CITY OF NEWARK
DELAWARE

PLANNING COMMISSION
GREEN BUILDING CODE WORK GROUP
MEETING MINUTES

December 18, 2018

3:30 p.m.

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

Chairman:	Will Hurd
Members Present:	Jeremy Firestone Tim Poole Reid Rowlands
Members Absent:	George Irvine Rob Jadick Stacy McNatt Ben Prettyman Katherine Sheedy
Staff Present:	Tom Fruehstorfer, Planner

Mr. Will Hurd called the Green Building Code Work Group meeting to order at 3:42 p.m.

1. **INTRODUCTIONS**

Mr. Tom Fruehstorfer: I'll start with what Michelle told me. She gave me the minutes, the draft minutes, which the only change was the change that Will recommended.

Mr. Hurd: Yeah, it was a small one.

Mr. Fruehstorfer: And that was it. So now you can run the meeting.

Mr. Hurd: My question is that we only have four of the nine allocated members, which means we do not have a quorum for approving minutes.

Mr. Fruehstorfer: I don't count.

Mr. Hurd: You don't count.

Mr. Reid Rowlands: You need one more?

Mr. Hurd: So, the minutes will sit. But did anyone have any issues with the minutes? No? Okay.

2. **CHAIR'S REMARKS**

Mr. Hurd: Okay, Chair's remarks are going to be very short because I think we can just dive into things. I'm really glad I found the Going Beyond Code book, handout thing, whatever it is. I think it was a good overview, I mean it's a little dated, but it's a good overview of available standards and codes out there, who is using them, and where they fit in, because they broke it out for energy, water, materials, indoor air quality, all the things we've been talking about, which is better, I think, than the other [inaudible] that I had found which sort of said here's

some standards and it says it covers materials, but you have to dig into that code to find out that it doesn't maybe say a lot about materials or indoor air quality, the way the other ones do. So, that was a very useful thing.

Mr. Rowlands: And that document that you referenced was the one we got emailed to us and had all the comparisons?

Mr. Hurd: Yes, so there was . . .

Mr. Rowlands: Yeah, I was wondering if it was . . .

Mr. Hurd: There was one called Going Beyond Code which was kind of a, you know, it was written to people who were thinking about enacting Green Building codes . . .

Mr. Rowlands: Yeah.

Mr. Hurd: And said, okay, so here, Colorado has this thing called Building Green Colorado. I had found, I forget which one it was, the Green Building Certifications Systems document, which does a similar sort of overview, but I think doesn't break it down as cleanly as the Beyond Code one did. Partly because Beyond Code really did say this is residential and this is commercial and was very clear about the differences between the two. And the other ones are a little vague about, you have to read further to go, oh wow, that's really a residential-based standard, not a commercial-based standard.

Mr. Rowlands: What's the big distinction between the residential energy efficient code and commercial?

Mr. Hurd: Building-code-wise, and Tim you can jump in if I'm off on this, is that residential is three stories or less . . .

Mr. Rowlands: No, I understand the distinction, but why should there be a difference?

Mr. Hurd: There's usually a difference in construction methods, size, and I think it may also be that there's a different target market that you're looking at. So, a residential-based standard, you're going to be dealing with people who construct single-family homes and who do townhome developers or such. So, three-story, five-unit buildings still fall into that kind of standard construction. You can stick a blower door on it, you can measure that. When you get into five-story apartment buildings . . .

Mr. Rowlands: You can stick a blower door test on it . . .

Mr. Hurd: Yeah, but it's . . .

Mr. Rowlands: And do the exact same analysis.

Mr. Hurd: You, okay . . .

Mr. Rowlands: As far as blower door. There's other things . . .

Mr. Hurd: But there's other things. I think there's a scale jump up and there's a shift, to my mind, at least, in the construction process, in the project management process, in the delivery process, so that you 've got a different kind of contractor, usually, building one over the other. And so, not to say that it's simplified, but I think the residential codes are intended to be a little simpler to understand and enforce and enact.

Mr. Rowlands: I only bring this up, I mean depending on which path we're going to go down, do we want to distinguish between residential and commercial? I say that because my heart lies with Passive House . . .

Mr. Hurd: Sure.

Mr. Rowlands: Which does not distinguish between the two.

Mr. Hurd: Right.

Mr. Rowland: It is per square foot, this is what you do. So, is it worth, I mean most . . .

Mr. Fruehstorfer: Will the other things fall under that though? I don't know what you decided last meeting and you kind of could be getting away from LEED because if LEED is one of the things being included, it's [inaudible].

Mr. Rowlands: Correct.

3. **REVIEW: GOALS AND AREAS OF FOCUS FOR THE GREEN BUILDING CODE**
4. **PRESENTATION: CURRENT GREEN BUILDING CODES & EVALUATION SYSTEMS**

Mr. Hurd: So, the last meeting we only talked about what were the areas of focus we wanted to be sure that the new Green Building Code that we enact covered. And that came down to be energy, resources, which is essentially material and water, and indoor air quality. And in energy, to be clear, we were talking about both conservation and generation, and then materials, you know, resources, and then indoor air quality. So, those four areas. Some codes will get into site development questions, and I think we, for the most part in the City, that's not an issue we're really facing, to sort of go how do we make sure people develop on the better site. We have so few available sites, it's either a redevelopment or it's an annexation greenfield site, and they're probably going to do a site plan approval, which gives us some control and does some of that stuff about green space and compact development and such.

Mr. Fruehstorfer: People are developing what they own. They're not figuring out what to buy based on what they're going to be able to do.

Mr. Hurd: Right. If we were in New Castle County, I'd be more concerned about wide open development and conversion of farms to, you know, and that kind of stuff. And the other one we're not dealing with as much is operations. That's sort of the other area that LEED picks up and some of the other ones pick up on, is the operations of the building, and that's kind of way outside the scope of the building code focus that we've got.

But kind of back to your point, I don't know that we're off of LEED, I think we're just trying to first figure out what we're trying to address . . .

Mr. Rowlands: Right.

Mr. Hurd: And then say, what's the best or better way to enact something in the scope of the Building Code that will address those areas effectively.

To your question, Reid, my thinking has been really that I think we do want to maintain in the Building Code, a residential and a commercial distinction unless we become fully convinced that Passive House is the standard that we want to enact across the City.

Mr. Rowlands: No, I don't think it should be, to be honest.

Mr. Hurd: Well, right, and the challenge is that because we're going to say that this is a mandatory code, I feel that we have to be cautious in how far we push that.

Mr. Rowlands: Oh, absolutely.

Mr. Hurd: Other places they do it, but they say, well, we have a voluntary green code, and if you follow that, you get bonuses. You get faster approvals or you get reduced taxes or you get some benefit that we can give to you if you choose this path. And in that case, you could say, you know what, you build a Passive House standard thing, we're going to give you all this stuff. We're not really in that space, but I also think there's no reason we can't say, as others have, to say this is our baseline, this is sort of the base code, and alternate paths to achieving our goal would be a Passive House certified building. So, we could say it's going to be 20% over the IECC, for an example, as a stretch goal. Or, build to Passive House standards. And, you know, we're not going to sit here and ask for a HERS rating because it's all going to be part of that package. But that makes it . . .

Mr. Rowland: No one is going to build to Passive certification unless there's a carrot out there for them.

Mr. Hurd: Right.

Mr. Jeremy Firestone: I guess the question, I think it's a good idea, but the question is can we swing it politically. So, that's, I mean we don't want the whole thing to be shot down . . .

Mr. Rowlands: Don't get me wrong. I'm not pushing for Passive certification . . .

Mr. Firestone: Right.

Mr. Rowlands: It's just, look into it, see what it is, and happily use portions of it.

Mr. Firestone: I mean I'm generally with you, but I also want to get this through City Council.

Mr. Hurd: I will say that the one place that we could push a little harder on this is in the site plan approval area. Because in there, it does say, you know, one of the criteria they're looking for is improved energy performance. And so, we could say, you know what, it could be LEED Silver, some high-level thing, or Passive House standard, or 40% over . . .

Mr. Fruehstorfer: It does say now LEED or something else approved, so . . .

Mr. Hurd: LEED certified . . .

Mr. Fruehstorfer: Someone could come in and say we're doing Passive, and Planning Commission could say, yeah, that's good.

Mr. Hurd: Right. So, that's in fact, that's the carrot then, is to say, here is a way to get approval for a site plan approval project . . .

Mr. Fruehstorfer: Which is going to have smaller setbacks, higher density . . .

Mr. Hurd: Smaller setbacks and you have a density bonus . . .

Mr. Fruehstorfer: More floors.

Mr. Hurd: Yeah, if you build to a higher standard. So, that might be the thing that we say, okay, here is the base Building Code. Every building that gets built falls under this. Here is the section where we talk about the higher levels of energy performance that we're looking for if you want something from us.

Mr. Rowlands: Site plan approval.

Mr. Hurd: Site plan approval.

Mr. Rowlands: And then in addition to that, there would be the code that we're talking about, whether it's a 20% stretch code or something that was just mandatory for everyone.

Mr. Hurd: Right. So, the base Building Code in the City right now says you have to have these LEED points . . .

Mr. Fruehstorfer: Which, at the time, the intention was in time we'll increase this and that hasn't happened.

Mr. Hurd: Right. That's what we're doing now. Do the energy code amendments count for single-family residential?

Mr. Tim Poole: No. It's for major subdivisions or buildings over 25,000 square feet.

Mr. Fruehstorfer: And that's something that maybe we can reconsider.

Mr. Hurd: I think I want to think about that. What constitutes a major subdivision? How many units?

Mr. Poole: I think five or more.

Mr. Hurd: Okay.

Mr. Firestone: Can we put in something more explicit into the rules that say that things will be looked at again in five or ten years, so that . . .

Mr. Fruehstorfer: It doesn't mean it will.

Mr. Firestone: Well, but if it's a requirement. It's in the ordinance. I mean, I understand it doesn't mean that it will, but if it's there and it says the Planning Commission shall review these in seven years, and it's right there with it, then hopefully the Planning Commission would review it again in seven years.

Mr. Hurd: Yeah.

Mr. Firestone: So, it makes certain that we stay up to best practices.

Mr. Hurd: Yeah, every, well every time the City adopts a new issuance of the ICC, so you're looking at the 2018, right?

Mr. Poole: Yes.

Mr. Hurd: So, they're looking at the 2018 ICC family of codes. These, the stuff that we're talking about is enacted as amendments to the IECC, the International . . .

Mr. Poole: Energy Conservation Code.

Mr. Hurd: Energy Conservation Code. So, if they were to enact the 2018, the Department basically has to decide are we enacting those same amendments to this Code, or do we need to revise those amendments as part of the Building Code? So, theoretically, every three or six years, you don't do a three-year cycle, do you?

Mr. Poole: We do, but we didn't make it for the 2015, so as that got further and further back, we decided that since the 2018 Code was out, we would act on that immediately rather than work our way up with 2015.

Mr. Fruehstorfer: That makes more sense. Review these things . . .

Mr. Hurd: Right, so theoretically every 3-6 years, the Code Enforcement Department and Planning is going to look at these amendments anyway.

Mr. Firestone: But when was the last time they were looked at? When were they enacted?

Mr. Hurd: '09 or '10.

Mr. Fruehstorfer: More than seven years ago.

Mr. Firestone: Yeah, so, I mean, the automatic review system, I mean if it's directed to the Commission then that goes to a public body versus, I don't know, I just would rather give it a little higher profile to make sure that we're . . .

Mr. Hurd: I'm going to make that, that's a question to the solicitor about how to phrase that.

Mr. Poole: It would probably be an amendment to the section that addresses the Planning Commission rather than . . .

Mr. Hurd: Not in the body of the code itself.

Mr. Poole: Part of the body of the code. That would be probably a municipal code amendment about the Planning Commission and its tasks.

Mr. Hurd: Good point.

Mr. Firestone: Okay.

Mr. Hurd: Okay.

Mr. Poole: Rather than as part of the amendments to the Energy Conservation Code.

Mr. Hurd: Yeah. So, yeah, we could phrase it essentially so that it says that the Planning Commission, included in its scope, is reviewing this particular set of amendments in the Building Code. So, if the Code Enforcement says we're looking at revising the amendments or we're looking to adopt 2018, the Planning Commission can say have we looked at the amendments to the Energy Code? Have we determined that they need, you now, or is it 2021 or 2024? I'll look at that one.

5. **DISCUSSION: WHICH SYSTEM OR CODE IS BEST SUITED FOR NEWARK?**

Mr. Hurd: So, the agenda was a little vague because I wasn't sure how this was going to work, but the first piece was sort of talking about the different standards. But I don't, obviously, want to do like a line-by-line breakdown of them, but were there any that jumped out to people and said this one seems like it's right in our, like, going to be good for us?

Mr. Poole: The three that seemed the most comprehensive to me, as I read that, was the LEED standard, the Green Building Code, and I think it was Green Globes.

Mr. Hurd: Yeah.

Mr. Poole: Now we did order a copy of the Green Building Code and we have a copy of LEED before, and we could look at the Green Globes if you want to really dive into those three documents as part of this work to determine what would be the appropriate one for us, or if we want to perhaps take sections out of each of them that we like.

Mr. Hurd: Yeah, I was thinking some of that too, to sort of say there might be one that's really better for materials and one that's better for energy, and not to say we're going to enact the whole thing, but to say we're going to take this section.

Mr. Poole: Certainly, one of the things that was in that document that you sent was the Town of Swarthmore, Pennsylvania . . .

Mr. Hurd: Yeah.

Mr. Poole: Made their own standalone code, which we could determine is best for us if we want to use some guidelines and some language from these separate codes, even if it's not just those three codes, but for other codes. But we sort of have to decide if that's what we want to do . . .

Mr. Hurd: Yep.

Mr. Poole: That way we could, if it's someone else's code, then we sort of have to follow what they say . . .

Mr. Hurd: Or amend it extensively.

Mr. Poole: Or we could, again, borrow or use some language and some concepts from each of the codes to make our own standalone code. That might be a little bit more work, but it may ultimately suit our needs and our ideas better.

Mr. Hurd: Yeah. I've been thinking the same thing. That's sort of what the second half of today is going to be and probably the next couple of meetings, is kind of to say if this is the one we pick, do we like it in its totality or do we need to kind of start slicing pieces out of this one and out of this one and start to put it together.

Mr. Fruehstorfer: And then do you need to talk to them about if you can do that . . .

Mr. Hurd: Right. Yeah.

Mr. Fruehstorfer: Because the last time LEED was definitely talked to and got permission to use pieces of it. That was allowed.

Mr. Hurd: Yeah.

Mr. Fruehstorfer: But someone else may not like you just copying a piece of their code and making it yours.

Mr. Hurd: That's a good point.

Mr. Poole: That's why I said we might want to look at concepts and things like that, that we're looking at, and establish our own sort of guidelines, which may ultimately be the direction we want to go. But that's probably a bit more work.

Mr. Hurd: It is. It is.

Mr. Rowlands: For me, I seem to like stretch codes.

Mr. Hurd: Okay.

Mr. Rowlands: It just seems simple. You pick 10% or 20%, let the third party verify, no headache for you. Is there anything is a HERS rater coming in and charging and rating to be that stretch code of 20%, or whatever we determine, that would take some of your work load off?

Mr. Poole: Not really because we'd ultimately have to review the finished document anyway. Would it be a little bit less work? Yes, but would it be significant enough to . . .

Mr. Rowlands: Lower a permit fee to compensate for asking to pay the third party.

Mr. Poole: Right.

Mr. Hurd: Yeah.

Mr. Poole: Yeah, that's, and really the cost of that third party may be extensive depending on how complicated we made this and where we want that burden to be. Like I said, that third party certification, if you read all the codes, that's, or the reviews of the codes, that's the big drawback for the ones that are more intensive.

Mr. Hurd: Yeah.

Mr. Poole: It's the cost of that certification.

Mr. Rowlands: Right.

Mr. Hurd: Yeah.

Mr. Fruehstorfer: And HERS, doesn't that come after the fact, too?

Mr. Hurd: HERS is a, yeah, it's . . .

Mr. Fruehstorfer: When it's all done, you do a test and . . .

Mr. Rowlands: Yeah but it's also analyzed beforehand to make sure that, yeah, that's going to meet that 20%. Then they go out and verify throughout the process.

Mr. Hurd: Yeah, the brief reading I saw, you know, single-family homes, it may be like $250 or $300 for a HERS rater to come in and basically run the post-construction testing. But, yeah . . .

Mr. Fruehstorfer: I'm wondering about the pre-.

Mr. Hurd: But the pre-, yeah . . .

Mr. Fruehstorfer: Come in and do the post- and, well, it doesn't pass.

Mr. Hurd: It doesn't pass, right.

Mr. Fruehstorfer: Yeah, so what are you going to do? You need to know that what you're planning to do is supposed to pass.

Mr. Poole: Yeah, that's on the design end . . .

Mr. Hurd: Yeah.

Mr. Poole: Which is more challenging. And the other part is doing the calculations. I mean if you want to talk about a stretch code where you're looking at 20%, somebody is doing that calculation, and that is costly. There is an expense there. What that expense is, as opposed to the original design cost, certainly on a commercial building that's less because there's already a significant design cost. But when you're talking about single-family homes, then typically those builders get one or two or three designs and say pick A, B, or C, and they don't necessarily have to have a designer involved.

Mr. Fruehstorfer: And that's why Roy didn't want this for the small homes, because of the cost associated with them doing that.

Mr. Rowland: Cost, no doubt, that's an issue.

Mr. Hurd: And thank you, Tim, because you triggered a thought. So, the other reason to separate residential from commercial, commercial buildings tend to have central systems, they tend to have a larger design team and engineering and such involved, so you often have to come at them differently in terms of designing efficiencies into it because you're now talking about central systems and ductwork and other things, as opposed to a single heat pump or a single, family-size, residential home size unit plugged into each unit. You know, even if it's townhomes, they get sort of a single package as opposed to a more complicated system of intake, ventilation and such. To me, that's the other reason why we want to pull commercial out separately, because the design process, the systems are different and would require sort of a different overall sort of standard and approach.

Mr. Fruehstorfer: Does it make sense to include residential homes under whatever the single that fell out of this before? If that's too expensive, maybe there's something else you could go with standards for smaller homes. Maybe some of the Passive House type things . . .

Mr. Hurd: Well even if the . . .

Mr. Fruehstorfer: That everyone has to do at least this. So, something that you don't drop out of that's not going to raise your price a lot.

Mr. Hurd: Well, everyone is going to have to meet the IECC at the base level.

Mr. Fruehstorfer: Yeah.

Mr. Hurd: And every version of it gets higher.

Mr. Fruehstorfer: But I think everyone thinks we want our code to require a little more than the minimum.

Mr. Hurd: Right.

Mr. Fruehstorfer: And right now, we've got a bunch of buildings that drop out of being required to do more than the minimum. So, what's the cheap way to make those people also do more than the minimum?

Mr. Hurd: Well, I guess my sense, but maybe you can assist, Tim, how many single-family homes are being built within the City of Newark per year?

Mr. Poole: Well, how many are being built for a single project that does not fit into these guidelines where we have infill development, or we have a single-family home or less than five single-family homes? Not that many, as opposed to certainly we have more buildings over 25,000 square feet than we have single-family homes that are being built that are not part of a major subdivision. But where we might be able to get a bit more aggressive would be buildings if we lowered that threshold of 25,000 square feet to 15,000 square feet or 20,000 square feet or 10,000 square feet, where it wouldn't affect those very small inexpensive developments but would affect those medium-size developments. Those three-story developments that are . . .

Mr. Hurd: Right. I'm thinking about your typical Main Street like rebuilt. How do we capture that one?

Mr. Fruehstorfer: Like the tobacco and smoke shop on Elkton Road.

Mr. Poole: No, because I think that was significantly less than 25,000 square feet.

Mr. Fruehstorfer: Should it have been exempted from . . .

Mr. Poole: Again, if we change those guidelines here, then we are progressing forward as far as increasing the requirements within the City.

Mr. Hurd: Right.

Mr. Poole: If we, again, got those developers, we do have a cadre of developers, that develop a lot within the City and have consistently worked on major subdivisions and those larger buildings while still doing some smaller buildings and single developments that this didn't apply to. But we sort of got their feet wet or introduced this system to them on those larger buildings where there was a bit more of a design team. And now the concepts re out there and the requirements have been out there for seven or eight years now, that maybe we're going to increase the number of projects that it applies to. Maybe we don't want to get to the single home infill development or maybe we do. Maybe we want to, again, reduce that number or size of the building that it applies to.

Mr. Rowlands: It would be nice to somehow incorporate every new building. But I know when you get a small single-family, costs are prohibitive to have third parties.

Mr. Fruehstorfer: If I started taking off trim around windows and seeing what was there, seeing the air coming in my windows, if my house was well-insulated and built with insulated aluminum siding and the guy did it right [inaudible] it's just stupid. Just because I'm a single-family, it should be tighter.

Mr. Hurd: It should be, yes.

Mr. Fruehstorfer: It should be tighter. So, every single house should be tighter.

Mr. Poole: But that's what the . . .

Mr. Rowlands: How do we do that and make it easy for them?

Mr. Fruehstorfer: Yes.

Mr. Rowlands: I agree.

Mr. Poole: But that's what the envelope testing requirements of the Energy Conservation Code do. That's what they do. They test for that draft window that missed . . .

Mr. Fruehstorfer: Then maybe the minimum isn't good enough and we want to, as a City, say it needs to be a little better than that.

Mr. Poole: Well, again, the question is when you look at the air changes per hour individually, which is what we're discussing with the envelope testing requirements and is the prime concepts of Passive House, then once you get below five air changes per hour, now you have to introduce fresh air to avoid sick building syndrome where the contaminants that are naturally part of the house that people bring in every day or the moisture or the smells or the off-gassing and all those other things, you have to introduce fresh air. And unless we're going to, as part of that fresh air exchange, look at an energy ventilator recovery system or something like that, it's not really going to be beneficial. Until we get to energy recovery, we're not gaining anything.

Mr. Rowlands: Could we do something, and I'm just thinking out loud, let's just throw a code that they have to meet two ACH and they have to have an ERV, and then we let them know that there is PACE financing available through Dover to pay for it. I don't know if there is, but there may not be any cost increase or there's a way to finance that.

Mr. Fruehstorfer: Unless that financing then disappears in a year.

Mr. Hurd: Yeah, there's always that issue.

Mr. Rowlands: Anything is possible like that.

Mr. Fruehstorfer: That financing stuff is there one year and not the next.

Mr. Hurd: To me, I would be content with a code, a scope that covered 80% of what gets built in a year, you know maybe just in terms of raw square footage. It's like if 80% of that fell under this umbrella, I think that's a good start.

Mr. Fruehstorfer: And are the regular Building Code standards good for the rest of it now or are they still [inaudible]?

Mr. Hurd: They're all on a trajectory to try to reduce overall energy consumption. It's just a flatter line than if you say plus 20%, plus 40%, Passive House, which is very steep. And this is probably where it starts to get into the more political thing to say how far are we ready to push this . . .

Mr. Rowlands: Yeah, right.

Mr. Hurd: For the people who don't have a choice, or do have a choice? Because if we push too hard on the people who can choose to build here or over the line in New Castle County, are we pushing people out as opposed to sort of going, you know, out? And that's . . .

Mr. Rowlands: Is that an issue, you think? We might scare people from building here.

Mr. Fruehstorfer: I don't think so.

Mr. Rowlands: I don't think.

Mr. Hurd: I mean . . .

Mr. Firestone: I think most people choose between sewer and water or non-sewer and water. I mean that's sort of the bigger . . .

Mr. Fruehstorfer: I think in the last year I can think of, I'll say the last couple of years, of the single-family homes built, at least half of them were built as rentals.

Mr. Hurd: Yeah. So, they're not going to build anywhere else.

Mr. Fruehstorfer: They're building here because of where it is.

Mr. Poole: Because of the rental housing market in Newark.

Mr. Fruehstorfer: Yeah.

Mr. Rowlands: Which means they can afford to put this stuff in there.

Mr. Hurd: Also true.

Mr. Fruehstorfer: And in the last few years, just a few that were just built as single-family homes for people to live in.

Mr. Poole: And, again, another factor is housing values in Newark versus housing values outside of Newark. The cost to build the house is the same. The question is the cost of the land and the value of the finished house, which is higher in Newark on both.

Mr. Rowlands: We are just beginning to see the values of homes going higher because of more energy efficient builds. It's not there yet by any means but there is a beginning inkling of, oh, this thing consumes so much less energy, it's got a little more value.

Mr. Poole: That's one of the things that's being talked about in the Energy Code Coalition that I'm part of in Dover. And DNREC is trying to educate the public about the fact that you can either buy a house that was built in 1940 and your energy bill will be $200 a month, as opposed to buying a house that was built today or built within the last 2-3 and is subject to these regulations that costs you less than $50 a month. And therefore, you have an extra $150 for your purchasing power. So, that's one of the public education concepts that people are working on and it's starting to take root, but it really has to be the folks that sell homes that drive that.

Mr. Hurd: The other area that, and this is going off on a tangent so I'll mention this and I'll try to bring it back, but the other area that needs focus on that is the mortgage lending business because they need to rewrite their understanding to say if I loan you a little more money to build a more efficient home, you can afford that higher mortgage because it's not costing you as much as to operate. So, there's a shift in their math that they have to do as well to say how is the house going to actually perform? What its level of expense and make that work. Because otherwise people go, I can't afford 5% more because they won't approve me for that payment. Well they would if your electric bill was half. So, it's a multi-factor thing, for sure.

Alright, Jeremy your thoughts?

Mr. Firestone: I did not read this document, so . . .

Mr. Hurd: Okay.

Mr. Rowlands: It's not a short document.

Mr. Hurd: It's not.

Mr. Firestone: I had to get a proposal out, so, but I read the one for Item 4.

Mr. Hurd: Okay, well Item 4 covers many of the same things. It's sort of a survey of standards and such.

Mr. Firestone: I mean I sort of like the idea of coming up with our own standards, some sort of hybrid, if we're able to do that. I do like that.

Mr. Hurd: Okay. Tom, do you have any thoughts as the Planning person?

Mr. Fruehstorfer: No, as a Planning person, it doesn't . . .

Mr. Hurd: Well, maybe from your personal experience. Are there any of those standards that would be most appropriate for our situation?

Mr. Fruehstorfer: Just what you discussed already, the getting away from some of the location-based and getting stuff that's more based on the actual energy standards. Better insulation, more efficient use of energy, and, personally, I also would like adding anything about landscaping. Native plants and landscaping.

Mr. Hurd: Right. A number of the ones under water address indoor and outdoor water use. The only ones that I would add to our list to sort of think about and consider, the ASHRAE 189.1, which is the commercial sort of green construction code, and the ICC 700, which is the green construction code. It's not really a code, it's a standard, so it's less an enforceable code like the International Green Construction Code is, but it's a standard for construction but I only

learned about it from reading this document, so I haven't had a chance to pull those down and take a look at them.

Mr. Rowlands: Which two are they again?

Mr. Hurd: ASHRAE 189.1 and ICC 700 are the ones that seem to be most often referenced by municipalities if they're not doing LEED. Basically, because it's a standard that you can follow, as opposed to a code that's enacted. So, there's some differences there.

Mr. Firestone: I guess my one other comment, having looked at the various codes in that other document is that there are some that are performance-based and some that are assessment-based, and I'm more inclined toward performance-based rather than . . . I mean it doesn't mean that people shouldn't do assessment but that merely doing an assessment is not sufficient in my view. That we ultimately need performance standards and I don't know how then we . . .

Mr. Fruehstorfer: How do you enforce that?

Mr. Firestone: How we enforce them, but if you have standards, you're going to move people in that direction.

Mr. Hurd: Right. Certainly, those two standards – the ICC 700 and the ASHRAE 189.1 – the standard is built with the starting point of being to reduce energy code. So, I think the ICC 700, which is a residential one, starts at 15% over IECC. That's it's baseline, is already 15% beyond . . .

Mr. Rowlands: That's just a stretch code then.

Mr. Hurd: It is essentially but having not read it but I'm sure it talks a lot about integrated systems and higher performance, probably much like Passive House sort of does. To say, you have to step back and look at that building as an integrated unit to say if I increase the insulation, I can reduce my equipment and there's my energy savings, not just because I'm doing this but I'm doing that.

Mr. Rowlands: And Passive really just cares envelope.

Mr. Hurd: Envelope, right. And how you got there.

Mr. Rowlands: Once you get there, why put a bigger system? You can't. And if they're smart enough, they're downsizing.

Mr. Hurd: Right.

Mr. Rowlands: But also, there's energy limits on per square foot.

Mr. Hurd: Yeah.

Mr. Rowlands: That's why you look for those super-efficient, small, but you only need small [inaudible].

Mr. Hurd: Okay.

Mr. Rowlands: What is the political will out there to get this thing passed? I mean do we have to tread lightly or can you go strong because they're all for it and they want to save the planet?

Mr. Firestone: The mayor is definitely supportive so that's important. So, I think there's a general appetite, but we've seen them on many issues where things get dicey.

Mr. Fruehstorfer: They all seem to like to say things against developers so a developer complaining about this being a part might make you think that . . .

Mr. Rowlands: They'll go for it.

Mr. Fruehstorfer: They'll go for it, but then you never know.

Mr. Hurd: No.

Mr. Fruehstorfer: They may do something and say this is just going to cost too much money and it's going to inhibit development. Forget about trying to protect . . .

Mr. Hurd: Yeah.

Mr. Fruehstorfer: They aren't out there asking for anything. Trying to predict what they're going to do with it is really hard because they really haven't said anything.

Mr. Poole: And the challenge is the poison pill. You don't want to have some minor component just make the whole regulation get struck down.

Mr. Rowland: Right.

Mr. Hurd: Yeah.

Mr. Poole: Some change that isn't an integral component to the idea suddenly creates a backlash that ultimately makes the proposal fail.

Mr. Hurd: And it's hard to know what that's going to be. Is it going to be enforced third-party verification? Is it going to be, I don't know, higher design levels or something?

Mr. Poole: Is it going to be . . .

Mr. Fruehstorfer: I can't recall them saying anything about wanting this.

Mr. Hurd: Yeah, no, I don't think they have. I haven't heard anything.

Mr. Fruehstorfer: This is being driven by the Planning Commission right now.

Mr. Hurd: And certainly, there is some public feeling about there's too much development. So, if this slows it down, that would be okay. But, you know, sitting on the Planning Commission side of things, it's like we need better development, sure, but we still need more units because we're not . . .

Mr. Rowlands: So, by enacting a 50% stretch code, it would slow things down. Maybe 50%, but 20% . . .

Mr. Hurd: Fifty might. Twenty, I don't think twenty would.

Mr. Rowlands: Right.

Mr. Hurd: I think twenty would be saying, like for site plan approval, if you want to build your five-unit townhome here and get thirty students living in it and making that money, we're asking for you to put a little extra and give a little back and make things better.

Mr. Fruehstorfer: So, now site plan approval, instead of just making a building that looks nicer, you're going to have to insulate the crap out of it to . . .

Mr. Hurd: Right.

Mr. Fruehstorfer: And there's been less focus on that . . .

Mr. Hurd: Yeah and I'm going to save that for a second, like the next meeting, but the concept is sort of, because it's already in the Code, to sort of say here is the baseline and here's the stretch for site plan approval. This is our new baseline. What do we think is a good stretch for site plan approval?

Mr. Rowland: Right.

Mr. Hurd: Because, again, we're saying you get to double the density on your plot or you get something out of it, so what do we . . .

Mr. Fruehstorfer: And now we're starting to shift around and think that higher density is better for the student developments, where for a long time it was, oh my God, that's more dense than before. And if we can couple that with no cars, then everyone is looking at it as a good thing.

Mr. Hurd: Yeah, I'm working on a thing for the Commission to consider that looks at essentially a re-looking at the site plan approval specifically for redevelopment projects because my sense is that the current ordinance really is focused on greenfield developments. And we've seen over and over where a lot of the stuff doesn't really line up when you do a redevelopment. It's like open space, well, it's a parking lot. And when they say we have open space, it's a parking lot. Yeah, but it's open.

Mr. Fruehstorfer: In RM zoning.

Mr. Hurd: Right, zoning, yeah.

Mr. Fruehstorfer: An RM parking lot is included in the open space.

Mr. Hurd: Right, but it's like . . .

Mr. Fruehstorfer: We could just redefine open space for site plan approval . . .

Mr. Hurd: We could but I think that there's . . .

Mr. Fruehstorfer: That doesn't include a parking lot.

Mr. Hurd: We're getting off topic, but I think that there's other ways to look at redevelopment. There's issues around redevelopment that I think we want to look at specifically differently than for greenfield. But I think one piece of that would be the energy or environmental green standards.

Mr. Rowlands: Some of this I see specifically are design guidelines where we got the sustainable layer in there. I saw that as I don't think anybody is going to meet that guideline per se, but it's getting them educated. When you get involved in Passive House and those two projects we just reviewed, they could be built for the same price at 80% less energy. They just don't know how to do it. They haven't been educated. They just haven't read. So, whatever wording comes in here, whether it's just thermal bridge reduction, it's just part of an educational aspect, too. Whoever has to read this thing is going to start to learn.

Mr. Hurd: Yeah.

Mr. Rowlands: So, when you list some of these codes, whether it's Passive or something else, people are going to start to research that.

Mr. Fruehstorfer: Some of the things maybe that are a requirement in there could be something they're familiar with and then or do something from Passive. I mean then they'll see that and look into that and maybe do it. Or, insulate to a certain LEED required value or . . .

Mr. Rowlands: I think it's really just getting them educated on the methodology. If they hear Passive and I have a stretch code I have to meet now, and Passive is an option, they'll research it and if they start seeing that it's possible or talking to another developer that did it, then they might just do it.

Mr. Hurd: Yeah, because the IECC is gentle in nudging but, you know, there comes a point where you go well to meet the wall insulation I need to build onto my house, I really do need an exterior foam layer. I need that continuous insulation layer.

Mr. Rowlands: No foam.

Mr. Hurd: What?

Mr. Rowlands: No foam.

Mr. Hurd: Or whatever, exterior insulation layer.

Mr. Rowland: Yes.

Mr. Hurd: Well, okay, so already now we're starting to deal with bridging and getting a better envelope. It's sort of like just by pushing them to do that, you're going to get a better sealed up envelope because of that nature. It's like, oh, now my air changes are down. But, you know, as a building code, it's very blunt and kind of, you know, it can only nudge so far. So that's why I think the stretch code and standards have some advantage.

Alright, so we have an hour left.

Mr. Rowlands: Well, the site plan approval, I like the sense that they've got carrots out there.

Mr. Hurd: Yeah.

Mr. Rowlands: So, do we structure something, okay, here's for site plan and here's something for non-site plan that's easy?

Mr. Hurd: That's my intention. Well, that's my intention, I don't know if the committee will follow that. But I feel that the Code already has said this is baseline, this is essentially stretch. Because it's like LEED-certified or better or equivalent.

Mr. Rowlands: Right. And I'll keep using stretch just for a general term right now, and who knows how we evolve. But either you do for site plan it's a stretch 30% and for normal construction it's a stretch 20% or something.

Mr. Hurd: Yeah.

Mr. Rowlands: Keep it simple. It's all the same, we just have to . . .

Mr. Poole: Or if we use a system similar to what we currently have, it you're going to build, then you need to get 25 points, and if you're going to go for site plan approval, you need to get 30 or 35 points.

Mr. Rowlands: Something, yeah.

Mr. Poole: You know, some additional 10% or 20% over what would be required.

Mr. Hurd: Right.

Mr. Poole: Because . . .

Mr. Fruehstorfer: At a minimum. So even if you're not, there are like six different categories you can work on to get site plan approval. Energy efficiency is one of them.

Mr. Poole: Right.

Mr. Fruehstorfer: Code says if you're going to use energy efficiency as one of your reasons, you've got to be certified, or meet the certified requirements. So, you could say I don't want to be certified but I have nice architecture, I have nice landscaping, whatever, and that's what you're going to do but still you have to get at least that 30% stretch on energy efficiency to qualify.

Mr. Poole: Or whatever . . .

Mr. Rowlands: Or whatever that is.

Mr. Poole: Whatever our guidelines are, whether its energy efficiency, onsite generation, or envelope or equipment efficiency, there's a few ways to get there . . .

Mr. Hurd: Yeah.

Mr. Poole: But we're talking about, ultimately, energy demand reduction.

Mr. Hurd: Yes. I think clearly from the last time, like half of what we're talking about, like if we're doing points or doing things like half of it should be about reduction or generation of, and the other stuff sort of fits in.

Mr. Rowlands: Half or three-quarters?

Mr. Hurd: Let's start with half.

Mr. Poole: Let's see what we wind up with when we're done. We need to have enough options and flexibility in there that people aren't restricted that they can only build one way.

Mr. Hurd: Right, we definitely don't want to lock them in and say this is it. We want to say . . .

Mr. Rowlands: How do you mean lock them in to only building one way?

Mr. Poole: If you have to get certain things but meanwhile it's difficult to get that with the windows that they want or with certain features of the home that they want, then it . . .

Mr. Fruehstorfer: They may need to look for points somewhere else. Efficiency somewhere else.

Mr. Rowlands: I understand but I can't come up with how being more energy efficient would change the style or design . . .

Mr. Hurd: Let me see if I can rephrase it. I think we could say either you meet our, you know, the IECC plus 20%. Okay, that's the baseline and we verify with HERS. Or, alternatively, you know, LEED silver or LEED-certified or something. We may need to put in there to say with a minimum number of credits in various areas because I have seen some of the example codes did that. They're like you need to hit this level and you've got to make sure you've got at least three in water, three in materials, and six in energy . . .

Mr. Fruehstorfer: Because a lot of their LEED points are coming from the location area, which does nothing.

Mr. Hurd: Right, because otherwise you get like I put in low-flow toilets and I'm using irrigation, and like it's all in this sort of off-the-shelf pile, and it doesn't push any of the areas. But that's, I mean . . .

Mr. Fruehstorfer: The number needs to be raised a little bit.

Mr. Hurd: But I think you could put that in the Code. You could say, you know, alternately accepted paths to compliance would be LEED-certified with credits distributed this way, Passive House, Green Globes at this level, and . . .

Mr. Rowlands: Whatever level we decide, I still don't see how we're going to be restricting a style of house or building.

Mr. Hurd: I think if we said here's 25, here's, you know, 40 points, and 25 of them you have to pick, is that maybe what you're thinking?

Mr. Poole: Yeah.

Mr. Hurd: That kind of constrains them to like . . .

Mr. Rowlands: Oh.

Mr. Hurd: You have to pick from this column and there's no way out of that. If you say, well, if you don't like this, you're welcome to do Passive House, you know . . .

Mr. Poole: Or, again, if we're worried about resource management, then maybe they don't want to get to this level of efficiency, but they'll get to this level of efficiency and they'll also decrease their water use, and they'll also do some onsite generation. But meanwhile, they're not here with the efficiency.

Mr. Firestone: Well, I don't think we want to be flexible on that, but what I would, I wouldn't mind having a bunch of criteria and then saying if you can show alternative performance through some other means and convince us that it's equivalent, then you can do it. But I don't think we want to give them outs on performance that you can trade off different types of performance.

Mr. Fruehstorfer: So, you don't have to insulate your house well if you cover it with solar panels and heat it and air-condition it with just the sun.

Mr. Poole: Again, there's minimum standards of the Code. We're asking them to go above and beyond the Code.

Mr. Hurd: Yeah.

Mr. Poole: And, frankly, the minimum standards of the Code have gotten quite restrictive, particularly in the areas of energy efficiency and envelope sealing and insulation values. And I don't know how much more you're going to gain in those areas to get a 20% energy savings.

Mr. Hurd: I'm going to say you're going to get a lot.

Mr. Firestone: I mean, it's pretty, I mean, I just put in a new furnace and it's 20% more efficient.

Mr. Hurd: Yeah, so, I mean . . .

Mr. Firestone: I mean it was very easy to increase the efficiency of my heating.

Mr. Hurd: Yeah, the general reading I've seen is . . .

Mr. Rowlands: Yeah, but from brand new, how you increase that 20% increase already, that's going to cost.

Mr. Hurd: It's not hard because I mean baselines aren't, well I don't actually know what 2018 is, but the 2015 IECC is an R21 wall. So, 20% is an R25 wall, you know.

Mr. Rowlands: Oh no, as far as wall assembly, yes. But as far an equipment rating of X, how do you get 25% more than today's Energy Star, which is what everybody uses anyway? That would cost.

Mr. Hurd: Yeah, that's true. Yeah, I would just say that sort of in the reading around, 20% seems to be where a lot of people have settled in terms of stretches.

Mr. Rowlands: Yeah, I've seen that also.

Mr. Hurd: They don't seem to be going much beyond that and they don't seem to be going under that a whole lot. Fifteen is wort of the range. Fifteen to twenty.

Mr. Rowlands: I see stretch as just simple. Easily verifiable . . .

Mr. Hurd: Yeah, we're not looking for 50% improvement, which is a big step. That's like, okay, take half your building and, you know, cut it off somehow. Well, effectively, it's like take this standard building and now take half of that and make it this, you know, that's another level, I think.

Mr. Rowlands: To get to Passive House around here, you build 2x6 walls with four inches of [inaudible] or whatever insulation they decide. That's your building. You're going to air seal it really, really, really, really good. But that's cheap. That's more technique. That's just not letting a plumber poke a hole and put a bead of caulking around there. That's taping the shit out of it and, sorry, taking the heck out of it and making it really tight. And not missing any holes.

Mr. Hurd: Right.

Mr. Rowlands: That's just a learning curve of a contractor. And once they do it, they don't even think twice anymore.

Mr. Hurd: Okay. So, I guess the question I have for us is whether we're, are we able to come together on a sort of set of standards or codes that we agree is going to meet our intentions? Or do we need to kind of frame, [inaudible] and then try to really address it next time with a little more research behind it? What I'm hearing is that we're all in slightly different places, I think, somewhat. I hear that we're mostly in agreement about stretch, basically over minimum code, stretching over that is a good thing. And maybe that's enough to sort of determine for today and then we can, in the next period, the next meeting, discuss more concrete ways to achieve that. Whether it's simply by saying in the Code that you've got to be 20% better than the IECC, verified by a third-party rater . . .

Mr. Rowlands: Or something.

Mr. Hurd: Or something, or, and then it's the or that gets into it. Or these standards or codes verified, you know, how many can we put in there?

Mr. Rowlands: You know what I'd like to, I guess, do some homework on, so a stretch code of 20% and site plan approval is a stretch code of, whatever, 30%, what actually does that mean? Okay, I know what the 2018 states, so 20% of 5ACH it's, 10% is . . . 4ACH is what the stretch code would be at 20%. So, that's not hard to get.

Mr. Poole: Well, again, are you looking at a 20% efficiency increase? Or are you just looking at upping the standard 20%? Because, again . . .

Mr. Hurd: It's a reduction in usage.

Mr. Poole: Right. So, is it true that if the required attic insulation is R49, does that mean that by increasing it to R60, are you then going to get 20% better energy savings? Or, is R49 . . .

Mr. Rowlands: The Code is also on your wall is X, and that would have to be . . .

Mr. Poole: Well, that's what I'm saying.

Mr. Rowlands: So, your envelope is now 20% better.

Mr. Fruehstorfer: Does that result in a 20% increase in . . .

Mr. Poole: But does that also . . .

Mr. Rowlands: In efficiency? No. It's a little more complicated.

Mr. Hurd: Yeah.

Mr. Poole: Right, that's what I'm saying. And now we're looking at, we're back to the calculation and verification and the cost of that.

Mr. Rowlands: Oh, no, absolutely. Right.

Mr. Poole: I mean if we're going to go into stretch code where you have to beat by 20%, now you're requiring third-party verification, period.

Mr. Hurd: True.

Mr. Rowlands: Well, probably. Now your insulation-wise, you know the Code right now and you look at their drawings and they have to be . . .

Mr. Poole: Right.

Mr. Rowlands: All you have to do is just add 20% to that envelope.

Mr. Hurd: Right, but is that . . .

Mr. Rowlands: That's not third-party. Your blower door, they're already going to have one anyway . . .

Mr. Poole: Right, but without energy recovery and having to reintroduce fresh air into the home, where . . .

Mr. Rowlands: I thought that was 3ACH you had to do that.

Mr. Poole: It's, no, anything less than 5, you have to introduce fresh air, and in order to meet Code, you have to go to 3. So, you already have to introduce fresh air into a new home.

Mr. Rowlands: That's fine.

Mr. Hurd: Right.

Mr. Rowlands: There's our indoor air quality just bumped up 100%.

Mr. Poole: Right, but meanwhile if you're reducing your ACH to 2, and you're still bringing it back up to 5 with fresh air introduction, where's your savings?

Mr. Hurd: Yeah.

Mr. Rowlands: You're not bringing it back up with an ERV.

Mr. Poole: What?

Mr. Hurd: No, no. I think I hear what you're saying. If we just bump all the numbers up . . .

Mr. Rowlands: Yeah.

Mr. Hurd: Insulation goes up, air tightness goes up, but we don't do things like require an energy recovery system, it's a tight building that's throwing . . .

Mr. Rowlands: They have to meet ASHRAE, so they're going to have to throw an ERV in there.

Mr. Hurd: Right, but . . .

Mr. Poole: Not if it's below a certain number of CFMs. Not in a single-family home. Again, if all your systems are under 2,000 CFMs, then you don't need an energy recovery ventilator. You just need more systems.

Mr. Rowlands: But if your blower door test is a 2, you have to have an ERV in there.

Mr. Poole: No, you don't.

Mr. Rowlands: There's some ASHRAE code that requires it.

Mr. Hurd: But ASHRAE doesn't come into play . . .

Mr. Poole: ASHRAE doesn't come into play in a single-family home.

Mr. Hurd: ASHRAE is commercial.

Mr. Poole: So, that's what I'm saying . . .

Mr. Rowlands: So, there's no code that's requiring X amount if you have a 0.6 ACH50 building for residence?

Mr. Poole: No. For residence, you have to meet 3ACH, but you also have to introduce fresh air and you do not have to put an energy recovery ventilator on. So, you have to get fresh air back in there and meanwhile you have to meet the air changes per hour, but without the energy recovery ventilator, you're not really saving that much energy, are you?

Mr. Rowlands: No, you're not.

Mr. Hurd: No.

Mr. Poole: That's what I'm saying. Just changing the numbers isn't making it more efficient.

Mr. Hurd: Right. No, good point.

Mr. Rowlands: Well, as far as air changes, your insulation would be . . .

Mr. Poole: Again, how much more energy are you going to save when you're talking about R49 to R60? There's not that much energy that gets through the R49.

Mr. Hurd: Yeah.

Mr. Poole: And are you going to reduce that, I mean, again, yes, the difference between R30 and R49 is huge. But once you get to those higher values, it's diminishing returns.

Mr. Hurd: Yeah.

Mr. Poole: And the amount of calculations that are going to be required and the amount of engineering that's going to be required is going to drastically increase the design cost of that home and the verification cost that it's compliant.

Mr. Hurd: Yeah, because a lot of the stuff where we just say you've got to do more, you can check it and say that there's the higher insulation. I can't check for air tightness and things, but you can say, okay, there's an ERV, or there isn't. You know, there's a checklist for that. But I would assume that the HERS is going check things about whether there's an ERV attached to the building and what that does to the energy profile.

I was pulling up the New Buildings Institute had a little sort of three-pager on stretch code provisions that they're developing but I didn't find their actual document. I have to call them up or email them or something, because it sounds like they're trying to develop model language for stretch codes. So, it may be worthwhile to start to pull some of that in to go . . .

Mr. Rowlands: Absolutely. Who . . .

Mr. Hurd: The New Buildings Institute, NBI. New Buildings Institute. So, that might be, yeah, so key characteristics are there, stretch codes are designed to be adoptable as an energy code strategy. This means that the measures will align with current code scope and limitations and primarily impact building components that are currently regulated by city building departments. It's also focused on prescriptive strategies, which is what most building departments and design projects are familiar with. And it looks like they're trying to develop them for both IECC and the ASHRAE 90.1.

Mr. Rowlands; Well, I think important is to keep it as simple as possible. It's not going to be a zero increase, but that has to be a big thing.

Mr. Poole: I think the current way that we do it with a points system is a good way to go about it. Where, again, you get points for this, you get points for this, you get points for this, and you have to reach a certain point. And if we want to say that for a standard project, you want to get to this, and for a site plan approval project, you want to get to this, then we can do that, but then we have to have enough choices for them to get the points . . .

Mr. Fruehstorfer: The simple fix is take away some of those choices that aren't effective and add some more that are effective and adjust the number of points that are needed.

Mr. Hurd: Yeah.

Mr. Fruehstorfer: And if you do those three things, then boom, you're done. It could be that simple.

Mr. Hurd: But, you know, we have to be willing to say within this range of points, we're willing to accept any 25 that they pick and recognize . . .

Mr. Poole: Right, which is what we did last time.

Mr. Hurd: Right, unless we want to get specific and go, there's an energy column, there's a water column, there's a materials column, and there's a [inaudible] column, and you've got to pick within those and then total it all up.

Mr. Rowlands: With a minimum point required in each one.

Mr. Poole: Right.

Mr. Rowlands: With a total requirement overall.

Mr. Hurd: Yeah. Because I think that's where we struggle, is where we say any 25 of these, and they go, okay, I'm going to take the 25 easiest ones. And it's like, did that move the needle enough?

Mr. Firestone: I like the idea of the minimum in each category and . . .

Mr. Fruehstorfer: Then the number isn't . . .

Mr. Firestone: It gives it flexibility but ensures that . . .

Mr. Poole: And, again, if you want to weight energy conservation, we can weight energy conservation.

Mr. Hurd: Yeah.

Mr. Poole: You have to get 50% of your points in energy.

Mr. Hurd: Right.

Mr. Poole: You know, that's fine, but then you still have to get this, this and this in the other columns.

Mr. Hurd: Right, it keeps them from ignoring one section.

Mr. Poole: Right. And, again, we can use one of the codes as a model or as a guideline for the concept . . .

Mr. Hurd: Yeah.

Mr. Poole: And assign our own point values. That's one of the, like LEED. Right now, after we adopted that, they changed the points on LEED and we still didn't change the amount of points you get. So, that's pretty much what we have right now, only I think that we want to look a little bit more toward increasing the points that you get in some areas and set standards for that.

Mr. Fruehstorfer: Yeah, that's another thing you could do. You could change the number of points that some of those things are worth.

Mr. Poole: Right, and put in a variable.

Mr. Fruehstorfer: I remember Stacy wanted to do that specifically.

Mr. Poole: Yeah, well, again, if you want to look at energy optimization, you want to say the standard is you have to have an 80% unit. You get to 90%, which everybody does because they don't want to build a chimney, and you get 1 point for that. If you get to 95% . . .

Mr. Rowlands: They should get no point for that because everybody builds it.

Mr. Poole: No, because the standard is 80%. Just because they're doing it for other reasons, doesn't mean that it's still not more energy efficient.

Mr. Rowlands: But if they're doing it for other reasons, we don't need to try to push them towards that.

Mr. Hurd: Well, but he's saying just by making that choice, they get the 10%, so there is . . .

Mr. Poole: So, again . . .

Mr. Rowlands: But they're going to make that choice anyway. This should be a, in general, a 20% increase in energy efficiency, indoor air quality, whatever, is what we're trying to do above code.

Mr. Hurd: Yeah.

Mr. Poole: Right, but if . . .

Mr. Firestone: Above what everyone is doing.

Mr. Hurd: Well, there's two different things . . .

Mr. Poole: No, because there's two different things there. Again, if you're going to get that and we only assign 1 point to get to 90%, which they're at least likely to do . . .

Mr. Hurd: Right.

Mr. Poole: Okay, then if they go to 95%, which means that that cost goes up significantly because now you're looking at variable speed, you're really milking the last little bit out of that, you're not going to get much above 96% on your furnace. You're just not.

Mr. Hurd: So, maybe the 90 to 95, that's two points if we're making the push. So, again . . .

Mr. Poole: Or you go from 90 you get one point, and at 95 you get four points.

Mr. Hurd: Yeah.

Mr. Poole: And at 13 SEER, which is Code, okay well you get to 15 SEER and you get one point. If you get to 19 SEER, you get four points. Because, again, there's going to be a cost increase but that's really pushing them to push for those points that they're going to get.

Mr. Hurd: Right. No, there's some validity and there's some logic in that that we could by basically changing the value of the points, not making everything equal, we can kind of craft a direction. To sort of say if you all do what you've been doing, you're not going to get there. You're going to get like a 10% bump and that's not going to be enough. You have to push something higher.

Mr. Fruehstorfer: And right now, those are all based on LEED . . .

Mr. Poole: Right.

Mr. Fruehstorfer. You could just as easily take some requirement out of Passive and include that in there, too.

Mr. Poole: And, again, at that point, we're probably looking at more of a standalone code that uses the concepts from those other documents.

Mr. Hurd: Right.

Mr. Rowlands: If you weighted the points on the envelope and air tightness, your mechanicals of getting that 95% become a little less relevant in that single-family house. If you increase that envelope thermally and air-tightness, your mechanicals are so much smaller.

Mr. Hurd: Right, but . . .

Mr. Rowlands: You're saving so much money right there.

Mr. Hurd: Right, but we're looking at the efficiency of the unit, not the size.

Mr. Rowlands: Oh, no, you're going to get 90% probably. But to get that extra, I agree.

Mr. Hurd: Right, but . . .

Mr. Rowlands: In the smaller units, you're pretty far up there to begin with. Regardless, there's a big cost savings by building a better envelope in your mechanicals.

Mr. Hurd: And we may want to look at that to sort of say you get four points for pushing the equipment up because that means you built the same crappy envelope that code allows . . .

Mr. Rowlands: Right, and that's what we don't want.

Mr. Hurd: Right, but you get eight points, maybe, for pushing up the insulation and pushing up the, so, you know, again, you say, what do you want to do? Do you want to keep pushing the equipment a little further or do you want to just actually building a better . . .

Mr. Poole: Maybe you want five points for an energy recovery ventilator. Something that encourages them to do something that they don't have to do but really benefits.

Mr. Hurd: Yeah, that would be worth the additional . . .

Mr. Rowlands: Another thing as far as building the points system heavy on the envelope, that's a dumb piece that just sits there for the life of the building.

Mr. Hurd: Right, the equipment comes and goes.

Mr. Rowlands: That equipment is going to be replaced again and again. So, put it into that envelope.

Mr. Fruehstorfer: Unless you just have kids who open the window because they're not paying for the heat.

Mr. Fruehstorfer: Again, operationally, you can never . . .

Mr. Poole: Enhance commissioning.

Mr. Fruehstorfer. That's their thermostat.

Mr. Hurd: That was one of the first arguments against LEED and I think it's still true is to say you can design the most efficient building and people could leave the doors open and open the windows and reset the thermostats and take huge, long showers, and do all sorts of things that counteract the effort.

Mr. Rowlands: Have you see that LEED platinum building in Chicago with all the fins?

Mr. Hurd: No.

Mr. Rowlands: It's a piece of garbage. It's LEED-platinum on 30 stories. It's kind of wavy like this.

Mr. Hurd: Oh, the Aqua Building.

Mr. Rowlands: Is that what it is?

Mr. Hurd: Yeah.

Mr. Rowlands: Take a thermal image vision of that.

Mr. Hurd: Yeah, I was thinking over here to the slabs.

Mr. Rowlands: [inaudible] straight through. It's bad. So . . .

Mr. Hurd: Again, you can sort of go, I've got natural ventilation and I'm getting all my credits there. And it's like, yeah . . .

Mr. Rowlands: I guess.

Mr. Hurd: Alright, I'm trying to think about, what are people's thoughts about the next phase of this? What would be most useful to look at, to have in front of you to help do the next things?

Mr. Rowland: I'd need an education on LEED again. I'm so removed from it for so many years. If it stays with the LEED points system, I need to know where our points are now and what points we're talking about and how many extra . . .

Mr. Hurd: Okay.

Mr. Fruehstorfer: Maybe you need a printout of what it is now and just start making suggestions for changes to that.

Mr. Hurd: I think the packet from last month had the current Code in it.

Mr. Rowlands: It did, yeah.

Mr. Hurd: Which had the list of our selected LEED points, which was from 2009, the v3.

Mr. Rowlands: Is it even worthwhile looking at them or are we just scrapping them and we're now going for energy, indoor air quality, materials, and those are our columns?

Mr. Fruehstorfer: I think most of those you're going to want that and you're going to divide them into categories, get rid of some, and maybe add some more.

Mr. Hurd: Yeah.

Mr. Rowlands: Okay.

Mr. Fruehstorfer: I mean the bulk of it is still going to be good.

Mr. Poole: I think certainly we should, number 1, get away from LEED v3 and go to LEED v4.

Mr. Hurd: As a baseline, yes.

Mr. Poole: That's where we're going to go. That's certainly where the new documentation is. It takes into account newer practices than something that was built in . . .

Mr. Fruehstorfer: Is it available free?

Mr. Poole: Yes.

Mr. Hurd: The overview, I guess, right?

Mr. Poole: No, you can download the whole document right offline and I have, and I brought it to the last meeting. I'd be happy to bring it to the next meeting.

Mr. Poole: Yes, we did.

Mr. Poole: We also ordered a copy of the Green Building Code.

Mr. Hurd: Okay.

Mr. Poole: So, again, we can look in there and maybe we can ask everybody to take a look at those documents. Maybe email them the link to say, hey, I'd like you to look at this and look at areas that you think we should prioritize that are in line with the concepts and the areas we want to work. Okay, well, we want to look at this, this, this, and this, well, next time we come together, let's looks at those areas, say where do we want to focus, where do we want to get our points. Let's look at how many points we want to get and what kind of ratios we want. Because, again, if we're looking at we want it to be balanced somewhat, but we want to look at maybe where we want to weight it. You know, we want 50% in energy reduction or in energy, and then subcategories of that. And we want to get, whether it's efficiency, whether it's envelope, whether it's energy recovery, whether it's, you know, and then we want to look at water reduction or onsite generation or where do we want to do that? And really, we need to have some sort of will as to what we want to do. And, like I said, it's more and more sounding like we're going to build our own standalone code with concepts.

Mr. Rowlands: What do you do about onsite generation? To me, if I'm building a residence or a commercial, if I have the right angle and all and its brand new, I'm just going to do it. I mean and not everybody is like me, for sure.

Mr. Hurd: No.

Mr. Rowlands: But more and more people are seeing that and as the solar prices keep coming down in price, it's just like the same price, so why not do it?

Mr. Hurd: Yeah, I think the challenge is that as an owner you get a different sort of rebate or tax structure that's different than if you're, I think, a commercial builder.

Mr. Poole: Do you know how many new homes were built by the builder with solar panels?

Mr. Firestone: Zero.

Mr. Poole: Exactly.

Mr. Firestone: I mean part of it is you've got a second market failure in that they're renting out and they don't really care from an economic standpoint how efficient their heating and cooling is. So, I think, you know, what I sort of thought would be a good idea would be to have, at some point in a year or two, a rebuttable presumption that you would put some onsite generation on, be it solar or something, so that you may have a lot that it just doesn't work. But then, you know, say by 2025, then you just to do it.

Mr. Rowlands: Or do you just make them solar ready and require it?

Mr. Poole: Well, we should probably check with the Electric Department because the one thing we should probably worry about is that if we heavily weight onsite generation, then the next time the builder comes in and they have a node of our electric grid that's going to be over capacity, is the Electric Department going to say, oh no, we can't do that.

Mr. Hurd: Right, there's always the challenge that you have to get it back into a grid that's . . .

Mr. Fruehstorfer: Fiscally, you're going to have issues.

Mr. Rowlands: But you're not dumping back into the grid more than 10%.

Mr. Poole: Right, but in a development. If you're talking about this is going to be applicable to new subdivisions and they build a new 50-home subdivision, it could be an issue.

Mr. Firestone: Probably not.

Mr. Rowlands: It's above me but . . .

Mr. Poole: Well, we should discuss it with the Electric Department.

Mr. Firestone: I mean it's not, we don't have that much new development space, so . . .

Mr. Hurd: If the golf course goes, we do . . .

Mr. Firestone: Well, yeah . . .

Mr. Hurd: But we have like one or two . . .

Mr. Firestone: Yeah, I mean you've got a certain amount of homes but as far as the total load that would be put on those buildings, it's not going to be very much.

Mr. Poole: Again, we should have a discussion with the Electric Department before we enact any sort of regulation that they're approving the concept.

Mr. Firestone: I mean if the golf course goes, then part of the approval is that they'll have to upgrade the electrical system if that's what needs be. I mean . . .

Mr. Hurd: Yeah, my sense is that, and Delaware state has enacted a sort of energy policy of getting residential homes net zero ready by I want to say 2025, but at least 2030 I think is their goal.

Mr. Poole: 2030.

Mr. Hurd: 2030? So . . .

Mr. Rowlands: And ready means it's just a conduit up to the roof.

Mr. Hurd: Well, it means also that your demand is reduced to the point where onsite generation can match it. Because if you're going to be net zero ready, you have to be basically matched to whatever your capacity would be.

Mr. Rowlands: To be net zero ready, as opposed to just solar panel ready or whatever it is.

Mr. Hurd: Right.

Mr. Rowlands: That's just a conduit up.

Mr. Poole: Right.

Mr. Hurd: Yes, but they're talking . . .

Mr. Poole: But do you have enough roof oriented in the correct direction that you can make it work . . .

Mr. Hurd: Right.

Mr. Poole: On an annual basis?

Mr. Hurd: So, I think for me what I took from that is for us, what we can focus on is reducing the energy consumed basically by stretch codes or whatever, pushing that down so that the buildings become more efficient and use less energy. And that gets us closer to the point where if they put a solar panel system on the roof, it matches up and we meet the state's requirement. But, you know, that's what, twelve years away? Who knows what it's going to . . .

Mr. Rowland: It's going to be nice to have a piece of conduit in that building now.

Mr. Hurd: Yes, and I think . . .

Mr. Fruehstorfer: Some are adding, and some are . . .

Mr. Hurd: Ben was talking last time that they do that. They run it right up.

Mr. Rowlands: Some people do, but it could be part of the Code. If you build it, it's just going to have a piece of conduit.

Mr. Hurd: I think that's worth . . .

Mr. Fruehstorfer: 36 Benny has it and I'm pretty sure it was being added on 30 Benny.

Mr. Rowlands: That you required it?

Mr. Fruehstorfer: It became part of the site plan approval.

Mr. Hurd: I think we can probably come at this from a couple of different directions. We can review LEED version 4 and we can review the International Green Building Code. I'll get hold of these, the Green standards, the ASHRAE 189 and the ICC 700, to sort of look at those. So that, one, we can start to look at it and may be say start to pull out the ones that you think are important items. Because one way to do this is to sort of say let's make a big pile of all the things that we think we want to do and how many are there? Hey, there's 50, great, it's 50 points. You know, or some number. But we have to take that pile and run it past Code Enforcement for one thing to say if someone came to you and said this is what they're doing, are you prepared to evaluate that, like we did with the other ones. To say is this something you can evaluate or is that a post-occupancy evaluation or it requires an engineer? What's the factors?

Mr. Fruehstorfer: And some of those can still be added but it's just that they can't rely on, as part of the requirement it has to be said they don't have to do that.

Mr. Hurd: Right.

Mr. Poole: They don't have to have that, again, if they want to focus on this stuff that is a little more difficult to prove, that requires that third-party verification, we can have it in there, but we need to have enough that don't require that you can do it without it.

Mr. Hurd: Right. So, we can kind of start saying let's collect these items and sort of push that way, but the other way is to start to think about in your mind what would a reasonable checklist look like?

Mr. Fruehstorfer: You can start putting together that spreadsheet like I had in the beginning at the first meetings and project it on the wall and start saying, yeah, that one, let's adjust it to the new LEED instead of the old LEED and . . .

Mr. Hurd: Yeah, and I want to kind of think about maybe this is the next month is to say, having looked at LEED, Green Construction Code and the other standards, which do we think is the best one to sort of start with? Which is the good baseline or fundamental document to start from? Then we can start to pull them apart and go, alright, these are all the things that it asked for? Which ones can we . . .

Mr. Fruehstorfer: Include them all on your spreadsheet and see which ones you like.

Mr. Hurd: Oh, yeah . . .

Mr. Fruehstorfer: And then when you're done . . .

Mr. Hurd: I don't want to be here for four hours going through a PowerPoint spreadsheet. Not happening.

Mr. Poole: No, but again, certainly those ones that align with our focus areas.

Mr. Hurd: Yes.

Mr. Poole: Because we've already developed this is where we want to focus, so that the ones that aren't in there, we just throw them out the window.

Mr. Fruehstorfer: They're not included at the beginning.

Mr. Hurd: Right.

Mr. Poole: Right. So, we want to look at those that align with our focus areas and particularly . . .

Mr. Fruehstorfer: Take the three or four different things that you like the most and then take the aspects out of them that fit into energy, put them all in a thing and say these are the ones that we like . . .

Mr. Poole: And then start weighting them and assigning them point values.

Mr. Rowlands: And then somewhere along the way, coming up with how many points do we want to require?

Mr. Fruehstorfer: I wouldn't worry about that until you've got everything . . .

Mr. Rowlands: No, no, once we're getting down there, okay now how many do we want?

Mr. Hurd: Right but we have to keep an eye on them.

Mr. Poole: This is the ones that are reasonable, that are enforceable and have enough variety that we can get there. And then we start saying, okay, well this is where we want to assign our points, and this is the value we want to get to.

Mr. Hurd: Right. But we're probably going to start with like 75 things because everyone is going to throw everything in and we'll be like, okay, it can't be a 75-item list. It's got to get . . .

Mr. Poole: Not if we want to focus.

Mr. Hurd: Right, and I think . . .

Mr. Fruehstorfer: Well, it could be, as long as a certain number of points have to be from energy . . .

Mr. Poole: Right.

Mr. Fruehstorfer: You could have a crapload of things in all of them, as long as you require a certain number of points from each.

Mr. Hurd: And you could also say some of these, we're going to move them in the site plan approval higher level. This is the 20 and that's the 40. Alright so we will, I'm going to try to do this earlier so people have time, we'll distribute the LEED version 4, and Green Building Code is just hard copy, right?

Mr. Poole: Yes, and it's a copyrighted document.

Mr. Hurd: Yeah, it is.

Mr. Fruehstorfer: So, that's one you won't be able to just copy them out?

Mr. Hurd: Well, we'd actually . . .

Mr. Rowlands: How long is it?

Mr. Hurd: Well, it actually is in the packet for this month because I went to the public site and I basically screenshot each section. Not quite screenshot but basically text-grabbed each section and jammed them together into a PDF.

Mr. Poole: Right, but we could almost go . . .

Mr. Hurd: So, we have it.

Mr. Poole: From a table of contents type thing, saying these are the areas, these are the concepts. We don't need to necessarily put that document out, but we could, again, these are the areas that are in our area of focus and these are the concepts that are in there. We're not providing the text of that, but we can have that document here for them to review that if you want to know more about this, this is what it is.

Mr. Hurd: Right.

Mr. Firestone: What you could post it so that it was only accessible online to people on the committee but have a public copy available for review.

Mr. Hurd: So, the ICC Code is public . . .

Mr. Poole: Not legally.

Mr. Firestone: What?

Mr. Poole: Not legally.

Mr. Hurd: No, yes you can.

Mr. Firestone: Yes, you can.

Mr. Hurd: The ICC has a public access site.

Mr. Firestone: Legally you can. You can post things and as long as people individually download them, you are entitled to, it's fair use.

Mr. Hurd: Yeah, but the Green Building Code, I got it from ICC has a public access site where you can look at all the various building codes without having to buy them. So that's where I sucked it up and so it's nebulous.

Mr. Firestone: He can't send them to us.

Mr. Hurd: I already did. It's in the packet last week.

Mr. Firestone: Then you have copyright issues when you send someone multiple copies of a copyrighted document. But if you post it, it's more like a library. And if individuals come and take their own individual copy, there's fair use. You can . . .

Mr. Poole: Well, again . . .

Mr. Rowlands: Of copyrighted material in general.

Mr. Poole: When I went to the ICC website to order the Green Building Code and it offered the digital download, you're not permitted to put that on a network computer. It specifically says in the digital document . . .

Mr. Hurd: I think that's so they can sell because they're selling a single-use copy as opposed to a multi-use.

Mr. Poole: Right.

Mr. Hurd: That's licensing, I think, more than copyright.

Mr. Firestone: I'm not saying you can make it open source like that . . .

Mr. Hurd: No.

Mr. Firestone: But you can make it closed source and then people can go in and download it.

Mr. Hurd: Had you started to break out the LEED version 4 credits when we first started having this conversation in Planning? Or was it just the version 3?

Mr. Fruehstorfer: I think I was using the version that was being used before. I don't think I ever looked at new versions.

Mr. Hurd: Okay.

Mr. Fruehstorfer: At some point, I had looked for new versions that I could download, and I hadn't found that. If there's a new one that can be downloaded, then you could start doing that I had one before and start populating a spreadsheet with those.

Mr. Hurd: What I was thinking because I had downloaded the checklists which is already an Excel spreadsheet, so there might be a way to basically take the checklist and expand it so you can fill it in.

Mr. Fruehstorfer: And then start adding in Green Building type things, but not word-for-word.

Mr. Poole: Right.

Mr. Hurd: Right.

Mr. Poole: Because, again, we're talking about concepts.

Mr. Hurd: You hit on the point, I think, that concepts are the way to go. So, if we start with a column of here are the LEED credits as a sort of a starting point . . .

Mr. Fruehstorfer: Yeah.

Mr. Hurd: Does the IG, Green, is it IGCC?

Mr. Poole: International Green Construction Code.

Mr. Hurd: Not Green Building Code, okay. Does the IGCC have a similar concept that lines up with it, and so we could have a column for it and it's filled in.

Mr. Fruehstorfer: Is it better written, better . . .

Mr. Hurd: Or just does it, yeah, better written. And it might have some concepts that LEED didn't touch and so maybe there's a couple of [inaudible] ones. And then the other standards could be, so we get kind of a matrix to go, in the world of energy, here's different ways of getting to, you know, achieving . . .

Mr. Poole: A number.

Mr. Hurd: An improvement in energy, right. And . . .

Mr. Rowlands: You're not talking about putting the LEED for water and an energy one for different points from different . . .

Mr. Hurd: Sure.

Mr. Poole: Why not?

Mr. Hurd: If we're writing our own . . .

Mr. Poole: If we're going to write our own code, then . . .

Mr. Fruehstorfer: You can decide your own points.

Mr. Rowlands; I know but if you want somebody to sit there and learn LEED, then okay I've got it . . .

Mr. Hurd: But I think what we're saying is we're not saying it's LEED . . .

Mr. Rowlands: Now I have to go to here and now I have to go here . . .

Mr. Hurd: We're stepping back. If we go this way, we're kind of taking a step back from LEED and saying, you know, install a 90% efficient furnace, 1 point.

Mr. Rowlands: Oh, then they don't have to go anywhere, they just look at ours.

Mr. Fruehstorfer: Yes, it's all going to be in the document.

Mr. Hurd: Yeah.

Mr. Poole: Right.

Mr. Rowlands: Okay.

Mr. Fruehstorfer: You can also cut one thing out of Passive and include it in ours with points . . .

Mr. Poole: If that's what we want to do where we, because nothing really fits exactly what we want to do. And if we're going to be like we did last time, just cutting sections out of LEED and not allowing them to use the full document, then what difference does it make if we, and assigning different point values, which we did . . .

Mr. Hurd: Right.

Mr. Poole: Then what the difference between that and what we're talking about right now?

Mr. Hurd: Yeah, I'm . . .

Mr. Rowlands: No, I like it.

Mr. Hurd: I was leery of trying to redo the sort of right-our-own-thing at first because I'm always convinced that someone else has solved this problem before us and it's just a matter of finding that thing and taking it and going, that's mine and I'm going to use it. I think the challenge we have, and I'm sure every municipality feels this, is that we're a little different than other people, you know, our situations. We don't have the same issues that some people have. We don't have the same constraints that some people have. And so, rather than trying to take a one-size-fits-all code and then say, well, now I have to start slicing pieces off or changing the language, maybe it is easier to go, let's just take these three things and these four things and those couple of things . . .

Mr. Fruehstorfer: You don't want to write it from scratch. Someone already did that. You just want to alter what someone did a little bit.

Mr. Hurd: Right, so we just find a couple of good spots and we take the ideas . . .

Mr. Poole: We don't necessarily have to copy all the text, but we can copy the concept and the idea.

Mr. Hurd: Yes.

Mr. Poole: Any maybe put some specific requirements to demonstrate that.

Mr. Hurd: Right. The real criteria is that we have to phrase it in a way that's enforceable by you.

Mr. Poole: Right.

Mr. Hurd: That you can point to it and say does the label say 90% efficient? Yes, great, check. There shouldn't be any . . .

Mr. Poole: It should be easy for them to document. It should be easy for us to enforce. Or, if they want to get complicated, then they get to pay for that third-party verifier and provide us with that certification.

Mr. Hurd: Right.

Mr. Poole: So, we can again give them a lot of options and say, look, here's the simple approach. You can do it this way or here is the complicated approach and you can pay somebody to advise us that that's how you did it.

Mr. Rowlands: Why would anybody [inaudible].

Mr. Hurd: Sorry, I think we have to make our simple approach not so simple.

Mr. Firestone: They may want a LEED-certified building.

Mr. Hurd: They might.

Mr. Poole: Right. Again, they can choose, if they're going to build 50 houses, to do the engineering once might work for them.

Mr. Rowlands: Oh yeah.

Mr. Hurd: Yeah.

Mr. Poole: If they're going to build six houses, it probably doesn't spread as far.

Mr. Hurd: Yeah, and the advantage I think of keeping it to the way that we've got it structured now, you know, with a list of criteria and a points thing, we're not asking the residential contractor and such to go out and learn how to build this thing. We're sort of saying within the scope of your current knowledge, we just need you to push these things up a little bit and make sure that these things get included. I think it's on us as we develop that list to be sure that it's meeting what I hear is our goal of hitting the 20% increase in, or decrease in, energy usage and some other metrics for the other areas of focus, so that however they slice the points, we get there.

6. **GENERAL PUBLIC COMMENT**

Mr. Hurd: I'll just ask for public comment.

Mr. Fruehstorfer: No one signed up.

Mr. Hurd: No one signed up.

Mr. Fruehstorfer: No one signed up for comments, so you don't need to worry about it.

7. **ITEMS FOR NEXT MEETING**

Mr. Hurd: Anything else on people's minds?

Mr. Rowlands: Just curious why we're meeting here instead of City Hall.

Mr. Hurd: Someone had taken that spot.

Mr. Poole: Room availability.

Mr. Hurd: Like three weeks ago I was told this was one of the dates you can have it, and then when we got around to going, hey, I'm going to take it on that date, Michelle came back and went, so, someone else has got it.

Mr. Poole: Too late.

Mr. Hurd: Too late.

Mr. Rowlands: I always see this building as a prime candidate for a deep energy retrofit. Just something to show the City's commitment and it's big, wide open.

Mr. Hurd: Yeah.

Mr. Rowlands: And you're paying the electric bill, right?

Mr. Fruehstorfer: You're not.

Mr. Rowlands: Not me anymore.

Mr. Hurd: Alright.

Mr. Firestone: Is it a wrap?

Mr. Hurd: I think we're a wrap. Thank you everyone.

There being no further business, the Green Building Code Work Group meeting adjourned at 5:17 p.m.

As transcribed by Michelle Vispi
Planning and Development Department Secretary

Attachments
Exhibit A: Goals and Areas of Focus for the Green Building Code
Exhibit B: Current Green Building Codes & Evaluation Systems
Exhibit C: Current Green Building Codes & Evaluation Systems – Additional Supporting Information