

**CITY OF NEWARK
DELAWARE**

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

October 22, 2019

3:30 p.m.

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

Chairman: Will Hurd

Members Present: Jeremy Firestone
Tim Poole
Reid Rowlands

Members Absent: George Irvine
Rob Jadick
Stacy McNatt
Ben Prettyman
Vacancy (Conservation Advisory Commission)

Staff Present: None

1. INTRODUCTIONS

Mr. Will Hurd: Welcome to the October 22, 2019 meeting of the Green Building Code Work Group. Will Hurd, Chair of the Planning Commission and Chair of this committee. I guess we'll go your way, Jeremy.

Mr. Jeremy Firestone: Jeremy Firestone, citizen, former Planning Commission member.

Mr. Tim Poole: Tim Poole, Code Enforcement.

Mr. Reid Rowlands: Reid Rowlands, citizen.

2. CHAIR'S REMARKS

Mr. Hurd: Okay, so what we're looking at here today, because we had talked a little bit, I guess we talked some about what we are going to be presenting because we recognized, I think, that that Excel spreadsheet wasn't useful in its base format for any of uses that we wanted to use it for. So, what this is, is essentially the presentation document that we can show to people and say this is the intent or criteria, sort of the generalized criteria of the credit. You know, separately, or after the ordinance is passed, we will develop a simplified checklist which just might be credit, title, and a checkbox.

Mr. Poole: I don't know that that's necessarily what we need to do.

Mr. Hurd: Well, I don't know either because that's all going to be you. And then there's some sort of criteria document which would say something like IECC table blah blah has the U-values that we're looking at. And that could be updated as the Code cycle changes or such, so that you could hand that to someone doing a plan review and say, if they're saying that they're going for this credit, this block here, that's what we're . . .

Mr. Poole: That's why I brought this.

Mr. Hurd: Oh.

Mr. Poole: This is a submittal that has been provided to me for a current project and how they currently submit.

Mr. Hurd: Okay.

Mr. Poole: And that's what I review for their proposed compliance pass.

Mr. Hurd: Okay. Now do you have like a checklist or something that you . . .

Mr. Poole: No.

Mr. Hurd: You just count them up and say that's 50 points or however many points?

Mr. Poole: Yes.

Mr. Rowlands: The 25 points . . .

Mr. Poole: The 25 points currently required. And that's what they do. They show me, they give me a narrative where they intend to get their points and as a close-out document, they have to provide enough documentation for me to be satisfied that they've met them.

Mr. Hurd: Right, so this is just saying these are the ones we're going to go for?

Mr. Poole: Right.

Mr. Hurd: And then you hold this and at the end of the project you go, so look at the last one, daylight views and goes where's that view shed diagram you promised to demonstrate compliance? And they can say here it is and you can go, yeah, okay.

Mr. Poole: Right, well again . . .

Mr. Rowlands: But they could come back with a completely different 25 points in the end and say, well, through the process we ended up having to, we didn't get that one but here's another one we did.

Mr. Poole: It's like for this one here, which is for the Newark Senior Living facility that they're getting ready to apply for, they added in two extra points because I told them they were a little ambitious in trying to go for 75% of the materials construction waste. On a green site, that's not all that realistic, in my opinion. So, they gave me 27 points.

Mr. Rowlands: But technically, they could've just said we're going to do it and come back, and they didn't make those but come up with two more points and it's still good.

Mr. Poole: And they would have met the requirements.

Mr. Hurd: Right, because it's a conversation. It's not . . .

Mr. Firestone: Yeah.

Mr. Poole: This is them saying this is how we intend to do it . . .

Mr. Rowlands: Sure.

Mr. Hurd: Right.

Mr. Poole: And if for some reason something doesn't work out, they can always go back and put in more efficient heat units or something to meet . . .

Mr. Rowlands: Yep, it all gets documented in the end and you've got your 25.

Mr. Hurd: But they have to give you that sort of proposed list to get the permit, right?

Mr. Poole: Correct.

Mr. Hurd: Got it, okay.

Mr. Poole: That's why I was saying, you know, I'm not sure that a checklist like this, which I stole from the Design Committee, is really necessary . . .

Mr. Hurd: Which is fine.

Mr. Poole: When this is typically what we receive.

Mr. Hurd: And I think that's partly, like the spreadsheet was getting very wonky, to use that word.

Mr. Poole: Yeah.

Mr. Rowlands: Do you get many requests filled out like that or is that just a nice one?

Mr. Poole: No, that's typically how I get them. Because that's how I direct them to submit.

Mr. Rowlands: Yeah, yeah.

Mr. Poole: They can either submit with a lot more documentation or they can give me a narrative that tells me how they intend to get their points.

Mr. Rowlands: So, in this list here, and then in the supporting one of here's your Code that you have and things like that, there could be a mock-up of one to say this is what we're looking for you to submit.

Mr. Poole: Right.

Mr. Hurd: Or it could be, I mean, that could be something that Code Enforcement also has on-hand. Because you've got those example sheets of sample pages from the Code that you're like this is something we're always going to look for. You could say this is a sample of a project narrative, kind of how we like it.

Mr. Rowlands: Right, and that's in the supporting document.

Mr. Hurd: Title, proposed points breakdown.

Mr. Poole: Right.

Mr. Hurd: So, what this is then, because part of what we ran into is that where we started having things like we said this or that, you know, where we're staring to use more words, the Excel sheet was having trouble.

Mr. Poole: This is much more of a usable document for the Code amendment.

Mr. Hurd: Right. This is something that's going to be easier, hopefully, to present to the public, to the Planning Commission, to hand back to staff . . .

Mr. Poole: Right.

Mr. Hurd: To kind of work from. So, that's what this is. That's why it was so late because it took much longer than . . .

Mr. Poole: I said to Michelle when I saw it, I was like, man, he did all the font work and all that. I'd have waited until we got the final draft for that but, you know . . .

Mr. Hurd: Some of that's just the base document that I have so it was just like, oh, it already has the nice fonts and colors, so I'll just keep it. So, there's a little bit of narrative in here about what commercial buildings have to achieve, the narrative about what the point, when we say 3 slash 4, we mean 3 or 4. But if we say things like up to 5 points, it means anywhere between 1 and 5 points.

Mr. Poole: Right.

Mr. Hurd: So, that people don't go, I could get the 10% and then I could go 20%, so I get both points, right? No.

Reviewing the minutes, oh sorry, I'm jumping ahead. So, those are my Chair's remarks. It's a revised document, content is essentially the same. It's been simplified in a few spots to remove, say, references to specific tables, and we've got the commercial and the residential mapping up more tightly now. Because I took all the comments that we had from our commercial review and then brought a lot of that over to the residential and made sure they kind of were falling in the same order. So, if we were doing windows first, windows came first, and then walls or whatever, so they map together.

Mr. Rowlands: And as far as this document's procedure, how far you've gotten along, we don't have the residential one.

Mr. Hurd: This is residential, this is both.

Mr. Firestone: It's got both.

Mr. Rowlands: It's got both? Okay.

Mr. Firestone: It starts on page 12.

Mr. Hurd: So, it does dig into it. So, that's Chair's remarks.

3. MINUTES OF THE SEPTEMBER 24, 2019 GREEN BUILDING CODE WORK GROUP MEETING

Mr. Hurd: The first order of business, though, is the minutes from the last meeting. Is there a motion for approval?

Mr. Firestone: Move to approve.

Mr. Poole: I'll second it.

Mr. Hurd: Okay, great. There we go. Alright.

THE MINUTES OF THE SEPTEMBER 24, 2019 GREEN BUILDING CODE WORK GROUP MEETING ARE APPROVED.

4. REVIEW AND APPROVAL OF COMMERCIAL CHECKLIST CRITERIA AND POINTS

Mr. Hurd: Review and approval of the commercial checklist. My hope, just because I know we're all getting tired of doing this, is that we can get through commercial and residential and approve them for the next step, which would be some sort of public workshop presentation thing before we hand it sort of off to Planning to put it in front of the Planning Commission. So, if we can reach that point, that would be lovely. If we can be in agreement on the language and the points, if it's just the language we have to sort of put points aside and let that . . .

Mr. Poole: Now, the intent . . .

Mr. Hurd: The intent, yes.

Mr. Poole: The intent of providing this to the Planning Commission, are we intending to give them a conceptual review and then a final review of the actual proposed ordinance? Because I don't believe they will approve the proposed ordinance off of a conceptual review.

Mr. Hurd: Oh, no, no, no, of course not.

Mr. Firestone: I mean they're going to need the language for the ordinance.

Mr. Hurd: Right.

Mr. Poole: That's my point.

Mr. Firestone: I would say that's the Planning Department's job to write the draft ordinance in conjunction with Council to implement these criteria, versus this committee's job.

Mr. Poole: You would be wrong.

Mr. Hurd: The reason for taking it back to . . .

Mr. Firestone: I'd be wrong?

Mr. Poole: Well, the person in the Planning Department that will do that is sitting at this table.

Mr. Firestone: Then it's with a person who is quite knowledgeable.

Mr. Hurd: The point of taking it back to the Planning Commission is because we are a subcommittee of the Planning Commission. So, our report out is to the Planning Commission to say here is the draft of what we came up with and we can talk a little, or I will talk a little bit, about what we were trying to achieve and how that focused us and how we did the points assignment as a draft. This is similar to the Parking Subcommittee, too. They just sort of came to the Planning Commission and said this is kind of where we are and they asked some questions and maybe we made some changes, but generally the job of the Planning Commission is to say, okay, we will approve, basically punting that back to staff to develop the ordinance . . .

Mr. Poole: Okay, so we're going to just go to them with the concept and then they'll get another shot at it when . . .

Mr. Hurd: And then it would come back to the Planning Commission as a proposed ordinance that we would then review in more detail.

Mr. Firestone: You don't think we should just do it all at once? Like have Tim draft up a draft ordinance and share it with us and then . . .

Mr. Hurd: No, I want to get other people's feedback on this as just a general concept before, I mean, not to say that they're going to make, we're going to necessarily accept all the changes,

but as part of the conversation, like with Parking, Parking went to the Planning Commission and said this is kind of what we're thinking and it didn't actually go up to Council from there, but . . .

Mr. Firestone: Right, but it's a little different because Planning Commission has to approve the ordinance before it goes up to Council.

Mr. Hurd: Right, so they're approving this draft document with whatever amendments or alterations they might want to make, to staff to have the draft ordinance prepared, that we'd then get, and we'd go, we'd be doing our . . .

Mr. Rowlands: And then it goes back to Planning Commission.

Mr. Hurd: And then it goes back to the Planning Commission as an ordinance that we would go through and then once we, Planning, basically says that's good language . . .

Mr. Rowlands: What does the draft have to do with them critiquing this point is too high or too low or something?

Mr. Hurd: That's why I'm thinking . . .

Mr. Rowlands: So, why waste a month's time. Let's just get the draft together and say here it is.

Mr. Poole: Well . . .

Mr. Hurd: I can check but my sense is just, and I'm not saying . . .

Mr. Rowlands: I mean they're going to edit that thing anyway so . . .

Mr. Hurd: Well, I know, and I'm not saying this because I'm the Chair and this is what I want to have, but I think as a subcommittee, our job is to report this back to the Planning Commission and put it in their hands. And then the Planning Commission will say yes, great . . . the Planning Commission is the one who would send it to the department for appropriation as a . . .

Mr. Rowlands: Why?

Mr. Hurd: Because that's their job. It's their responsibility.

Mr. Firestone: I think we can do it all in one bite. I mean I look at it, again, as different than the Parking because those were sort of recommendations which then went up to City Council. This is really, we were charged with coming up with the new Green Building ordinance, not just numbers. So, I don't see this as going, the language is going beyond our charge.

Mr. Hurd: That's a good point. I should check the language of how we formed this subcommittee to see what was being asked for. If they're asking for development of the amendments, then what we would do is turn this into Code language.

Mr. Poole: And, again, I don't know that should we go before them twice, once just to go with a conceptual discussion with them to make sure that they're okay with the path that we've chosen before we spend the additional significant amount of time to put it in ordinance format. Which is not, this is the bulk of the work . . .

Mr. Hurd: Right.

Mr. Poole: I mean that's the fact of the matter is that putting the ordinance verbiage around this is minimal.

Mr. Hurd: Right. Yeah.

Mr. Poole: But the concept that they approved that, number one, we're not using any base document and that we're creating a standalone document, and that we have it in the areas that they feel are acceptable is the big issues.

Mr. Hurd: Right.

Mr. Rowlands: So, if they say, okay, I like your concept, you can go with it, then we have to go back and draft an ordinance.

Mr. Poole: Right.

Mr. Rowlands: I think it unlikely they're going to say we don't like what you did, start all over, in which case we would still have to come up with an ordinance. So, I still don't see why we just don't give them the ordinance, here it is, they'll be talking about that and . . .

Mr. Poole: Because the likelihood is, we're going before them twice anyway. Because they're not going to accept this at 100%, in my opinion . . .

Mr. Hurd: Oh, they're not going to take the ordinance . . .

Mr. Poole: It's unlikely that we're going to get through there one time and they're like, man, this is great. Why don't we send this right up to Council?

Mr. Hurd: You've done this before.

Mr. Poole: I would suggest that, you know, if we get feedback from them on this document and then the next time we come back it has all the ordinance language and their feedback incorporated, it might be the way to go.

Mr. Hurd: I was mostly thinking that this, even though this is still kind of dense, it might be easier to digest than an ordinance, which gets a little dense. I said dense twice, I know that. But, and I don't know if we need, I mean, I could simplify this even more and just sort of say, you know, just the titles or something.

Mr. Rowlands: How about a draft of an ordinance? They're going to want to critique that and if you come back a month later and they critique that, then we have to come back again? I just don't want to lose time . . .

Mr. Hurd: Well, I'll tell you what . . .

Mr. Rowlands: There's one more building out there that's going to get built . . .

Mr. Hurd: Well, let's do this. Let's see if we can come to agreement as to this draft and say are, we okay with this moving on to whatever the next step is. I will go back and I will research, because it's in the minutes, of what's our charter, officially. And if I'm confused, I might ask Mary Ellen and just go, you know, where do we fall on this? And if anything, I can certainly report to the Planning Commission at the next meeting to say, I can basically say here's the draft that we finished as a committee, as an informational item, and we've handed it off to staff to have the ordinance language drafted as per our charter, if that's how our charter was written, and we'll be seeing that in a month or two. No? You don't think so?

Mr. Poole: I don't think that there's any value to that at all.

Mr. Hurd: Okay.

Mr. Poole: I think that we should give them this in their packet, give them the opportunity to digest it in their packet, and that way they can be prepared with intelligent questions . . .

Mr. Hurd: Maybe. You were on the Commission.

Mr. Firestone: I was on the Commission.

Mr. Poole: And not be sort of reacting as they read it.

Mr. Hurd: Right. Oh no, I wasn't going to hand it to them in the meeting.

Mr. Poole: Right.

Mr. Hurd: But our packet has both agenda items, we have informational items, so I didn't know if we wanted to put this in as informational and just say here's the draft from the . . .

Mr. Poole: They're going to want to talk about it. They're going to want to question it.

Mr. Rowlands: Is this going to have some public workshop first?

Mr. Hurd: Well that was what I thought the next step was because that seemed to be something Mary Ellen seemed to think was a good idea, I think. I'll have to check my notes. I thought Ben seemed to think it might be a good idea.

Mr. Poole: I think it would be a good idea but, you know . . .

Mr. Hurd: But I'm sort of the, yeah, I don't know.

Mr. Poole: Well, I think it is a good idea to have a public workshop, but should we present something to the Planning Commission first and say this is what we're thinking, we're going to have a public workshop to get some public reaction to it, but we wanted to give you a chance to chime in first.

Mr. Hurd: Right.

Mr. Firestone: Well, there was this guy Hurd who made a motion . . .

Mr. Hurd: Oh, you found it?

Mr. Firestone: Seconded by McNatt to review and discuss LEED certification standards to identify and recommend revisions to the LEED ordinance . . .

Mr. Rowlands: We may have taken a step beyond that.

Mr. Firestone: With the conditions that the work group report monthly . . .

Mr. Hurd: I'm sure I was acting in the . . .

Mr. Firestone: I was absent that day.

Mr. Hurd: Usually there's a recommendation written into the department language . . .

Mr. Firestone: Well, anyway, that's what it says. Review and discuss LEED certification standards to identify and recommend revisions to the LEED ordinance.

Mr. Hurd: That's what this is, so that's not . . .

Mr. Poole: This is a lot of revisions.

Mr. Firestone: So, I think we, I mean it says revisions to the ordinance, so we're allowed to come up with the words that go, that's part of the LEED ordinance.

Mr. Hurd: I wasn't getting that from what you're saying. Okay, but you're saying basically that we come back with . . .

Mr. Firestone: It didn't just say the LEED criteria or standards . . .

Mr. Poole: Right.

Mr. Firestone: No numerical, no numbers. It says the ordinance, so I think that's the whole enchilada.

Mr. Poole: The verbiage isn't that challenging of a part of it. I mean the big thing is to make sure we're going to need to go further than the last ordinance went, just because this goes into three sections of the Code. Meaning that currently it's in the Subdivision Code and it's in the Energy Conservation Code amendments. We will also have to go into the Zoning Code when we talk about site plan approval.

Mr. Hurd: Or is it in Subdivision? Oh, subdivisions need to have . . .

Mr. Poole: Only major subdivisions and buildings over 25,000 square feet.

Mr. Hurd: Right, right. Okay.

Mr. Poole: That's the criteria for even having the requirement. So, therefore, in order to make it happen, we're going to have to amend all three portions, all three of those portions of the Code in order to get this the way it works.

Mr. Hurd: Right.

Mr. Poole: Which, again, the big change there is adding in the site plan approval part.

Mr. Hurd: Yeah, and not to diminish it, but it's mostly just going in and saying, instead of saying buildings over so many thousand square feet, it's buildings over these many thousand square feet. Or subdivisions with this many units.

Mr. Poole: Right.

Mr. Hurd: It's almost a one-liner.

Mr. Poole: Well, again, however that language is, it will need to be amended to fit the new criteria.

Mr. Hurd: Right, and the site plan approval will need to basically . . . I want to get out of there the whole LEED certified language and just say comply with the . . .

Mr. Firestone: Comply with the Newark certification . . .

Mr. Hurd: The new Energy Code.

Mr. Rowlands: What's the name of this thing?

Mr. Firestone: The Newark Energy Code.

Mr. Rowlands: Yeah, I like that.

Mr. Hurd: Well, basically point them back to the amendments to the Energy Code, which should then say things like projects seeking site plan approval, because that's where we have the points laid out.

Mr. Poole: Yeah.

Mr. Firestone: It also says we should meet monthly for no longer than six months.

Mr. Hurd: Yeah, that was so ambitious.

Mr. Poole: And if we had just decided that we wanted to doctor up the current LEED stuff, we probably could have gotten it done in that . . .

Mr. Firestone: Yeah.

Mr. Hurd: Yeah.

Mr. Poole: But we quickly realized that we weren't going to be satisfied with that.

Mr. Firestone: I don't have any objection. I was just reading what was . . .

Mr. Hurd: No, I'm agreeing . . .

Mr. Firestone: Reading the Chair's motion.

Mr. Hurd: This is not what we had planned. Alright.

Mr. Rowlands: Well, this heading says proposed amendments to the 2018 Energy Conservation Code.

Mr. Hurd: That's the next one.

Mr. Poole: That's the one that we're getting ready to adopt and we, I believe, are in front of the Council in January.

Mr. Hurd: Alright, I can't find anything in my notes about a workshop, so I'll ask around and see if that seems to be a . . . there's a part of me that goes, this is no way going to light up people the way parking did.

Mr. Rowlands: Probably not.

Mr. Hurd: So, we could say, hey, we're having a public workshop on the amendments to the Energy Conservation Code and we'd show up.

Mr. Firestone: Well, it's not like anyone has attended our . . . we had one person, once.

Mr. Hurd: I know.

Mr. Poole: But there will be some folks who are interested in this and they're going to be the major developers that typically work in the City because they're the ones that this is going to affect the most. These folks that come in and build one project, they'll figure it out. They'll interact with us and they'll come up with a document that works for their one project. The ones that it's going to affect the most are those folks that do a lot of projects in the City and it's going to affect their bottom line the most.

Mr. Hurd: Yep.

Mr. Rowlands: And are they going to show up even?

Mr. Firestone: Yeah, four or five of them.

Mr. Poole: Will they show up to a workshop? Probably just to get the documents and to be able to maybe discuss what our thinking and concepts are. But where they're going to make their stand is at the Council meeting.

Mr. Hurd: Yeah.

Mr. Poole: Whether or not they'll attend the Planning Commission meeting to debate it I think it unlikely.

Mr. Rowlands: Right.

Mr. Poole: They're going to be at the Council meeting where the rubber meets the road.

Mr. Hurd: Okay. So, let me recap to see if this is what everyone is thinking. Provided that we approve this draft document, the next step is it goes to staff, it becomes draft revisions to the ordinances, various ordinances, and appears in front of the Planning Commission at some point in the future. Right? No workshop, no presenting the draft to Planning. Or were you thinking that it might be valuable to present informationally to . . . I can't remember. You had a good point but then I'm not sure if we stayed on that point.

Mr. Poole: Well, again, to the Planning Commission, I think it would be a good idea to present it to the Planning Commission . . .

Mr. Hurd: Okay.

Mr. Poole: And get their feedback. And that can serve as a public workshop. I mean it . . .

Mr. Rowlands: Yeah, right.

Mr. Hurd: Yeah.

Mr. Firestone: I mean a lot of the complicated ordinances took us two or three meetings anyway.

Mr. Hurd: To develop, yeah.

Mr. Firestone: So, this one will . . . I wouldn't expect that they're going to vote up or down in that first meeting anyway.

Mr. Hurd: No.

Mr. Poole: No.

Mr. Firestone: We go before them and . . .

Mr. Hurd: This will be enough when the corrections . . .

Mr. Poole: There will be some bloodletting.

Mr. Hurd: We'll see if we can tamper that.

Mr. Poole: Red pens will be . . .

Mr. Rowlands: So, at what point is this ready to go before them for the first . . . I mean, are we close enough now?

Mr. Hurd: When we say this is what we want to present. To me, that's why it's good to . . .

Mr. Rowlands: Right. We have to dial in the points on a few more things . . .

Mr. Poole: Which is probably after next month because most likely we're going to go through this today and then we're going to be done with this, or Will might make some minor changes . . .

Mr. Hurd: My expectation is, if anything, we're approving it as edited or amended, you know, if we make some edits.

Mr. Poole: Yeah. And then meanwhile, I can look at the language in the adopting ordinance and the Zoning Code and the Subdivision Code and get all the language surrounding this document tightened up. And then we can then come back here next month, look at the revised document and the Code surrounding it, and then say, yeah, we're ready to go before the Planning Commission, we'll present this to them and give them an opportunity to give us some feedback, and any public comment and things like that so that then we will probably be back before them the following month . . .

Mr. Hurd: I don't know what's scheduled out in terms of development proposals, so we may not be in there . . . I think there's something coming in December Mary Ellen was saying. So, we may be January before there's space on the agenda.

Mr. Poole: That will be what it will be, but in the meantime, we want to have something that's fairly polished to give to them rather than . . .

Mr. Hurd: Okay, so I was thinking that we could hand this to the Planning Commission while you're working on the language, but you're saying hand them an actual draft ordinance?

Mr. Poole: Yeah, I'm thinking that that's probably the best plan.

Mr. Rowlands: But we'll see that draft next month?

Mr. Poole: Right.

Mr. Hurd: If people are willing to do one more month, I think that makes sense. If people can do one more month.

Mr. Rowlands: Absolutely.

Mr. Hurd: November gets weird because the fourth Tuesday is Thanksgiving week, so we'd have to do the fifth or something. The week after.

Mr. Poole: Again, that's not an issue for me . . .

Mr. Hurd: It's not for me but other people have schedules and lives.

Mr. Firestone: Are you talking about the 26th?

Mr. Hurd: Yeah.

Mr. Firestone: I can do the 26th, too.

Mr. Hurd: Okay. Alright, so . . .

Mr. Poole: Because pretty much, we're . . .

Mr. Firestone: It's easy because the University cancels class that whole week.

Mr. Poole: So, you'll have all the free time, right?

Mr. Firestone: I have more free time that week than I do most weeks.

Mr. Rowlands: So, our meeting is the 26th?

Mr. Hurd: Alright. That's also good to me because I was feeling a little iffy because the agenda didn't really say that we were reviewing and approving the residential criteria, but by the time I was sort of thinking we really do need to wrap this up, I couldn't amend the agenda to add that. So, this lets me, basically the November agenda is review and approval of the draft, boom, one item.

Mr. Firestone: Will you be able to write the draft ordinance in a couple of weeks and then share with us and we can also . . .

Mr. Poole: Most likely. Yeah, I think that's realistic. I can probably get approved to do a little bit of overtime if needed.

Mr. Rowlands: So, it goes before Planning in December maybe . . .

Mr. Hurd: Probably January actually because . . .

Mr. Rowlands: January . . .

Mr. Hurd: If we're approving this at the end of November, the Planning Commission is the week after. It's the first week of December.

Mr. Firestone: Yeah, and it's got to go to . . .

Mr. Rowlands: Then we're back in to Planning in February . . .

Mr. Hurd: Probably.

Mr. Rowlands: And then Council in March?

Mr. Poole: Well, again . . .

Mr. Hurd: Again, it's when there's . . .

Mr. Poole: The Council . . .

Mr. Hurd: And Council is going to have two readings so there's going to be the first time it appears on the agenda . . .

Mr. Rowlands: Is March . . .

Mr. Hurd: And then the second reading . . .

Mr. Rowlands: And then April would be the following.

Mr. Hurd: Possibly.

Mr. Poole: Well, again . . .

Mr. Hurd: A lot of it depends on space . . .

Mr. Poole: Well, these days it's my understanding that the City Secretary's Office will assign an assumed review time as part of the Council agenda and they will only put enough items on the agenda to complete the meeting at a reasonable time. So, if it runs over, we're not going to get a spillover until 1:00 a.m., there will be a spillover to 10:00 p.m.

Mr. Hurd: Right. And I think they're also trying to sort of like one meeting is just development proposals and the other is sort of administrative things. So, there's only like two meetings in the month that they'd be dealing with something like this.

Mr. Poole: Right. Once we've gotten through the Planning Commission, then they'll tell us when our slot is.

Mr. Hurd: Right, then it's at the mercy of the City Secretary.

Mr. Rowlands: So, optimistically or whatever, May . . .

Mr. Poole: April, May, June.

Mr. Hurd: April, May . . .

Mr. Rowlands: To add a code.

Mr. Hurd: Yeah. The wheels turn slow.

Mr. Rowlands: Yeah, I know.

Mr. Poole: Again, ultimately though . . .

Mr. Rowlands: Here's another building that just came before the Design Committee. We lost that one probably.

Mr. Poole: Yeah, but by the same token, to do this process in a year is very realistic and it's reasonable.

Mr. Hurd: Yes.

Mr. Poole: And again, considering the amount of work and effort and thought that's had to go into this . . .

Mr. Hurd: I'm not . . .

Mr. Poole: Coming from nowhere, a year is very good.

Mr. Hurd: It is. Are we ready to dive in?

Mr. Rowlands: Yeah.

Mr. Hurd: Okay. So, with that all said, I think the points, I don't want to get bogged down in the points per se, unless you think they're wildly off track for a credit because I think there's going to be some give and take down the road as well. So, again, this is our draft for . . .

Mr. Poole: I think, in general, the points are . . . we've had a lot of discussions around the points . . .

Mr. Rowlands: I think we're close on them.

Mr. Poole: And I think that the ones we don't agree on, I don't know if we're ever going to agree on.

Mr. Hurd: That's a fair way to put it.

Mr. Rowlands: Sometimes trying to look at this from an outsider who is just looking at it and trying to understand it, when you had like, you had to explain it, points noted as one-half . . .

Mr. Hurd: No, one space . . .

Mr. Rowlands: Yeah, I know, but it could be one-half. Instead of even, eliminate that and instead of down here on the right where you say 3 slash 4, just say or.

Mr. Hurd: Yeah, I was just thinking that as I was saying it.

Mr. Rowlands: Okay.

Mr. Hurd: Okay, then we can scratch that whole thing. Yeah, I grew up in the Quaker tradition and the Quakers' decision-making process is by consensus, which is really hard to do sometimes. But what often happens is that after there's been enough conversation about the issue that everyone knows where everyone stands, if there is one person who is basically against it and stopping it, they will either not show up at the next meeting or stand aside so that the decision can be made but everyone knows that there was one who . . .

Mr. Poole: I abstain.

Mr. Hurd: It's essentially that, yeah.

Mr. Rowlands: Essentially, but you're not allowed to do that. Our Passive group that does. It's frustratingly . . .

Mr. Hurd: It's a way.

Mr. Rowlands: It works.

Mr. Hurd: And I've tried to run this more that way than just sort of going, we're voting, 3 to 1, bang, which just kind of runs . . .

Mr. Poole: Right, and we've had a lot of discussions and, you know . . .

Mr. Rowlands: Can you imagine a Council meeting running that way?

Mr. Hurd: Two, three in the morning. Alright, for starters, 5,000 square feet, that was the cut-off, right?

Mr. Hurd: Mr. Poole: Yep.

Mr. Hurd: And we had talked about 50 points is the base with site plan approval at 60.

Mr. Poole: Are we sticking with major subdivisions which are five or more . . .

Mr. Hurd: Well, that would be under the residential section. Here's I'm saying for all new residential, that's where I couldn't remember where, because again this is one, we've talked about both sides.

Mr. Poole: Right, and the fact is that we had one single single-family home in the one year that we had it. So again, I think if we leave it at major subdivisions where it's five or more dwelling units, I think that's a fine criteria.

Mr. Hurd: Hadn't we talked about bumping it down to three?

Mr. Poole: We did talk about bumping it down to three but then . . .

Mr. Hurd: Did you bring us, I can't remember if you brought us, you brought us commercial permit sizing, but I don't know if you brought us subdivision.

Mr. Poole: I did and that's why I said we had, you know, thirty some new dwellings and there was one single guy. And that was less than three or less than five. Like I said . . .

Mr. Rowlands: And he shouldn't have to meet this why?

Mr. Poole: Because a lot of the site stuff is a lot more difficult in a site of one. How are you going to manage your stormwater when there's no regulations for your stormwater or you have one or two or three? It's, and that's not necessarily what it is, but there is a component of that that we have to realistic in what's achievable. Are we going to then reduce out some of those things in the residential portion to make it more feasible with less than five?

Mr. Hurd: Right.

Mr. Rowlands: I don't want to go down that path.

Mr. Poole: Right. I'd rather keep them strong and still apply to 95% of the subdivisions that we get as opposed to dumb them down and get 100%.

Mr. Poole: Yeah, I would probably go . . .

Mr. Rowlands: Or that one guy just has to up his ante.

Mr. Poole: Yeah, but again we haven't been through the residential, but if we go through that today, yeah, this isn't going to be applicable, this isn't going to be applicable . . .

Mr. Rowlands: Yeah, right. Okay.

Mr. Poole: And at some point, if there's 80 credits and they can only meet 40 of them because of their subdivision size, that's not fair to them.

Mr. Hurd: I don't think we're going to run into that as much but I'm leaning towards the three-unit subdivision or more because I know they're looking at a zoning, like an additional building type in the zoning that's like a multi-unit, like a higher density multi-unit in an RM zone. I think that's a three- or four-unit building.

Mr. Poole: One or two.

Mr. Hurd: It's one or two?

Mr. Poole: Two family dwellings. Because right now, if it's three, it's townhouses. If it's two, it's a two-family dwelling and we don't have anywhere where that's approvable in our Code.

Mr. Hurd: Right. Okay. So I think three, to me, feels like where I want to, I want to catch the smaller sites that are starting to redevelop because I think we're starting to run out of the bigger four, five or six . . . some, at least.

Alright, back to the beginning. So, as we said, the stretch option . . . oh, from the minutes, we had opted to change this section title to just Energy, so that's . . .

Mr. Rowlands: In that 20% or better, you have stated the 2018 Code. Would it be better to just state the current . . . ?

Mr. Hurd: Oh yeah, that's a parenthetical remark here. I'll . . .

Mr. Poole: No, because we're going to re-adopt, whenever we adopt the 2021 Code or the 2024 Code . . .

Mr. Firestone: It just folds into there.

Mr. Poole: This will fold into there.

Mr. Hurd: Right. And again, this isn't Code language . . .

Mr. Rowlands: This would have to be amended because right now it says 2018.

Mr. Poole: Right. Well, it has to be amended anyway because it's an amendment to that Code so when we adopt it . . .

Mr. Hurd: The amendment doesn't stick. As soon as you adopt the . . .

Mr. Firestone: I think he's just talking about the title. We should have a title that doesn't have proposed amendments to 2018.

Mr. Hurd: No, because it's amendments to the 2018 Code that's in the process of being adopted by the City. When the 2021 Code comes out, we have to do amendments to the 2021 Code.

Mr. Poole: And this will go away. It will be deleted and it will be inserted in the new ordinance because there will be some Code sections that . . .

Mr. Firestone: In 2020 you just have to adopt a new ordinance.

Mr. Poole: Yeah, we just have to adopt a new one and I'll modify this because every once in a while, a section changes to where instead of being Section 405.7, it's now 403.7.

Mr. Hurd: Right. Tables move and things . . .

Mr. Rowlands: You or the next guy?

Mr. Poole: Either one.

Mr. Firestone: He's here forever.

Mr. Hurd: He's forever.

Mr. Poole: The plan is another 14 years, but you know . . .

Mr. Rowlands: Alright, then you're here for the 2021. Alright. But I just didn't want to be locked into that . . .

Mr. Firestone: If you can get us to 2030 . . .

Mr. Poole: If I win the Powerball tomorrow, guess what? I'm not going to be here the following day. Or if I step in front of a bus.

Mr. Firestone: You've got to turn in your ID.

Mr. Poole: Absolutely. By mail.

Mr. Hurd: Remember, this is intended to be a little more narrative than Code language. I'll leave the formal Code language to . . .

Mr. Firestone: You can't win the Powerball until like May.

Mr. Hurd: Alright, there are things, or provide a minimum of 24 points from the following EC credits. So, I've given everything a credit number now.

Mr. Poole: Which will be very good when we go before the Planning Commission.

Mr. Hurd: Yes.

Mr. Firestone: I like the light blue in the headings.

Mr. Hurd: It's, again, just like the default one . . .

Mr. Firestone: Aesthetics are important.

Mr. Hurd: Okay . . .

Mr. Rowlands: And we're not doing the opt-out in commercial for Passive?

Mr. Hurd: No. You were going to figure out if a Passive building, how many points a Passive building could conceivably get.

Mr. Rowlands: Oh, they can get it, it's just some of the ones of your site and things like that that are required . . .

Mr. Hurd: Site is not required. There are no required site points.

Mr. Rowlands: In commercial.

Mr. Hurd: Well, no I guess for site under the resource conservation there are.

Mr. Poole: Oh yeah, there's a good bit of them.

Mr. Rowlands: Right, and we don't get those.

Mr. Hurd: Right, but you can get a lot of other things.

Mr. Poole: But if your typical Passive House building is going to be at 60 points, and it's going to be so heavy in the energy that it's worth an opt-out . . .

Mr. Rowlands: I know but you've got so many here, a minimum of 24 points from this category which we don't get any of those points . . .

Mr. Poole: Right, but in those other two categories, there's only going to be 8 points and, again, that's an option that we have. I mean if we want to say that if they're going to be so strong because they're in Passive House or they've met the LEED requirements then that's an opt-out, then okay.

Mr. Rowlands: So, if you do Passive certified, you opt out of everything?

Mr. Hurd: Possibly.

Mr. Poole: That's what we want to propose. That's what we're here to discuss.

Mr. Rowlands: Right, and that's what I was . . .

Mr. Poole: Right.

Mr. Rowlands: Because we are pure energy, we're pure envelope, we're a little bit of indoor air quality and stuff like that . . .

Mr. Hurd: I will say that since we've given that as an opt-out path in the residential, it does make some sense to say if you can do a Passive . . .

Mr. Rowlands: Certified.

Mr. Hurd: Passive certified commercial building, why wouldn't it count? Because we have the same issues in the residential about resource and site and . . .

Mr. Rowlands: And that's why that opt-out is kind of like . . .

Mr. Poole: And again, if we think that that's an acceptable alternative to meeting this, to have that certification . . .

Mr. Rowlands: You know how I feel.

Mr. Hurd: How do we feel about that?

Mr. Firestone: I don't know . . .

Mr. Poole: Again, I don't know where it would land in the energy section if they were to do Passive House.

Mr. Hurd: I would phrase it in the same way we did the, so go to page 12 in residential. And I think you had started this language, Tim. It says alternative compliance path establishing rating system.

Mr. Poole: Right.

Mr. Hurd: And we say Passive House certified. It gets you 50 points and you're done. Now if you're looking for site plan approval, as I noted here, you still need to get the additional 10 points from someplace. But otherwise, those one, two, three certified Code paths gets you out of it. I'm okay with taking that paragraph and putting it in front of commercial.

Mr. Poole: I'm okay with that so long as there's not just the one alternative. If we're going to go with LEED and Passive House and National Green Building Standard, I'm okay, or the National Green Construction Code, isn't it?

Mr. Hurd: Well, Green Building Standard is a residential one. We'd have to change that for, it would probably be the ASHRAE 189 I think is the Green Building . . .

Mr. Poole: There's the Green Construction Code.

Mr. Hurd: Yeah, yeah, okay.

Mr. Poole: IGCC.

Mr. Hurd: Yes.

Mr. Poole: So again, if . . .

Mr. Rowlands: I wouldn't allow them to opt-out for LEED Silver. It doesn't come close to a Passive certified.

Mr. Poole: Yeah but the LEED Silver will also have that site stuff that people don't really value. So again . . .

Mr. Hurd: And some of the resource things. That is also why we said it has to meet the 20% energy reduction. It can't just be LEED Silver picking from all over . . .

Mr. Poole: Again, where is LEED Silver and would we rather say LEED Gold?

Mr. Hurd: I honestly don't know.

Mr. Rowlands: Yeah, I mean I'd like to say gold but . . .

Mr. Poole: You know, is there a point where that is acceptable? And if that's the point, that's the point we need to make. If LEED Silver isn't going to get it, okay, does LEED Gold?

Mr. Hurd: I'm leaning towards LEED Gold because that's two steps up for me. Because we have Certified, Silver, Gold, Platinum. Gold is pushing . . . Silver, I guess in my mind, and I'm not knowing as much about the current standard, but to my mind Silver is kind of like I pushed a little and Gold is I pushed harder, and Platinum is I did all sorts of stuff.

Mr. Firestone: Right.

Mr. Poole: I did everything I could. And if that's the way we want to be and the other option is, you know, that's your opt-out. You could just plain comply.

Mr. Rowlands: Right.

Mr. Firestone: Yeah.

Mr. Poole: If you want to opt-out because you're using a different standard that we value . . .

Mr. Hurd: If like your client is pushing you to do LEED Gold, fine, we'll take that.

Mr. Poole: Right, that's acceptable.

Mr. Hurd: You don't have to do . . .

Mr. Poole: Yeah, you're going to give us this lovely sheet of paper from the folks at LEED that say that you did it.

Mr. Rowlands: So, we're changing Silver to Gold and I need a better understanding of the National Green Building Standard Silver.

Mr. Hurd: I'll have to . . .

Mr. Rowlands: Is there a Gold on that one too?

Mr. Hurd: I don't know if it's three levels and Silver is in the middle, so I'll have to look at that. So, the Green Building Standard is residential focused, and the Green Construction Code is a commercial-focused one because it does say for residential projects, you've got to look at basically the National Building Standard. So, we'll have to, that's the one change I'll have to make in that . . .

Mr. Rowlands: Those two certifications, change it to Gold for LEED, copy and paste back into the commercial . . .

Mr. Hurd: And reference the International Green Building Construction Code and if it has levels.

Mr. Rowlands: Fair enough.

Mr. Poole: I have it and you can borrow it . . .

Mr. Hurd: I can get it online.

Mr. Poole: You can borrow it for a couple of weeks on the way out if you want.

Mr. Hurd: Yeah, I'll do that. Okay, so we'll have an opt-out. Alright, page 2, higher insulation walls is the first time that we have this sort of two ways of reaching points, two ways of getting the point at two different levels. So I just want to make sure that this is clear enough for people so that Tim can write something . . .

Mr. Rowlands: Where are we now? Sorry.

Mr. Hurd: Page 2.

Mr. Firestone: EC-6.

Mr. Hurd: EC-6, higher insulation in walls.

Mr. Firestone: I mean you could just do it once and have blank better and blank better, and then you could say . . . I don't know. You may be able to set it up so you don't need to repeat it twice.

Mr. Hurd: It's hard to write this cleanly anyway we go at this. But I want to just be sure that we're all clear on what the intention is, which is to say either the overall assembly, if you do it as a U-value assembly, is 10% better. Or you're looking at R-value which is, because if we're talking about continuous exterior insulation, that's only in the table dealing with R-value code, so we have to kind of think about it that way to say, oh yeah, you have the R-3 on the outside or the R-5 and 13 interior. Well, that 13 has to be 10% better or better exterior and better interior.

Mr. Firestone: Or you could do, is 10% slash 20% better, or 5% slash 10% better and then have one slash two (1/2).

Mr. Poole: I think that I would rather be more clear, and this is more clear.

Mr. Hurd: Okay.

Mr. Poole: If you give people an opportunity to be confused, they will take you up on it.

Mr. Hurd: Yeah, they will.

Mr. Firestone: Okay, I mean I think what you've got written is fine, too.

Mr. Hurd: Okay.

Mr. Firestone: I mean I clearly understood what you were intending.

Mr. Hurd: The main reason there's two is because there's two different tables in the IECC. One is U-value and one is R-value. So by saying U-value and R-value, it sends them to different locations.

Mr. Poole: Right, you can either do this or you can do this, but meanwhile I'm . . .

Mr. Hurd: Okay, yeah. Oh, so then EC-8, I rewrote the thermal bridges section slightly . . . well maybe not slightly but a little more . . . trying to, you know, as we were discussing, trying to bring it in and be a little more focused.

Mr. Poole: I like the four-square inches.

Mr. Hurd: And what I ended up doing was I went back and I read the Code that was proposing this and I found the language where they were setting up how they were thinking about doing this, and some of that came in to this to sort of say, like as a preface, this is what we're trying to do. So, that helped me write this better. And the intention of it was, as we discussed, was to

say if you have an uninsulated thermal bridging element, it's got to be in your calculation for your envelope. Which means if I've got a four-inch square hole, I have to push other elements of my building envelop up so that the overall envelope complies.

Mr. Rowlands: Any why are we sitting at four inches?

Mr. Hurd: So that we could cover things, I think we were so, most structural elements would be a 2x2 structural element is going to get covered. Well, it's going to get accounted for. So, if I have a two-inch square stock thing sticking through the wall holding up a sign, that's going to get accounted for at a minimum.

Mr. Poole: As opposed to something that will provide that thermal bridge. And you have to set it somewhere above the head of a nail.

Mr. Rowlands: I understand that.

Mr. Hurd: Right, because we went back and forth about the 1% is like, okay, so I took out that percentage things and just like if it's bigger than this, it's in the calculation as an element and . . .

Mr. Poole: Right, because it was 1% of the wall area which, again, on a 1,000 square foot, four-story wall, it's 100 square feet.

Mr. Rowlands: No, I understand that. But right now you're saying anything less than four square inches we don't count.

Mr. Hurd: Right.

Mr. Poole: Right.

Mr. Rowlands: So, why is it four? Why isn't it two or three?

Mr. Hurd: Because I had to pick a number.

Mr. Rowlands: There's a lot of structural stuff that's four-square inches across.

Mr. Hurd: Yeah, I wasn't ready to go digging into the math to see where's the break-even point.

Mr. Rowlands: We just want to pick a number but to me, four, I mean that's a honkin' piece of steel.

Mr. Hurd: No, no. They're square, two by two.

Mr. Poole: Two by two.

Mr. Rowlands: Okay.

Mr. Poole: Not 16 square inches. One quarter of that.

Mr. Hurd: Two by two.

Mr. Rowlands: Alright, fair enough.

Mr. Poole: Then again, we have to pick a number and that's as good as any.

Mr. Hurd: We're not developers.

Mr. Rowlands: Well, I'm dumbing it down, I read it wrong. I was thinking four by four. Alright.

Mr. Hurd: And then I threw in the examples just so people know what we're talking about like slab edges.

Mr. Poole: You may want to mention something about structural projections.

Mr. Hurd: Some sort of, where it says floor to wall interfaces, wall to corner interfaces, floor and slab edges, structural supports.

Mr. Rowlands: All your rooftop HVACs, whatever their support is.

Mr. Hurd: Okay. Alright. I'm going to try not to go through this line-by-line because that drags this out.

Mr. Poole: No but where you did a lot of editing, you should probably bring those out.

Mr. Hurd: Air tightness in the building, in the language I just said an ERV is required for this credit.

Mr. Rowlands: Where are we now?

Mr. Hurd: Page 3.

Mr. Poole: Page 3, EC-9.

Mr. Hurd: We've kind of talked around it but I just wanted to make that clear that is you tighten up the building, you put in an ERV.

Mr. Rowlands: You might want to say ERV or HRV. Around here we almost always do ERVs but there are some people doing HRVs.

Mr. Hurd: Or I could say energy recovery ventilation is required because that's a credit for . . .

Mr. Firestone: So how then does that relate to EC-16?

Mr. Hurd: You get that one.

Mr. Firestone: So, if you do this, you end up with 6 points?

Mr. Poole: Yep, and it will be worth it, in my opinion.

Mr. Hurd: Yeah.

Mr. Rowlands: They're pretty important so I'll give you that one.

Mr. Firestone: Okay, I just wanted to make sure we're . . .

Mr. Poole: Yeah, if that happens, they're saving a lot of energy.

Mr. Firestone: I'm going with the consensus.

Mr. Rowlands: You actually might get more points for this because in your indoor air quality, don't you get a point somewhere back there? You're going to get it by putting an ERV in.

Mr. Hurd: There's something in there about ventilation, yeah.

Mr. Rowlands: Maybe we're giving too many because you'll definitely get it in indoor air quality.

Mr. Hurd: I will make a note to make that clear that this one ties to EC-16 so that there . . .

Mr. Firestone: Okay.

Mr. Hurd: And EC-16 is where it says ERV or HRV.

Mr. Firestone: Do we want to move EC-16 to become EC-10?

Mr. Hurd: No, because right now it's under mechanical systems.

Mr. Firestone: Right, but it would still be the first in that section.

Mr. Hurd: Oh, I see what you mean.

Mr. Firestone: So, then it would directly follow EC-9.

Mr. Hurd: That would be good.

Mr. Poole: It doesn't hurt anything to rearrange it.

Mr. Firestone: Yeah, I just wasn't sure whether there was any . . .

Mr. Hurd: The order was kind of like big to small. Because it's like commission the system equipment but yeah, that's fine.

Mr. Firestone: Okay.

Mr. Hurd: I'll probably move it. Yeah, I don't think I made . . .

Mr. Rowlands: And actually you won't be giving those 6 points all the time. They may decide to put an ERV in there, but they don't meet them . . .

Mr. Hurd: Because they decide not to make it tight, right.

Mr. Poole: And either one, if they do both, that's a wonderful thing.

Mr. Hurd: But we don't want to make it tight without having . . .

Mr. Rowlands: Oh, absolutely.

Mr. Hurd: Some other way because then it's like . . .

Mr. Poole: Right.

Mr. Hurd: Yeah, I think maybe EC-27 I might have tightened up the language a little bit because it was kind of long and wordy. But basically, I was simplifying sometimes the language here to make it easier to understand, knowing that we have, in that Excel spreadsheet, the bulky Code language.

Mr. Poole: Right but I think we're going to lose the spreadsheet.

Mr. Hurd: But I mean as a reference point. When we go to write this, we can go back to that spreadsheet and go, what was that? Because oftentimes that was stuff I took out of an actual code and moved it in. So, renewable energy, not a lot of changes, I think, in this one. On page 6, resource conservation. Here again, 8 points.

Mr. Poole: Under EC-28, can we label that as commercial kitchen?

Mr. Hurd: Yes.

Mr. Poole: Because if they put some Energy Star appliances in the company break room . . .

Mr. Hurd: Yeah, that doesn't count. Well, it does say commercial fryers, dishwashers, but yeah good catch. I'm trying to see if there's anything really that changed here. Things like in RC-10 I added in a little parenthetical note about native or drought-tolerant plants as approved by the City horticulturist just to give them a place to go to. Hey, there's the rain. And in RC-12 I pulled in some language from the residential that had some constraints on how the system for rainwater or graywater reuse was designed. So I just kind of pulled that into here along with the 50% just to sort of say if you're doing a rainwater reuse, you need to meet a significant portion of your irrigation demands.

So, page 9, RC-28, I know I'm jumping around, sorry.

Mr. Poole: Back in RC-14 on page 7, you need to switch toilets to water closets.

Mr. Hurd: Okay. that's the Code language?

Mr. Poole: Yes.

Mr. Hurd: Okay. Do we need to say urinals?

Mr. Poole: Urinals are an alternative to your required, but if you want to put urinals in there as requiring this, then yeah.

Mr. Hurd: Urinals don't seem to use a whole lot of water in the first place.

Mr. Poole: No, they only use one gallon per flush and most of the time when we get high efficiency urinals, they're flushless.

Mr. Hurd: I was going to say, if we push this too hard, is it going to be like well it's the one gallon or the no-water. There's probably not much in between.

Mr. Firestone: Composting toilet.

Mr. Hurd: A composting toilet also. Yes.

Mr. Poole: Yeah.

Mr. Hurd: Anything on page 8 that catches anyone's eye?

Mr. Poole: I think on RC-15 where you have elevation in parentheses, I would change it to say within five feet of elevation.

Mr. Hurd: Okay. Yeah, I'm always struggling with how to write that in a way that says you have to be five feet above the flood . . .

Mr. Poole: Yeah.

Mr. Hurd: I'll be the flood ordinance has some language you can probably steal about that.

Mr. Poole: But again, five feet of elevation above.

Mr. Hurd: Okay.

Mr. Poole: Actually, all development shall be a minimum of five feet of elevation above the floodplain. So, reword that, I think. Development and improvements, or something like that. Or just improvements.

Mr. Hurd: Shall be five feet of elevation above the 100-year flood elevation?

Mr. Poole: Yeah. Again, make it as clear as possible.

Mr. Hurd: So RC-28, page 9, heat island reduction, I took some of the language we had in the residential and started pulling it back in here, which is where I'm zoning out, not zoning but giving one or two points based on percentage of hardscape areas that have the minimum SRI just to kind of, because I think it was all has to be. I thought, okay, let's temper that a little because the residential kind of did say, okay, 50-75% you get a point, more than 75% you get two. Page 10, IEQ . . .

Mr. Firestone: On the RC-28 so you have or 90% and then you have 50-75% you get one . . .

Mr. Hurd: Good point.

Mr. Firestone: The whole thing doesn't quite line up.

Mr. Hurd: I could just say or are permeable paving units.

Mr. Poole: So, what are we doing? Changing that to 75%?

Mr. Hurd: No, RC-28, basically the way this credit had been written where I stole it from, they wanted things with a low SRI or to be permeable paving because they tend to have lower . . . so I think we're just striking the or 90% of all exterior paving excluding drive aisles. I'm striking that out and just saying exterior paving units have a minimum SRI of 29 and concrete has a minimum SRI of 35 or are permeable paving units.

Mr. Firestone: RC-29, the first or should be an and.

Mr. Hurd: Okay

Mr. Poole: Or it can be and/or.

Mr. Firestone: Well the problem with any kind of or there is that you could then just have flat roofs that don't comply but sloped roofs that do and you would make it. So, if you just say and, then that just applies to any kind of roofing that you have, you have to meet 64 for flat and 25 on sloped . . .

Mr. Hurd: Gotcha.

Mr. Firestone: On 75% of all your roofing.

Mr. Hurd: Now I get you. Indoor Environmental Air Quality. I did some light editing to the construction indoor air quality management plan just to be, partly to expand on it because sometimes it's like flush the building and I wanted to make it clear that it's 14,000 cubic feet of outside for each square foot of gross floor area. Because it was kind of like CFM per square foot. Okay, not everyone is going to get that.

Mr. Poole: You can lose to Code Enforcement. Because you're submitting it to the City and it's not going to go to anyone else.

Mr. Hurd: That's true.

Mr. Poole: And then I think that there should be an or before before occupancy.

Mr. Hurd: I was actually going to make it be both. No?

Mr. Poole: No one will ever take that credit. I've never had anyone take the during construction one, but almost everyone takes the post-construction, before occupancy one.

Mr. Hurd: Alright, that's fine then. You convinced me. Oh so, prefinished materials, IQ-7 and IQ-8, composite wood materials, I brought those over from residential because they seem to be ones that could apply to both spots. Again, it was putting them next to each other and going, talking about this here, this could also be . . .

Mr. Poole: Yeah, it has value in both places.

Mr. Hurd: Right. And this way we're not like . . .

Mr. Poole: Thank you.

Mr. Hurd: Okay, so that's commercial, ending on page 11. Are we in general agreement that that's filling our intentions?

Mr. Poole: Yeah.

Mr. Rowlands: This is almost getting ready for prime time.

Mr. Hurd: Almost? I hear the but.

Mr. Rowlands: Well, I don't mean prime time Council and Planning Commission. What I want to do is to get it to this point, I think, and forward it to a few architects to get their input. And I only mean input like how easy or how hard is it to meet this Code?

Mr. Hurd: Right.

Mr. Rowlands: I'm not looking for them to critique what we're doing here. It's just is this a do-able thing?

Mr. Poole: I think it's do-able. It's always do-able. You can do anything. It's just how much does it cost.

Mr. Hurd: I have a structural engineer who said we can do anything. It's just how much are you willing to pay.

Mr. Poole: How nice does your wallet want it to be/

Mr. Rowlands: Well, I'm talking about the architects that I deal with and they're all Passive Certified people so they're into these codes, this green stuff. They live and breathe this stuff. So, they should be able to take 10 minutes and go through it and go, yeah, I can do that, I can do that, I can do that, or I wouldn't bother with that.

Mr. Hurd: Yeah, I'm not sure how I would . . .

Mr. Poole: You could do that on your own between now and the next meeting.

Mr. Rowlands: No, I'm talking about doing it on my own.

Mr. Hurd: Okay. Yeah, yeah. That's fine. This is a public document. It's in the packet.

Mr. Poole: You can send it out to whoever you want and say, hey, does this seem realistic to you? We're just looking for some feedback. And if you get a bunch of panicked stares or wet tissues back . . .

Mr. Rowlands: I don't think it's that bad. But they'll come back with one or two good comments.

Mr. Poole: Yeah.

Mr. Hurd: Because most of it, I mean the Planning Commission is not going to be looking at this necessarily from a constructability aspect. We don't have anyone on there except for me who can necessarily look at it that way. Council certainly doesn't have the expertise. They're going to be relying on. . .

Mr. Poole: They're going to rely on us.

Mr. Hurd: And testimony from the concerned public who have a financial stake more than they have . . .

Mr. Poole: Yeah.

Mr. Rowlands: So, you know I've asked you for the spreadsheet for me to work on . . .

Mr. Hurd: I did.

Mr. Rowlands: Yeah, I'm fine. Is this available online or . . . ?

Mr. Hurd: Not as a document. It's a PDF. I can send you the Word document.

Mr. Rowlands: No, PDF is fine.

Mr. Hurd: I'll double-check but it should be on the website. I think when Michelle posts the agendas . . .

Mr. Poole: It was emailed to you.

Mr. Hurd: She may have to go back in, but they tend to link on the agenda item, they link to the supporting documents.

Mr. Rowlands: But all these little changes you're about to make like getting rid of that one . . .

Mr. Hurd: Oh that, yeah.

Mr. Rowlands: You're going to make those in the next week or so?

Mr. Hurd: Sure.

Mr. Rowlands: And when you're done and ready to submit it for publication, just send me a copy and I'll try to get it back before our next meeting.

Mr. Hurd: Okay. Yeah, because I've got to get this done quick so Tim can work on this.

Mr. Poole: Well, actually none of this is going to change. This is just going to fit in the middle of all the verbiage that I've got.

Mr. Hurd: Right. I mean there's some things where we're saying or this or that.

Mr. Firestone: You could probably even share with them this document. I mean the changes that we're dealing with are . . .

Mr. Poole: Minor wording changes.

Mr. Firestone: Minor wording changes. The intuition should be the same.

Mr. Rowlands: Correct.

Mr. Hurd: Yes. Okay. Alright, general agreement and approval of the commercial? Going once, going twice, we're good. Alright. Boom. Love it.

5. REVIEW OF RESIDENTIAL CRITERIA

Mr. Hurd: Residential, which we haven't looked at for a while. So we start by saying to reduce the energy use of all new, I wonder if the language should be residential subdivisions of three units or more, I guess. Right? Okay. So then we have this little introductory blurb that says when we say residential building, we mean International Residential Code defined which, for those of you who don't know, it's one- and two-family dwellings, up to three stories.

Mr. Poole: Yes.

Mr. Hurd: So like all the townhomes on Benny are residential code because they are three-story, essentially single units. Don't they?

Mr. Poole: No. There are some that are four and they're regulated under the IBCSR3s.

Mr. Hurd: That's good to know. Because I know that there were some buildings that were going up that were basically falling into the residential code and not the commercial code, even though they were multi-unit rentals because it's a townhome.

Mr. Poole: Right. If it's constructed in accordance with what the IBC kicks you to the residential code, then that's where it goes.

Mr. Hurd: Which is one reason why I'm trying to make sure that these two are relatively balanced because there are some buildings that are going to kind of waiver right on that line. I mean basically, right? There's been like, well, we're four stories so we're out of ROC and we're into IBC but we're not a 5,000 square foot office building. We're still a residential building.

Mr. Poole: Right.

Mr. Hurd: Someone was about to say something. Was that you, Jeremy?

Mr. Firestone: No, I'm good.

Mr. Hurd: So, so we have an alternative compliance path, which we just talked about . . .

Mr. Rowlands: And change LEED Silver to Gold.

Mr. Hurd: Right. And then the stretch performance option. And this is something that I did add so I want to make sure that I point this out and we discuss it. EC-1 certified performance 20% better than Code. Just like the commercial, it's 30 points and you still have to do the other resource conservation and indoor environmental air quality points. It dawned on me as I was reading this to go if we have the 30% and the 40% better than Code, which have more points assigned to them, that there should be some compensatory reduction in the other points required. Because otherwise we're going to say, hey, you've got to get 40 points, but you still have to get 16, so now we're requiring 56 points.

Mr. Poole: Or 51 points. EC-2.

Mr. Hurd: Yeah. So, what I was trying to push out was to say if they go to 30% better, we're going to give them 35 points. Let's take 4 points off, they're at 5 on energy and we're going to take 4 points off the required minimums, so it's 6 and 6 now instead of 8 and 8. And then if you

do 40%, it's 4 and 4 so that they still have to go to those sections and they still have to get some of those credits. But we're not pushing them past the 50 mark just by improved energy performance. And that's open for discussion because that's a brand-new thing.

Mr. Rowlands: No, I kind of see what you're saying but if you leave it the way it is, there's almost no incentive to go for the 40 points.

Mr. Poole: Right.

Mr. Hurd: That's partly, yeah . . .

Mr. Rowlands: Because they're going to have to go and get those other 8 and why do it? So, I see what you're saying.

Mr. Poole: I would suggest that we make it in EC-2, 4, and 5 . . . no, we're looking at 7 and 8. Seven being on the resource conservation . . .

Mr. Hurd: So, only taking a point away?

Mr. Poole: Yeah, because they still get the 50.

Mr. Hurd: But the minimums took them to 40, right? Because 24 and 16 was 40 points.

Mr. Poole: Right.

Mr. Hurd: So, I would think that we want to still hold that, roughly hold that base line. Except we're not quite here. That's true.

Mr. Poole: The problem is that then they can choose to get those flex points from the energy area and we're reducing the requirements in the other areas.

Mr. Hurd: Right.

Mr. Firestone: Well there's not much flexibility.

Mr. Poole: Well again, if you're talking about 4 and 4, which then gets you, what were you saying?

Mr. Hurd: So, EC-2 is 35 points in the energy, you still have to get 12 minimum in the other two. So, that's 47.

Mr. Firestone: There's only 3 other points floating around.

Mr. Hurd: EC-3, if you go to 40%, it's 48 points now and 2 flex points. Part of this was trying to hold to the sense of like we don't want them to fully load into one category and forget the other ones. So, if they said, hey, 40 points in energy and 10 from wherever, it's like yeah, take the 10 easy ones over here. I wanted to sort of say you still have to get 4 in the resource and 4 in the IEQ.

Mr. Poole: I would say we . . .

Mr. Hurd: I was trying to make the math not get too complicated. You know, go 8 to 6 to 4. So, that was my intention and so that's why it's here to sort of say did that mean the intention?

Mr. Poole: I can live with it.

Mr. Hurd: Okay.

Mr. Firestone: I mean one question I have is what's the relative expense of getting to 20% versus 30% versus 40%? So, is 40%, you only get 10 more points, but is it twice as expensive? Is it three times as expensive?

Mr. Poole: No, it's . . .

Mr. Hurd: I honestly don't know but I hear what you're saying. It's like are we rewording them . . .

Mr. Firestone: Appropriately. I mean a lot of things, the low-hanging fruit is pretty cheap.

Mr. Hurd: Right.

Mr. Firestone: So, the 20% might be pretty easy to get to, in which case maybe you should only get 15 points but the 40% you get 40. I think the scale, to me, seems backwards as far as its, it should, you should get rewarded more as you increase your percentage. Point per percent, not less.

Mr. Poole: Well . . .

Mr. Firestone: Because it should be getting more expensive. You've got to do more . . .

Mr. Poole: But the concern about that is we can't really give them more than 40 points here, can we?

Mr. Firestone: Well, I'm saying maybe the 30 is too high.

Mr. Hurd: Well, the point of the 30 was to get away from the 24 points that you have to get in that category. To say if you document, if you get it tested and documented that you hit a 20% reduction, that's what we care about. So, you get 30 points . . .

Mr. Firestone: So, why shouldn't you just get 24? I don't know. It just seems to me that . . .

Mr. Poole: Because we're rewarding them for paying that expense of proving it.

Mr. Firestone: Right, but you may be disincentivizing the 30% and the 40%.

Mr. Hurd: Possibly.

Mr. Firestone: Because you're not giving them any additional points to . . . I mean to go to 40, you're doubling the efficiency . . .

Mr. Poole: I don't disagree with that . . .

Mr. Firestone: But you're only getting 10 points rather than the 30 points for the first 20 and . . . the second 20 should be more expensive.

Mr. Hurd: Right, so . . .

Mr. Poole: I don't disagree with you, but I also don't think that anyone is going to take that criteria.

Mr. Firestone: Well, certainly not the way they're laid out.

Mr. Poole: No, I mean period, ever. But then again, we will find out.

Mr. Hurd: I think Jeremy has a point in that if the cost value isn't there, then there's no point in pushing for a reduction . . .

Mr. Poole: Right.

Mr. Hurd: I mean I almost want to say if I'm pushing that hard, I might as well go through an established rating system and get that way and be done with the whole thing. So, the residential one is the only one where we've got tiered certified performance criteria.

Mr. Rowlands: Jeremy, you'd rather see the 30 start at 25?

Mr. Hurd: Twenty-five would make sense.

Mr. Firestone: Well [inaudible] you know, like 10.

Mr. Poole: I would think that if we go, lose the 40, go to the 30 and give them 40 points.

Mr. Firestone: In my mind we'd be like 10, 20, 40.

Mr. Hurd: Ten points for doing certified?

Mr. Poole: Ten points for the 20%.

Mr. Firestone: Ten points for 20%, 20 for 30%, and 40 . . .

Mr. Poole: Yeah, but you're saying then they still have to get 14 other points in energy.

Mr. Firestone: I'm just trying to tell you how I think about relative points for doing efficiency work, that's all.

Mr. Poole: And I don't necessarily disagree with you. I'm just saying then the opt-out isn't an opt-out.

Mr. Firestone: Well, I guess maybe we should just not have EC-2 and EC-3. If no one is going to do them and they're set up not the way people think about these things, why do we want to include them?

Mr. Poole: Like I said, I think a reasonable compromise . . .

Mr. Hurd: I think it makes to take the 40% out because that's a stretch. That's a real stretch.

Mr. Poole: That's going to be very difficult to achieve and for an extra 10 points, it's not likely that they'll go through that. If they're going to do that, they're going to do it because they value the 40% and not the points that we're going to give them. But if we do the 30% better than Code and make that worth 40 points, then I think that does give them an incentive to push a little bit to get there.

Mr. Firestone: I mean, I would rather push people to do something rather than have criteria that aren't going to do anything.

Mr. Hurd: Yeah.

Mr. Firestone: I just want to give people appropriate incentive and I don't see this system as incentivizing anybody.

Mr. Rowlands: You're talking about modeling and building where performance is 20% better . . .

Mr. Hurd: Yeah.

Mr. Poole: Right.

Mr. Rowlands: Than Code.

Mr. Hurd: And confirming it.

Mr. Rowlands: Well that's your model that's going to do it.

Mr. Hurd: But I think we were talking about documented compliance using third-party verification.

Mr. Poole: That's still the modeling though.

Mr. Hurd: That's true.

Mr. Poole: They're not going to submit this a year after they've got the building and say . . .

Mr. Hurd: Here's my 20%.

Mr. Rowlands: So, my gut feeling is that to get 20% better than Code, it's not all that hard to do. You're going to spend money but the equipment is out there and you just . . .

Mr. Poole: Yeah, you can get there.

Mr. Rowlands: You can get there. Thirty percent, I still say you can get there. Forty percent, I know you can get there. If you build a Passive, you are at 80%.

Mr. Hurd: Well, right. That's why I'm agreeing that we take out 40% because we do have an established rating system path that could say I'm going to really put in the energy savings and, oh look, I'm a Passive House.

Mr. Firestone: Well, what about 35% and 40 points? Would that incentive anyone?

Mr. Hurd: So, a little more than 30?

Mr. Firestone: Yes. So, get rid of, we just amend EC-2 to say 35% and you get 40 points, and we get rid of EC-3.

Mr. Hurd: Do we want to take the points for EC-1 down at all? From 30 to something?

Mr. Firestone: I mean I think it's, the only reason that we have, to justify 30 is that that's what we have on the commercial side.

Mr. Hurd: Well, it's the same argument on the commercial side, to sort of say, and many of the, I think the intention was if I got 24 points for EC thing, I should get a building that is 20% better than Code, plus or minus a little. But that's a lot of little pieces. Or I could just say I'm doing a couple of big, I've modeled it and I'm getting . . .

Mr. Firestone: Do you think you need more than the 24 points to incentivize someone to do the stretch?

Mr. Hurd: Yes . . .

Mr. Poole: Yes.

Mr. Hurd: Because I think we want to say . . .

Mr. Poole: The engineering and modeling expense is significant.

Mr. Rowlands: Yeah, that can cost . . .

Mr. Firestone: I'm fine then keeping it at 30 and say 35% better, you get 40 point. And we just have two options and if someone picks the bigger option, they get the bigger points.

Mr. Hurd: Okay.

Mr. Poole: And then do the same thing for the commercial?

Mr. Firestone: Yeah.

Mr. Rowlands: Yeah, I kind of think three is pushing it.

Mr. Firestone: Three standards, yeah. Especially if we're not all that optimistic that people are going to select . . .

Mr. Rowlands: So, are we now thinking still at the 20% better or are we going with 30% better?

Mr. Poole: Here's another thought for an opt-out . . .

Mr. Hurd: Yes?

Mr. Poole: Net Zero.

Mr. Hurd: Well that would be under the established rating system, wouldn't it?

Mr. Rowlands: You could definitely put Net Zero in there.

Mr. Firestone: What if, yeah, EC-3 is Net Zero and you get 50.

Mr. Poole: No, AP-2 is Net Zero.

Mr. Hurd: But why . . . ?

Mr. Poole: Or AP-1, just add Net Zero in there.

Mr. Firestone: Oh, as another option?

Mr. Poole: As another option.

Mr. Firestone: Yeah, I'm fine with that.

Mr. Poole: If your building produces as much energy as it uses, you're off the grid. Net Zero.

Mr. Hurd: Yeah, and the thing of it is . . .

Mr. Rowlands: I mean I like it. It's good but will anybody, if you're going to build to Passive . . .

Mr. Hurd: Well, I know that the . . .

Mr. Rowlands: To go to Net Zero you just put solar panels up.

Mr. Poole: Right.

Mr. Hurd: The 2021 IECC, there's an amendment being proposed that basically Net Zero appendix to sort of say if you do this you get a Net Zero building, and that's an alternate path basically within that Code, so in three years if that passes, that's going to be sitting in the Code waiting for us to basically go, or that or this. My only concern with Net Zero, and it's probably the same concern with the Passive House, is that it's an energy focused element . . .

Mr. Poole: Yeah, absolutely.

Mr. Hurd: And the other, the Green Building Standard and the LEED does address resources, which addresses carbon, which addresses site and water.

Mr. Poole: And I don't disagree with that, but the point is the reason we're accepting certified Passive is because you're going to go so far in the energy that we feel there is value there to compensate for losing the others. And I'm saying that Net Zero is the same thing.

Mr. Rowlands: It is.

Mr. Hurd: Yeah, okay.

Mr. Rowlands: It's a little higher.

Mr. Poole: It's probably a little higher but there may be some things that you choose to do there that wouldn't get you to Passive.

Mr. Rowlands: But if you're going to do an opt-out for a certified Passive House, there's a good chance you're going to put solar panels on it, in which case you are Net Zero. Or close.

Mr. Poole: Again, but there may be able to do some things and achieve Net Zero but not get Passive House.

Mr. Rowlands: I don't think so.

Mr. Poole: Well, it depends on how much energy you produce, doesn't it?

Mr. Hurd: I mean it's really all about . . .

Mr. Rowlands: I guess you could build a leaky sieve and put 14 gigawatts on there and you're Net Zero.

Mr. Hurd: Right. It's still a terrible house. Two thoughts. One, would the Net Zero possibly be something we would accept as the initial 10 points for the site plan approval. Like we're saying if you get the 50, guess what, you also get the 10 points that we're asking for for site plan approval.

Mr. Poole: No, because I think there's a lot of site stuff in site plan approval that has a lot of value.

Mr. Hurd: That's the answer I wanted but I didn't want to . . .

Mr. Rowlands: Yeah, but in site plan approval you have to meet certain . . .

Mr. Hurd: Yeah, you do.

Mr. Poole: Site plan approval, they have to say it looks good to me.

Mr. Hurd: The site plan approval process, which is different, the discretionary site plan approval process, which is an alternate add to approval to the Code currently says one of the criteria to be considered by the Planning Commission and Council for approval is LEED certified compliant, or an acceptable alternative, basically. And that's what I'm trying to change here is to say instead of saying that little bit, point to these amendments and these amendments are saying, no, it's a 60-point building, so it's 10 more points than . . .

Mr. Poole: You will go further.

Mr. Hurd: You will go further. And you will go further in our credits, not in LEED certified because LEED certified is . . . I have dishwashers and I have, you know . . . the second I was going to say is that the established rating system, you know, if we add Net Zero, we're now pretty heavy on the energy and not so much the other things. Do we want to say that that's not a full 50 points? Still crank it down to 45 points and leave 5 points to still be . . .

Mr. Poole: If it's an alternative path, it's an alternative path.

Mr. Hurd: Okay.

Mr. Poole: And again, if they're going to go that far, they're spending a lot of money and giving a lot of effort.

Mr. Hurd: I just want to kind of make sure that we're all kind of clear . . .

Mr. Firestone: I agree then they're not doing other stuff.

Mr. Hurd: They're not doing other stuff if energy is really the thing that we're trying to focus on.

Mr. Poole: And like I said, if they're going to go that far, which is, you can get to 50 a lot easier . . .

Mr. Firestone: Presumably if they're doing some of these things, they're going to do some of these other things anyway.

Mr. Hurd: Right.

Mr. Firestone: You know, they're going to try to have a tight building and, you know, they're going to be trying to do a whole bunch of other things.

Mr. Hurd: I think to Tim's point, or somebody said it, it's like you're doing Net Zero not to pass the criteria here in the Building Code. You're doing it for some other reason.

Mr. Firestone: Personal reason.

Mr. Hurd: Personal reason, marketing reason, you know, whatever the reason is. It's not so you can get your building permit easier.

Mr. Poole: Right.

Mr. Hurd: As you said, there are easier ways to get the points.

Mr. Poole: Alright and we're going to do the alternative path and the EC-2 for both commercial and residential.

Mr. Hurd: Yes. Okay. So, moving into the envelope, very similar language. This has, the mechanical systems there are now conversations about no ductwork and effective ductwork locations and ceiling ductwork which was not in commercial.

Mr. Firestone: Move up EC-17 and be parallel . . .

Mr. Hurd: Yep.

Mr. Firestone: And I guess I would just say any changes in the language we made to clarify on commercial, we should just make sure . . .

Mr. Poole: Is that for the EC-10, it will be linked to EC-17?

Mr. Hurd: So, EC-17 because EC-11, the first item in mechanical systems after increase air tightness of the building.

Mr. Rowlands: And they all move down one.

Mr. Hurd: And they all move down one, yes. EC-15, I couldn't find, I wanted to find a reference code or something that said here are some efficient, you know, minimum efficiencies for various heating equipment and I couldn't really find one because, again, the Green Construction Code is commercial only. It doesn't address residential. And so a lot of this comes out of the National Building Standard, Green Building Standard, sort of verbatim from there. Because I was looking for a table where I could just say refer, you must comply with blah blah's table and then we wouldn't have to keep updating it.

Mr. Poole: Now . . .

Mr. Hurd: If someone could find one, that would be nice.

Mr. Poole: Well, the duct blast test that's required in the Energy Conservation Code, how does that compare to this?

Mr. Hurd: I have no idea.

Mr. Poole: Because I think we're . . .

Mr. Hurd: So, ceiling ductwork I had to work it around a little bit. But the idea here is, one, you seal the ductwork so that it doesn't leak, and then the points you get are very dependent on where the ductwork is located. So, this credit only make sense, it only makes sense to start sealing your ductwork because it's outside the thermal envelope or crossing the envelope boundary. There's not a lot of point to getting that single credit because the ducts are inside the thermal envelope. And that was the intention to sort of go if the ducts are inside the thermal envelope, that's what you want.

Mr. Poole: Right, and that's what's required under the Energy Conservation Code where you have to do the duct blast test to say that the ducts don't leak.

Mr. Hurd: So, is this something that's currently already in the Code so maybe we don't need this one?

Mr. Poole: Yes.

Mr. Hurd: Okay. I don't have the 2018, that may be why . . . alright, so we have efficient equipment, radiant floor heating, and service water heating. And again, a big long list of different efficiencies for different types of equipment. The one thing that's different here for efficient lighting fixtures is that I didn't add the exterior lighting that we have in commercial because residential doesn't typically have a lot of exterior lighting.

Mr. Poole: I think we, now your high-efficiency water heaters . . .

Mr. Hurd: Yes?

Mr. Poole: I think you're not going to catch very many with that.

Mr. Hurd: Okay.

Mr. Poole: Because your typical gas water heater is 40,000 BTUs and your typical instant is 199.

Mr. Hurd: Okay. Alright, so what . . .

Mr. Poole: We should lower that to 30 and 150.

Mr. Hurd: Well, so you have gas water heaters and then you have storage gas water heaters with an input rate greater than 75 or instantaneous, so that's a separate chunk.

Mr. Poole: Right. And again, we should lower that to probably 30 and 150.

Mr. Hurd: So, the storage gas water heater with more than 30,000 BTU?

Mr. Poole: Right. Because that's going to catch most water heaters and it gives them an opportunity for the credit.

Mr. Hurd: Okay.

Mr. Firestone: Do we want to give any credit for electric range or stovetop and other, versus gas?

Mr. Hurd: Versus gas?

Mr. Firestone: I mean the long-term objective is to move people off gas and onto electric . . .

Mr. Hurd: Right.

Mr. Firestone: Because you can power with renewables.

Mr. Hurd: That's a good thought. Yeah, I'll see if there's any language on that.

Mr. Poole: And then . . .

Mr. Hurd: Or maybe even a generalized credit for no gas appliances.

Mr. Poole: How much are we going to give them?

Mr. Firestone: I mean just a point. No different than the refrigerator.

Mr. Poole: Well, I was going to get to that in a minute but . . .

Mr. Firestone: Okay, how much do you want for that EnergyStar-rated refrigerator?

Mr. Poole: One point but I also don't like the half-point for a dishwasher. I think that we should probably do all EnergyStar-rated appliances, all kitchen appliances, and then give them 1 or 2 points, but that would include the stove, the dishwasher and the refrigerator.

Mr. Rowlands: And they're still almost getting it by default.

Mr. Poole: Right, they are because . . .

Mr. Hurd: Do they have EnergyStar for stoves and things?

Mr. Poole: I'm sure for the electric ones they do.

Mr. Hurd: Okay.

Mr. Poole: And like I said, like Reid said, that's almost getting it by default because in all likelihood your appliances are going to meet that before you even walk in the store.

Mr. Hurd: So, the 1 point was for refrigerator and dishwasher together?

Mr. Poole: One point for all kitchen appliances.

Mr. Firestone: Yeah, I would . . .

Mr. Hurd: I thought it was 2 points.

Mr. Firestone: It's not that much . . .

Mr. Poole: What?

Mr. Hurd: There was a 2-point option you had.

Mr. Poole: Yeah, no. It was going to be 1 point for the fridge and 2 points for all, and I think it should just be 1 point for all because most likely when you walk into the appliance store . . .

Mr. Rowlands: It's what you get.

Mr. Poole: Ninety percent of your options will meet this. At least.

Mr. Hurd: It's not the most rigorous criteria.

Mr. Firestone: No. Ten years ago . . .

Mr. Rowlands: If you're trying to build the cheapest home out there, as maybe a developer might do, they might be able to pick a non-EnergyStar appliance.

Mr. Poole: They might.

Mr. Rowlands: And now they will.

Mr. Poole: Again, for the extra \$10 or \$20.

Mr. Rowlands: Exactly.

Mr. Poole: It's not like they really have to stretch for that.

Mr. Hurd: Alright.

Mr. Poole: And I'm just saying they either do them all or don't bother.

Mr. Hurd: I like simplifying it, for sure. Renewable energy, the one thing I did change here was PV panels. I went back to your table that you had given us, Jeremy, and that's why I'm giving them, it goes up to 8 points so that they can get up to the 8 kilowatts, which I think was the EC-25.

Mr. Poole: Per dwelling unit.

Mr. Firestone: Yeah.

Mr. Poole: They get them in all of them.

Mr. Firestone: Yes, per dwelling unit.

Mr. Poole: Not just one of them gets 2 kilowatts and then we got the credit.

Mr. Firestone: I would agree with that.

Mr. Hurd: Thank you for pointing out the loophole. Yes. Okay.

Mr. Poole: Yeah, look, the model house has . . .

Mr. Hurd: It's got all the photovoltaics.

Mr. Firestone: On EC-26, the Green Power Plan, is it implied that that's for everything? I mean it's signing up for something.

Mr. Poole: Yeah, you sign up, that's the power you get.

Mr. Firestone: That's what you get.

Mr. Hurd: Right.

Mr. Poole: You will get that power and you'll pay a little bit of a premium.

Mr. Hurd: You're paying the difference between whatever the regular power is and the renewable power of the . . .

Mr. Poole: They're not going to give you 20% of the Green Power Plan and 80% of the other one.

Mr. Hurd: Yeah, there's no scale on it.

Mr. Firestone: Just saying, I do have a hard stop at 5:30.

Mr. Hurd: Okay, well we have five minutes, let's wrap this up. Resource conservation, all the same stuff. I mean there's some things we maybe haven't talked about here, but we have RC-11 on page 19, moisture management, which is basically a rain screen system but with a minimum air space not just on, basically on house wrap.

Mr. Poole: Can we stretch out RC-8?

Mr. Hurd: Sure, how do you mean?

Mr. Poole: Give examples, truss construction . . .

Mr. Hurd: Well, truss is under prefabricated components unless you want to combine this. Basically, the optimal value engineering is like if I'm going to stick frame this, I'm typically doing 24 inches on center, my floor joist lines up with my wall stud, I've got minimum headers because I've got, you know, the load path comes down on either side of the window, so all my window openings are between load path, so I don't have a big honking header that's taking up load.

Mr. Poole: So, where is that described?

Mr. Rowlands: Yeah, it's not in the . . .

Mr. Poole: Let's reference that.

Mr. Hurd: Well, advanced framing principles which that needs to get . . .

Mr. Rowlands: But there is no here's the manual on advanced framing.

Mr. Hurd: There probably is. There probably is.

Mr. Poole: Well then find the manual and reference it.

Mr. Rowlands: Yeah, reference it.

Mr. Hurd: I just put, I said reference, so there we go, we've got that covered.

Mr. Poole: Okay. And that's just greed on my part.

Mr. Hurd: RC-8 and RC-9 are a similar kind of thing but I don't know if we want to just . . .

Mr. Poole: No, I think we're good.

Mr. Hurd: Okay.

Mr. Poole: I think we're good having them separate.

Mr. Hurd: Okay.

Mr. Poole: If they want to stick frame and they want to do all that, then they can have the optimal value engineering framing. Or if they want to do prefabricated components, then that's fine too.

Mr. Rowlands: And they can do both.

Mr. Hurd: The idea of the prefabricated, of course, is that it's less waste, less material, less . . .

Mr. Poole: Right. Because it's all in a factory and a computer says I can get a 7-foot wall and a 1-foot cripple wall out of this 8-foot two-by-four.

Mr. Hurd: Alright, so we have improved moisture management, which is rain screens. RC-12 is improved flashing which is essentially all of these additional . . . I have to double-check that those are actually not required in Code or you might know off the top of your head. The idea being that these are additional water management features that aren't typically required but are essentially good to have.

Mr. Poole: These are not all required.

Mr. Hurd: Do you know which ones are, in fact, required?

Mr. Poole: None of them actually, I think.

Mr. Hurd: Alright, so this is . . .

Mr. Poole: Oh, the flashing at expansion joints and stucco walls, the expansion joints are basically a flashing material. You're not going to have an expansion joint without it.

Mr. Rowlands: So you're going to pull the whole RC-12?

Mr. Hurd: No, just pull the line that flashing is installed at expansion joints and stucco walls.

Mr. Rowlands: Well, if you go to the second line, all windows and doors are either self-adhered or liquid, how else do you do it?

Mr. Poole: With Tyvek and tape.

Mr. Hurd: Yeah.

Mr. Rowlands: Tape is self-adhered.

Mr. Hurd: It's not a self-adhered flashing.

Mr. Rowlands: So, they're just taking a [inaudible] in Tyvek and taking it in?

Mr. Hurd: Yeah.

Mr. Poole: Right. Which is acceptable but meanwhile you have this lovely . . .

Mr. Rowlands: Is that common still?

Mr. Poole: No, most of the time they're using the . . .

Mr. Rowlands: Self-adhered tapes.

Mr. Poole: Self-adhered tape but, again, it's not required. And most of the time where it happens, it's because that what the siding manufacturer does for their warranty.

Mr. Hurd: Or the window manufacturer.

Mr. Poole: Yeah.

Mr. Rowlands: I have seen so many bad self-adhered. I mean it's what they build right now. And self-adhered around there, they're just, as opposed to a liquid flashing.

Mr. Poole: Yeah, well liquid applied is definitely the way to go if you're concerned about it but . . .

Mr. Rowlands: So, what happens if you take out self-adhered and just put liquid flashing.

Mr. Hurd: We could do that. We could say . . .

Mr. Rowlands: It could get you 3 points.

Mr. Hurd: All window, door head and jamb is liquid applied. Do you like that?

Mr. Rowlands: I mean you're getting 3 points for this. This should be . . .

Mr. Hurd: Okay.

Mr. Rowlands: Now flashing with expansions joints and stucco walls, they're doing that.

Mr. Hurd: That's what he said.

Mr. Poole: Well, now if they've got the new construction windows and they've got the built-in flashing, do they still have to have the liquid applied?

Mr. Hurd: I don't know.

Mr. Rowlands: You're talking about a flanged window?

Mr. Poole: Well, according to this, they do.

Mr. Rowlands: Right. But are you talking about a flanged window?

Mr. Poole: Right.

Mr. Hurd: That's not flashing.

Mr. Rowlands: So, once you put that window in, how are you flashing that flange to your Tyvek or whatever.

Mr. Hurd: Yeah, you still have to flash the flange to the wall.

Mr. Rowlands: You can do it with self-adhered, which is not as good as doing it with liquid.

Mr. Poole: Okay.

Mr. Hurd: Before you run, Jeremy, is there anything in the future pages that you want to . . .

Mr. Firestone: No, I don't think so.

Mr. Hurd: The last page I just want to point out to people is the definitions page for the few things that we, they're things that I looked at them and I went, I'm not sure I know what that means. So, I will make sure I put that on the list. It's a starting point.

Mr. Firestone: I think that's a good idea.

Mr. Hurd: Because it's going to end up in the, the Code is going to have a definitions thing anyway.

Mr. Firestone: Yep. I think that's a good start.

Mr. Hurd: Alright, so include flashing on covered doors. Page 21, I had called out RC-24 and RC-26 as being for the subdivisions only because they were only for compact developments and such but now that we've made this only four subdivisions, we're going to strike that piece of text.

Mr. Poole: Just the parentheses only?

Mr. Hurd: Yes. Because you can't do compact development in a single-family . . .

Mr. Poole: Right.

Mr. Hurd: On a single unit. Or reduce parking because it's like there no opportunity for that. Did you bike, Jeremy?

Mr. Firestone: I did not bike. I checked the weather and it was not going to be a good bike ride.

Mr. Hurd: The whole day was not good.

Mr. Rowlands: Well, I have to say, this thing is starting to take shape.

Mr. Firestone: But I did take my electric vehicle.

Mr. Hurd: Good job.

Mr. Rowlands: Does anybody know anything about propane vehicles?

Mr. Hurd: It seems like a lot of mail trucks are propane.

Mr. Poole: What do you want to know?

Mr. Rowlands: Should I, or shouldn't I?

Mr. Firestone: I would say . . .

Mr. Rowlands: I can't right now. Boulden on Old Barksdale was the only one you could get propane from.

Mr. Poole: Well, they probably could do it at their 107 Sandy Drive address.

Mr. Rowlands: They said they're not there yet.

Mr. Poole: Okay.

Mr. Rowlands: Waiting on permits from you or something.

Mr. Poole: I don't think so.

Mr. Rowlands: I found a gorgeous van that's cheap and that these guys . . .

Mr. Poole: Again, if you can get the availability of the propane . . .

Mr. Rowlands: Which you can't.

Mr. Poole: It's a wonderfully efficient way to run a vehicle.

Mr. Rowlands: Oh absolutely. The more I read about it, the more I want one.

Mr. Poole: But you'd probably be better off with a hybrid or an electric vehicle.

Mr. Rowlands: Not towing a skid steer trailer.

Mr. Hurd: Some torque issues maybe. Thank you again, Jeremy.

Mr. Poole: Are you kidding? Electric you can get all the torque you want.

Mr. Rowlands: They just don't make anything with that power to tow.

Mr. Poole: Probably not.

Mr. Rowlands: They have home conversions but they're \$5,000 for your own car. If they can get that down to a couple hundred bucks, I'd never have to go to a gas station again.

Mr. Poole: Jeremy is already there.

Mr. Firestone: I'm there.

Mr. Rowlands: I want to be there.

Mr. Firestone: It is really nice not having to go to the gas station. Good night.

Mr. Hurd: Thank you. I'm going to add flood zones into the residential.

Mr. Poole: Good plan.

Mr. Rowlands: You have IQ-7, page 23, MERV filter 8 or higher.

Mr. Poole: Where?

Mr. Rowlands: Page 23, IQ-7. I've seen a lot of 12s and I've been seen a 15.

Mr. Hurd: This is one we've talked about and I know that, because part of the issue is to say, yeah, we put an 8 in and then the homeowner came along, or the resident came along, and they put in the Home Depot special.

Mr. Rowlands: Or even worse, it doesn't get changed . . .

Mr. Hurd: And it clogs up.

Mr. Rowlands: And they clog up a lot faster the tighter you get.

Mr. Hurd: It's a credit. I'm okay with just dropping the whole stupid thing if that . . .

Mr. Rowlands: No, I like it there, it's just, it's a love/hate. You know, you put them in, you can do the best MERV filter you can get and then the follow-through is where it loses it.

Mr. Poole: Well yeah, but . . .

Mr. Hurd: No, that was the whole complaint with LEED at one point. It was to say you can build the most efficient building and then everyone leaves the windows open and it's like occupant control.

Mr. Poole: Yeah, you can't fix . . .

Mr. Hurd: You can't fix people.

Mr. Poole: But again, there's value there, so give them the point.

Mr. Rowlands: Yeah.

Mr. Hurd: And I think you pointed out, Reid, it gets people thinking about it.

Mr. Rowlands: Yes, it does.

Mr. Hurd: Part of our, we have so many conflicting at time, well maybe not conflicting, but we have so many things that we're trying to do here and one of them is just get people thinking about doing it better.

Mr. Poole: Yep. And, yeah, not everybody is going to go out and spend \$30 on a furnace filter.

Mr. Hurd: Right. Alright, so of course we're not looking for approval, but we are, I mean, is there anything else people are seeing that we want to throw in here before we kind of lock up the draft and go to the next level.

Mr. Poole: I think we're there.

Mr. Rowlands: We have a lot in here.

Mr. Hurd: I know, there is a lot.

Mr. Poole: But guys, this is what we were looking for.

Mr. Hurd: This was. It was not going to be let's just tweak those credits.

Mr. Poole: And I wouldn't be surprised if people didn't steal this.

Mr. Hurd: Well, that would be lovely because that's the best compliment.

Mr. Poole: Right.

Mr. Hurd: Alright, so that's the review.

6. SCHEDULING OF NOVEMBER AND DECEMBER MEETINGS

Mr. Hurd: So, we'll schedule November 26, I think that's the date.

Mr. Poole: Yep. The 28th is Thanksgiving so . . .

Mr. Hurd: Oh, you know I think, wait, I'll have to check that the 26th is actually . . .

Mr. Poole: For who?

Mr. Hurd: Like whether the building, well I guess the building is open.

Mr. Poole: The building will be open. We'll find a room.

Mr. Hurd: Okay, we'll go with the 26th and I'll check my email with . . . because Michelle had, we talked about, because we just have to block out rooms in advance if we're not going to use Council Chambers.

Mr. Poole: Yeah, and we'll find a room, whether it's this room or the Council Chambers or the Mayor's Conference Room or the City Manager's Conference Room, we'll find a room.

Mr. Rowlands: Are we good?

Mr. Poole: Yep.

Mr. Hurd: Like I said, it occurs during a holiday week so it's just a matter of a holiday week and people may not want to be here.

Mr. Poole: The four people that . . .

Mr. Hurd: Are showing up.

Mr. Poole: Have shown up for just about all the meetings all said they're going to be here.

Mr. Hurd: Okay.

Mr. Rowlands: We're good.

Mr. Poole: Folks that don't show up anyway, they might not be available.

Mr. Hurd: Okay, great.

7. GENERAL PUBLIC COMMENT

[Secretary's Note: There was no general public comment at the October 22, 2019 Green Building Code Work Group meeting.]

8. ITEMS FOR NEXT MEETING

[Secretary's Note: There was no discussion of items for the next meeting at the October 22, 2019 Green Building Code Work Group meeting.]

There being no further business, the Green Building Code Work Group meeting adjourned at 5:34 p.m.

Attachment

Exhibit A: [Green Building Code Checklist Amendments \(Commercial and Residential\)](#)