



Impacts to infrastructure are not fully addressed by the new planning guidelines applied to local area plans:

Upgrades to existing infrastructure to support more density

How community infrastructure will support substantially increased density is not addressed in the Guidebook for Great Communities or in any other City planning documents.

An Offsite Levy was put into effect in recognition that certain existing infrastructure would not be able to handle 50% increased population density. Offsite levies in established areas have been collected since 2016 and they are in the process of being reviewed. Offsite levies are one-time costs paid by the developer. The charges cover either: 1) the actual installation of new infrastructure (Greenfield development) or 2) the anticipated or immediate replacement or upgrade of existing infrastructure that pertains to redevelopment (Established Areas). The redevelopment of a single residential lot may not trigger the immediate replacement or upgrade of existing infrastructure. However, if an entire city block of existing single-detached dwellings were replaced by a multifamily development, the existing infrastructure would almost certainly end up being replaced or upgraded immediately to accommodate the increased density at the time of development.

The charges on our Enmax bills are meant to cover the cost of ongoing maintenance such as water main breaks, replacement of existing infrastructure that has reached its use by date (life cycle maintenance) as well as **upgrades to existing infrastructure**. For instance, the Bonnybrook Wastewater Treatment Plant is currently undergoing expansion to increase capacity to the tune of \$800 million in capital expenditures. Capital expenditures may be initially borrowed, but the payment of any expansion or upgrade to existing facilities is incorporated in those charges for Water Treatment & Supply; Wastewater Collection & Treatment and finally Stormwater Management that we see on our monthly bills. The charges are calculated not only to cover any immediate 'it is broke, fix it' costs but also future replacement and expansion to accommodate growth. In short, the monthly charges we see on our Enmax bills are not for a single development in an Established Area or for a Greenfield development. They are the costs to maintain the citywide infrastructure network in addition to the costs based on actual household usage such as cubic meters of water or kilowatts of electricity.

In established areas, water and wastewater are the greatest areas of concern. The funds collected for the re-development of "Established Areas" are split between Water & Wastewater Treatment; Storm & Sanitary Sewers. Those funds are further dedicated to the specific geographic region of the City in which they were collected: northwest; southwest; northeast; southeast; west & centre city. These funds are attributed to geographic regions, which is not neighbourhood specific. So funds collected in Brentwood (NW) could be spent in Silver Springs

(also NW) if that happened to be the area that was considered most in need of immediate upgrade or replacement to accommodate higher volumes.

In general, the existing infrastructure in established neighbourhoods is considered sufficient to accommodate increased population density. The main difference between then and now is the number of bathrooms. Housing in neighbourhoods built prior to 1970 normally have no more than a single bathroom; guest half-baths were considered a luxury. When those homes are replaced with the construction of new homes, the number of bathrooms is much higher. For example, a single detached dwelling replaced by two infills would likely result in the number of bathrooms increasing from one to four (2 infills, each with two baths). Obviously the construction of multifamily dwelling units such as apartment or condo buildings would have an even greater impact.

There are many concerns that the policies in the Guidebook and the resulting Local Area Plans do not sufficiently address how infrastructure and public amenities are to be improved upon to support increased density.

For example, in the North Hill Plan, there is:

- No requirement or clause for the analysis of water and wastewater to understand the projected impact of growth on the utility network. There is no strategy for funding the capital investment required to improve infrastructure and amenities.
- No identification of parking, traffic shortcutting, lights or crossings, nor access issues that need to be addressed as density increases.
- No “Asset Map” or list that would guide continual growth and change created for the North Hill Plan, along with the current status of infrastructure and amenities, the priorities for investments, the financial tools that could support implementation, and a future service plan with recommendations.

Other unanswered questions, not addressed in the North Hill Plan, include:

- Is there sewage treatment capacity?
- Will there be upgrades to public realm infrastructure?
- Pathways and bike routes need to be identified.

Density Bonusing

Density bonusing is a tool that enables the City to grant developers additional density in exchange for such practices as: contributions to a ‘community investment fund’ or the provision of affordable-housing units or the protection of heritage assets in areas with potential for intensification. In Sunalta, for example, this ARP recently introduced density bonusing for 14th Street and 17th Avenue gateway areas in exchange for monies invested in a community fund that will be used for public realm improvements. Density bonusing rules are used in Hillhurst-Sunnyside, the Beltline, Sunalta. The City has expressed the desire to come up with a city-wide tool for density bonusing, however, no generic approach has been defined to date.

The concern with density bonusing is that once again this could lead to ‘spot upzoning’ that would not respect a community-based strategy for adding density to an area. Communities such as Mission-Cliff Bungalow warn that unless there is a community project that is clearly identified as needing funding or a proposed site that cannot be economically redeveloped under existing

zoning, then there is no need for density bonusing.¹ The Guidebook for Great Communities states on page 87: “A local area plan may include density bonusing policies for landmark sites or core zones.”

Transit Oriented Development (TOD)

In areas that are within a 600-meter radius to an LRT station (Light Rail Transit station) or a BRT stop (for Bus Rapid Transit), a mixed-use development with higher density is encouraged. This form of development uses existing infrastructure and optimizes the use of the transit network to create mobility options for transit riders and the local community. It is meant to generate a vibrant centre for local residents.

A significant challenge with TOD areas is that they are developed through multiple phases by multiple developers. Which developer will be responsible for creating open spaces and/or public amenities? Each one looks after his/her own building and provides minimal public space or open areas. How can we ensure that we don't end up with only density (i.e. towers and buildings), but not the promised or anticipated “attractive open space network”? The guiding principles for great TODs include elements such as “creating great open spaces,” “incorporating public art and programming” and “integrating green infrastructure.”² No single developer is responsible for these elements and without tools and requirements for financing, the public spaces tend to be left out. Communities end up with the density, but with no additional amenities or open areas.

A TOD area should be integrated with surrounding communities. However, the Guidebook does not have policies for guiding development that would be sensitive to existing communities, providing transitions of scale, form and character, while creating opportunities to enhance connectivity.

Finally, infrastructure for the public realm requires financing through a partnership between the City and private development interests. There must be clear responsibilities defined for upgrading public access to the TOD site, for example, which are lacking at present. How are pathways, bike lanes or other access points going to be planned for public areas? If there is a public square in the middle of a large TOD, how are people going to get to it? Will the paths around the TOD station be upgraded? Who pays for that? The developer? The developers? Or the City? There need to be proper guidelines and policies around TODs before construction begins.

Loss of urban tree canopy and overcrowding of public open spaces

The Guidebook for Great Communities contains almost no reference to the importance of urban tree canopy. The size of the urban forest is measured by its “canopy,” that is, the trees planted on both private and public land. The goal for Calgary's Urban Forestry was 20% tree canopy in the 2016 Strategic Plan. Currently, Calgary has only 8.25% tree canopy and there is a revised target of 16%. Current funding is just enough to maintain that tree canopy, but not enough to

¹ See: <https://pub-calgary.escribemeetings.com/filestream.ashx?DocumentId=21501>.

² Brentwood Station ARP, pp.17-19. See: <https://www.calgary.ca/PDA/pd/Pages/Current-studies-and-ongoing-activities/Transit-Oriented-Development-TOD.aspx>

increase the canopy to meet the target. Calgary Parks' participation with the Calgary Guidebook to Better Neighbourhoods and the North Community Plan has been limited.³

The Guidebook offers no tools or incentives to increase public green spaces while promoting the addition of significant density (with the associated loss of private green spaces and tree canopy). This is a major failing of a document that is intended to guide sustainable future development city wide. In the Guidebook:

- Target densities and development objectives = higher lot coverage = significantly fewer trees and permeable ground in private property;
- Increased densities = significantly more people requiring access to public green spaces (coupled with significant loss of private open spaces and trees).

We should be seeing firm policies with enforceable penalties added to the Guidebook to “increase the tree canopy” (MDP goal, stated in section 2.6.3). The current MDP requires that “Implementation Guidebooks and/or Local Area Plans should outline the target tree canopy in the study area and follow the Parks Urban Forestry Strategic Plan guidelines for tree planting intentions and opportunities,” Bylaw 46P2013 (MDP 2009, section 2.6.4). Recent amendments proposed to the Municipal Development Plan suggest decoupling increased density from the increased need for green spaces. We view this as a mistake.⁴ More green spaces should accompany added density.

The Local Area Planning suggested by the Guidebook would contradict many of Calgary's sustainability principles and policies adopted to guide future city growth and resilience. The following list of policies and excerpts is provided for illustrative purposes; it is not meant to be comprehensive:

- “Ensure sufficient community open space provision in Inner City and Established Areas by maintaining a minimum of 2.0 hectares of open space per 1,000 residents. Calculations should be applied to logical community clusters where parks and recreation amenities are accessible and shared between communities. Community open space includes areas dedicated for schools; community centres; playfields; outdoor performance spaces; community gardens; and habitat areas that offer public amenity.”⁵

These goals are set forth in the 2009 Municipal Development Plan. *Where in the Guidebook are they recognized or adhered to?* Does everyone understand that school buildings factor into the calculation of ‘open spaces’? That’s right. The area of school buildings is included in the calculation of public open space.

³ <https://pub-calgary.escribemeetings.com/filestream.ashx?DocumentId=2458> and Druh Farrell’s “Climate Update #2,” March 2, 2020. <https://www.calgary.ca/citycouncil/ward-7/Pages/latest-news-detail.aspx?SidebarListCategory=0&ArticleID=323>.

⁴ Page 50, section 2.3.4 of the proposed amendments for the MDP states: *a deficiency in open space should not imply that additional density is not warranted as the quality of existing open space and proximity to alternatives are also considerations*. Cf. <https://www.calgary.ca/engage/Documents/Next20/Summary-of-Proposed-Revisions.pdf>.

⁵ Calgary Municipal Development Plan, 2009, section 2.3.4: page 2-24.

- Council Priority: A healthy and green city. “Calgarians recognize and appreciate that Parks, the urban forest and natural areas are significant to the environmental quality and recreational fabric of Calgary. Trees serve to define the long term character of the city as a whole and the individual communities within it.”⁶
- “Citizen well-being in urban environments partly relies on having access to space where they can relax, recreate and experience nature and culture. Studies show proximity to parks and nature is beneficial to mental and physical health.”⁷
- “Social benefits of Urban Forestry include reducing stress, promoting health and wellness and fostering aesthetically pleasing, walkable communities. Environmental benefits include improved air quality, cooling effects (shade), reduced storm water runoff, increased wildlife habitat and climate change moderation. Economic benefits include increased property value on treed streets and attractiveness of business districts.”⁸
- “However, due to capital funding constraints, we (Urban Forestry) will not be able to plant the 7,500 trees per year required to grow the urban canopy and meet the long-term Municipal Development Plan target for tree canopy coverage.”⁹
- Benefits of an urban tree canopy include: aesthetic beauty, shade (which significantly reduces urban heat-island effect), reducing pollution through carbon capture and storage, reducing energy costs for heating and cooling, critical in stormwater management, contribute to a sense of wellbeing and impart a sense of place, enhance community satisfaction, and conserve biodiversity. This is a partial list.¹⁰

The current percentage of tree canopy has not changed in recent years. There has been no increase, despite the goals set by urban forestry . Instead, trees on private land are continuously being lost. We estimate the percentage of urban tree canopy will decrease.

Ecological areas, recreational amenities & schools

The following are some unanswered concerns about by local area planning:

- Identification of ecological assets (school grounds, play grounds, natural areas); do they have enough capacity for increased density? For example, in Tuxedo Park, the community’s only park was the topic of minimal enhancement in the North Hill plan, with higher density planned for around the park and a possible C-train station next to it;

⁶ Open Space Plan (2002, amended 2003), City of Calgary. <https://www.calgary.ca/CSPS/Parks/Documents/Planning-and-Operations/open-space-plan.pdf?noredirect=1>

⁷ One Calgary: 2019 to 2022 Service Plans and Budgets, p.337. https://www.calgary.ca/cfod/finance/Documents/Plans-Budgets-and-Financial-Reports/Plans-and-Budget-2019-2022/Service_Plans_and_Budgets_2019-2022.PDF

⁸ Ibid, p.363.

⁹ Ibid, p.365.

¹⁰ Peter Duinker, C. Ordóñez and J. Steenberg *et al.* 2015. “Trees in Canadian Cities: Indispensable Life Form for Urban Sustainability,” *Sustainability*, Vol.7, n.6, pp.7379-96.

- Upgrades to water systems are necessary in many parts of Calgary. Water drainage will be further complicated by increased density, lot coverage and cement.
- Land Use planning impacts the viability of schools. Is there room in local schools for the increase in students?
- Do recreational facilities have enough capacity for the additional density? Will community facilities be rebuilt or added to?

Lack of Heritage Area Policies

Heritage policies in the Developed Areas Guidebook were taken OUT of the Guidebook for Great Communities. This was a watershed moment for heritage advocates and communities that have heritage assets they are seeking to protect. The pilot area plan for North Hill is proceeding without any heritage policies that protect historical areas.

The planning tools for heritage conservation of “areas” were included in The Developed Areas Guidebook (DAG), which was first approved in 2017 for local area planning. In October 2018, this Guidebook was amended to include policies for three heritage conservation approaches: supporting **heritage district overlays** and community investment funds to support heritage conservation; as well as a property tax relief incentive to incentivize heritage conservation. Pilot communities engaged in local area planning worked with heritage conservation approaches defined in the Developed Areas Guidebook (e.g. Bridgeland/Riverside and Inglewood/Ramsay).

In September 2019, the Guidebook was superseded by the Guidebook for Great Communities, which no longer contains the policies for heritage overlay districts or the heritage incentives and tools of the earlier Guidebook. As of February 2018, heritage professionals, community representatives, heritage organizations and representatives from the development industry had been working on heritage policies and incentives that *they thought* would be included in the revised version of the Guidebook. In October 2019, the senior heritage planner that contributed to the design of heritage districts resigned from the City of Calgary.

In comparison, the City of Edmonton uses heritage area overlays, direct control zoning and planning policy, in addition to individual designation of Municipal Historic Resources, to regulate form and character of historic districts. Here are some examples:

Westmount:

https://www.edmonton.ca/city_government/edmonton_archives/the-westmount-architectural-heritage-area.aspx

Glenora:

<https://www.edmontonsarchitecturalheritage.ca/index.cfm/neighbourhoods/glenora/>.

While Councillors in PUD seem to recognize the importance of bringing heritage policies back into the Guidebook for Great Communities, they seem unwilling to direct City Administration to draft or adopt true “area” policies like the ones drafted for the Developed Areas Guidebook or those used in Edmonton. The Guidebook is missing tools to identify character areas and potential heritage districts, which would in turn manage the exceptional qualities of those areas during the creation of local area plans.

A report on heritage policy tools and incentives was discussed on April 1st 2020 during a meeting for the Planning & Urban Development (PUD) Committee. These policies and incentives are a step in the right direction, but they do not include area-based policies, they propose block-face policies (explained below), and they lack definition for enforcement. For example, Layer 2 policies include: “guidelines [that] would not preclude row-house, multi-family, or other innovative development where **compatibly designed**.” However, there is no explanation or tool that regulates what is meant by “compatibly designed.”

Proposed Heritage Policies

The heritage policies proposed at PUD on April 1st 2020 apply to streetscapes (block-faces) according to the identification of a certain percentage of historic sites. A block-face is one side of a street between two street corners or other geographic boundaries. Sites identified as ‘historic’ are not listed on Calgary’s Inventory of Historic Resources, and may not qualify for the Inventory as an individual property. Their significance is recognized as being included in a geographic concentration of similar sites: “containing a building generally constructed prior to 1945, exhibiting historic stylistic architectural value, substantially retaining their original design and features, and reflecting a pattern of historic development in an area.”

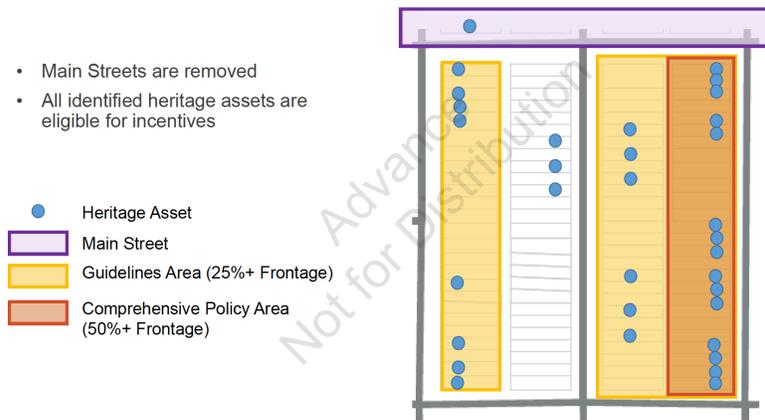
Table 4.1: Heritage Policies (layers 2 & 3) proposed at PUD on April 1st 2020.¹¹

	Layer 2: 25%+ heritage on block face	Layer 3: 50%+ heritage on block face
REGULATORY PLANNING TOOL	Design Guidelines; all uses Discretionary	Direct Control District with very specific area boundary
LEVEL OF CONTROL	Medium	High

- **25% heritage on block face:** Design guidelines for all properties (including non-heritage) within the identified streetscape. All new construction is discretionary, requiring design review, e.g. guidelines for roof pitch, massing, fenestration, materiality, etc.
- **50% heritage on block face:** Mandatory restrictions and allowances for properties with and without a heritage asset. “Shall” instead of “Should.” For example, regulations on massing, setbacks, roof pitch, etc. The highest level of control offered and it requires the greatest level of support from property owners.

¹¹ See: <https://pub-calgary.escribemeetings.com/filestream.ashx?DocumentId=127650>.

The block-face approach would result in piecemeal implementation with several mini-areas, but no real cohesive heritage area over a contiguous cluster of residential blocks. Here is what it looks like to see 'block-face' policies applied:



The heritage policies under consideration only apply to streetscapes and privately-owned assets. Better area-based policies are desired. Heritage areas should encompass commercial and green spaces, as well as private lands. The evaluation of heritage assets should include ALL categories of asset that exist on Alberta's Inventory for Historic Resources, including:

- Buildings, which can be residential, commercial, institutional and industrial;
- Streetscapes, including Main Streets, sidewalks, boulevards and roads (for example, Medicine Hat's "Historic First Street" has municipal protections); as well as
- Parks and Landscapes.

Alberta's "Historical Resources Act" has provisions for designating historic areas where the heritage significance of an area lies in the area's overall character rather than its constituent buildings or other features. When we speak of heritage areas, we must acknowledge that the protection of an area requires the coordination of several different departments.

Proposed Heritage Incentives

The new financial tools proposed (tax back grant and tax credit programs) may be insufficient on their own to encourage designation. An increase to the Historic Resource Conservation Grant Program is also required (not instead of the tax programs). These financial incentives are particularly needed to help protect standalone homes in landscapes that face upzoning outside of the heritage policy areas. The increases could be paid for out of heritage density bonusing/transfer payments that actually reflect the value of the increased density approved for new development. Clear direction for heritage density/transfer bonusing formulas (based on FAR, height, etc.) should be developed.¹²

¹² Recommendations and observations made in letters submitted to PUD by Calgary Heritage Initiative (CHI) are referred to in this commentary on proposed heritage policies and incentives.

Closing Words on Heritage Protections

Calgary needs to start investing in our significant stock of older buildings; whatever we invest in them increases our tax base without significant infrastructure upgrades resulting in a net increase, which is not often the case for new construction. The improvement of existing dwellings creates 40% more GDP in Canada than new construction, as well as a much higher proportion of local employment (heritage planning expert Marc Denhez). As well, Calgary needs to be competitive in attracting future Calgarians and tourists to a 'great' city, and ALL truly great cities have historic areas. In almost all cases these historic areas were not protected because they were exceptional, and in fact were prime targets for demolition and redevelopment but have become exceptional *because* they were protected.¹³

¹³ Many thanks to Marilyn Williams and Lorna Cordeiro for their insights on heritage incentives and tools.