Subject: Email - Communication - Michael Nemeth - City Centre Schools - CK 610-11

Attachments: city_centre_school_design_alternative.pdf

From: Web NoReply <web-noreply@Saskatoon.ca>

Sent: Sunday, February 21, 2021 10:22 PM To: City Council <City.Council@Saskatoon.ca>

Subject: Email - Communication - Michael Nemeth - City Centre Schools - CK 610-11

--- Replies to this email will go to

Submitted on Sunday, February 21, 2021 - 22:21

Submitted by user: Anonymous

Submitted values are:

Date Sunday, February 21, 2021 To His Worship the Mayor and Members of City Council First Name Michael Last Name Nemeth Phone Number (306)

Email

Avenue L South Address

City Saskatoon

Province Saskatchewan

Postal Code

Name of the organization or agency you are representing (if applicable)

Subject City Centre Schools

Meeting (if known) Monday Feb 22 Regular Council Meeting

Comments I've been encouraged by others in our community to send this concept proposal to you as one of many potential alternatives that could meet budget and also respond to the requests by some of the community for smaller, more walkable schools. Schools should be able to grow with the community and a modular approach could offer this at a reduced cost. We shouldn't build based on past enrollment data alone, but should have contingencies for growth and anticipate students to return to these neighbourhood schools when the spaces are invested in and rejuvenated. Culturally appropriate and net-zero energy design would be a necessity. I think there are so many great ideas waiting to be discovered through an open consultation process on the amalgamation. No existing neighbourhood should see such a drastic change without a deep discussion with all members of the community. The Junction Improvement Strategy was written in 2014, perhaps City consultation funds could be allocated at this time to complement the discussions on the location and design of the school(s) including the inevitable changes to surrounding infrastructure and amenities.

I think there are several aspects to be discussed well before a site is settled on. I put together a concept that would put a new, Net-zero modular school at each of the current sites for less than the proposed budget for the mega-school, followed by the historic schools being renovated (at no cost) through clean energy financing like PACE / FCM GMF perhaps the old schools won't work for classrooms with universal accessibility in mind but they can remain and serve the community. The school site can remain a central square in the fabric of the community as it has for over 100 years.

I hope we can find an approach that is adaptable to the evolving needs of the community. Thank you for your efforts!

Best regards,	
Michael Nemeth	
306	
	ı

Regarding: Proposed City Centre School in Optimist Park

Suggestion to maintain existing school locations and keep 2-3 schools running instead of amalgamating to 1. Concept for King George redevelopment (which could also apply to Pleasant Hill and Princess Alexandra).

From: Michael Nemeth

Resident of the West Industrial neighbourhood (living adjacent to Optimist Park)
Parent of a child who will attend school in the community

Others have already expressed their concern that building the proposed amalgamated City Centre School in Optimist Park would result in a loss of green space, public gathering and play space in a community with relatively little.

An antiquated and undersized stormwater management system in the area is also a real concern, especially as our climate changes and becomes more severe. Resilience to flooding can be achieved through thoughtful design of vegetation and retention structures and is a necessary consideration to mitigate risk and ultimately protect residents from rising insurance costs.

There are a multitude of vacant but contaminated sites in the vicinity that have been overlooked as a site for a new school. These sites will continue to be reminders of missed opportunities and inaction until they are reclaimed. Environmental reclamation is a challenging but practical and achievable task, with many experts within our city ready and able to help with this work. Brownfield sites can be transformed into safe, beautiful community assets, just as we have created along our river banks and farmers market site.



One of many possible concepts for a modular school expansion at the King George site

But, specifically, I would like to raise the point that there has been essentially no public consultation on amalgamating the 3 schools in the first place. Others have noted that our four communities (West Industrial, Pleasant Hill, King George, and Riversdale) have experienced a lack of consideration that would not be acceptable in any other community or neighbourhood.

While a school across the street would be very convenient for my child, what about the fabric of the community that has been established around the existing school sites for over 100 years?

I don't think it's fair to those whose property values will fall due to the closure of a school, how would they be compensated?

We moved to the community because we wanted to live in a walkable area - to reduce our use of a vehicle, to get exercise, and to meet our neighbours. Concentrating the schools will produce an opposite effect — yes, the school will be close by for us, but everyone else will now need to drive or bus their children to the school, exponentially increasing the traffic in the area.



We shouldn't miss this opportunity to engage the whole community in an inclusive design process and really think about what our education and community space could look like. A competent planning process should begin to assess the long-term development needs of the neighbourhoods.

We see it every time a new school is built – students flock there and the attendance in the surrounding schools drop. I believe this is a result of an under-resourced provincial education system. It's understandable that parents and students will do whatever they can to get the best learning experience. They are bound to avoid worn-down, leaky and outdated buildings that have been neglected.

Past student enrollment data may not be the most appropriate to base decisions on for the future of these communities. We need to make projections that will include increased density due to the bus rapid transit line on 22nd street. We should account for overall densification trends of these communities as aging homes are renewed and the West Industrial neighbourhood transitions to "uses more complementary with the surrounding neighbourhoods" as noted in the City of Saskatoon's Junction Improvement Strategy. I interpret this to mean an increased transition to medium-density residential, community facilities and light commercial.

These historic, core neighbourhoods are adjacent to the downtown and the river and will continue to be sought after locations to live and raise families as Saskatoon grows.

If public consultation is truly valued, why does it seem that amalgamating 3 schools into 1 is already a foregone conclusion? I am not aware of any public engagement up to this point on the amalgamation itself. The deflection that engagement can wait until detailed design completely misses the need for a much broader discussion. It feels as though this decision is being rushed and should have started before our schools reached a point of no return. If our provincial government truly valued providing thoughtful and well-designed places for our children to learn, they should have been investing in our core schools for the past number of decades, and started meaningful conversations about the future of our schools years ago.

Public schools are innately community centres where we send our youth to learn and grow. They belong to the community, the people. When you build or make something yourself, you know the effort that went into it. The extra effort is worth it because there's a better chance you're going to get what you want, designed with your needs in mind. This works on an individual level, but it can and should work in a project involving many.

Consensus is a key part of inclusivity and is essential to make community projects work. Feeling included empowers people, engages them and allows them to take pride in building something they may not be able to on their own. Universal design, for example, is accessibility for all people. Everyone's needs are considered. A school can be just a building – or it can be a meaningful strategy by a community to achieve the things we care about.

The amalgamated school proposal as dictated offers little imagination and even less respect for the residents of these neighbourhoods. A building delivered from the top down will be at best an institution, reminding us of our colonial rule, while a space built by a community will have a self-healing foundation, energized by interdependent, engaged citizens who want to do what they can for those who need it.

So, should there be 1 school? 2 schools? 3 schools? 4 schools? This should be open for public discussion.

To contribute to this discussion, I would like to propose an alternative to building in Optimist Park. An idea that I hope sparks more and better ideas. This concept could be applied to any of the existing schools. I think it speaks to many of the concerns I've heard expressed. It can be done for a lower cost than proposed and at the same time offers ongoing flexibility, adapting as the needs of the communities evolve. It doesn't need to take up acres of scarce green space. School sites that have been established in neighbourhoods for more than a hundred years don't need to be abandoned out of a reflex of austerity (King George School was built in 1912).

Abandoning the old buildings and leaving the deferred maintenance

provided zero.

costs for someone else is not the lesson I want my child to learn. You might remember recently, around the world, millions of youths protesting that adults have let them down in regard to climate change – the deferred maintenance scandal of the century. Ironically, Optimist Park was created in 1910 out of public demand for parks when developers originally



From the 2011 City of Saskatoon Optimist Park Safety Audit Report:

The original land use plan for Riversdale was proposed in August, 1904 by Dr. Willoughby, a graduate in medicine from the University of Toronto. Originally the land use plan had no land set aside for parks with many lots shallower than others of their time. This design was created to increase land development profits, not to attend to the amenities desired by many of the citizens. As a result, citizens were quick to demand a park and, in 1910, development began on what was to become Optimist Park (originally known as Westside Park), one of Saskatoon's oldest green spaces.



Located in the southeast of the Riversdale neighbourhood, Optimist Park intersects Avenue K South, between 18th and 19th Streets, and has grown and changed over the years. Between 1924 and 1931, it was expanded and landscaped as part of an unemployment relief project. Later, a skating rink and rink house were added, and a speed skating oval built, establishing Optimist Park as Saskatoon's home of speed skating until the 1971 Canada Winter Games, when the Clarence Downey Speed Skating Oval was built. The park has since been developed to include winding tree-lined paths, tennis courts, a ball diamond, paddling pool; play structures and a toboggan hill.

We should hold a design competition to generate many great concept designs for presentation, review and feedback during initial community public consultations. Architecture firms would be invited to dream with us, with specific attention to highlight designs from Indigenous architects and designers. All would be compensated for their input — but ultimately a team would be chosen to turn the numerous design considerations into a functional, beautiful building that we're happy to call our own.

I'm not an architect, so I hope you don't find my sketches too ugly \odot . I made them in my spare time over a few hours in Sketchup and Google Earth. Although, I am an engineer who works in the design and construction of Net-zero buildings and have experience designing energy efficient heating, cooling and ventilation systems for schools. My hope is that the concept prompts further discussion and shows what might be possible with the building blocks that are available to us.

The concept is developed for King George school since I live closest to it, but it could be applied to the other schools as well to keep all 3 operating close to where their students live.



The expansion of the King George facility could be scheduled in two phases.

Phase 1 – Build a **new modular school** as an addition to the existing school building with capacity equivalent to the existing enrollment + 10%. The building would be **Net-zero energy** with no increase in cost due to clean energy financing (see point 6 below).

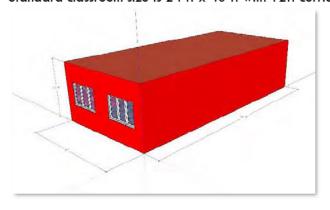
Phase 2 – Once students can start attending the new school, the **existing building would be renovated to Net-zero energy** through clean energy financing. Afterwards, it could be used as a school, daycare, a community centre or whatever people need most at the time.



DETAILS:

Phase 1

- New modular school on King George site
- Concept design has 30 classroom modules for 20-30 students each = 600 to 900 students, easy
 to expand or reduce in size likely would be much smaller at first but could be added to and
 stacked up over time.
- 3. **Budget pricing per module** is \$350,000 or \$280/sq ft for Net-zero ready construction by a local modular builder experienced in modular schools.
 - a. 30 classrooms, 37,440 square feet, 600-900 students, would be close to \$10.5 million.
 - b. Budget to build City Centre School at Optimist Park for 600-900 students is \$29 million.
 - c. Standard classroom size is 24 ft x 40 ft with 12ft corridor section.



- d. Yes, it's a portable classroom, but it's a well designed, factory built, quiet, warm and well-ventilated classroom that's attached to the rest of the building and is designed as a cohesive structure that looks like it might belong there.
- e. The siding, colour and form choices for the building are unlimited.

4. Underground parking

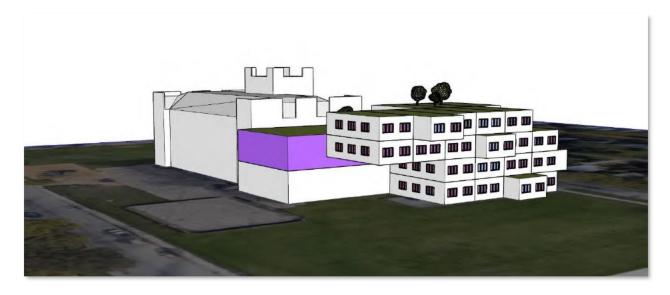
- a. The aim of underground parking would be to preserve surface green space.
- b. Cost per underground parking stall can be \$70,000 each, but it might be necessary if there is a future combined community space on site attracting more drivers.
- c. Might not be necessary if effective public transit, bicycling infrastructure, ride sharing, taxi and autonomous vehicles are further improved.
- 5. Rebuild gymnasium with a higher roof and an indoor community walking track.
 - A green roof and roof-top garden could be installed to provide additional outdoor learning space.



b. Allow \$2 million?

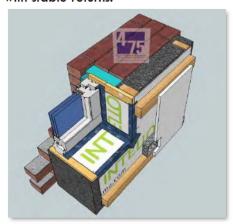
6. Clean energy financing could come in many forms.

- a. It could be similar to the new PACE financing-based Home Energy Loan Program being developed by the City of Saskatoon – there are many examples of Commercial PACE programs in other jurisdictions.
- b. It could be Energy Performance Contracting, there are many examples of governments implementing EPCs to finance energy upgrades, including the City of Saskatoon.
- c. There is funding from the Federation of Canadian Municipalities for Net-zero community buildings and the Federal Government Climate Action Incentive Fund available for schools.
- d. The legislated increase in carbon levy alone is a good business case to invest in efficiency.



Phase 2

- Renovate existing King George building to Net-zero energy with PACE financing or Energy Performance Contract.
 - a. The business case for Net-zero energy renovations gets better and better.
 - There are an increasing number of investors looking for long term energy efficiency projects with stable returns.



- Refit existing, renovated building as community space with local improvement charge or cooperative.
 - a. The renovated King George school could be used as a school if the capacity was needed, or it could function as a daycare, affordable art space or other community space if that was needed more.
 - b. Depending on the ownership structure desired, a community based legal entity such as a non-profit or co-operative could be facilitated to own and manage the community space.



[above] Historic masonry homes in New York – The middle one has been renovated with new, high performance windows and extra insulation on the interior. The cooler colours in the infrared thermograph shows that heat loss is substantially reduced compared to the neighbours. The Passivhaus / Net-zero approach is practical and leads to a long lasting, comfortable, easy to heat building with little maintenance required.

Appendix A: Inspiring School Designs from Around the World



[left] Harris Academy - Sutton, UK - Passivhaus [click for video] offers long lasting energy savings and low operating costs for this school through simple ideas like thick insulation, high quality windows and plugging drafts. Ample fresh air and daylight is provided for a healthy learning environment, but highly efficient heat recovery systems mean that little energy is wasted.

Several Saskatchewan buildings have demonstrated that if you invest appropriately in insulation and good windows you can see a comparable capital cost savings in the heating, cooling and

ventilation systems. Not only are the buildings more comfortable and healthier, they cost nearly the same to build as conventional and offer decades of energy savings. Sustainability is baked in. This is something the students and community can take pride in. Please excuse the lack of foliage in the photo.

[below] 2010 expansion and renovation of **Stoddert Elementary School**. The new Stoddert Elementary was the first school in Washington, DC to be fully heated and cooled by geothermal energy and is LEED-gold certified. The contrast between the historic brick school and the new addition seems to work – but I'm not an architect.



Appendix B: In and Around Optimist Park: an Homage

