stay away from it because the government is not supporting it anymore as it addresses energy and water specifically and nothing else. I want to say Green Globes or green something like that is another system that addresses things and there are similarities to LEED. The simplest thing is that the town of Swarthmore enacted a Code and it's like a four-page checklist and it's like a single sentence. You know, are you doing this, are you doing this, are you doing this? You get a checkmark and you have to have so many checks, so many points, basically, out of their base number. So, it can be as simple as that if we can come to agreement on what the areas are and how we want to address them. Or I do agree with you that locking into a particular system has challenges and some disadvantages and possibly costs. So, I think we want to be careful or be thoughtful about if we say, you know what, all things considered, do we want to be doing LEED or using the LEED system in some sort of an adapted manner. We have kind of be thoughtful though because it's going to change on us. I mean that's, Tim is really into it. He's trying to look at, you know, LEED 4, I guess it is?

Mr. Poole: V4.

Mr. Hurd: Version 4 against Version 3, and credits in Version 3 don't exist in Version 4. So, and that, I think, indicates how the world of sustainable and green construction has shifted because there are things that are no longer required to be a credit because it's an assumed construction practice. I think that that's an ongoing piece that baseline has come up some, so we don't want to require anything that's already a baseline. We want to take that baseline and go up.

Ms. Gray: It's kind of like seatbelts. We all grew up and we didn't have seatbelts and it was fine. Well, now the standard is seatbelts in cars.

Mr. Hurd: Right, and for the same matter, gas efficiency. You know, now it's mandated and now it's being forced and now that there's [inaudible] things, you sort of don't think about it as much but now it's kind of like that baseline has come up.

Mr. Prettyman: But I will say if somebody wants to burn more gas in their hot rod, they should be able to burn more gas in their hot rod. If somebody doesn't want to wear their seatbelt, I think they should not have to wear their seatbelt.

Mr. Firestone: I mean it's a law. You have to wear your seatbelt. You can get a fine, but there's costs to the rest of society when someone doesn't wear a seatbelt. It's just like any other law that we have on the books. They all restrict individual freedom in some respects. Seatbelts is really no different than anything else.

Mr. Prettyman: Right, I'm just saying that you want to be on the front end of things, we should take into account the broad spectrum and not create something that's directed at specifically new construction which may impact new construction of a single-family home or new construction of Section 8, or new construction of something totally different than we've adapted into our Code that we for some reason cannot achieve on a broad spectrum. I mean the seatbelt was a bad, it was good. My gasoline maybe wasn't that big of a deal, but you know, at the same time, there's grandfathered things and different things like that, but we're seeing a shift on the building aspect as far as the norm. But, having said that, I think a lot of stuff that has been brought through the City has had a higher level of building practice. It may not be at the highest but it's certainly not at the bare minimum. So, with regards to that, you know, I think we want to, I agree, moving forward as a builder and developer, we're trying new practices and we're getting shown new things, but at the same time, it does take a while to kind of catch up which is why we may take, you know, you may want to take water fixtures off because everything is pretty much low-flow in the standard now. You know, I would understand, I could see that because it's caught up and now a low-flow toilet is no different than the one next to it, you know what I mean? But going in and requiring spray foam on all new buildings, I mean that would be a tremendous increase, just as two examples on how far we go or if you take one thing out and replace it with something else. That's why I was saying if we take out the small things, I think we may end up bringing that number of LEED credits actually down because you think there's a lot of smaller things that are just being easily checked off, which I'm sure there are, but at the same time, if you're going to replace them, I don't think you can replace them with that many harder things, I guess, or more intricate, depending on what they are. I know we've gone down with Hillcrest through the list, you know, I forget how many different LEED things there are, but there are only a certain number that the City recognizes. And you know, some of them are like extremely hard and you do have to go out of your way to achieve 26 or you know, those higher numbers. It's not just the easy things that are checked off, but the easy things, they're just part of LEED. I mean recycling is easy, but it's done and is important.

Mr. Firestone: But we also know that the people who are building rental properties, for example, don't put solar panels on roofs. They just don't do it. So, some of the single-family homeowners do, and it's because, I mean sometimes it's expense, sometimes it's, I mean some properties are not necessarily ideal for solar if they're very wooded and depending on how you

have to face the building. I mean there are reasons why you might not, but in my time on the Commission, there was no one who ever put forward putting panels on the roofs. And I'm not saying that we need, again, I think we want to understand that we're not going to be California overnight. And so, we need to build in things to move us to higher standards over time and that also means that you need to think about differences between single-family homeowners and where it might take longer, there's also not the same market failures that exist with rental properties. Homeowners have incentives from a financial standpoint if they can afford the upfront costs because there are savings long-term by becoming more energy efficient. Whereas the incentives for developers are different. They're just different. And there are different incentives between renters and landlords, and the only way you can really address those is through standards. You know, if you're a rental, you can want more efficient appliances and more efficient construction and various things, but you can't make headway on that like you can as a homeowner.

Mr. Prettyman: No, I agree. Solar is always a touchy subject, at least as far as in new construction. A lot of times they don't want to design the system until it's built because if there's a standard as far as you can't build something that goes back into the grid, I guess, so much I think. When we were getting solar numbers for 47 West Cleveland, they had to design the system so that it didn't put back into the system more than, I think it was like 10-15%, otherwise they weren't allowed to do it for whatever reason. And then it's, you know, we just haven't seen it be, you know, very effective. And from a maintenance standpoint, we're still like nailing things on roofs. There is more roof penetrations and from a property management perspective, it ends up just being a little bit of a cost but we do have all the conduits in all the buildings and we are currently looking at The Heights on South Chapel, on adding that in on the roofs because we do have that option and the cost to run the inside lights and everything like that was more than what we thought. I will also say that it is a revenue stream for the City of Newark, so I don't think we should clamp down on it super hard but certainly in order to change, you're going to need to push the envelope, but it's just something to keep in mind as far as moving forward. As a developer, it becomes cost-effective to provide a net zero home where the solar generated heat is able to be used, which they can charge a higher rent for, but there becomes less revenue for the City than an older house next door.

Mr. Hurd: It's good that you brought that up because I think that's the conversation that has started at some levels in the City and it's not, I think, moving very far, but I know I brought it up several years ago. How do we as a City encourage energy efficiency when we make the bulk of our money selling electricity? And until the City, I think, figures out how else to get money to fund things, you know, to replace that it's about \$30 million. It's a big percentage of the general budget. You know, until they find another way, you know, obviously the little stuff we're doing now isn't going to make, one guy putting solar panels on his house isn't going to make any difference, but if we start saying every major development over, you know, 3,000 square feet has to have solar panels, that's a lot of electricity coming online that the City is going to have to address.

Mr. Firestone: Yes, but if you mandate electric heat, then there's going to be a lot more revenue. I mean in the long run, the City's system of funding itself is not equitable. I mean it's not equitable in the short-run and . . .

Mr. Hurd: That's the key to it, yeah.

Mr. Firestone: It's very regressive and it needs, ultimately, to be changed because it hurts poor people, it hurts fixed income people. It's not fair. Ultimately, we're going to have to figure out a way . . . it's sort of structured the way it is because of the University, but ultimately we're going to have to figure out a different way.

Mr. Hurd: Yeah, I think that larger question is outside the realm of this group, but I think it's certainly something we do want to keep in mind. But to be sustainable, we can't become so

dependent on electricity and the sale of electricity, because the City can't sustain that, but it's got to come from some place.

Mr. Poole: One comment that I've heard repeatedly is about the single-family home, which currently does not fall, one single-family home does not fall under the current guidelines. Currently, the guidelines are only required for major subdivisions and for buildings over 25,000 square feet. So, are we going to be looking at changing the guidelines to affect more projects? That's a question we should ask ourselves if we continue to have those items come up in discussion.

Mr. Rowlands: This is all based . . . the requirement to meet the existing points system is if you go through site plan approval?

Mr. Hurd: No.

Mr. Rowlands: No.

Mr. Gray: Tim, you can explain the two.

Mr. Poole: It's either a major subdivision or buildings over 25,000 square feet.

Mr. Rowlands: Right, 25,000 square feet, which is not going to be a single-family home.

Mr. Poole: Correct.

Mr. Rowlands: So, it's commercial buildings, basically, or major subdivision.

Mr. Poole: Correct.

Mr. Hurd: But I will add that there's a provision in the site plan approval code that refers back to the Building Code on this where one of the criteria for site plan approval is basically meeting the energy, the LEED credits, for a LEED-certified project. So, instead of the 25 points from the City, we're looking at 39 or 40, depending on which system, whether it's LEED for Homes or LEED for New Buildings. And that's really top level. But there is a provision to say you need to go higher if you're going to ask for site plan approval. Not if you're going to ask for just a regular subdivision plan approval. And that actually, when Ben was talking, it brought up a good point of sort of where [inaudible]. I mean there's residential construction and so there's like, when you think of residential construction, you know, single-family, and there's residential-style construction, which is like what you're building on Chapel and is like five townhomes in a row. It's built like a single-family home, it's just bigger. And then there's the more commercial developments, like Millcroft is going to fall into that or the new assisted living. Those kinds of buildings are going to fall in the commercial construction. So, that could be also an area that we want to think about. Where do we draw, where do we sort of separate it out? What do we want to have enacted? What do want to meet the Code, because we could say, you know, a single-family residential would fall into the IECC, the Energy Conservation Code, and that Code keeps bumping up year-after-year.

Mr. Rowlands: That's the way it is now, right?

Mr. Hurd: Yeah, I think. And then you say, okay, what's the level of construction – size or type – at which point we want to start putting additional constraints or expectations on it?

Mr. Rowlands: I think what we have on the books now is appropriate. You don't want to burden single-family homes too much.

Mr. Firestone: Other than potentially a golf course.

Mr. Rowlands: But that would be a major subdivision.

Mr. Firestone: I mean we don't have that much space for individual new construction. So, it's probably a relatively small gain and it may not be worth our attention or the potential for backlash that it might engender to focus on.

Mr. Rowlands: One aspect of Passive House that my group runs into a lot is general the general knowledge. Somebody wants to go build a house and they've never heard of Passive. Or maybe they've heard of it but they don't know much about it. And once they do, it's like why wouldn't you want to build that way? So, it's going to come that we're going to be building more energy efficient to a single-family home because people will want to build that once they're aware of it. I like where it sits now as far as the Code requirement. A major subdivision and that's when it kicks in, or commercial buildings over how many square feet?

Mr. Poole: 25,000.

Mr. Rowlands: Yeah, maybe we ought to lower that down a little.

Mr. Hurd: That seems pretty big.

Mr. Firestone: It seems that, I mean the impetus of this working group, too, was the major subdivision, so it also sort of makes sense, I mean that's where as Commissioners we had recognized a problem. And it seems that would be appropriate for this group to focus on that problem. And it doesn't mean the other one isn't, at some point, worthy of attention, but I would suggest that we keep our mandate narrow.

Mr. Rowlands: The actual points you're talking about as far as energy efficiency, water, indoor air quality, just for the general discussion, is it worthwhile for each of us or maybe a group of us decide on a weight factor? Energy is, you know, 50% of what we want to think about, water that's down, indoor air, and where it falls through the cracks on the road? To finalize what we do try to tackle and not . . .

Mr. Hurd: Right, when I looked at it, I was sort of saying, because ranked has its own problems. One is, when do you get to #5 or do you get to #5 at all, kind of thing. And if you just sort of said of the, because presumably there is going to be some sort of amendment to the Energy Code that's going to delineate something. And so, yeah, you might say, okay, half of the things we're going to ask them to do, maybe if we say that's energy. And, you know, 25% is going to be about resources. And the other 25% is going to be about a mixture between construction waste and indoor air quality, as an example. Or, you know, 20, 20 and 10 for renewable energy. Sort of a mixture that it's in there but it's not, you know, so that it's an appropriate scale.

I think the other thing I want to just throw back out in a different way that Ben had brought up is as we are pushing construction things higher, a lot of it is going to be about sort of education and usage. And so, we can't just turn around tomorrow and say, okay, everyone has to have a liquid-applied exterior or barrier. Because every one of the contractors is going to go, a what? Exactly. Well, that's the thing today.

Mr. Rowlands: Didn't you see Ben's pretty light blue building out there?

Mr. Prettyman: We have a liquid-applied barrier.

Mr. Hurd: Oh, so you are doing that? It's one of those where, you know, it's a more effective air barrier than the paper and taping and things because there's this opportunity for gaps and such, but it also means your ventilation systems need to be better, and it also means you have to have contractors who can apply it effectively. So, if what you're building is residential-style construction, you're sort of limited to residential contractors and that sort of scale, and there's

a boundary between residential and commercial. And so, you know, we want to make sure that we're not pushing that too far, too fast, is essentially your point.

Mr. Prettyman: A lot of the manufacturing codes and stuff are driving the change in materials which is trickling down, which is driving them to come up with new things and then, you know, at first it's premium cost and then, you know, over the 5-10 years, we do see it start to come down, at which point we can start to see on a, I mean it just depends on where you are and how your numbers look, and that kind of stuff. But we end up seeing, you know, the ability to incorporate that into our structure effectively, I guess.

Mr. Hurd: Alright, I'm not sure that I feel closer to understanding which focus areas we want to do but I think this has been some good discussion, and we have 45 minutes to finish this up.

Mr. Prettyman: It sounded like everyone was leaning more toward energy.

Mr. Hurd: Well, I think energy is certainly the big one.

Mr. Prettyman: I got a few in some of the easy ones like the recycling and construction management, and I think everyone can agree that less energy is less fuels being burned and less carbon footprint, which is kind of the whole . . .

Mr. Hurd: Right, I would agree. And I think as we [inaudible] some of the easy things are good things to be still doing, like recycling and like indoor air quality. Some of that baseline stuff is still good things to be keeping in the mix and making people pay attention to.

Mr. Poole: Also, as I was looking at the LEED V4, there are a lot more points available on energy efficiency than there are in many of the other areas, because that's where you're going to get the most LEEDs and, if you're looking for a lot of points, the place to find them is energy efficiency.

Mr. Hurd: Okay, so . . .

Mr. Rowlands: In your research of energy efficient LEED points, is it all on mechanicals or is there much about just the building envelope, as far as energy efficiency?

Mr. Poole: It's under optimize energy efficiency, which is percentage-based over the standard.

Mr. Rowlands: Of our mechanicals, your lighting . . .

Mr. Poole: Of energy usage. So, if you're saving it on Passive House, you're still saving the energy.

Mr. Rowlands: Okay. I just want to also bring up a stretch code or reach code. Does anybody know anything about those? It's like 20% better. It's definitely a thing out there and it's more of a HERS rating, so we could make it as simple as stipulating we have a stretch code and it's 10% or 20%, and they just have to do a HERS rating, which is third-party on occasion. But it's out of our hands. It's just simple and easy, and you can dictate it. And that's all about the energy efficiency. So, you can research stretch codes.

Mr. Firestone: Do you think it might be useful for us to have a presentation by someone of all these various codes and get an understanding of the sort of pros and cons of them?

Mr. Hurd: That's, so, that's me. I was going to be looking at what's out there existing and what areas it addresses and pros and cons. I see myself shouldering much of that in terms of putting it together.

Mr. Firestone: My recollection is that there's one of our sustainability consultants knows a fair bit about a number of these various codes. Does that ring a bell with you?

Ms. Gray: Are you talking about AECOM, the consultant?

Mr. Firestone: Yeah, one of people on the team.

Ms. Gray: Possibly. We can certainly ask.

Mr. Firestone: I mean, assuming that's the case, then one option, too, would be to, around one of their meetings, when that person is in town, to schedule a say one-hour session after the Sustainability Committee meeting where that person would then sort of take us through all of them since that person will already be here.

Mr. Poole: I'm on the Delaware Energy Codes Coalition . . .

Mr. Firestone: Okay.

Mr. Poole: And some of the other folks on there are a group out of New England, Northeast Energy Efficiency Partnerships (NEEP). I could probably arrange for someone from there to provide some information for us.

Mr. Firestone: Okay, I think that would be great.

Mr. Hurd: Okay. Awesome. I was looking at existing rating systems mostly, is what we're looking at because I don't think there's any, I did pull down the Green Construction Code. I need to sort of dig through that to see if that's, because it looks like it's simple but in the last version there was a lot of complaints about how it was all over the place. And it seems to be more focused at this point.

Back to the focus areas. Energy, that's the big one. What's the next most important area? Resources, which is water and materials together, renewable energy, waste, indoor air quality, if we want to go there, operational, because it's about operational issues.

Mr. Prettyman: What is operational?

Mr. Hurd: Well that's where you're saying things like you have to have a recycling program. You get credit for having established a recycling program or bike racks or, well that's transportation more. But there's controllability of your indoor environment is an operational level thing that has less to do with, has something to do with performance, but has more to do with user comfort and such. But, you know, there's aspects of that, that sort of ongoing usage of the building and comfort and such. You know, the challenge is that those are harder to enforce from a Code Enforcement standpoint.

Mr. Poole: Well, again, if they're designed into the building things are currently in our guidelines such as pollutant source control, have exhausts in your copier room or in your laundry facilities. Things like walk-off mats at building entrances. Things like separate trash areas for recycling. There are many different ways that you can provide these operational things that are part of the current guidelines that can be designed into the bill.

Mr. Hurd: Right. Okay.

Mr. Prettyman: I, personally, think that the second focus might be on the waste aspect and recycling as far as building with less waste, because if you're pushing for a green building that's energy efficient, that produces less waste, so now we have, let's just say we have a SEER 19 heat pump versus a SEER 14. So, you have that system in place and it's running for 10 years. The energy efficiency part of the building is probably a part of the building that is going to be in

place forward for 10 years. Appliances or whatever it might be. Solar or whatever. Now we might want to focus in on how can it be made with less waste, which is less product. I mean, I don't know, just as a second focus.

Mr. Firestone: I wasn't clear. Are you not including renewable energy in with energy? So, you're really talking about energy use and efficiency?

Mr. Hurd: I'm using energy use and efficiency as one . . .

Mr. Firestone: Okay.

Mr. Hurd: Basically, reduction of energy usage as a broad topic and how we achieve that, because I think we're clearly saying that reducing the energy use by buildings is the first goal. Right?

Mr. Firestone: Yes.

Mr. Hurd: Okay. Additional goals are reducing the materials, so one could be . . . resources could be the broader second focus and it can be included in the materials that go into the building coming from either recycled or rapidly renewable sources or sustainable sources, reducing the water use by the building, and then also reducing the waste produced in the construction of the building and recycling. So, if you say I'm going to have to demolish this building and put another one up, I'm taking that building and it's becoming something that is going into the recycling stream. And when I'm building this building, I'm separating my waste so that what's going here, the concrete's going there, and the metal is going here . . . and metal is a no-brainer because that's money . . . but yeah, so that's an enforceable thing. If an inspector shows up and if he doesn't see the three dumpsters or whatever it is, or if he sees stuff in the wrong dumpsters, there's conversations about that. So, it's like do we want to look at the broad category of resources or do we want to break those out any smaller? Do we think that's the next level?

Mr. Firestone: Okay, I mean for these, I'd say the other two categories would be renewable energy and then resources, which could include also dealing with water.

Mr. Hurd: Okay.

Mr. Firestone: I mean that's sort of my, that ultimately the goal of reducing energy in large part is to reduce fossil fuel consumption . . .

Mr. Hurd: Right.

Mr. Firestone: And the other main way you do that is through renewable energy mandates.

Mr. Rowlands: Some of those recycling and building materials are almost becoming second nature anyway. Almost. If your site allows for it, you would do it.

Mr. Prettyman: There's advantages to it. So, 36 Benny Street, as time seems to move forward, the more people are paying attention and conscious of just their daily actions on all walks of life. So, the demo guys are now saying if I'm tearing something down and I separate the material, I can, you know, I'm only paying to dump block at \$250 a container, whereas if I put the same block in a construction debris container, I get it weighed by the ton and that same container could be \$600. So, there's some of that. Their bids are coming back and they're wanting to separate because it's advantageous to that sub and we're not seeing as much saving on, let's just say, a general contractor's end, but there is a way for somebody to make a little bit more money and cut their price down. And so, we're seeing just that action is kind of making it, incentivizing the separation of the materials, at least on our particular jobs.

Mr. Rowlands: So, we should take that off the table. We don't need to be dealing with that right now. It's taking care of itself.

Mr. Hurd: This, I think, falls into that either it's become so standard that we don't need to codify it, or do we want to say it's mostly a standard and we want to just make sure that that's now the baseline? I'm some of a fan of market but I'm also knowing at times that the market will go in odd directions if you just let economics drive it.

Mr. Firestone: I mean it seems like it's something that you could put in that people should use best practices and it can be addressed in that regard. I just want to say also that I'm going to have to depart and as far as my December schedule, the only day I can't make it is December 19. I'm assuming you're not talking about the first week since that's like next week.

Mr. Hurd: We have to give us at least two weeks.

Mr. Firestone: But after that, it's just December 19. That's a Wednesday.

Mr. Hurd: For Jeremy, not the 19th. And we can't do the 25th, for sure. We're closed, right? Okay, thank you, Jeremy.

[Secretary's Note: Mr. Firestone exited the meeting at 5:13 p.m.]

Mr. Poole: One thing I wanted to mention and get back on track about is while it is standard practice to separate your materials for demolition, for construction it's not. Typically, those materials all wind up in the same dumpster and then your hauler will typically take it to a single stream separator and that will be expense on their end. But it needs to meet with certain guidelines. But also if you're taking the, if you're paying that extra to have that separation of materials, while you may get some benefit of cost savings on your dump fees, you're also paying for that which, again, is applicable for a project that you don't have demolition. You're not redeveloping an existing site and you don't have that additional expense of demolition, you don't have those additional expenses. You're developing some ground that, okay, well, you've got to get rid of some, you've got to manage the existing organic material that's onsite, but you don't have to manage the construction waste of demolition. And you also don't get that benefit.

Mr. Hurd: True. Before we dig into these in that sense, we're just trying to make sure we [inaudible]. Energy reduction, renewable energy, resources, is there any other ones that we've talked about that people want to make sure are on the list. Is indoor air quality still one? Okay. Let's call indoor air quality because that's what we're affecting. Anything else?

Mr. Rowlands: Do you have [inaudible]?

Mr. Hurd: I'm kind of putting that under resources in terms of just, I'll say I hope that some of the resources stuff can be addressed by sort of going, here's the minimum standard either we're going to enact or follow, and then maybe there's a stretch goal above that that you can get some credit for. So, you know, if you say all demolition waste is separated and you know the push goal is all construction waste is separated, there's that extra, you know, there's a bump. And we say here's your minimum water because that's what Code says, you have to put this toilet in. But if you want to start talking about water recycling and other water reduction systems within the building, okay, that's a push beyond sort of what's going on. Or if you want to look at demand water heaters or loops or other things which help reduce energy. Any other?

Mr. Rowlands: Question for Tim. Your Codes Coalition, adopting the 2018 IECC, do you know where that stands?

Mr. Poole: Yes.

Mr. Rowlands: Yes, you do.

Mr. Poole: Actually, the amendments have been drafted and the representatives at DNREC are forwarding them to the state legislature early next year.

Mr. Rowlands: As amended?

Mr. Poole: Yes.

Mr. Rowlands: And is it worthwhile to have the City adopt it, the 2018 IECC, as written as part of this Code? Just have them adopt it, which makes it a little bit stiffer than what's the state doing, if I have it correct.

Mr. Poole: Currently our amendments that we're working on are designed to meet with the State Code, which there are very few amendments in the State Code, and none that would reduce the energy impact.

Mr. Rowlands: Specifically, the testing of the blower door?

Mr. Poole: Well, the way that it's in the 2015 Code and the 2012 Code that the state adopted, it allowed for some relief for smaller dwellings. In the 2018 Code, they allow for the same relief to allow for five air changes per hour, but it makes you offset them in a performance pass so that it ultimately meets the same prescriptive requirements in the Code through a performance pass alternative that says that you will make savings in other areas to meet the additional energy losses that you would gain through the up to five air changes per hour.

Mr. Rowlands: But I thought it was, the amendment to that code, was something to do with not requiring it to be tested.

Mr. Poole: No. It is prescriptive.

Mr. Rowlands: I thought there was an amendment in there that it was still you had to meet this but you didn't have to have it tested, which was counter-intuitive.

Mr. Poole: It's mandatory. Blower door test and envelope compliance is mandatory. It has been mandatory. There's no . . .

Mr. Rowlands: I know it has been . . .

Mr. Poole: Right.

Mr. Rowlands: But the amendments that they propose to . . .

Mr. Poole: And the state is only adopting the residential portion.

Mr. Rowland: Right.

Mr. Poole: The state only adopted the residential portion. The state did not adopt the commercial portion such as the City of Newark has. And like I said, the amendments for the state this year have changed to, again, make people who are looking for that relief because of your additional challenges for a . . .

Mr. Rowlands: Smaller is a challenge.

Mr. Poole: Smaller house are offset by energy savings. By more efficient mechanicals or lighting or additional insulation and things like that.

Mr. Prettyman: The reach program, that's just like a standard, like you can apply that to anything? Like we would just have a reach program and it would say you're going to achieve reach, and it would be 20% over the 26 or whatever, or whatever rating we determine? I just like the idea that that might be something that's easily, it may achieve what it seems you're going after with regards to taking out the easy things and adding in some harder things. If we had a, let's just say we called it something, so we'll just call it reach for simplicity reasons in site plan approval. And somebody comes up and says we're going to meet the reach requirement and it's nothing to do with the reach program that you're talking about but this group or somebody decides on additional recognized areas of energy efficiency and we add them in, and then we can maintain the current expectation, but then someone is required to go above and beyond that and we get even more.

Mr. Hurd: Yeah, I think a simple way to do it is to say, you know, honestly, a simple way to do the energy is to say you design the building to be let's say 20% better than the IECC's code, and you use a contract or something to say here's my, basically to just say, as a first party, you say okay the contract says it's 20% better than baseline. There you go, I'm done. And then you say, okay, the reach goal is 50%. And then as long as the system that the designers can use and Code Enforcement can use are in agreement and can evaluate, because if you go to 50% you're talking some higher level of stuff. You're talking about lower air changes, you're talking about [inaudible], you're talking about [inaudible], you're talking about more complicated integrated systems that [inaudible] is probably going to break down on. Because [inaudible] is very basic. It's just like, well, you put a lot of insulation in. It's like, yeah, but we don't know about the air because you don't hear about the air, but it doesn't really record it the same. So, you know, we could come to that conclusion to say using some standard evaluation system that uses the IECC as a baseline, because that's sort of the baseline Code, we're looking to see, you know, everything that people are building bigger, you know, over a certain square footage to be this percent better. And if you want relief from some of the constraints to do site plan approval, we want this much more. And then it's really up to the design team to say, how are we going to get there? And it makes code enforcement a little easier because they go, yeah, 50%. But there would be a list . . .

Mr. Rowlands: You make it sound so easy.

Mr. Hurd: I know. But then, of course, there would be a list of items that says this is what we're implementing because there would have to be some sort of report that said, you know, there's an integrated inner barrier, and there's blah blah. and there's a thing. Alright, so what I got . . .

Mr. Prettyman: I think I have another one you might want to focus on.

Mr. Hurd: Okay.

Mr. Prettyman: I think that the like, shoot myself in the foot for lack of a term, but enforcement might be an area where we want to focus on, as well, because I'm not saying it's like super-lax but we don't have a formal, not that I'm aware of, like we submit something to you guys as far as, you know, what things are met. We keep track of what's met, but I'm not 100% sure that it's like third-party or anything like that. You know what I mean? So, it would only go as far as what somebody's saying with regards to, and it might just be something to think about. I mean, some of these laws and rules are only as good as they can be enforced, so enforcement or at least accountability with regards to that might be something that we might want to think about.

Mr. Hurd: Right. And that was actually under the goals on sort of the code that we're doing with the amendments to the process. Enforcement was one of the things that I had up because that has to be able to be evaluated and enforced and verified by our current staff without forcing them to go out and become certified whatevers in all the things. Not that it wouldn't be valuable to be but we're trying not to make this something that's so onerous on the City's side

as well. To say oh, by the way, your entire staff has to get trained. But you're right because, and I don't know how enforcement already happens.

Mr. Poole: On my end typically at the design process we require a narrative from the design team that this is how we're going to meet the requirements. And at the end of the project, before a certificate of occupancy is issued, I require a final report from the designer that says this is how we met that. Whether it's because here's the invoice from my trash hauler that says this is how many tons we got, this is how many were diverted here, this is how many diverted there, and that's in a receipt from their trash hauler. This is here's a copy of our receipts for our paints. This is the types of paint that we used, and it is low-VOC-compliant. This is the energy efficiency that's required. These are the units that we put in and they're that much more energy efficient. And, you know, all the other different ways that they can meet the LEED points. And I require, basically, similar to the third-party inspection agents for concrete and for steel and for exterior insulation finish systems and things like that that all require a third-party verification. We get a report at the end of the job that says everything was compliant. We get a similar report for the City's LEED-based requirements that says this is how we met them and here's the required documentation of what we did.

Mr. Hurd: Okay, so it's sort of like a mini LEED certification. The one LEED project that I worked on, that was part of my job was to pull the documentation together for all the credits that we were seeking. And it would be like here's the verification and we'd have to draw it on a little map. Like here's a bus station, here's a quarter-mile radius, here's the project. You know, that basic stuff, but they need to see it. But that sounds like that's a reasonable level of compliance to sort of say if we're talking about more efficient equipment, here's the sheets on the equipment installed highlighting the efficiency. Okay.

5. ITEMS FOR NEXT MEETING

Mr. Hurd: I think I'm comfortable with the four focus areas that we've got and I have a feeling that how they're going to kind of rank and fit in is going to come out as we sort of figure out systems that make sense for them.

6. GENERAL PUBLIC COMMENT

Mr. Hurd: General public comment?

[Secretary's Note: There was no general public comment.]

7. SELECTING DECEMBER MEETING DATE

Mr. Hurd: So, our next meeting. Following the guidelines of the fourth Tuesday puts us on the 25th which, of course, is not going to work. The available dates for this room are the 17th, the 18th, the 26th and the 27th. Let me just double check what my calendar is. So, the 17th is a Monday . . .

Mr. Rowlands: The 17th was no good for Jeremy.

Mr. Hurd: The 19th was no good for Jeremy. He didn't know about the dates. The 18th is still a Tuesday. The 26th is a Wednesday.

Mr. Poole: I'm not available the week after Christmas.

Mr. Hurd: Okay.

Mr. Poole: I'm on vacation.

Mr. Hurd: Okay.

Mr. Rowlands: The 18th?

Mr. Poole: The 18th works for me.

Mr. Hurd: Is that okay with you, Ben? Alright, the 18th it is. Now we just have to get an agenda to Michelle in like two days, but I'll do that. Anything final that anyone wants to put into the record for today? We're all good? Alright. We're in adjournment.

There being no further business, the Green Building Code Work Group meeting adjourned at 5:30 p.m.

As transcribed by Michelle Vispi
Planning and Development Department Secretary

Attachment

Exhibit A: [Green Building Code Work Group November 27, 2018 Meeting Packet](#)