Subject:

ACWG Does not Support High Rise Buildings in the City, Low Rise and Wood construction are the Obvious Way to Reduce the Current Dangerous Climate Change

From: Vince Caruso

Sent: Monday, February 5, 2024 12:28 PM **To:** Planning < <u>Planning@a2gov.org</u>>

Subject: ACWG Does not Support High Rise Buildings in the City, Low Rise and Wood construction are the Obvious Way

to Reduce the Current Dangerous Climate Change

See our <u>website ACWG.ORG</u> for recent past <u>Agenda Items and Updates</u>, our <u>MDEQ</u> (EGLE), Washtenaw County and City of Ann Arbor adopted ACWG produced Allen's Creek Watershed Management Plan and, other information.

In General: ACWG does not support High Rises. Low Rise is a much more dense and Climate Friendly.

711 Church Street Proposal is not good for Ann Arbor.



Downtown Paris, Low-rise Buildings Are the Norm Not the Exception and Is Much More Dance Then Highrise Cities
(Google, ACWG; Rt Clk for Larger)

Tall buildings (about **20 stories**) emit CO2 equivalent to **20 years of the City of Ann Arbor's CO2 emissions**, 2.1 million metric tons of carbon dioxide equivalent emissions annually.



The Standard, Student Housing, Under Construction Recently In Ann Arbor (MLive; Rt Clk for Larger)

"Cement emits as much CO2 as India (the whole country)" Washington Post June 27, 2023. Ann Arbor is pushing taller concrete buildings as a "Mantra" to Developers, RealEstate Interests and U of M. with disregard for Climate Change.

From the Washington Post Article:

"The cement industry is responsible for 8 percent of global carbon emissions -- triple the emissions of the aviation industry. And making all that concrete also emits an <u>enormous amount of carbon dioxide</u>.

Not only does the carbon dioxide from the reaction spill into the atmosphere, but **cement producers also use** huge amounts of coal or natural gas to heat the kiln." (bold by us)

Tall buildings cause excessive **Heat Island** effects in cities, creating **health hazards**, and requiring **more** carbon-producing air conditioner use.

Just the **20 story concrete and steel building's enormous** Carbon Footprint is about **20 million pounds of carbon into the atmosphere** for just the concrete and steel alone, not including all the actual construction-related carbon emissions, which is also considerable!

Proof Low Rise is More Dense and Much Lower Carbon Emissions:

Paris, for example, with its mostly **four- and five-story buildings**, produces fewer overall emissions than both sprawling exurbs and skyscraper cities given the land required to build tall buildings and the carbon-intense building materials like aluminum and steel it takes to construct them, a neighborhood of skyscrapers would result in about **140% more total emissions** than a Paris-like lower-rise area with the same population.

Paris is more dense than high-rise cities and better for the residents in many ways.

Low-rise buildings can mostly be built with **carbon-capturing wood**, high-rises do not currently have this option. This has never been addressed by the city.

Ann Arbor tall buildings are not being built to accepted standards according to reliable sources in and out of city hall. Poor installation of insulation and sealing are just some examples. Ann Arbor needs to Walk the Walk.

The City of Ann Arbor generates about <u>1/2 M tons of carbon a year</u> so one 20-story concrete and steel building is equivalent to 40 years of city emissions. Not much of a very meaningful Carbon Reduction Plan.

More carbon emissions mean more rainfall and powerful storms and, disastrous flooding, injury and death.

7 Reasons Why High-Rises Kill Livability (Smart Cities Dive site):

- 1. **High-rises separate people from the street:** Anything and anyone above the fifth floor is definitely out of touch with ground-level events.
- 2. **High-rise scale is not the human scale:** High-rises are simply so tall that they make no visual sense to a pedestrian at eye level. You can't even see the whole building unless you're in another high-rise. You become lost and engulfed in glass and steel canyons which can be isolating and dehumanizing.
- 3. **High-rises radically reduce chance encounters and propinquity:** you are greatly isolated from others.
- 4. **High-rises are vertical sprawl:** With high-rises, they take up too much vertical space for something (in this case dense housing) that could be achieved with much less height.
- 5. **High-rises=gentrification and inequality:** Low/Mid-rises=resiliency and affordability: Tall buildings offer increased profits for developers. However, the higher a building rises, the more expensive the construction.
- 6. **Are High Rises Even Green?** High-rise buildings are built largely of steel and concrete and are less sustainable than low-rise and mid-rise buildings built largely of wood;

7. **High Rises are not good for your health:** Psychologist Daniel Cappon writes in the Canadian Journal of Public Health that high-rises keep children and the elderly from getting the exercise the extra effort it takes to get outside encourages them to stay at home and flip on the TV.

A report in **Fast Company** On the Dangers of High-rises Buildings:

"According to a new study, a **neighborhood of skyscrapers results in about 140% more total emissions than a lower-rise** area with the same population, like most Parisian neighborhoods. And he believes that the level of alienation and isolation, things that have been proven to negatively impact health and even shorten people's lives, increase with the height of the building.

But taller and denser isn't necessarily better for the environment, according to a new study published in the journal "npj Urban Sustainability - Nature". By studying the full lifecycle greenhouse gas emissions of urban development—from the production and transportation of the building materials to the energy required to use and live in buildings over time—an international team of researchers has found that high-rise cities are actually producing more total emissions than shorter, but still dense, urban areas.

Isolate residents especially children and elderly, disabled..." (bold by us)

Children not outside as parents can't see:

A 5-year-old in our neighborhood unlocked his front door and walked away from home. I saw him and took him home before he was able to cross a nearby very busy street. Eyes on the neighborhood can really make a difference.



Library Lot Proposed High Rise, Rejected by Ann Arbor Voters

Tall buildings are not the answer to housing shortages, but are a blight on our community, producing much more pollution and Global Warming Carbon Emissions, that will be with us for decades. This when we are being asked to sacrifice to reduce carbon emissions.

Mayor Taylor and his supporters on council **proposed unlimited building heights** in the city of Ann Arbor. Developers were ecstatic, not so much city residents.

Limited Ann Arbor Drinking Water Supply:

As we discussed previously on our website - more tall buildings in a city with a very limited drinking water supply from the Huron River is ill-advised and dangerous. Mayor Taylor and some on council wanted **GLWA** - Detroit water to support more high-rises but it showed that he did not know what he was asking for, not just more water, it was worse water in a major way, hugely expensive, super high energy usage and roundly rejected by the city. With the Gelman/Danaher groundwater contamination, Scio and Ann Arbor Twp are looking to Ann Arbor for more safe drinking water for years to come.

Car Parking for TC1 will be minimal or not at all. Cars will not go away anytime soon and they will be parking up neighborhoods near the highrises at no cost to developers, one reason why this is happening. This will have a major negative effect on parked-up neighborhoods including devaluation and noise.

Commercial and residential buildings account for nearly a third of U.S. greenhouse gas emissions, according to <u>calculations</u> by the Environmental Protection Agency that include the emissions from their electricity use."

Ann Arbor is pushing much taller buildings in the city for some reason. Developers, Real-estate Interests, Investors and U of M are all pushing for this with big donations to electids (why we desperately need campaign finance reform).

"Cement emits as much CO2 as India". Washington Post June 27, 2023:

"The **cement** industry is responsible for **8 percent of global carbon emissions** -- triple the emissions of the aviation industry. And making all that concrete also emits an <u>enormous amount of carbon dioxide</u>.

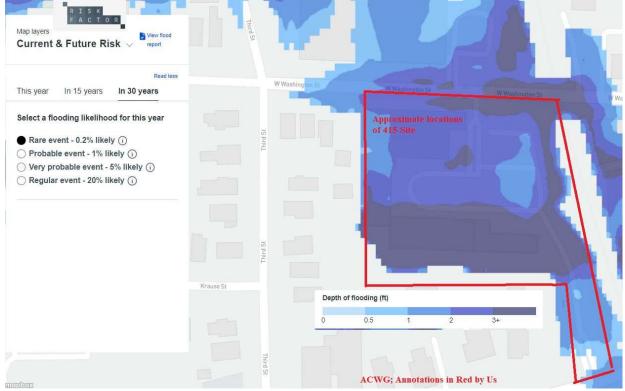
Not only does the carbon dioxide from the reaction spill into the atmosphere, but cement producers also use huge amounts of coal or natural gas to heat the kiln." (bold by us)

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Building With Wood: Wood Buildings create a negative effect on Carbon Emissions with wood 5-6 story buildings, Sequestering CO2 not producing huge amounts of it.

Ann Arbor's water supply is very limited, why Mayor Taylor pushed for Detroit Water (Great Lakes Water Authority), but was not supported by council or residents after the facts of very high cost, excessive energy use and carbon emissions, excessive fees, and poor water source, were brought to light by Rita Loch-Caruso PhD Toxicologist and Dan Bicknell MPH and others.

Building In The Floodplain, Likely Floodway For Affordable Housing, No Less, At 415 W. Washington is Dangerous with bigger storms:



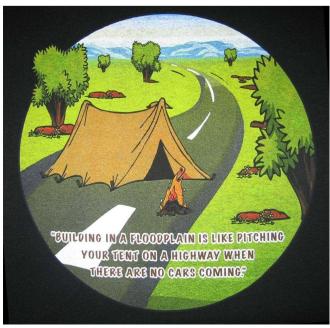
First Street Foundation 30-Year Flood Hazard 0.2% Chance Exits May All Be in 2 to 3 Feet or more of Flood Water

Our Allen's Creek Watershed Management Plan adopted by MDEQ, Washtenaw County and City of Ann Arbor and ACWG agrees with Jerry Handcock's comments not to build on this site due to the floodplain covering virtually the entire site.

For some reason, city officials failed to involve Jerry Handcock in the evaluation of this 415 plan. Planning officials stated "Oh. Our Bad!"
Jerry made comment anyway.

Jerry Hancock, the city's stormwater and floodplain programs coordinator, raised concerns about the development proposal, saying putting a large residential structure in a flood zone is **inconsistent with the city's flood-mitigation policies**. City Council obviously does not feel home flooding is not a major concern **especially when developer profits** are concerned.

Since 2004, the city's policy has been to look for opportunities to **purchase floodplain properties** and demolish structures.



Association of State Floodplain Managers

"BUILDING IN THE FLOODPLAIN IS LIKE PITCHING YOUR TENT ON A HIGHWAY WHEN THERE ARE NO CARS COMING"! (ASFPM)

Links:

https://www.washingtonpost.com/climate-solutions/2023/09/28/zero-emission-buildings-biden/https://www.washingtonpost.com/climate-solutions/2023/06/27/concrete-greenhouse-gas-emissions-cement/"Cement emits as much CO2 as India (the whole country)" Washington Post June 27, 2023. https://www.fastcompany.com/90666746/is-building-tall-really-best-researchers-dispel-the-myth-of-climate-friendly-skyscrapers.

Ann Arbor should be working toward lower carbon emissions, not higher, according to Ann Arbor!

Thank You.

Vince Caruso

Coordinating and Founding Member - <u>Allen's Creek Watershed Group (ACWG), ACWG.ORG</u>

Executive Committee (ExComm): Treasurer and Founding Member - <u>CARD: Coalition for Action on</u>

Remediation of Dioxane

Former Executive Committee Member (ExComm) Sierra Club Huron Valley Group