

Hall, Renee

From: Mark Clipsham <mc@architecturebysynthesis.com>
Sent: Friday, October 11, 2024 8:46 AM
To: City Council and Mayor
Subject: Road/rebuilding work in the research park and natural swimming. Practicing/practical sustainability

[External Email]

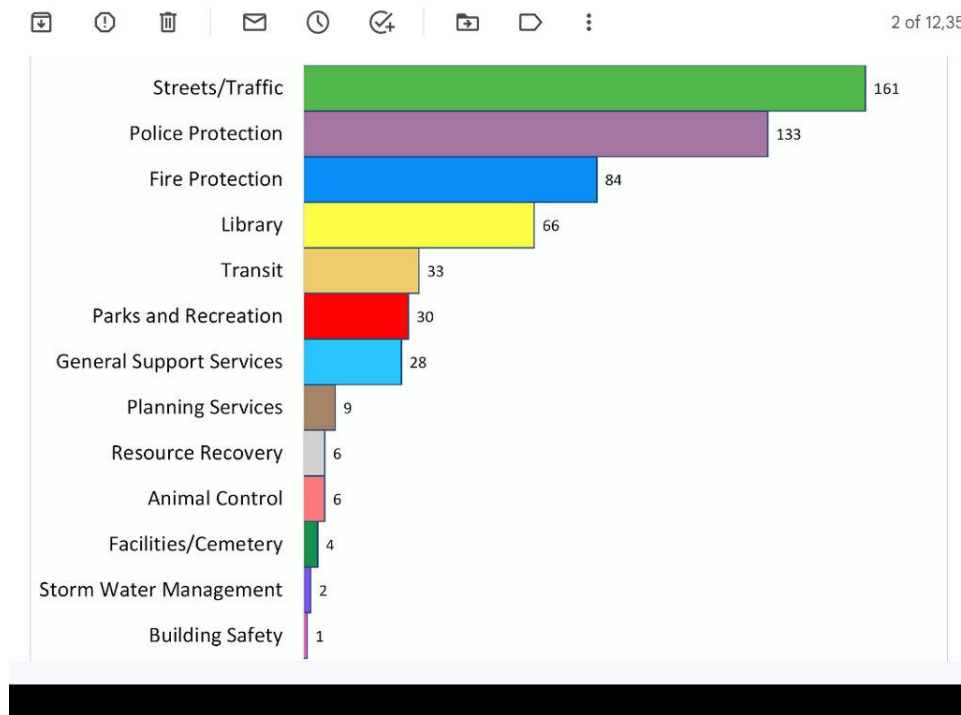
Dear Folks,

I was observing the complete rebuilding of Airport Road in the research park and wondering why it was not being maintained as the roads in the rest of the city. First tar in the cracks, then refurbish/replace seams/cracks/small areas, then cut and replace ever bigger areas of degraded pavement, grind the surface and top coat with asphalt - sometimes that is patched and recoated too. Then finally tear out completely and rebuild. This seems to be the traditional method as observed - anecdotally it would then arguably be the most cost effective - why not for this project? That road is built to high standards for heavy traffic - close to highway spec - 11" road bed? Many streets in Ames need this much more. Aesthetics? The Research PARK needs to look pretty? Maybe a different funding pool? Regardless of where the funding comes from, how does that mesh with the city and university's sustainability goals/policy? That is a lot of concrete for that amount of SF - more than for all of Main Street. With one exception the research park does not generate sales tax revenue to support the community either.

Concrete production is a significant source of carbon in the environment that will be around for a long time. I've read estimates of between 4 and 8% of carbon emissions are from concrete production - much more from vehicles that drive on the concrete roads. Dehydrated lime used for making concrete uses a lot of fossil fuel. Like covid climate change is very real and deadly. It needs to be taken into account with every decision made as they have long term implications.

Low density/sprawl is really expensive - financially, environmentally and from a health perspective. Sprawl is a major source of carbon emissions (The burning of fossil fuels, such as coal, oil, and gas - most EVs are charged with energy from these as are road materials made/installed/maintained) - sprawl was not mentioned once in the sustainability consultants report/recommendations (?). EV's or (horse drawn carts for that matter) would make some/a difference to the carbon footprint as recommended by the "sustainability consultants" but they would still be operating on sprawling, taxpayer supported/subsidized, high energy entrained /carbon infrastructure that needs ongoing maintenance, especially in a cold climate that uses salt for snow/ice melting. Some of the buildings in the park are surrounded by chemically maintained expansive lawns using petroleum-based nitrogen fertilizer and weed/insect killers that run off into the rivers and streams ultimately, others are surrounded by prairie, both are surrounded by hard concrete surfaces. There would be relatively less of this with a denser development - basic elementary school math. The auditing of different parts of the city relative to infrastructure/maintenance cost vs tax revenue would show this clearly - to guide future sustainable growth - it will never happen. Everyone already knows the answer and just doesn't want it published/public.

The city and our country seem to be stuck in a 1950s unlimited resources/endlessly resilient environment, endless economic growth forever planning paradigm. The logical conclusion is fairly easy to figure out - prime farmland covered by lawns, streets and buildings. Why is it like this? In general see below - from the city budget a few years back. Sprawl makes police/fire/transit/"planning"/support services and stormwater costs relatively more expensive - it is part of streets/traffic cost too because it affects travel time hence the number of stations/employees per population served is lowered. Public transportation needs a critical mass of users to operate in the black otherwise it has to be subsidized by taxpayers - a constant issue in sprawling cities. Streets/transpo is by far the biggest expense to the taxpayer in poorly planned cities. Sprawl means owning a car for most people - a big expense that adds to the climate change and healthcare crisis while compromising community.

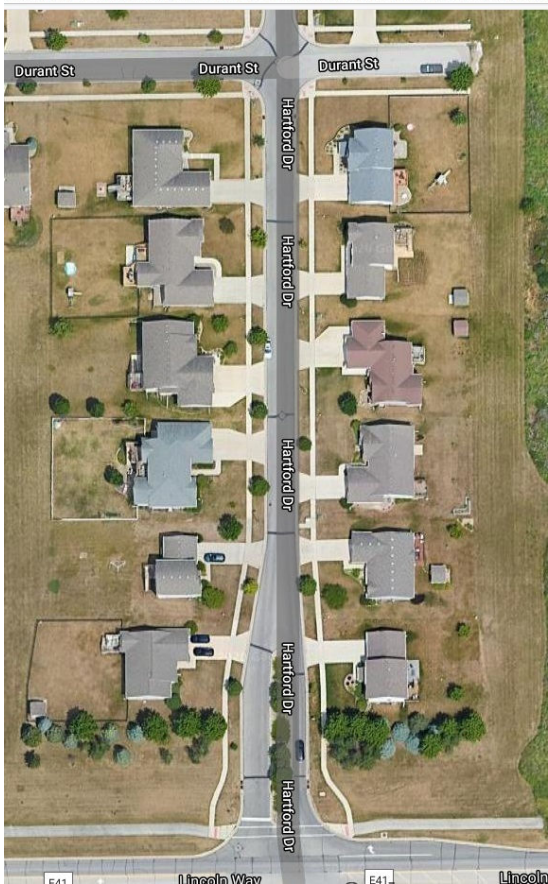


The designated private company research area is designed as a park as opposed to a campus - like a deer park of an England manor vs an Italian villa in the renaissance days to landscape history buffs. The manor of the wealthy had singular design elements placed in oceans of grass one drove past in the carriage, the villa was designed as a series of rooms on an axis that merged seamlessly with the surrounding compact gardens (outdoor rooms) - turf rarely afforded because of its high cost to maintain. The same concept is applied to people/environmentally, affordable friendly cities. Stand alone buildings and residences use much more energy to condition/maintain - close to the standard in Ames. Ames is still relatively small and the true cost of sprawling development happens at the next larger growth scale. Infrastructure costs grow closer to exponentially in sprawling cities. I keep wondering what drives the "planning" of Ames development expansion (AEDC?) - planners schooled in sustainable practices and community-minded walkable/bikeable cities? Or a reaction to a request from developers? Low density sprawl certainly is easy to do and very profitable for private business - maintained by the city and its taxpayers at a cost to their community, personal and the environment's health. The city dictates policy - why is there still surface parking as an option? If people/developers want to make money here they should be helping make it a better place to live. Lower development standards spur more and faster growth (economic activity). Growth can be tall, lean and strong or sprawling, fat and weak. Sprawl is the equivalent of a bad, unhealthy diet and no exercise. Low density sprawl with lots of attendant

infrastructure creates the appearance of prosperity through created need and excessive consumption of materials, labor and energy but comes with a high civic and environmental price tag as a financial maintenance liability/debt that has to be constantly paid by the taxpayer. It is not sustainable/solvent but for a constant input of tax revenue whose burden grows faster/bigger than revenue as the city sprawls. It lacks the stability/solvency of a compact, walkable European style city.

A low percentage of occupied/taxable space relative to the cost of the infrastructure to support it means it is subsidized by taxpayer money - it does not support itself with its tax base - this is true of all low density development including typical residential - very little of a typical yard is used - supported by very expensive infrastructure. Lawns and parking lots have little taxable value. Great for the local economy short term, bad for the environment and civic solvency/tax rates. The higher density developed areas (like Main Street, Campus Town and the older residential areas in Ames) subsidize the sprawl. There is little to no community in this type of low density almost exclusively vehicle accessed development. The garage door is the front door.

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The excessive parking that is in Ames does not help. I can't remember a time when I saw a commercial parking lot even half full in Ames - the university, behind the shops on Main and Campus Town (high density development) withstanding at times. The infrastructure surrounding them is paid for/subsidized by taxpayers. A logical solution to lower taxes and meet sustainability goals while enhancing community and walk/bikeability would be to have minimum lot coverage not maximum, and maximum parking allowed not minimum. Allow/encourage unused parking to be sold/used as outlot parcels. Why does an industrial PARK have to look nice and be developed in a residential style?

"The phrase "Life, Liberty, and the pursuit of Happiness" is one of several examples of **unalienable rights** that the Declaration of Independence states that governments are created to **protect**. The Declaration of Independence also states that governments are instituted among people and derive their just powers

from the consent of the governed." The Declaration of Independence. Written to differentiate the new US from heavy-handed, bureaucratic authoritarianism. So, who among "the people" decided I shouldn't be able to swim in Ada Hayden and why?

Other city planning/ funding vs opportunity/public need and wishes. The "city" (taxpayers/donors) is spending \$30M on an indoor pool I will never use as will many other people for the same reasons. It will use a lot of concrete in it's construction. I wish they would spend \$100 on a "swim at your own risk" sign at Ada Hayden - the only place I would swim within 100 miles in Iowa. Just got back from Beaver Lake in Arkansas to see several clients and go swimming.



It is 31,700 acres/49.5 square miles, 483 miles of shoreline and very steep sides up to 200 ft deep with a mean of 60 ft deep. Swam 11 of the 13 days I was there. Drownings are rare to the point of being newsworthy. Are people in Arkansas better swimmers, have more common sense, are more responsible/accountable, or just luckier than in Ames/Iowa (or does the state just let people pursue happiness)? The city seems to think so via their laws about Ada Hayden. No swimming allowed. So, to compensate they build a chemically controlled indoor swimming pool. These chemicals dry my skin out, hurt my eyes and sterilization chemicals are used to kill biological activity - along with being linked to respiratory problems for the same reason. Indoor pools are noisy (often playing "music") and simply not natural - all fine and well if I can swim in a natural body of water on my own reconnaissance at practically no cost to the city/taxpayer a few months of the year. They can have their \$30M year round indoor pool - why can't I have a \$100 sign next to an outdoor lake? What is the compelling reason for this policy/law? Can I see the research that justifies it?

I am not a team player or a fan of groupthink - I'm an individual, independent, self-employed and don't do work here. "If you want to lead the orchestra, you have to turn your back on the crowd." Ames prides itself on innovation - I haven't seen it. The future will be the result of decisions made today. How about something like this if I can't swim in Ada Hayden? Good design is hard work but very rewarding and healthy. The city needs to up the game several notches. The days of low hanging fruit are gone.



Sincerely,

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The project is the manifestation, of the relationship, of all the people involved in the project.

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