Density by Design



Kingston's Mid-Rise and Tall Building Policies

Issues and Options Report



Council's Climate Emergency Declaration

Whereas climate change is currently contributing to billions of dollars in property and infrastructure damage worldwide, stressing local and international economies;

Whereas climate change is currently jeopardizing the health and survival of many species and other natural environments worldwide, stressing local and international ecosystems;

Whereas climate change is currently harming human populations through rising sea levels and other extraordinary phenomena like intense wildfires worldwide, stressing local and international communities;

Whereas recent international research has indicated a need for massive reduction in carbon emissions in the next 11 years to avoid further and devastating economic, ecological, and societal loss;

Whereas an emergency can be defined as "an often dangerous situation requiring immediate action";

Therefore be it resolved, that the City of Kingston, officially declare a climate emergency for the purposes of naming, framing, and deepening our commitment to protecting our economy, our ecosystems, and our community from climate change.

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Purpose of this Paper

This Issues and Options Report represents the first phase of the drafting/creation of new policy for the City of Kingston that will guide the design of future proposed midrise and tall buildings across the city. The eventual new policy report will be entitled "Density by Design: Kingston Mid-rise and Tall Building Policy."

The purpose of this Paper, which has been prepared after a first round of public consultation and the review of midrise and tall building design guidelines and policy approaches in various cities across Canada, is to stimulate continued discussion between and among Council, key stakeholders and the wider community about related current or emerging issues. Defining and further discussing

these issues will help the project team, made up of City Planning Department Staff and planning and urban design consultant Brent Toderian of TODERIAN UrbanWORKS, to work out what needs to be addressed in the policies. It will also help to shape a clear vision for the future development of mid-rise and tall buildings in the City.

How We Got Here

In recent years, the Planning Department has been faced with a greater number and complexity of development applications than ever before. The success of the Williamsville Main Street Study in terms of spurring development has been significant, and City staff have seen applications for bigger and taller buildings proposed as infill development in many areas of the City. Taller buildings have also been proposed on the periphery of the built-up areas of the City, which has led to a discussion of where density and larger buildings can be supported by City infrastructure.

The current Official Plan contemplates high density residential development anywhere in the City, based on identified locational criteria. This mainly limits and directs taller buildings to arterial and collector roads, with some consideration given to land use compatibility.

However, not all arterial and collector roads in the City are appropriate places for taller buildings from an infrastructure and built form perspective. Applicants and City staff have identified a need for clearer direction from the Official Plan when it comes to the location of high-density and tall buildings.

Originally the Density by Design project intended to provide policies to direct the design of buildings taller than 4 storeys, without specifically addressing the "where" of those buildings (which would be the subject of subsequent work). As the project team researched, observed current proposals/applications, and began developing recommendations, it was determined that what was needed was concurrent action on both the "how" and the "where" of tall buildings, in order to direct such buildings to locations that better reflect the public interest. As a result, this work will now present options to both direct the design of buildings taller than 4 storeys, as well as their permitted locations across the City. It is proposed that existing policies that permit high density residential development in any location be amended.

In March of 2019, City of Kingston Council declared a climate emergency. That Declaration, which built on the foundation of sustainability goals set by previous Councils, requires a reconsideration of Kingston's land use policies, discussions and decisions. Built form is powerfully related to climate change in many ways, as is the location of density relative to mobility options or car dependency.

How this Report has been Prepared

The drafting of this Issues and Options Report has been undertaken with consideration of the context of the existing planning framework which is comprised of a number of key policy documents and various strategic planning documents including:

- City of Kingston Official Plan
- City of Kingston Zoning By-laws
- Council's Strategic Plan 2019 2023

This report builds on various background studies and is being developed in tandem with several secondary planning exercises including:

- Central Kingston Growth Strategy (forthcoming spring 2020)
- North King's Town Secondary Plan (forthcoming spring 2020)
- Williamsville Main Street Study Review (forthcoming spring 2020)
- Active Transportation Plan, 2019
- Nodes and corridors work
- Transportation Plan
- Cycling and Pathways Study, 2003
- Downtown Action Plan, 2004
- Growth Management Strategy, 2004
- Downtown and Harbour Area Architectural Guidelines Study, 2007
- Residential Intensification/ New Community Design Guidelines, 2010
- Williamsville Main Street Study, 2012
- Climate Action Plan, 2014
- Design Guidelines for Residential Lots, 2015

The Issues and Options Report has also been informed by a number of activities in the first phase of consultation conducted as part of this process including:

- Meetings/workshops with citizens open to all;
- Meetings with stakeholder groups comprised of local builders, real estate agents and other people involved in the property industry;
- Interviews with other key stakeholders;
- Briefings with/from relevant City departments.

The new policies created through this work program are anticipated to be completed in the Spring of 2020. Further opportunities for community input into the project will be available in the coming months, with specific community consultation on this Report in November 2019, and further consultation on the release of a draft policy for community comment in February of 2020.



Applicability of this New Policy to Non-Residential Buildings:

It is important to note that this work program, and the resulting policy, will primarily relate to residential or mostly residential/mixed-use buildings in the city. The policies are not currently intended to relate in their entirety to office buildings or other tall commercial buildings such as hotels. One of the considerations that will be subject to further discussion will be which specific design considerations in this Report will also apply to commercial/office buildings. This will be definitively confirmed at the next stage, the creation of draft policies.

For example, it is likely that policies relating to an active ground plane and the prevention of blank walls will also pertain to commercial/office buildings. On the other hand, policies relating to maximum floor plate sizes will not relate to commercial/office buildings, as they generally require much larger and more diverse floor plates. In some cases, specific policy nuances relating to commercial/office buildings may be included,

eg tower separation requirements where the separation is between a residential building and a commercial/office building.

The following chart reflects an initial consideration of which elements would and would not relate to office or hotel buildings, presented for further discussion:

	Element/Issue	Residential	Residential-Mixed	Office	Hotel
1	Height	/	/	/	/
2	Width	/	/		
3	Tower Separation	/	/		
4	Setback/Orientation	/	/	/	/
5	Upper Floor Stepbacks	/	/	?	?
6	Podium	/	/		
7	Ground Floor Design	/	/	/	/
8	Above-grade Parking	/	/	/	/
9	Building tops/Caps	/	/	/	/
10	In-Building Amenities	/	/		
11	In-Building Active Transport	/	/	/	/
12	Additional Architectural Details	/	/	/	/



Project Background and "Lenses":

As the project team works with the community and stakeholders to undertake this work program, we have committed to Council to be especially mindful of "4 Lenses" through which to look at our work and resulting policies. **These 4 are as**

follows:

1. The Link Between Land Use Planning, Transportation & Building Design and the Climate Emergency

Land Use Planning & Transportation

There are no municipal powers and responsibilities that have a greater effect on climate change mitigation than the interconnected decisions around land use and transportation. In this context, land use includes density, built form, mixed-use, urban design, etc., which all have powerful implications for both building and transportation emissions in cities. How much density there is, where density is (& is not), how density is designed and uses are mixed, and particularly how car-dependant density is, all have powerful implications for sustainable cities and greenhouse gas (GHG) emissions, and require significant rethink and transformation in and by cities if the "Climate Crisis" is to be responsibly mitigated.

Green Building Design

It is well recognized within green building design "best practices" that the details of how we design and build the form of buildings can have a significant effect on energy consumption and resulting greenhouse gas (GHG) emissions. In addition to key aspects such as materials, the shape and nature of the building envelope itself can have a significant impact on energy efficiency. This is important to remember as we consider building design expectations that affect the envelope shape for various urban design performance reasons. This does not mean that every building should be designed as a "simple box," but it does mean that public interest issues relative to urban design need to be weighed against our evolving learning around building energy performance as a key public interest objective.

Throughout this policy development, the key issue

of wood-frame construction as an alternative to concrete/steel construction will be actively considered. It is recognized that wood-frame construction has many public interest advantages, including its nature as a renewable resource, its significantly lower carbon footprint than concrete, and its reduced construction cost (with corresponding potential greater affordability). However, wood-frame construction has been considered less architecturally flexible when it comes to building shape (mainly due to concerns over leaking, with the actual level of risk being a source of debate amongst architects and builders), with implications for how other urban design considerations can be addressed.

It is noted that the local Kingston market has been relatively slow to adopt the 6-storey wood frame allowances in the Ontario building code (for various reasons, including insurance costs relating to the pre-completion vulnerability of wood projects to fire before sprinklers etc are installed and operable), but that is expected to change over time, and it is in the City's interests to facilitate that shift occurring as quickly as possible. It is further noted that the advent of "engineered wood" (also known as "mass timber" or cross-laminated timber aka CLT) has an opportunity to create change when it comes to taller wood buildings, as it is much more flexible, more fire-resistant, etc. Although it is currently considered expensive (currently similar in cost to concrete) due to limited availability of materials and expertise, this is expected to quickly change in the coming years. The British Columbia Provincial Government has already allowed up to 12-storey buildings in its Provincial building code, and the National Building Code is expected to follow suit in 2020.

Although they are beyond the scope of this work program, the Project Team understands and recommends that in order to achieve the much greater reductions in building energy consumption and associated emissions associated with addressing the Climate Emergency, the City will

need an ambitious strategy for green building design/passive building design relative to all new construction as soon as possible, as well as a strategy for retrofitting of existing building stock. Similarly, the City will also need to develop an ambitious district energy strategy to take groups of buildings or neighbourhoods "off the grid" wherever possible by making use of available renewable energy sources.

2. Affordability and Market Choice

Design choices can have small or significant effects on both the cost of construction, and the cost/affordability of housing rents or purchase prices. As the intention of this work program and new policy is to be aligned with the results of the Mayor's Task Force on Housing, proposed new policies will be considered relative to the effects on affordability, with "win-win" approaches identified wherever possible when it comes to achieving multiple public interest goals. Design policies shouldn't add significantly or unreasonably to construction costs and housing cost levels without demonstrable and justifiable public interest advantages. Further, new policies should support aspirations for greater housing diversity and choice, and in particular increased market interest in and support for housing in urban settings with associated lower public infrastructure costs, reduced car-oriented cost-ofliving, lower carbon footprint implications, better support for public health, etc.

3. "Sense of Place" and Neighbourhood Character:

The intention of this work program is not to create a "one-size-fits-all" approach to building design across the city, or to specifically copy approaches from other cities, but rather to reflect different locations, contexts and character across the city. In particular, sensitivities and opportunities around the unique built and cultural heritage of Kingston will be overtly addressed and embraced. Policies will seek to identify a "Made In Kingston" approach

that learns from best practices and successes/ failures from other cities, but eliminates superficial replication.

4. Ease of Development in the Most Important Places:

In every element of this work program, consideration must be given to the effects of the resulting requirements on the strategic "ease of development" in Kingston. Although development shouldn't be more complicated, difficult or time-consuming than it needs to be in order to achieve the many relevant public interest outcomes, it is particularly important that the system not inadvertently send the wrong messages to the market and development activity by, in essence, making the wrong developments in the wrong locations easier (or just as easy) as the right developments in the right locations.

Unfortunately this inadvertent result is quite common in land use planning approvals systems (ie greenfield development, with its significant costs and public interest implications, is almost always considered "easier" than badly-needed infill developments that address many important public interest goals), and there are many existing examples of this in the current planning system in Kingston. Thus as the existing approaches and policies are reconsidered and new policy requirements are established, avoiding such an outcome will be a key consideration. In short, the outcomes that are most supportive of the public interest as identified by Council goals, policy and direction, should be the easiest to propose and achieve.

Land Economics and Financial Feasibility

The project team and the City's planning department, more generally, have identified the need for increased knowledge of the economic factors that influence land use planning outcomes. Additional work in land economics is

anticipated in early 2020 that will inform this and other policy projects currently being undertaken by the City.

In order to identify feasible design policies for buildings between 7-9 stories, across the city and specifically in the Williamsville Main Street Corridor and the North Block area of the Central Business District (CBD), a more specific economic feasibility analysis is required. This is because the scale and urban design approach for tall buildings preferred by many in the city is to keep height below 10 storeys or so, and to step back floors in various ways above the 4th-6th floor (either through standardized step back requirements, or angular plane requirements that can lead to site or context-specific design answers).

The challenge with such approaches is that, in Kingston, and indeed across Canada, concrete buildings between 5-9 storeys or so are frequently considered either economically challenging, or unfeasible. Each city has a "feasibility gap," depending on the local economic factors, that make certain concrete building heights (ie 5-7, 5-8, 5-9 or even 5-10) challenging or unfeasible, where builders can either build 4-6 storey wood-frame or hybrid buildings, or concrete buildings taller than the "gap," but not anything in between. This gap exists in Ontario and Canadian cities even if the concrete building is designed essentially as a box, and is intended for more initially profitable condominiums rather than rental, and is made even more challenging where the concrete buildings are expected to step back, and/or where the buildings are intended to be rental buildings.

Therefore any assumption that a 5-9 storey concrete building is economically feasible should be tested by the city through economic analysis to ensure that intended or preferred building form outcomes can in fact occur.

More specifically, such analysis should consider the following interconnected questions:

- Are 5-9 storey concrete buildings economically feasible in various contexts in the city? If so, what design conditions or factors are necessary (ie floor plate size)?
- If such buildings are initially feasible, are they still feasible if the buildings are articulated with stepped-back floor requirements or angular plane requirements?
- Do the feasibility answers to the above questions differ if the buildings are condominium or rental buildings?

Method of measuring density

Currently the City of Kingston measures density largely through a "units per hectare" measurement, although floorspace index (FSI) has been used or proposed in some areas of the city. It is recognized that in urbanized or urbanizing contexts, floor space index is generally considered a more effective way of measuring, regulating and accurately communicating the level of building density on a site that all parties could expect. It is proposed therefore that the city continue to transition to FSI in urban contexts city-wide, either within this specific work program, or leading from this work program in the next review of the Official Plan, whichever is more realistic given the urgency and corresponding interest in expediting the Official Plan Amendments needed for this work program



Location of Height and Density

Before discussing the many urban design-related issues and elements, it is necessary to discuss/address a significant issue that affects all other considerations in this report.

Where Tall/Dense Buildings Should Be Allowed, And Where They Shouldn't

Issue: As the City seeks to provide design policy to influence how mid-rise and tall buildings are designed, there is a critical and urgent need to address where such buildings are permitted and built.

Background: In the initial work program and direction for this exercise, it was explained that this work would establish policy to guide how mid-rise and tall buildings are designed, but it would not yet reconsider where taller buildings (and corresponding higher densities) are built. The latter consideration, which requires significant reconsideration in light of many observed challenges and new directions such as Council's Climate Emergency declaration, was originally intended to be addressed in a subsequent/ overlapping work program.

However, City staff and the Project Team have observed that many applications for tall buildings are currently being contemplated and/or submitted under existing policy in problematic locations that would represent years, and even decades, of market activity in Kingston at our current projected growth rate. If all such proposals are approved, and if such applications continue to be submitted prior to relevant policies being reconsidered, it would significantly undermine the City's ability to achieve density and development in those locations that would best address the many challenges Kingston faces, including the response to the Climate Emergency declaration. In short, and to paraphrase a common colloquialism, as the barn doors are being considered for closure, many or most of the

horses are currently leaving the barn.

The proposals and applications are arriving at a time when there is still a perception that Kingston is in a housing shortage crisis, even though Staff analysis recently shared with Council and the public shows that applications and resulting housing supply to address that crisis have already been approved, and many are under construction.

Residential Rental Vacancy Rate

Staff reported to Council on the 2017 and 2018 vacancy rates in reports dated January 2018 (18-043) and March 2019 (19-065). The purpose of these reports was to provide and analyse Canada Mortgage and Housing Corporation (CMHC) research indicating that Kingston's residential rental vacancy rate was declining (0.7% in 2017, and 0.6% for 2018). A healthy vacancy rate is considered 3%, and when rates are lower there are impacts on affordability and availability of housing.

Staff's analysis put the CMHC data in the context of the City's broader work on housing provision by both the Planning, Building and Licensing, and Housing and Social Services departments. It included data on land use planning applications and approvals, building permit numbers, consideration of the secondary market (CMHC only considers rentals with 3 or more units), population forecasts by Statistics Canada and City reports, and local development trends.

Staff analysis determined that it is reasonable to assume that the low vacancy rate for Kingston has been driven more by a lack of supply than by demand due to population growth. Both reports analysed the factors that influence the rate at which new dwellings are introduced into the rental market. These include but are not limited to:

- legislated timelines for development review and required technical analysis;
- delays due to appeal (Local Planning Appeal Tribunal);
- technical limitations (eg. servicing capacity, need for additional technical study, need for site remediation, etc.); and,
- potential lack of motivation, financial capacity, construction resourcing or other matters that affect the ability of the proponent to bring an approved project to market.

The January 2018 report requested direction from Council to review options to ensure that development moves to construction following all Planning Act approvals. Since that time there have been discussions with Council and through the Strategic Plan asking staff to develop incentives to move things from approval to construction, as well as the enforcement of timeframes for site plan approvals. City staff haa also requested that the Ministry of Municipal Affairs and Housing proceed with the regulation to enable the Planning Act tool for zoning with conditions, as this could provide a means for the City to require approvals to proceed to construction. Other options are being explored in discussion with the taxation department to change the timing of tax levy changes at the time of land use planning approvals instead of occupancy to further incent development. Staff have considered the development of a Community Planning Permit System (CPPS) to streamline approvals, but this approach comes with a substantial investment in detailed planning policy work and associated public consultation, and requires further study.

The March 2019 report noted that City staff would be working with the Mayor's Task Force on Housing to identify solutions that will motivate applicants to proceed at a faster pace once they obtain their land use planning approvals. This work is still underway and is expected in early 2020.

At the time of the March 2019 report, It was estimated that the City would require the introduction of approximately 645 new rental units to increase the vacancy rate from 0.6% to 3%. New units would then be required every year to maintain a healthy vacancy rate on an ongoing basis.

Updated Numbers - Current and Ongoing Construction

Since that time approximately 1700 additional units have received zoning approval and are able to proceed with site plan approval and building permits. As part of the Strategic Plan, Council has set the goal of an additional 3045 units by 2022. Six months after this goal was set, the City has made significant advances on this goal, with almost 1000 housing units proceeding to construction in 2019 to date.

Average market rents in the City are below the Provincial average, but from 2008 to 2017 have increased faster than the Province, with a 32% increase for the City and a 24% increase for the Province.

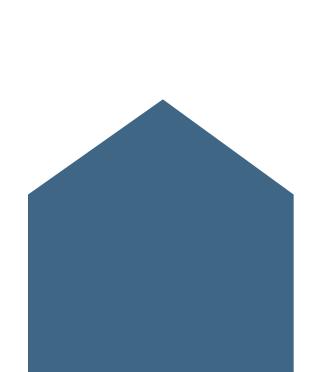
The overall analysis reveals that the increased demand for rental housing is predominately a result of the growing senior population coupled with the growth in the City's student population base. There were 26,100 units in the City's rental market in 2016. The current vacancy rate submits that 25,943 of those units are occupied. Currently, there is a need for an additional 645 units to raise the vacancy rate to 3%. This assumes there is not a pent-up demand for rental housing that is not easily identified in the data (i.e. temporary accommodation of those seeking more permanent accommodation within the rental or freehold housing markets).

The demand for net new rental housing is expected to total 8,740 units over the 2016-2046 period. This demand will be greatest in the short term as the boomer population continues to grow alongside increased enrollment at local post-secondary institutions.

Population Forecasts and Rate of Growth

Over the next 30 years, the City's <u>population</u> <u>projections</u> indicate a need for 13,730 additional housing units city-wide. As of the March 2019 Rental Vacancy Rate Report, 3629 multi-residential units had received land use planning approvals but had not yet moved to building permit application. An additional 8571 residential units were actively awaiting planning approvals.

The number of units currently in the pipeline represents 62% of the total number of housing units Kingston needs over the next 30 years. To meet the projected long-term housing needs required over the next 30 years, an additional 5159 housing units are needed in addition to those currently under consideration.





Density in the Right Locations

The market supply situation is such that Kingston now has the opportunity to strategically pause, analyze and address the larger question -- are we putting density in locations that will assist with the addressing of the Climate Emergency, or in locations that may in fact exacerbate that emergency through increased car dependency?

Many applications for tall buildings/higher density in suburban or edge locations are using as justification the need to use land more efficiently, for many reasons including a wish to not have to expand the urban boundary. Thus it is important to address that justification directly.

There are many public interest reasons for the City to seek to strategically densify. For the purposes of this policy discussion however, it is critical to make a key distinction between two densification scenarios:

Scenario One: Densification Anywhere within the Urban Boundary:

There are constant demands and pressures to expand suburban development (and thus the city's urban boundary) as population grows.

These demands bring resulting pressures on rural, agricultural, and environmental land, and require the expansion of both hard and soft municipal services, often in the most expensive ways for cities based on life cycle construction, maintenance and operations costs.

There is a recent perception that cities benefit from any form of densification that is within the existing urban boundary, including from new tall and mid-rise buildings in suburban areas. While cities do need to more efficiently use these lands to accommodate more people with more efficient services, the best response to this issue in the suburban context often come in the form of ground-oriented densification strategies such as smaller lot sizes, secondary suites and laneway houses, duplexes, row houses, and stacked townhouses.

However, somewhat counter-intuitively, when it comes to high densities and tall, dense buildings specifically in the suburbs or at the city's edge,

there can be both significant implications and missed opportunities when such buildings are built in suburban locations that are not strategic. If such density does not have a specific proximity to diverse shopping opportunities that can meet weekly or even daily needs, and/or real and diverse employment opportunities, while also not being proximate to infrastructure that provides attractive alternatives to driving such as frequent, effective and well-connected public transit, then such density will be both concentrated and largely car-dependant, with significant public interest implications. These implications include potential concentrated traffic impacts and increased driving and GHG emissions, and a concurrent weakening/undermining of market support for alternative density locations that actually have the "planned function" to increase mode shift to walking, biking and public transit while decreasing per-capita GHG emissions. In short, increases in cardependant density can increase negative car-related results while at the same time undermining the viability of much better locations for density. It can actually be strategically worse than achieving less density for a city's strategic goals and aspirations, when it doesn't have the right supports nearby.

Scenario Two: Densification in the Right Places within the Urban Boundary:

When tall buildings and associated high-density are placed in well connected, mixed-use locations well serviced by attractive (frequent and well connected) public transit service and walking and biking infrastructure, in addition to the general benefits of density discussed in the previous scenario, other significant public benefits are achieved, and problems are avoided. Car dependency is lessened with mode shift from driving to public transit, walking and biking, with resulting GHG/climate change, public health, infrastructure costs, equity and economic development benefits. Market interest is not eroded by too much housing supply in problematic locations without a planned function.

It needs to be stressed that such public benefits generally do not appear if density is proximate to less significant shopping or transit opportunities, ie proximity to "commercial" that doesn't provide such daily or weekly shopping benefits (non retail space-extensive commercial uses, or too small retail offerings such as gas station convenience stores), or proximity to transit stops along routes that are not frequent or well-connected given existing and anticipated service levels.

Once these two density scenarios are better understood, including how density in the wrong places can significantly undermine a slow-growth city's ability to achieve density in the right places, it is clear why urgent addressing of the "where and where not" of tall buildings/high-density is critical. However, Kingston's current policy allows consideration of tall buildings/high-density virtually everywhere in the city subject to meeting specific criteria.



Current Policy Direction: Intensification

The City has recognized the need for intensification within the existing urban boundary to maximize corporate investments in infrastructure and build a more sustainable and resilient community, as well as to be consistent with Provincial direction.

The Official Plan identifies Centres and Corridors as the areas where intensification will be focused, and where greater densities of residential and non-residential development will be permitted. Centres and Corridors are mixed-use areas and buildings that include employment, residential, commercial and supporting uses and facilities (Section 2.2.7).

The Official Plan indicates that within the urban boundary, intensification through moderate increases in building height or density may be considered at the edge of neighbourhoods, provided that the development is adjacent to transit routes, community facilities, areas of open space, or mixed use Centres or Corridors (Section 3.3.8).

The Official Plan calls for 40 percent of new residential development and 10 percent of new non-residential development to occur through intensification within the urban boundary (Section 2.4.5). Given the availability of vacant lands within the urban boundary and Council's climate change priorities, as well as the results of this project, these numbers are considered relatively low and will need to be evaluated in order to ensure they are still appropriate. Both the percent targets and the suggestion that infill within the urban boundary is sufficient, will need reconsideration, given that as noted previously, the current policy allows for car-dependent infill in places within the urban boundary that are not strategic. The Project team is working to identify infill locations that are transitsupported in Kingston, and researching approaches to differentiating car-dependant infill from transitsupported infill, including recent ground-breaking studies and methodologies created by the Queens University School of Planning.



Current Policy Direction: High-density Residential

Section 3.3.C of the Official Plan establishes policies for high-density residential uses. These uses must generally satisfy the following locational criteria:

- The subject property is located:
 - a. within a Centre or Corridor;
 - **b.** within an area subject to a Secondary Plan or a Specific Policy Area Plan provided such Plan permits high-density residential use; or
 - **c.** on the periphery of a low or medium density residential neighbourhood provided the proposal demonstrates conformity to the policies of Sections 2.6 and 2.7 of the Plan, where applicable;
- the property is within walking distance of areas designated for commercial use (i.e., any of the uses within the Commercial Hierarchy except for Neighbourhood Commercial);
- the property is within walking distance of parkland, open space or community facilities; and
- the property is located on an existing arterial or collector road.

Although these criteria seem to provide sufficient direction, they actually permit high-density residential development in areas that are not appropriate given the other land use planning principles within the Plan and required by Provincial policy. For example, not all arterial or collector roads or peripheries of low and medium density residential neighbourhoods are appropriate locations for high-density residential development.

Most recently, these locational criteria were revised as part of the five year Official Plan review. Yet the criteria still provide a lot of flexibility in terms of the location of high-density residential uses. For example, by applying the criteria, it is still possible to support locations that are automobile-dependent. Clearer and more specific policy direction is needed in the Official Plan regarding appropriate locations for high-density development.

An additional issue with Section 3.3.6 is that it is largely silent on built form. The form that high-density residential development takes is a key component of broader land use planning goals established by the Plan.



Current Policy Direction: Downtown and Harbour Area

Section 10A of the Official Plan establishes areaspecific policies for the Downtown and Harbour Area. These policies were defined on the basis of a series of technical studies including the Downtown and Harbour Architectural Guidelines Study.

Section 10A.4.6 includes policies explicitly pertaining to new buildings and height provisions; these policies prescribe height limits and reference the need for angular plane setbacks.

Section 10A.4.7 provides that if a taller building is compatible with the massing of surrounding buildings, does not create unacceptable amounts

of shadowing, and meets the land use compatibility policies of Section 2.7, a greater height within a specified building envelope may be approved.

Section 10A.4.7 provides flexibility with respect to building height on a site-by-site basis provided that the policy tests are met. There is no upper height limit implied in Section 10A.4.7. The policy is reportedly confusing and ambiguous as it relates to building height within the Downtown and Harbour Area and will also require refinement as part of this project.

Current Policy Direction: Land Use Compatibility

Many of the policies in the Official Plan relating to intensification and infill, high-density residential uses, and building height require the demonstration of conformity to the policies of Section 2.7 of the Official Plan. This section describes principles of land use compatibility that are intended to support the quality of existing areas and provide for suitable transitions in order to avoid or mitigate adverse effects.

The land use compatibility matters to be considered include, but are not limited to, the following:

- shadowing;
- · loss of privacy due to intrusive overlook;
- increased levels of light pollution, noise, odour, dust or vibration;
- increased and uncomfortable wind speed;
- increased level of traffic that can disrupt the intended function or amenity of a use or area or cause a decrease in the functionality of active transportation or transit;
- environmental damage or degradation;
- diminished service levels because social or

- physical infrastructure necessary to support a use or area are overloaded;
- reduction in the ability to enjoy a property, or the normal amenity associated with it, including safety and access, outdoor areas, heritage or setting;
- visual intrusion that disrupts the streetscape or buildings;
- degradation of cultural heritage resources;
- architectural incompatibility in terms of scale, style, massing and colour; or,
- the loss or impairment of significant views of cultural heritage resources and natural features and areas to residents.

Many of the above-noted items (such as visual intrusion and architectural incompatibility) are subjective in nature and require clarification in order to ensure that their direction is effectively implemented. Wherever possible, staff are striving to provide quantifiable measures to the tests related to land use compatibility.

Application of Current Policy Direction

In the past, these criteria have been interpreted rather loosely related to development applications. Although such buildings can provide needed housing supply, and do represent more efficient use of land in a general sense, some are located in largely car dependent locations with little opportunity to change that within the timeframes required by the Climate Emergency.

Although Staff have begun to consider applications using a more strict interpretation of the criteria having regard to the broader policies of the Official Plan as well as the Climate Emergency Declaration, this is resulting in challenging negotiations with applicants, and may result in challenging appeals given the lack of clarity in current policy wording.

Given the significance and urgency of this situation relative to the Climate Emergency declaration and other Council priorities, the Project team have determined that action is required to address it in the context of this work program, notwithstanding what was initially messaged when the work program was initiated.

Options:

- 1. By end of May 2020 create an Infill Green Light Strategy relating to the strategic locations/ areas of the city that assist with the addressing of the Climate Emergency and other city policy. This strategy should consider all current/ existing barriers and incentives to development, and ensure that barriers in Green Lit areas are removed, and that existing and new incentives only apply to Green Lit areas of the city. In short, make it much easier to develop in the right places, as we limit opportunities to develop in the wrong places. Note that this would apply to high density & tall buildings above 6 storeys in height, but not to medium density and buildings of 4-6 storeys in height.
- 2. By the end of May 2020 bring to Council Official Plan amendments to the existing policy, and especially the existing criteria, for tall buildings/high-density, to ensure that tall buildings and high density development essentially only be permitted in locations where they will not be cardependent. Since criteria are always somewhat subject to interpretation and challenge, this may have the effect of significantly lessening, but possibly not fully halting, such development in

- counter-productive locations. It is recognized that any approach that changes policy is subject to LPAT appeals. If such appeals are lodged, the City can consider additional planning tools eg. interim control bylaws, until such appeals are concluded. Note that this would apply to high density & tall buildings above 6 storeys in height, but not to medium density and buildings of 4-6 storeys in height.
- 3. Bring forward mechanisms to specifically pause tall building/high-density development in unfavourable or counter-productive cardependent suburban locations. Bring to Council corresponding Official Plan amendments that would clearly prohibit tall buildings and/or highdensity in such locations, removing the current, interpretable criteria approach, with the specific intention of directing such development activity and market interest toward those portions of the city subject to the Green Light Strategy discussed in Option 1. It is recognized that any approach that changes policy is subject to LPAT appeals. If such appeals are lodged, the City can consider additional planning tools eg. interim control bylaws, until such appeals are concluded.

What We Heard: There is strong public support for urgently addressing the climate emergency with real action, and during this work program there was significant public concern that we were intending to address the "where and where not" later in a subsequent work program, rather than in this work program. At the same time, there is considerable concern by applicants that this work program might affect the ability to build tall buildings across the city, even as a result of new design requirements, therefore it is reasonable to assume that there will be considerable concern from specific applicants and perhaps the general development industry around the options listed above.

Recommended Approach & Why: Given the significance and urgency of the situation, decisive action is recommended. Such action would represent a significant move toward addressing the Climate Emergency Declaration, as land-use decisions and continued car-dependency represent the most significant issues related to climate change under the city's direct control.

When considering the implications of Options 2 or 3, Option 2 is recommended at this time as it works with the existing policy framework and can be brought forward quickly. Option 3 may represent the basis for further work in the future, especially in the context of the next 5-year review of the Official Plan where a more robust consideration of additional options can be analysed. Option 2 would be combined with an urgent and coordinated creation of Option 1, an Infill Green Light Strategy, which is also strongly recommended, as the two will work together to allow the city to succeed in meeting its objectives of development in the most publically advantageous and least car-dependent locations.





Urban Design Issues

Following consultation with the public, the project team has identified the following mid-rise and tall building design issues related to this work program and policy development. Many of these issues are interrelated/overlapping.

Building Height/Number of Floors

Issue: How tall should we allow tall buildings to be?

Background: : The allowable height of tall buildings has been the most challenging and controversial issue in most community discussions about urban change and growth for many years now in Kingston, especially in contexts where existing cultural heritage attributes are involved. It could also be suggested that excessive, almost exclusive attention has been given to building height, with not enough attention given to the many other design issues relating to new tall buildings that are discussed in this Paper.

The height of buildings is indeed an important factor in considering the urban design of new growth in any city, and in particular in a city with Kingston's unique heritage attributes. Historically, taller buildings were not possible when many heritage buildings in Kingston were built, but improvements in construction techniques have removed limitations over time. Never-the-less, debates over whether taller buildings should be built, regardless of whether they can be built, have been long-standing and frequently passionate.

The tallest heritage buildings in Kingston are the former Rockwood Asylum and the Annandale apartments at a 5 full storeys (albeit with taller floor heights than are common now). Many other heritage buildings have domes or spires that reach much taller, but the main buildings are 2-3 storeys (ie. Frontenac County Courthouse, City Hall, Kingston Penitentiary, Prison for Women, and various churches). The prevailing height for heritage buildings in Kingston is 1-3 storeys.

Taller buildings in the city have tended to be hotels in the downtown area, or large "slab-like" residential buildings around the city that are both tall and very thick/wide, with design issues that go beyond how many floors they have.

When designed well and in the right locations, taller buildings when combined with higher densities can significantly support many public interest goals and urban design benefits. When designed poorly however, they can not only create negative design and visual impacts/implications, but they can also can create greater public opposition to the very concept of building height, making future discussions on taller buildings more difficult.

Taller buildings are typically more efficient in terms of the land resources they consume, as they usually provide more density than mid-rise or ground-oriented forms of development (although depending on the specific tall building design approach, eg so-called "tower in the park" designs, this hasn't always the case in the past. It should be noted however that "tower-in-the-park" forms generally are not still proposed, and in fact generally should no longer be supported for many reasons, thus usually greater height now also results in greater density). They can be more financially efficient or affordable to build than smaller/shorter buildings, since certain costs of development may be fixed for any size/height of building, including land costs, costs of elevators, etc.

However, tall buildings with associated high-density can also represent public interest challenges where they are located in car-dependant locations, including localized traffic problems and general increases in driving (with resulting emissions implications), and an eroding of market support for more strategically effective density in less car-dependant, more multi-modal locations (as discussed previously in this report).

Some cities establish maximum heights in policy or zoning for various areas, and other cities allow such heights to be evaluated and negotiated through development applications using site-specific urban design review. Setting maximum heights (when combined with other maximums such as maximum

floor plate sizes or maximum floor space ratio/ density) provides clarity to all parties around what specifically can be built, including to applicants when they are considering how much land should be purchased for.

However, establishing specific heights for specific buildings is exceedingly difficult to do for an entire city outside of a detailed master-planning exercise(s), and is beyond the scope of this work program. Furthermore, it is frequently observed that when maximum heights/floors are established for general areas like a central business district (CBD)/ downtown, the challenge is often that the market then assumes that the maximum height and the permissible height will be the same thing, even if provisos or design guidance are established in policy. Thus land can be sold/purchased based on the assumption that the maximum height is achievable, providing significant challenges for the city if/when it is later determined that a height lower than the maximum is warranted for a specific site.

Options:

- 1. Set specific height limits/maximums for different areas of the city.
- 2. Allow heights to be determined by area-specific policy in the case of secondary plans or special policy/study areas, or site-specific urban design analysis in the case of applications, while using other design policies (eg maximum floor plate sizes) discussed in this report to ensure buildings are well designed regardless of the ultimate height deemed supportable through urban design analysis.
- 3. Set specific height limits for the CBD/downtown area only, with the remainder of the city addressed as in Option 2.

What We Heard: Building height remains a key concern for many residents, especially in contexts where heritage sensitivities exist such as the CBD. We heard concern about the height of buildings

regarding potential concerns such as human scale, visual impact, sense of place/character, heritage context, shadowing, wind impacts, bird fatalities etc. We also heard from many others that there has been too much focus on building height, and not enough focus on other design aspects such as building width and how the ground floor of buildings are designed and the building is oriented. Still others pointed out that concerns such as sense of place/ character and visual impact, although relevant, should not necessarily determine the answer for issues such as building height and density, given the related connections to major public and societal challenges such as addressing the climate change emergency through smarter land use decisions, community affordability struggles, growing public infrastructure costs, and so on.

Recommended Approach & Why: For various reasons of practicality discussed above, the Project Team does not believe that building heights could or should be set for the city as a whole. However, based on observation and public input, providing clarity on height within and across the CBD may have specific and important benefit for all. An approach that sets maximum heights within/across the CBD/downtown, while allowing maximum height to be considered on an area or site specific basis using urban design analysis across the rest of the city (Option 3) is therefore recommended.

Height clarity is necessary within the CBD/ downtown due to heritage sensitivities and currently unclear policy, whereas for the rest of the city, supportable height would be subject to many local and site-specific design considerations. Effort should be made to differentiate maximum vs permissible heights within the CBD using clear design-related policy direction, so that applicants don't assume that the maximum height will necessarily be the permissible height when purchasing land.

Potential height limits in various sub-areas of the CBD will be proposed for further public input in the next phase of work, and might include for discussion

purposes areas such as the Lower Princess Street Character Area; the "Hub" area at Division Street and Princess Street; and portions of Queen Street and Brock Street.

For the portion of the CBD commonly referred to as the "North Block," which has been the subject of a recent Appeal decision, building height has been a key issue of discussion and debate. The existing zoning allows for up to 9 storeys but with requirements to adjust the building shape to meet angular plane requirements. Recent applications have requested that taller, slimmer buildings on 4-6 storey podiums be considered, suggesting that 9 storey perimeter-block concrete buildings are generally not viable/practical when compared to the lower cost of 6-storey wood-frame or "hybrid" concrete and wood buildings. This viability challenge could explain why market applications have not been proposed to the city under the existing zoning rules.

In the last decade one 9 storey residential building has been developed in the CBD (Anna Lane at Queen St. and Bagot St). Many in the community have referenced this building as a preferable building form. This building was proposed and executed by a non-profit condominium development company. Although the development did not receive additional funding sources, the viability considerations for market building is not generally applicable to a non-profit model.

As noted previously in this report, this observation on viability is consistent with similar observations for 7-9 storey concrete buildings in many other cities across Canada, many with more favourable market conditions than Kingston. Viability is especially challenged given the additional Kingston requirement to further vary the 9 storey shape considerably in order to meet angular plane requirements, and the fact that in Kingston, unlike other cities where this viability "gap" for 7-9 storey buildings has been identified, the assumed development type is rental rather than condominiums.

There is a reasonable debate to be had about the urban design and public interest implications of 9 storey perimeter block (aka "very long and thick") buildings, as compared to taller, much slimmer and separated buildings. However as a starting point for such a debate, which assumes a similar density in each case, it is important that the city determine if the building form established in existing zoning, and often referred to as "preferred" in discussions regarding growth and change in the CDB, is indeed viable and thus likely to be actually realized over time.

It is therefore also recommended that an economic analysis be conducted in order to determine if the permitted 9 storey building approach is viable, with or without variables such as step-back requirements above the 6th floor or angular plane requirements. This analysis should answer whether 7-9 storey buildings are viable; whether they are still viable if their shape is significantly altered due to design policies; and whether they are viable in any design scenario regardless of whether they are rental or condominium in nature. Consideration should also be had for the implications of how the continued evolution of wood-oriented taller building approaches and associated costs might change such viability conclusions over time.

2

Defining "Mid-Rise" and "Tall Buildings"

Issue: What is considered a mid-rise building, and what is considered a tall building, for Kingston in general and this policy specifically?

Background: One of the most common questions asked during the first phase of public consultations for this work program was "what do we consider a mid-rise or tall building?"

It is recognized that what can be considered tall in one context, may be considered mid-rise in another. Our review of approaches developed in other cities illustrated that it is rare for cities to create policy or guidelines for mid-rise and tall buildings in the same work program, however doing so allows us to consider the definitions in an aligned/strategic way, among other advantages. Our review also found that different municipalities have defined mid-rise and tall buildings differently. However, in all cases we have seen, there is a clear line in number of floors differentiating tall from mid-rise.

It is obviously important to define when mid-rise heights stop and tall building heights begin, as there will likely be significant differences in how buildings will be addressed in policy depending on whether they are considered mid-rise or tall.

In Kingston however, it is also generally recognized that what constitutes a "tall building" in the downtown, or even in the most heritage-sensitive portions of the downtown specifically, may differ from what constitutes a tall building in key transit-supported urban corridors, or elsewhere in the suburban pattern of the city. Therefore one definition for tall and mid-rise for the whole city may not be sufficient to address the special issues/contexts in specific places.

Options:

- 1. Most large and very urban municipalities with considerable experience with tall buildings of various sizes define a range of heights that are considered mid-rise (generally between 4-9 storeys are considered mid-rise), and a higher range that is considered tall (10+ storeys).
- 2. small and mid-sized cities with less experience with tall buildings often have a lower range for mid-rise buildings (generally between 4-6 storeys),

- with buildings above 6 storeys being considered tall in most contexts. Among other things, this corresponds with the number of storeys that have been able to be built with wood-frame construction in recent years (although this will likely change in the coming years with taller wood buildings).
- 3. Given the variety of locations/contexts in Kingston, a hybrid approach may be to insert a "locational flexibility" into the policy. In such an approach, 4-6 storeys would always be considered mid-rise, and 10+ storeys would always be considered tall, but 7-9 storeys may be considered either mid-rise or tall, with different resulting design implications, depending on where in the urban pattern they are and the resulting design implications. The different locations would be identified in the policy in order to provide clarity.

What We Heard: In early phases of public consultation, many questions were asked about how mid-rise and tall buildings would be differentiated. When various options were shared in response, including the "locational flexibility" approach discussed above, no general preferences were heard from the public.

Recommended Approach & Why: The Project Team gave considerable consideration to Option 3 given the many contexts in the city where perception of height (and what is considered "tall") may vary. Given an interest in "keeping things simple" however, Option 2 is recommended with mid-rise across the city being considered 4-6 storeys, and buildings 7+ floors being considered tall buildings. Option 1 is not preferred since the prevailing and historic scales of buildings in Kington are not as tall as those found in bigger urban cities, thus "big city" definitions of what is mid-rise or tall are not relevant to the Kingston scale, history and context. Note that later in this report, design approaches for tall buildings of varying heights will be discussed, based on the observation that "perimeter block" buildings between 7-9 floors should be treated significantly differently than tower-and podium buildings or slim tower buildings taller that 9 floors.

Policy Area Contexts Across The City Issue: How do we evoid a "One Oire File All".

Issue: How do we avoid a "One-Size-Fits-All" design policy approach for mid-rise and tall buildings across the city?

Background: Currently the Official Plan policies direct intensification/growth primarily to the CBD and the Princess Street Corridor, but uses locational criteria and land use compatibility to provide flexibility for other areas of the City.

In negotiating taller buildings in many different contexts across the city, the project team have noted that many of the key variables for better tall building design, eg. building width, building orientation etc., vary based on context. As a result, we need a more context-specific solution rather than a "one-size-fits-all" approach across the city. For policy to provide a level of predictability and clarity for communities and applicants alike, the context considerations can't be so site-specific as to necessitate unique negotiations on every site in the city. Therefore consideration has been given to definable areas within the city where conditions are similar enough that an area-specific set of policies can be created.

A key question has been how many areas should there be? The more there are, the more "fine grained" the policy approach is, but the more area-specific policy needs to be drafted, managed and clearly communicated. The fewer there are, the easier it is to communicate and manage the applicable policies, but the less context-sensitive the resulting policies are.

Options:

- 1. One set of design policies for tall buildings be created, applicable across the city.
- 2. A relatively low number of defined policy areas, as low as two (such as inside the defined CBD, and outside the defined CBD), be created.
- 3. Up to 6 defined policy areas be created that reflects substantive and definable differences between areas using the urban/suburban nature of the areas in question, ie Street Oriented Urbanizing Places (sites of varying sizes that would be expected to have a design relationship to existing streets); Large Site Urbanizing Places (sites of large enough size to consider a master plan involving new internal streets, ie former shopping centres, the former Women's Prison site,

- and similar locations); CBD-Heritage Places; CBD-Non Heritage Places; Urban Waterfront Areas; and Suburban Areas. Further consideration would be given to whether 'Suburban Areas' should be divided further into two categories, "Urbanizing Suburbs" and "Suburban Neighbourhoods", reflecting that some corridors in suburban areas may still see medium density and mid-rise infill, even if high density and tall buildings are not considered. Other portions of Suburban Areas would not be expected to see medium density infill. See map
- 4. More than 6 defined policy areas be created based on specific centres or centre-types, specific corridors or corridor-types, special sites, etc. (eg individual corridors, centres, etc).

What We Heard: Various options were discussed with the public and stakeholders during the first round of public consultation, and although there was considerable interest in which approach would ultimately be identified and used, and general support for avoiding a "one size fits all" approach, no specific preference was particularly championed by the public.

Recommended Approach & Why: Approximately 6 definable policy areas are recommended (Option 3), in order to provide sufficient context differentiation, while avoiding the excessive management and communications challenges of even more policy areas, including site-specific policies. It is recognized that sites around the city that are expected to have a strong design relationship with existing streets have a lot in common with each other around the city, and would thus benefit from a relatively consistent approach, while well-located larger sites around the city (ie the former Prison for Women site, and shopping mall sites on transit with the potential to urbanize/transform) also have a lot in common, and should see similar approaches. Corridor or centrespecific policies aren't considered necessary or appropriate within this work program, although area or site-specific policies may be created through new work programs such as secondary plans or special study areas related to specific areas/neighbourhoods, centres, corridors or special sites in the future.



Building Width/Floor Plate Size

Issue: What size of floor plate/building width should be permitted? How wide is too wide?

Background: There has been considerable discussion in the city over the last several years around the width of buildings, particularly when combined with tall building heights. Buildings that are both tall and wide/thick with very large floor plate sizes often express a "slab-like" impression and impact, with visual and urban design implications that are more significant than tall buildings that more slim in nature. For this reason, floor plate size has been a principal consideration in development negotiations in recent years.

What is acceptable as a floor plate size depends greatly on building height and context. For example, mid-rise buildings of 4-6 storeys in height can routinely be both "perimeter block" in nature (meaning the building edges generally go all the way out to the edge of the block on as many as all four sides, potentially taking up as much as the whole block, often with a central courtyard), and also quite long (taking up entire block frontages), with little concern other than an interest in breaking up the block length architecturally for reasons of creating urban design "rhythm" and avoiding visual monotony.

Depending on the context, this may also be true for buildings up to 8 storeys, although in such cases there may also be an interest in stepping back higher floors for various reasons, and creating gaps that break up higher floors periodically to provide occasional relief from the scale along an entire block length. This becomes even more necessary when buildings rise to 10+ stories, where depending on the context, they may need to be broken up into definable buildings (essentially separated "short towers") with maximum floor plates.

In other contexts, anything above a 4 storey podium might require separated and stepped back slimmer towers with maximum floor plates (as opposed to perimeter block buildings), even if such buildings are only 8 storey in height (which would seem to observers as "towers" in lower scale contexts).

For buildings with towers of 8-12 storeys total over a podium with definable separated tower forms, slightly larger floor plates may be supportable than what would be appropriate for taller slim towers. For example, in an urban context where towers taller than 12 storeys should have a maximum floor plate of 800 square metres (8500 square feet), a tower of just 8-12 storeys could have a maximum 840 m2 (9000sf), or even 880 m2 (9500sf) depending on the exact number of floors (noting that in many/most contexts, much larger "slabs" should still never be supportable). Thus how these design elements are combined in various contexts can matter significantly.

Lastly, it is also noted that in addition to floor plate size, floor plate orientation can be significantly important relative to urban design impacts. For example, a tower can be relatively thin and exceedingly wide at the same time within the context of potential maximum floor plates, with implications to sensitive contexts, views, etc. Although orientation approaches that maximize private views (for example) can help support market interest in urban living, which can have public interests linked to it as well, such approaches to floor plates should never be supported where such private views are achieved at the expense of significant public view impacts and other direct public interests.

Building Width in the Suburbs Outside Urbanizing Areas

A specific issue has dominated considerable discussion during this work program already – should "slab buildings" with very large floor plates, often combined with considerable height, continue to be permitted in suburban areas specifically that aren't expected to urbanize? Note that this question needs to be considered in the context of the higher priority question regarding where tall buildings should or shouldn't be considered, discussed earlier in this report.

One "school of thought" is that slab towers with very large floor plates (over 930 - 1115 m2 or 10-12,000sf, and in recent years even larger) should be prohibited everywhere for better urban design performance across the city. Another "school of thought," mostly raised by applicants/builders who have been constructing such buildings for many years, is that large floor plates contribute to efficient buildings and thus more affordable construction costs, and by extension more affordable housing.

The Project Team has thus considered whether such buildings might be permitted in suburban contexts only, where it might be argued that the urban design implications of such buildings are less impactful. This would recognize that applying the other design elements in this report, such as building orientation to streets and ground floor activation, would improve the urban design outcomes of such buildings, separate from how floor plate width is addressed.

A counter-argument is that allowing this would translate into a majority of new apartment housing in Kingston, a traditionally slow growth market, continuing to be built in suburban locations. These locations are further away from shopping, transit etc, where the public interest impacts, such as car dependency, emissions contributing to climate change, etc, are much greater (see the discussion regarding where tall buildings should be allowed, discussed earlier in this Report).

If development is seen to be "easier" and more costeffective in the suburbs than in more appropriate and publically-beneficial urban settings on frequent public transit and with better public interest outcomes, including improved climate change mitigation, the city may be making development easier in the "wrong places" than it is in the "right places," a significant strategic consideration in every element of this work program (see Lens 4 previously discussed in this Report).

Given the key importance of this issue, the Project Team would like to hear from the public and stakeholders on tower width in the suburbs specifically, without a recommendation at this time. See the Options for further explanation.

Options:

- 1. Negotiate floor plate sizes on a case-by-case basis using urban design analysis, with no maximum established in policy.
- 2. Limit the maximum size of the floor plates in towers taller than 8 storeys, or towers taller than 8 storeys above a podium, to a slim width/size on a city-wide basis similar to that seen in other cities maximum 700 m2(7500sf). This would represent a "best practice" in Ontario.
- 3. Limit the maximum size of the floor plates in towers taller than 8 storeys, or towers taller than 8 storeys above a podium, to a slightly thicker but still relatively slim width/size, reflecting Kingston's different economic conditions relative to other cities, on a city-wide basis -- maximum 800 m2 (8500sf). This would represent a "standard practice" in Ontario.
- 4. Vary the maximum floor plate size above a podium or for a building higher than 8 storeys based on context areas identified in section 3 of this report, as follows:
 - CBD Heritage Site Maximum: 745 m2 (8000sf) - buildings 9 storeys or less: 800 m2 (8500sf)
 - CBD Non-Heritage Site Maximum: 800 m2 (8500sf) - buildings 9 storeys or less: 840 m2 (9000sf)
 - Waterfront Maximum: 700 m2 (7500sf)
 - Street Oriented Urbanizing Places: 800 m2 (8500sf) - buildings 9 storeys or less: 840 m2 (9000sf)
 - Large Urbanizing Places: 800 m2 (8500sf) buildings 9 storeys or less: 840 m2 (9000sf)
 - Suburban Sites: see Option 5.

Note that with this option, the tallest "perimeter block building" allowable in the city would be 8 storeys.



- 5. For the Suburbs specifically, the following options are submitted for discussion:
 - apply a maximum floor plate size for the suburbs that is larger than that applied to other parts of the city, resulting in larger towers but not slabs [ie 880 m2 (9500sf) or 930 m2 (10,000sf)]
 - apply a maximum that would essentially reflect a "mini-slab" [ie 1115 m2 (12,000sf)]
 - apply a maximum that would take slabs back to a size prior to their "expansion" in recent years [1300 m2 (14,000sf)]
 - allow floor plates to be considered on a site-by-site basis, including potentially the continued expansion of slab width over time.

What We Heard: There was considerable support for establishing a maximum floor plate size and regulating the width of buildings among the general public, and specific support for potentially varying the width maximum by context rather than a "one-size-fits-all" approach across the city. There was considerable concern about regulating width from representatives of the development industry

Recommended Approach & Why: A contextual approach to maximum floor plates based on defined policy areas is recommended (Option 4), with further consideration of what the specific maximums should be across the various areas defined in the policy, in the next stage of this work program.

With regard to the "Suburbs" context specifically, the Project Team is holding off providing a specific recommendation on how to address so-called "slab" buildings in that specific context until hearing further from the public and stakeholders. This would mean that "slabs" would be essentially prohibited in all other contexts of the city if the recommendations of this report are implemented, and that tall buildings in the suburban context would also be subject to new requirements based on the other recommendations of this report.



5

Building Width, Height & Use of Angular Plane in Williamsville Specifically

Issue: How should height and width be addressed specifically in the Williamsville Main Street Corridor, and along Princess Street specifically, as a solution to the issues that led the City to pass an Interim Control By-law?

Background: In May of this year, Council approved an Interim Control By-Law and authorized further planning study for the Williamsville Main Street Corridor. This was in response to a number of applications for the Princess Street corridor that, cumulatively, would result in a prevailing building scale that is different from that anticipated during the extensive engagement and community consultation for the corridor.

The commonly understood intention of the Williamsville Study was that the prevailing scale along the corridor would be 4-6 storeys, with a relatively small number of strategically located buildings up to 10 storeys in height (identified in the policy as "landmark buildings"). These buildings would not compete with or overwhelm the generally prevailing mid-rise scale. Instead, development applications have been taking advantage of a provision in the landmark building criteria related to larger lot sizes. This has been done by assembling land to meet the requirement.

As the angular plane policies have been found to be prescriptive and challenging within the Kingston market from an economic viability and city hall operationalization perspective, Staff have instead been taking a flexible approach while using the angular plane requirement as the basis for negotiating more generally positive building design/urban design outcomes. However, the fact remains that the intention was not to have a prevailing 10 storey scale along the corridor.

It is recognized that the existence of the 10-storey "landmark building" policy opportunity has sent a message to the market that the land along the entire corridor is worth an amount reflective of a 10 storey building, as long as one assembles sufficient land. This assumption, when combined with the reality that a "price premium" is typically required to be paid by applicants when assembling land,

means that land is transacting at high prices. Thus the current policy conditions make it difficult for applicants to purchase land and build a 6 storey building without losing money.

It can be frustrating for everyone when a 10-storey building is technically allowed, such a building is assumed in the pricing of land, and a 6 storey building is later requested by the community, staff or others. It is important for all parties that the existing policy problem be addressed prior to more land changing hands.

Options:

- 1. Continue to allow landmark buildings under existing policy, with a continued flexible approach to angular plane, resulting in a general scale of 10-storeys as illustrated by recent applications.
- 2. Continue to allow landmark buildings under existing policy, but require a strict adherence to angular plane requirements, resulting in a general scale of 10-storeys if/where projects are able to viably accommodate such requirements (Note discussion elsewhere in this report regarding how it is at best currently unclear whether 7-10 storey buildings that would meet angular plane requirements are indeed viable. If they are not, but if landowners continue to presume that land is worth 10-storey prices, or will be again in the future if they are patient, this can cause development inactively within the corridor).
- 3. Replace the current criteria for landmark buildings relating to land area, with a schedule specifically identifying the remaining (limited) locations for 10-storey landmark buildings at key intersections only, with such tall buildings located at corners, with a maximum tower width above the podium of 800 m2 (8500sf), and

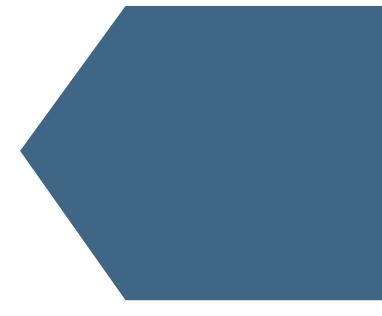
tower separation requirements outlined elsewhere in this report. Angular plane requirements would not apply to the tower portion of the developments, since thinner and separated towers don't have the light and shadow implications of blocklong 10 storey buildings. Further, angular plane requirements would no longer apply to the 4-6 storey mid-rise or podium portion of buildings. Policies would be added to support the notion that the architecture of any additional landmark buildings have an architectural quality and beauty that support the visual "landmark" intention.

What We Heard: There is strong support from the public and stakeholders in the Williamsville community for a solution that confirms the original intent of the Williamsville Main Street Corridor, which is a prevailing 6-storey scale with strategically located landmark buildings that mark key locations/intersections.

Recommendation and Why: In conversations with community groups, the public, applicants and staff who were involved with the Williamsville Main Street process, the Project Team's recommendation is to address permitted heights (Option 3), replacing the lot area criteria with a schedule locating the remaining landmark building opportunities at key intersections along the corridor.

Although Option 2 sounds reasonable given it appears to reflect the original intentions, it could result in many more block-long 10 storey buildings where viability can be achieved for various site- or applicant-specific reasons, possibly in a relatively "scattered" pattern. In most cases however, such buildings are not expected to be viable. It would however continue to send the message to land-owners that their land is worth a price reflective of a 10-storey building, making 6-storey buildings too costly.

For various reasons including economic viability and difficulties of city hall operationalization, angular plane requirements are no longer recommended for use either in the Williamsville area specifically, or the rest of the city generally. Where stepbacks of upper floors are considered reasonable, advantageous or necessary for various urban design reasons, a more simple stepback requirement approach is recommended rather than angular plane.





In the case of Williamsville specifically, although a stepback of the 5th and 6th floor of mid-rise or podium buildings would have certain urban design benefits, such stepbacks also have many challenges associated with ease/effectiveness of construction, affordability, energy efficiency etc.

For these reasons, at this point the Project Team is not yet ready to recommend such required stepbacks. We would like to continue to model and analyse the implications prior to the next stage of the work program, and would like to hear further from builders and the broader community on this question.

The Project Team has also considered whether stepbacks should be required of concrete midrise or podium buildings only, but not woodframe, given that the issues and implications are different for each, and as a potential incentive to see more wood-frame mid-rise built (with resulting positive public interest implications). The viability and appropriateness of such a materials-based approach will be considered further prior to the next stage of the work program, and public/stakeholder comments are welcome.

The Project Team notes that in keeping with the intended creation of a "Green Light" Strategy discussed earlier in this Paper, and the 4th "Lens" of this work program, it is important to avoid overregulating the very forms of development we seek to encourage.

We also note that if the ultimate recommended policy approach is to not require stepbacks, the policy could be written in such a way as to direct staff to monitor and report back to Council after a defined period of time on observations regarding that decision, so that adjustments could be made to the policy if necessary. Thus a more observation-based approach to policy for this design element over time could be used.



Upper Floor Building Stepbacks

Issue: Should both tall and mid-rise buildings across the city step back on higher floors to improve urban design performance, and if so, by how much?

Background: One of the most common ways to deemphasize the height/mass of both tall and midrise buildings (and podiums at the base of taller towers) is to step back upper floors by a reasonable distance. This makes the upper floors less obvious and influential on the perception of height/building mass from pedestrians on the street and from other vantage points.

- Stepbacks can provide many urban design performance benefits. They can:
- improve the human scale of buildings
- improve sunlight and sky views to and from the street and/or adjacent properties
- serve to widen public views down streets above a certain building height
- assist in the compatibility of buildings adjacent to lower-scaled heritage buildings
- support other urban design benefits.

This design element has been discussed in the previous section in the context of the Williamsville Main Street Area specifically, however this section will address it for the city as a whole.

Stepbacks decrease floor area while impacting internal floor layout/unit layout efficiencies (which is often the primary reason they are resisted by applicants). They also can affect both construction costs relative to housing affordability, and building envelope effectiveness relative to energy performance and greenhouse gas emissions. Thus such stepbacks should be considered carefully and strategically.

Stepbacks can also be more difficult to achieve in wood-frame construction, as they can contribute to leaking if not completed properly. Stepback requirements can lead builders to switch to concrete construction, even in building scales

where wood frame is viable, with resulting implications for GHG emissions and affordability. This may continue even as engineered wood/ CLT/mass timber makes wood construction more flexible and reliable, as it has been observed that stepbacks currently represent a specific construction challenge for CLT/mass timber.

Stepback depths should be assessed relative to various public interest intentions, including:

- sufficient depths to support sunlight access
- potential roof-top amenities and spaces
- de-emphasizing of mass/height by ensuring such floors are generally not visible or particularly "impressionable" from street level.

Insufficient stepbacks can be ineffectual from a design perspective, while still being disadvantageous relative to some or all of the consequences discussed above.

Options:

- Allow building stepbacks to be negotiated on a case-by-case, contextual basis.
- Do not specifically require stepbacks for 4-6 storey wood frame or wood/concrete hybrid buildings specifically, to help make such wood buildings more viable and attractive to the builders/applicants, with various associated public interest benefits.
 Use other ways to de-emphasize the 5th and 6th floors, including materials, colours, lower cornice-lines, building articulation etc. For concrete buildings, identify a required stepback for the 5th and 6th floors.
- 3. Do not specifically require stepbacks for ANY 4-6 buildings or podiums, to help make such buildings viable and attractive to the builders/ applicants. Use other ways to de-emphasize the

5th and 6th floors, including materials, colours, lower cornice-lines etc.

- 4. Require stepbacks above the 4th floor for 5-6 storey for ALL such buildings, wood frame, hybrid or concrete buildings, either in all contexts, or specifically where a prevailing 4 storey or lower scale exists. Identify minimum effective stepbacks, with additional or different stepbacks potentially possible through sitespecific negotiations.
- 5. For concrete buildings from 7-9 storeys, do not require stepbacks in order to assist with building viability, energy efficiency, etc.
- 6. For concrete buildings between 7-9 floors, require angular plane stepback requirements.
- 7. For concrete buildings between 7-9 storeys, establish minimum stepback requirements above the 6th floor, and/or above the 8th floor. Establish minimum expected stepbacks, with additional or different stepbacks possible through site-specific negotiations. Stepbacks on slim towers above 9 floors in height are generally not seen as necessary, as tower design issues can be addressed through other policies relating to floor plate size, architectural caps, colours and materials, etc. As various stepback options are considered further, issues of energy performance and affordability will continue to be assessed.

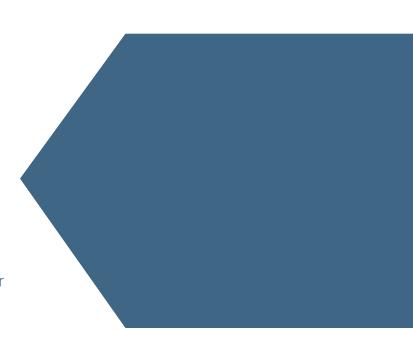
What we heard: In general, the idea of stepbacks are supported by those who raised them among the public. The public was interested when learning that stepbacks have an effect on building energy performance, and thus GHG emissions from buildings. Concerns around excessive or unreasonable stepbacks were raised by some representatives of the development industry.

Recommendation and Why: As discussed in the previous section relating to Williamsville, for various reasons including economic viability and difficulties of city hall operationalization, angular plane requirements are no longer recommended for

use in the city generally. Where stepbacks of upper floors are considered reasonable, advantageous or necessary for various urban design reasons, a more simple stepback requirement approach is recommended rather than angular plane.

For 5-6 storey wood frame or hybrid buildings, no required stepbacks are currently recommended (Option 2), for various reasons including an interest in helping this more sustainable form of construction be more attractive to local builders. The Project Team intends to continue the modelling and analysis, as well as the conversation with the public and stakeholders (comments are again welcome), to determine if this approach should be expanded to include concrete buildings (Option 3), for various reasons as discussed in the previous section relating to Williamsville.

For buildings above 6 storeys, it is recommended that economic analysis be conducted to determine how various stepbacks affect project viability in various contexts, recognizing that buildings of 7-9 storey heights are frequently challenging in many contexts across Ontario and Canada even when developments include condominiums, let alone rental projects. If determined to be generally feasible relative to project viability, the stepbacks discussed in Option 7 are recommended.





Building Setback and Orientation

Issue: How should buildings relate to streets through setbacks from street edges/sidewalks and general building orientation?

Background: In various contexts in the city, how a building relates to adjacent streets can be the difference between buildings strengthening and helping to define the street for pedestrians and others, or buildings feeling car-oriented and isolated. Building orientation should be chosen to best strengthen streets (public or private).

When setbacks from streets are too large, it has a dramatic effect on the viability and success of streets as safe and vibrant people-places. Larger setbacks also tend to result in less efficient use of land, with intervening surface parking or generally unused lawns. When buildings are oriented in a way that fails to frame and enliven streets, streets can become simply space for cars.

When setbacks from streets are too small, especially in urban conditions, the sidewalk feels cramped for pedestrians. Opportunities for street activation and pedestrian comfort assists such as street trees, patios, etc are limited. Where there isn't clarity on setback requirements, applicants can assume higher densities are possible on sites, making it difficult to negotiate reasonable setbacks during the development review process.

Typically in Kingston a 1-metre setback from the right-of-way edge (not the curb) to the building line is initially expected, but experience illustrates that a 0-metre setback is frequently requested by applicants, and in the past has been approved. More recently, staff have noted that at least a 1 to 2 metre setback is required in urban contexts for adequate sidewalk widths and a good design relationship with an active building edge (good pedestrian comfort and movement, room for street trees, street furniture and patios, etc), therefore requests for 0 setback have not been supported. The question remains what width of setback is sufficient.

Options:

- 1. Allow setbacks and building orientation to be negotiated on a site and context-specific, caseby-case basis based on urban design analysis.
- Create policies to direct and ensure buildings are generally located and oriented in a way that supports active and interesting pedestrian-scaled street frontages.
 - Buildings would have their longest, most positively-designed and animated frontage along principal street edges (or on larger sites, along private street-like spaces).
 - No intervening surface parking or large/deep lawns would be permitted.
 - Both minimum and maximum setbacks would be used.
 - Buildings would be relatively close to the sidewalk, while ensuring enough distance and space for:
 - comfortable and engaging sidewalk activity
 - design elements such as street trees
 - comfortable pedestrian movement
 - lively patio/seating space for restaurants and/or cafes, etc.

Further consideration will be given to whether a 1-2 metre setback is generally sufficient, or if more is needed generally or in certain contexts. Together with corresponding policies to ensure active uses at-grade discussed later in this report, the intent is to make streets as walkable and lively as possible.

Further analysis would identify specific minimum and maximums prior to the next stage of this work program. Policies would reflect the different nature of streets/roads in various contexts around the city (see Section 3).

What we heard: There was generally strong public support for buildings with setbacks and orientation that strengthen and support streets and neighbourhoods.

Recommendation and Why: Policies that establish minimum and maximum setbacks and required building orientation to streets (Option 2) are recommended, with consideration for the various areas/contexts across the city.





TOWER SEPARATION

Issue: When towers are relatively close together, how close should they be permitted to be?

Background: When towers are close together or clustered, there are additional cumulative urban design implications that must be addressed, even if each individual tower has a relatively slim width/ floor plate size. Towers that are too close together can result in issues of privacy, lack of light/sunlight access, impact on both public and private views, potential cumulative wind tunnel effects, and overall cumulative visual impact. It should be noted that although private views are not protected in policy, it is generally recognized that beautiful private views from tall buildings are a key reason people choose to live in tall buildings, with corresponding public benefits. Thus the ensuring of at least some level of positive private views from all private buildings is managed by many cities, where possible/ reasonable.

Experience from many other cities illustrates that ensuring a reasonable minimum tower separation, especially combined with a reasonable individual tower width/floor plate size maximum, ensures the ability to provide a reasonable level of distance/privacy/livability between towers. It also provides:

- a reasonable amount of light access;
- a reasonable level of positive private views (although complete or expansive views are not guaranteed or even necessarily sought);
- a reasonable breaking-up of cumulative visual mass from multiple buildings (thus avoiding a "wall" or "cluster" perceived effect or other cumulative visual impacts);
- an avoidance of excessive cumulative shadowing impacts, and;
- other urban design advantages.

It also allows the podiums at the base of such towers to determine the effective "human scale" at street level, as towers are not close enough together to dominate the street-level experience for people and pedestrians.

Standard practice across various cities is to require this tower separation for buildings or portions of buildings above 7 or 8 storeys in height, and further to allow some minor discretion regarding this separation requirement where buildings are not "flush" in their relationship with each other. For example, a "jogged" or corner-to-corner relationship between two buildings, where there aren't unreasonable implications of view blockage, cumulative massing etc., can affect the requirement.

Options:

- 1. Allow tower separation to be determined on a case-by-case basis using urban design analysis relative to various public interests.
- 2. Establish a city-wide general minimum tower separation requirement. A review of Canadian cities of various sizes suggests that a minimum tower separation of 25 metres (approximately 80 feet) for any towers or portion thereof above 7 storeys is commonly used to achieve the urban design results discussed above. Less than 25m is generally considered too close.

What we heard: Tower separation was generally not brought up unprompted during discussions with the public, but when specifically explained, there was a high degree of support for a specific tower separation requirement.

Recommendation and Why: A mandated minimum tower separation approach of 25 metres (Option 2) is recommended, as implemented in many other comparable cities, with some limited discretion for reduced distances where towers are not "flush."



Podium Design

Issue: Should tall towers/buildings be designed specifically with podiums, and if so, or where they are used, how should such podiums be designed?

Background: A podium beneath a taller tower is the part of the building that contributes most to the pedestrian experience along the streetscape. It creates what is referred to as the "human scale" along a street. It is essentially a mid-rise building that can have considerable frontage along a street, with the associated tower placed on top, usually set back from the street so as to ensure the mid-rise podium has its own perceived presence and scale, separate from that of the tower.

Podium heights can vary in the same way that midrise building heights can vary, but generally should be similar or related to the prevailing height of existing and/or heritage buildings along the street or in the neighbourhood. In the absence of existing buildings, the height-to-width scale of the adjacent street or other factors can be used. In very urban/ dense cities, podiums can be as high as 5-7 floors on wide avenues/streets. However in Kingston's case, prevailing heights suggest that podiums in the range of 3-4 storeys would be generally more reasonable, with the potential in appropriate contexts for 5th and 6th floors, possibly where such floors are significantly stepped back above a clearly defined 4 storey cornice line, so as to not influence the sense of scale created by the initial 4 storey mass.

When designed well, and combined well with relatively slim towers that are stepped back from the podium edge and separated reasonably from each other, podiums provide many of the advantages of midrise buildings, including the aforementioned sense of human scale, access to light and sunlight, disruption of wind-tunnel effects, etc.

It is noted that podium and tower buildings are currently not specifically discussed or enabled in City of Kingston policy. In fact, in many cases, existing policy or design expectations act as barriers to such buildings being contemplated. For example, angular plane requirements created for large perimeter block buildings that are applicable to the podium portion, but are not applicable to or appropriate for a fundamentally different but equally reasonable approach to density like separated, slimmer towers.

Options:

- At a minimum, establish in policy clear direction that podium and slim tower buildings may be supportable as an approach to density and growth in various locations/contexts in the city. Where policies are intended for other building forms (eg angular plane requirements intended for tall, wide perimeter-block buildings) and would interfere with the ability to consider podiums and slim towers, establish that they are considered a reasonable building alternative that may be considered notwithstanding non-applicable design rules or expectations.
- 2. Establish specific areas where podium and tower forms are either allowed in addition to other forms, or are in fact the preferred/required form.
- 3. Establish design policy for podium and tower designs that establish requirements meant to address key issues such as podium height (for example, a general maximum of 6 storeys with 2 stepped-back levels, and a more typical podium height of 3-4 storeys depending on adjacent/nearby building contexts), minimum step backs from podium-edge to tower, etc.

What we heard: Generally the podium approach to taller buildings was supported by those who discussed it during the initial engagement. Where there was concern raised, it was usually directed more to the issue of the potential heights of the related towers.

Recommendation and Why: A city-wide policy that provides design direction for podium and point towers, when proposed, is recommended (Option 3). In addition, a general policy establishing podium and tower designs as a permissible approach to height and density (Option 1) is also recommended, given that recent observations suggest that the absence of such a policy has lead to confusion and complications. Lastly, Option 2 is also recommended and should be considered in the context of follow up planning work undertaken by the city.

Ground Floor/Street Wall Design

Issue: How should the ground floor(s) of buildings be designed to activate and enliven streets?

Background: Arguably the most important element of building design from the perspective of the pedestrian experience is the design of the ground floor "street wall" (otherwise known as a building's "plinth"). This is the first (and sometimes second) floor of buildings immediately visible to the pedestrian at eye-level. This is especially important in highly walkable contexts such as the CBD/downtown. The street wall has an exceedingly significant effect on the public/pedestrian experience in terms of how interactive, transparent or visually interesting and engaging it is designed to be.

As a general rule, the starting point for creating a well-designed street wall is to ensure there are, wherever physically possible and reasonable, no blank walls. These include walls that require landscaping or art/murals in order to seek to mitigate their "blankness." It also includes scenarios where street walls become "de facto" blank walls, through poorly designed at-grade residential entrances where, because of avoidable design mistakes, high screening or closing of blinds are predictable; or where commercial windows are filled with "lifestyle images" or stacked products rather than transparent views directly into shops or services.

Avoiding blank walls isn't enough for street wall designs to be considered truly engaging. Experience has shown that smart street wall design choices will be the difference between a vibrant and engaging sidewalk edge, and a public realm failure.

At-grade uses can include retail/commercial uses, cultural uses, "accessory" uses (eg. lobbies or amenity spaces in residential buildings), or at-grade residential primary entrances to homes directly off the street. These require 4-5 steps upward from the sidewalk to provide separation from the public realm. This is a critically-important requirement for success that has been learned after observing many failures in many cities.

Street realm design also has a significant impact on the safety, both real and perceived, of people in public spaces. Crime Prevention through Environmental Design (CPTED) provides important considerations for public realm safety including natural surveillance, or "eyes on the street".

Options:

- 1. Leave the design of at-grade street walls to individual design negotiations on a case-by-case basis.
- 2. Create policies to specifically direct the design of the street wall for the 1st floor, and where appropriate the related 2nd floor, of all mid-rise and tall buildings. The intent of such policy is to limit/prohibit unnecessary blank walls facing the street, and ensure well-designed building edge-conditions to enliven and animate the adjacent street/public realm. Policies would include specific design direction for residential, retail/commercial and other uses typically found on the ground floor of buildings. Policies would address issues such as:
 - transparency;
 - slightly elevated residential entrance frontages;
 - no sub-grade or elevated commercial frontages where avoidable;
 - retail/commercial frontage lengths, heights and depths;
 - safety; and,
 - accessibility in the context of successful street vitality.

What we heard: There was strong support received from the public for deliberate policy that ensures a high quality, animated and interesting street wall, and strong public recognition that this was a particularly important building element when it comes to how buildings contribute to public life.

Recommendation and Why: A policy approach that specifically directs the design of the street wall (Option 2) is recommended, given the critical importance of this element of building architecture to buildings of every scale. Consideration of various land uses typically found on the lower floors of buildings should be given with associated design policies developed.

Above-Grade Parking Screening

Issue: How should above-grade parking be handled in building design?

Background: One of the biggest challenges with high-density building design, regardless of its height, is how to address parking. In particular, atgrade and/or above-grade parking within buildings is challenging. Where other cities have an ability to (and often a specific requirement to) address substantial parking underground, underground parking can be difficult and costly in Kingston due to the geological characteristics of the area, as well as the local economic conditions for development.

The much-preferred solution from a public interest perspective (climate emergency, affordability etc.) would be to build substantially less parking. This will require a review of the City's parking standards, having specific consideration for minimum and maximum parking requirements. This is because many applicants are seeking to build parking in excess of minimum requirements, in order to address perceived market preferences.

When parking is proposed at-grade and abovegrade within buildings, it adds to the massing and negative urban design impacts of buildings without providing housing. It can be visually unappealing while providing fewer "eyes on the street" from the lower floors of buildings. It can also be negative to the sidewalk-edge safety and experience of pedestrians.

Where at-grade and above-grade parking within buildings hasn't been specifically prohibited, some cities have had a level of success mitigating the situation though visual screening requirements. It is interesting to note that in some cases screening is required to have a public art element.

The more effective approach used by other cities is to require that useable floor space (housing units, commercial floor space, etc) acts as a buffer between the building edge and the parking, so that the parking isn't just screened – it's effectively invisible. In such cases, it is important to remember that parking still adds significantly to the scale,

massing and impact of larger buildings without providing corresponding housing or commercial uses.

Options:

- 1. Ban above-grade parking.
- Review minimum parking requirements to be sure they are in keeping with city directions relating to the recent Climate Emergency declaration, affordability, transit ridership and active transport, etc. reconsider minimum parking requirements, and create maximum parking requirements where considered strategically effective in order to avoid overbuilding of parking with implications both to mobility, cost, emissions and built form.
- Require developments to provide as much of its parking below-grade as is identified to be feasible. Applicants should have to establish to the satisfaction of the city that below-grade parking is not feasible.
- 4. For at-grade and above-grade parking within buildings considered necessary or reasonable, designs should provide safe, active and attractive visual screening including usable floor space wherever possible, such that parking isn't visible/obvious. Consider integrating a public art component/requirement as part of the screening design.
- For at-grade and above-grade parking within buildings considered necessary or reasonable, rather than screening, design buildings to provide intervening viable and usable floor space so that parking isn't readily perceivable.

What we heard: Parking was brought up many times by the public during events and conversations as a key element that needed to be addressed. Many in the public were concerned that parking requirements were not included as a

part of this work program initially. It was explained that parking would be considered, in keeping with Council goals, as part of a separate but aligned exercise. Never-the-less, design expectations to address at-grade and above-grade parking within buildings were generally supported by those who commented on parking.

Recommendation and Why: An approach to emphasize underground parking wherever feasible is recommended (Option 3). Screening abovegrade parking where unavoidable (Option 4) is recommended in areas outside the CBD/downtown and key urbanizing contexts. In areas that are more design sensitive (ie the CBD/downtown and key urbanizing contexts), require intervening viable and useable floor space (Option 5).

It is also recommended that Option 2 be resourced and undertaken as an aligned work program as soon as feasible, given that the amount of parking built can put significant pressure on the design solutions meant to mitigate its effects.

The best option to address parking is to build less of it. The next best option is to put as much of it as is feasible underground.

Although a ban on above-grade parking (Option 1) likely isn't viable, this should be considered the ultimate goal (if changes that make parking redundant don't happen first), with timely steps to both reduce the amount of parking and increasing the amount below-grade over time.



In-Building Active Transport Supports

Issue: How should higher density buildings support active, healthy and sustainable mobility choices other than privately-owned car use?

Background: Higher density buildings, when done well, support ways of getting around the city other than the car, simply through the many benefits of density and design itself. There are many details of building design that can provide support for more active, healthy and sustainable alternatives to the car, including walking, biking and public transit ridership. These can include:

- reduced car parking in general
- flexibly-designed car parking that can convert to other uses over time as less parking is required
- parking for electric plug-in vehicles
- secured bike parking (both private eg individual storage rooms, and communal)
- additional bike-supportive facilities (repair, cleaning etc)
- dedicated parking spaces for car-share vehicles
- · well-lit, secured bike parking for visitors
- well connected end-of-trip facilities
- enhanced pedestrian amenities (ie benches, lighting, landscaping/street trees)

The city already requires convenient, secure bicycle parking in all multi-residential buildings. This requirement should be strengthened to clarify that parking must be provided at or below grade (in the case of underground parking), rather than inunit (which was clearly not intended in the existing approach, however some applicants have tried to make a case for it using the existing wording). Currently, 1 space per dwelling unit is required.

Options:

1. Address Active/Sustainable Transportation needs/opportunities through other municipal work programs.

2. Create general policy supporting such Active/ Sustainable Transportation initiatives, to be further developed in other municipal work programs.

What we heard: The need to include active transport policies relative to new building design/development was specifically raised by the public during the first stage of public consultation, after it was initially not included in project team presentations.

Recommendation and Why: Create high-level policy establishing the municipal goal of further developing more detailed policies, regulations and initiatives relating to additional active/sustainable transportation supports (Option 2), required or incentivized, in new higher density building design/construction.



Building Tops/Caps

Issue: How should buildings be architecturally topped/capped so as to create positive visual additions in the skyline?

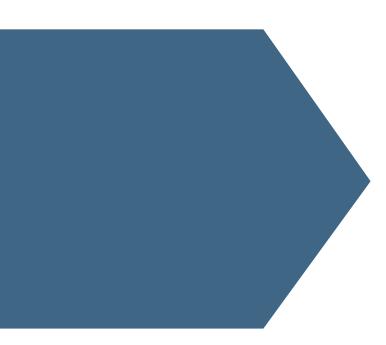
Background: The way a building is capped impacts how the building is perceived from a distance and within the overall city skyline. Depending on the design approach chosen, building tops can make a building appear taller, shorter, wider, thinner, and more or less visually interesting or beautiful.

Options:

- 1. Leave the design of architectural capping of buildings to case-by-case design negotiations.
- 2. Provide architectural policy guidance on the public aspirations for such caps, and at a minimum ensure that negative visual elements such as mechanical equipment are appropriately screened.

What we heard: The issue of how buildings are capped was raised by some from the public during the first round of public engagement, after it was initially not included in the project team's presentations. The project team agreed that it should be added, and committed to do so. It was not frequently raised by the public however.

Recommendation and Why: Include a policy speaking generally to the architectural public aspirations for building caps (Option 2), including requirements for visual screening of elements such as mechanical equipment, etc.



Additional Architectural Details (Including Architectural Beauty)

Issue: What policies should guide more detailed architectural choices, such as materials, colours etc? Can policy support more architecturally interesting and beautiful buildings?

Background: In many ways, Kingston is known for its building materials – it is known as "The Limestone City" and many of the City's historic areas are red brick. In addition to supporting key issues such as architectural compatibility of new buildings with heritage buildings, the choice of details such as materials and colours can be effective in supporting other issues and design elements relating to both tall and mid-rise buildings discussed in this report, such as:

- the emphasizing of "human-scale" even in taller buildings and the de-emphasizing of height and width of buildings;
- the intention to create either "background buildings" or alternatively "signature buildings" depending on what is called for in given circumstances;
- the breaking-up of long blocks or facades of buildings/podiums through variation of architectural expression and the "rhythm" of facades;
- the avoidance of architectural monotony and the achievement of architectural diversity in various ways where appropriate.

In addition, during the first phase of public engagement, some participants specifically asked if our new policy could result in "more beautiful new buildings than we've been getting." Of course, beauty is in the eye of the beholder. Discussions around better and more beautiful outcomes may be better left to broader cultural discussions around city building. Some high-level policy and potential consideration of new tools/approaches (eg an Urban Design Advisory Panel, local urban design awards, etc) may be able to facilitate such broader discussions.

It is noted that there are limitations on the ability of planning departments in Ontario to govern

architectural details and elements such as materials and colours through planning powers established in provincial legislation. Hence any related policies relating to these elements would have to recognize and reflect such limitations.

Options:

- Leave issues/details of materials, colours etc to case-by-case application negotiations where appropriate.
- 2. Create general policies encouraging the strategic consideration and negotiation of materials and colours in the identification of supportable design proposals, given the effect that materials and colours can have on important issues such as visual impact, heritage compatibility, perceived building height and width, building façade length, etc. Consider a general policy relating to the aspiration of achieving more architectural beauty and design quality in the city, while also achieving city goals relating to green design, affordability etc.

What we heard: Materials, colours etc. can be a very important issue to residents, especially as they relate to heritage building compatibility. Thus they were brought up by the public frequently. Also as noted above, the issue of architectural beauty was introduced by the public during sessions.

Recommendation and Why: Create policies that discuss details such as materials and colours, and architectural beauty in general (Option 2) relative to various issues such as heritage compatibility, deemphasis of building height, width and façade length, etc., with clarity around what is permissible under provincial legislation.

Integration of Commercial Uses

Issue: How should commercial uses be integrated into buildings in a way that is both viable and is not incompatible with the functioning of the residential portion of the building?

Background: The integration of commercial retail and service uses in a building is an important part of building complete communities. In some instances, such as on traditional main streets, commercial uses are required at grade to promote an active pedestrian realm. In other locations, commercial uses can support the liveability of an area by integrating some of the goods and services that residents both of the proposed building and surrounding community would frequent on a regular basis, thereby increasing reducing reliance on travel to other more distant locations.

What we heard: The issue of the integration of commercial uses was raised by some members of the public during the first round of public engagement, specifically related to proximity to amenities that supported a walkable lifestyle.

Recommendation and Why: Include a policy generally addressing the integration of commercial uses, including direction regarding an appropriate range of commercial uses, floor heights, signage, entrances, and other commercial-oriented criteria.

Options:

- 1. Leave the design of commercial space to caseby-case design negotiations.
- 2. Provide policy guidance on the integration of commercial uses, and at a minimum ensure that specific requirements are included, such as a 4.5 metre floor height at grade, to support immediate or future commercial use.



Building Access

Issue: How should building entrances be implemented to be both a functional element and a positive additions to the structure?

Background: Building entrances are an important part of a structure's 'legibility'. It is important that residents, guests, and others are able to quickly and easily locate and use the primary and other entrances to both the pedestrian and vehicular environments. A related element is where residents are picked up / dropped off, as well as where deliveries are made to the building.

Options:

- 1. Leave the design of building entrances to caseby-case negotiations.
- 2. Provide policy guidance regarding entrances to ensure that they are given sufficient architectural treatment for wayfinding and that negative situations such as primary doors being oriented only towards parking areas and not towards the public realm are avoided.

What we heard: While building entrances were not specifically raised, the issue of how buildings deal with resident and guest arrivals and departures, as well as how deliveries are handled, were raised by members of the public.

Recommendation and Why: Include a policy generally addressing the integration of entrances, including direction regarding placement, prominence, and how people and goods arrive.



Where We Go From Here

The new policies created through this work program are anticipated to be completed in the Spring of 2020. Further opportunities for community input into the project will be available in the coming months, with specific community consultation on this paper in November 2019, and further consultation on the release of a draft policy for community comment in February of 2020.

The public can submit comments on this paper at any time through the end of 2019. This can be done by:



Get Involved Kingston - Density by Design project space at <u>GetInvolved.CityofKingston.ca/tall-midrise-buildings</u>



In person at consultation events the week of November 18



Email to Andrea Gummo at agummo@cityofkingston.ca



Mail to City of Kingston, ATTN: Density by Design, 216 Ontario St K7L 2Z3

Increasingly, people are being asked to shift their perspectives and the way they do things in the face of a changing climate that is changing as a direct result of human action. Climate change is a global problem with many local options for mitigation.

Of the spheres of influence available to municipal government, land use planning is unquestionably the biggest. The decisions that municipal Councils make today will last for decades, if not centuries, and they have the ability to either worsen our impact on the climate or mitigate the impact that is already being observed.

