

City of Coral Gables City Commission Meeting
Agenda Item E-3
October 10, 2023
City Commission Chambers
405 Biltmore Way, Coral Gables, FL

City Commission

Mayor Vince Lago

Vice Mayor Rhonda Anderson

Commissioner Melissa Castro

Commissioner Ariel Fernandez

Commissioner Kirk Menendez

City Staff

City Attorney, Cristina Suárez

City Manager, Peter Iglesias

City Clerk, Billy Urquia

Public Speaker(s)

Agenda Item E-3 [11:06 a.m.]

An Ordinance of the City Commission providing for text amendments to the City of Coral Gables Official Zoning Code pursuant to Zoning Code Article 14, “Process,” Section 14-212, “Zoning Code Text and Map Amendments,” to create carbon concrete requirements, a review procedure, and an appeal process that reduce greenhouse gas emissions, providing for repealer provision, severability clause, codification, and providing for an effective date. (Sponsored by Vice Mayor Anderson)

Mayor Lago: Moving to E-3.

City Attorney Suarez: E-3 is an Ordinance of the City Commission providing for text amendments to the City of Coral Gables Official Zoning Code pursuant to Zoning Code Article 14, “Process,” Section 14-212, “Zoning Code Text and Map Amendments,” to create carbon concrete requirements, a review procedure, and an appeal process that reduce

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greenhouse gas emissions, providing for repealer provision, severability clause, codification, and providing for an effective date. This is a public hearing item.

City Planner Garcia: Jennifer Garcia, City Planner. So this is requiring a reduction in the carbon of concrete or any construction of any concrete element of a building within the major zoning district, which is MF3, MF4, MF2, as well as the MX district, MX1, 2, and 3. The requirement is that they would be required to reduce the amount of carbon within the permit set and the permits would be reviewed by the developer, sorry, Development Services Director or designee to make sure that at the review of the permit that it complies and again, after inspections as well. And if for some reason they feel that they cannot meet it, there's an appeal process to be able to get one.

Vice Mayor Anderson: Mayor.

Mayor Lago: Just clarify something.

Vice Mayor Anderson: No, no, its fine.

Mayor Lago: Didn't want to show you a lack of respect on your item.

Vice Mayor Anderson: Not a problem. I sent you all a memo because there was a lot to this item coming before us. First, the time that I learned about this was back in August of 2019 and there was an article about a builder that built with carbon cure process. Essentially, explaining that by injecting carbon into the concrete while its being developed you need less cement and cement is the item that offputs the carbon into our atmosphere, that it actually makes the concrete stronger, so therefore, I obtained all kinds of technical data that I therefore shipped to our esteemed structural engineer to analyze, our City Manager Peter Iglesias, as to the feasibility of being able to use this in construction here. More recently, aside from talking to different architects and different folks to bring projects forward in our city and I noticed that some projects are already starting to accept this and want to use it. We called also the concrete suppliers in Miami-Dade County and determined that the pricing at this point is the same as regular concrete, so therefore, concerns about it being a financial burden upon development and increasing the cost for housing, etc., is no longer in existence. The language that we chose to put in this was technically feasible so it allows that leeway if there is either engineering reason or a financial reason why its not feasible to be able to use this type of concrete that it through other options out there. I've had lots of conversations with the Manager about concrete and he will explain to anybody that wants to learn the minutia there's a different type of concrete that you use for

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sidewalks, different one you use for structural elements, and I don't need to be an expert in that. Our staff needs to be the expert in this and that's why the review process is through staff to be able to make these determinations and it shouldn't be something that on the dais we determine whether or not they need to be using carbon sequestered cement. So lastly is, this will provide lead...for whoever builds, and the application of this is only in our MF and MX structures. This will not affect duplexes; it will not affect single-family homes. It just will affect our bigger structures. We'll be the leaders in the State of Florida on this. No other county, no other city in our state has moved forward in this direction. There are other states that have, Hawaii and they are using it in Georgia, they are using it in the northern states, they are using it in Canada, they are using it in Europe. Its been around for a while, so it's a tried and true technology. So, I hope you all like it. Its been a long time. I've been trying to get this baby moving. Its been a long time to get all the technical data together and have it evaluated by our staff. Its been two years that I think I first put it in front of Suramy Cabrera when she was here and I put it in front of our City Manager and then we took the steps to fully look at the data.

City Manager Iglesias: May I address this Mayor.

Mayor Lago: Of course, please.

City Manager Iglesias: Thank you very much. Its very well put, Vice Mayor. This is basically a recaptured technique of carbon dioxide, but the big issue is cement manufacturing which creates a lot of CO2. This method injects CO2 during the production of concrete which is different than cement, captures maybe 6 percent of the carbon dioxide and what happens is it works as adding cement to the mixture. What it does is, the CO2 reacts with calcium creating calcium carbonate, which lowers your cement ratio. By lowering cement in the concrete, then you are actually recapturing some of the CO2 that is done during cement manufacturing because you're lowering the amount of cement that you need. It does not affect the concrete. I think our structures are not affected here and there is also just to keep the industry honest, there's a way of appealing the use of it to make sure that the cost stay in line which at this point are zero as far as additional cost. So, it doesn't affect concrete, probably in the long term provides us a slightly higher strength and it's a good way to recapture some of the CO2 generated in cement manufacturing.

Vice Mayor Anderson: And may I ask, what's the first project you plan on using it on?

City Manager Iglesias: On Fire House 4.

Commissioner Menendez: I just want to comment when I was briefed in agenda review. I think its great and what I really like about the legislation, the way its written, it allows that flexibility just in case there are changes in the market forces going forward if there are changes. Having that mechanism in there, I think it makes it an even better piece of legislation. So, I'm very supportive.

Vice Mayor Anderson: Thank you.

Mayor Lago: Great job.

Vice Mayor Anderson: I'll move it.

Mayor Lago: This is something that we can help.

City Manager Iglesias: May I say Mayor, it also helps with the LEAD certification.

Mayor Lago: Which is something again that we, as a city, I remember when I proffered that legislation a few years ago, we lead the county in regard to having buildings 20,000 square feet or larger, where for example, City of Miami and other municipalities are 50,000. So, Matt and I worked on that a few years ago, and this is just another example by the Vice Mayor where we're leading. The cities are the leaders in regard to sustainability and environmental stewardship. So, I commend the Vice Mayor for this effort.

Vice Mayor Anderson: We have a first, we have a second. We have no public comment.

City Clerk Urquia: No public comment. I'm sorry, who second it?

Commissioner Castro: I did.

City Clerk Urquia: Thank you, ma'am.

Commissioner Fernandez: Yes

Commissioner Menendez: Yes

Vice Mayor Anderson: Yes

Commissioner Castro: Yes

Mayor Lago: Yes

(Vote: 5-0)

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