

CITY OF SASKATOON BYLAW 8770 ENVIRONMENTAL ZONING BYLAW REVIEW

STAKEHOLDER CONSULTATION

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Introduction

In the Spring of 2022, Crosby Hanna & Associates was retained by the City of Saskatoon (City) to undertake an Environmental Zoning Review of the City's Zoning Bylaw No. 8770. The purpose of the review is to provide the City with examples of environmental regulations used by other urban municipalities that are either leaders in innovative approaches to environmental zoning, or have similar considerations, constraints, and/or climate to the City of Saskatoon. Furthermore, the intent of the study is to develop new or amended regulations for Bylaw 8770 that support the City's environmental / sustainability initiatives.

A study of 22 Zoning Bylaws and Ordinances ranging across 5 countries was conducted to draw upon regulatory best practices to inform the development of environmental regulations and amendments to Bylaw No. 8770 for the City of Saskatoon.

The following topics were reviewed, and recommendations were made concerning whether proposed amendments to bylaw 8770 should be considered:

- Green Buildings (LEED, BREAM, Passive Housing);
- Green Roofs/Roof Top Gardens;
- Low Impact Development;
- Adaptive Reuse and Infill Development;
- Landscape Regulations;
- Parking Standards;
- Electric Vehicle Parking Standards;
- Dark-Sky Compliant Lighting; and,
- Grey Water Re-Use.

These recommendations are being distributed to stakeholders throughout the City of Saskatoon. It is our intent to gather feedback from select stakeholders (interest groups) to determine whether the proposed amendments would be favorably received, what type of uptake would be expected from the community, and barriers to successful uptake.

The following pages detail the existing regulations in place at the City of Saskatoon as well as potential amendments that are proposed for consideration.

Green Buildings

Existing regulations

The City of Saskatoon currently incentivizes green buildings through bonus provisions in the B6 – Downtown Commercial Zoning District for green building development. Within the B6 – Downtown Commercial Zone, a number of density bonus options are provided (height bonuses).

Recommendations

It is recommended that the districts below be considered for the same incentives as to what is currently provided in the B6 district:

- B2 – District Commercial District;
- B3 – Medium Density Arterial Commercial District;
- B4 – Arterial and Suburban Commercial District;
- B4A – Special Suburban Centre and Arterial Commercial District;
- B4MX – Integrated Commercial Mixed Use District;
- B5 – Inner City Commercial Corridor District;
- B5B – Broadway Commercial District;
- B5C – Riversdale Commercial District;
- IB – Industrial Business District;
- MX1 – Mixed Use 1 District;
- MX2 – Downtown Warehouse Mixed Use 2 District;
- M3 – General Institutional Service District; and,
- M4 – Core Area Institutional Service District.
- RM4 – Medium / High Density Multiple Unit Dwelling District;
- RM5 – High Density Multiple Unit Dwelling District.

It is further recommended that the City consider additional forms of density bonussing, including Floor Area Ratio (FAR) bonussing for both residential and commercial properties, if a green building is proposed for development. FAR is defined as floor area / total lot area. For example, a four storey building with each floor being 250m² has a total floor area of 1,000m². On a 1,000m² lot, this means a FAR of 1000/1000, which equals 1.0 FAR. FAR does not dictate design but dictates the amount of floor area permitted, which can be built based on the height, lot coverage, and setback regulations, all of which are found in the Zoning Bylaw

Green Roofs / Roof Top Gardens

Existing Regulations

Green roofs are defined in the zoning bylaw. The City of Saskatoon currently allows for a height bonus in the B6 Zoning District, in conjunction with the development of a green roof. The green roof must cover 50% of the building footprint at grade level. The height bonussing states that an additional 10% height may be added to a building, not exceeding 7.6 m, or 2 to 2.5 storeys.

Recommendations:

It is recommended that the following be considered with respect to amending the City's Zoning Bylaw to encourage green roof development:

- (1) For multiple-unit residential dwellings, mixed use residential / commercial buildings, or commercial / office buildings – allow for density bonussing, as outlined in Table 4, within the same zoning districts as provided in Section 3.2.4 of this report. Additional incentives, including either reduced parking requirements, could be provided. This could be achieved through a provision in the Zoning Bylaw which would allow for the Development Officer to reduce the parking requirements, where the proponent is applying to construct a green roof.
- (2) To incentivize green roofs in residential districts (e.g. detached garages), consideration could be given to allowing for an increase in square footage / coverage of a detached garage. This could be achieved through the addition of a provision in the zoning bylaw, which would allow for the Development Officer to provide such an incentive, where the applicant is proposing a green roof.
- (3) Incentives for green roofs in light and heavy industrial areas could include a reduction of the required landscaping, or minimum number of parking spaces. This again could be achieved through a provision in the Zoning Bylaw which would allow for the Development Officer to reduce the standards, where the applicant is proposing a green roof.

Low Impact Development (LID)

Existing regulations

According to the Low Impact Development Design Guide, the City of Saskatoon currently employs wet ponds, dry ponds, constructed wetlands, grassed swales, vegetated buffer strips, oil/grit separators, soak-away pits and on-lot ponding areas. There have been occasional installations of bioretention cells.

The Zoning Bylaw currently states the following with respect to general regulations for parking and loading facilities: “Hard surfacing (of parking lots) may include permeable, or porous pavements capable of withstanding expected vehicle loads including porous asphalt, porous concrete, permeable unit pavers and open grid pavers. Permeable pavement is not permitted for gas bars, service stations, public garages, trucking terminals and similar uses with potential ground contamination or in heavy industrial districts.

Recommendations

LID emphasizes on-site features and systems that help to lower runoff quantity, lower peak runoff volumes and flow rates, and improve runoff water quality. Although consideration can be given to architectural, engineering, and landscape provisions to enhance LID-style development, the City of Saskatoon manages this largely through the building permit process, and at the neighbourhood design stage.

It is recommended that the City consider amending the zoning bylaw to provide additional incentives for LID-style development. Amendments could include the following:

- (1) Height bonuses and reduced parking requirements for proposed developments that utilize LID techniques such as permeable surfaces, roof rainwater collection systems and bioretention/rain gardens, etc.
- (2) The City requires a curb of 150mm to separate any off street parking from any landscaped area. This regulation forces parking lots to be designed to drain into the municipal storm water system. If the city were to eliminate this regulation, it would be possible to design driveways and parking lots to drain onto a permeable surface and allow for water to be diverted from its storm water system. It is understood that 150mm is the standard curb height for streets with on-street parking as per the City's Design and Development Standards. However, consideration could be made to relaxing this curb height on private property.

Landscape Regulations

Existing Regulations

The City has developed a series of general landscape regulations, as well as specific landscaping regulations within each zoning district.

Recommendations

Ways in which the City could amend the zoning bylaw to support the City's environmental and sustainability initiatives through landscape regulations are broken down into different landscape elements and are summarized below.

Turf and Plantings

Turf (both grass and artificial turf) are both allowed as soft landscaping materials within the City's zoning bylaw. Artificial turf provides zero ecological benefit, as it does not ensure proper drainage, and does not allow for a reduction in greenhouse gas emissions. It is recommended that artificial turf be removed from the City's bylaw as an acceptable soft landscape material.

It is further recommended that the bylaw be amended to prescribe maximum amounts of turf as a form of landscaping. This would then require developers utilize shrubs other planting schemes which provide the following benefits:

- (1) Increases in bio-diversity;
- (2) Improved means of stormwater management; and,
- (3) Shrubs and trees help reduce greenhouse gas emissions to a much greater extent than turf alone.

Lastly, it is recommended that the City prescribe a minimum of three different species of trees / shrubs to be planted at any given development. While the zoning bylaw currently requires that plant materials (trees and shrubs) be a species capable of healthy growth in Saskatoon and shall conform to the standards of the Canadian Nursery Trades Association for nursery stock, it is recommended that the minimum type be expanded to three. This would lead to resilience against disease and infestation in a monoculture situation. In 2018, a significant portion of ash trees in the City died due to an infestation.

Xeriscaping

Given the nature of xeriscaping, it is recommended that it should be further encouraged, or even required, in certain areas of the city (e.g. industrial areas), as plants utilized in xeriscape projects are drought resistant and do not require irrigation. It is also recommended that a definition be added in Bylaw 8770.

Other LID Considerations

In low density residential areas of the City, the amount of impermeable surface area can be regulated to further reduce surface water run off that puts pressure on municipal storm water infrastructure. It is recommended that the City continue to allow bioretention areas, rain gardens, and bioswales as means of landscape development. It is further recommended that box planters, swales, other water collection cisterns, and constructed wetlands be permitted within required setback areas and allow these areas to fulfill the landscaping requirements as outlined in the Zoning Bylaw.

Adaptive Reuse and Infill Development

Existing regulations

The City of Saskatoon currently utilizes “The Vacant Lot & Adaptive Reuse Incentive Program” as a means of encouraging development on existing vacant or brownfield sites, and the reuse of vacant buildings in established areas of the city, including the City Centre. The program provides financial and/or tax-based incentives to owners of eligible properties. It is noted that there are no zoning implications associated with this incentive program.

Within the Zoning Bylaw, the City provides for infill development in the R2A Zoning District (Low Density Residential Infill District). The intent of this zoning district is to provide for residential development in the form of one and two-unit dwellings, while facilitating certain small-scale conversions and infill developments, as well as related community uses. The Low Density Multiple Unit Dwelling District (RM1) also provides for residential development in the form of one to four-unit dwellings, while facilitating certain small and medium scale conversions and infill developments, as well as related community uses.

Recommendations

There are currently no zoning implications of the Vacant Lot and Adaptive Reuse Incentive Program.

It is recommended that the following changes could be considered with respect to infill / adaptive reuse and vacant lots within the City’s zoning bylaw, should any development be proposed that provides exceptions the municipal requirements, as prescribed by the zoning bylaw to encourage such development:

- (1) A definition for “adaptive re-use” provided within the Zoning Bylaw. The rationale for adding this definition is provided in bullet (2).

- (2) The Zoning Bylaw be amended to allow for reduced off-street parking requirements to any change in use and intensity of a building that is defined as an adaptive reuse. This could be achieved through the addition of a provision, which would allow for the Development Officer to provide such an incentive, where the adaptive re-use is considered a “green initiative”.
- (3) Adaptive reuse of existing buildings in residential areas may also require building envelope and insulation alterations. It is recommended that including exterior insulation within the list of permitted yard encroachments would allow for existing buildings to be brought closer to modern insulation standards and would encourage their continued use.
- (4) In residential areas, the City of Saskatoon Zoning Bylaw currently allows for a 1.0 metre eaves overhang in the front yard, in many cases this maximum overhang is not sufficient due to its latitude. Buildings on a south facing lots are required to be built away from the front site line if the builders wish to properly implement a passive solar design. It is recommended that the City enlarge the front yard permitted projection for eaves on south facing lots, or corner sites, which would enable the building to take advantage of passive solar energy without having to sacrifice rear yard space. It is recommended that a similar amendment be made for sites where a substantial un-obstructed building wall faces south, provided the projection does not encroach on the side yard beyond 0.75 m.

Parking Standards

Existing regulations

The City of Saskatoon currently utilizes a time-tiered metered parking system user-pay parking in the several areas for street parking, including the following:

- Downtown from Spadina Crescent to Idylwyld Drive, 19th Street to 25th Street (no parking is provided on 25th Street), and portions of 1st and 2nd Avenues, to 26th Street;
- Broadway and portions of 9th Street, 10th Street, 11th Street, 12th Street and Main Street;
- Riversdale including 20th Street and portions of Avenues A, B, and C, as well as a portion of 19th Street, and Sonnenchen Way and Saunders Place;
- Central Avenue and portions of 109th Street, 110th Street, 111th Street, and 112th Street, to the west of Central Avenue only.

The City does not have off-street parking requirements within the B6 Commercial District.

Commercial Districts

In commercial zoning districts, the City has prescribed standards based on proposed land use. However, the City allows for a reduction in the number of parking spaces at one space for 30 m² of site area used exclusively for the transit terminal. In commercial districts, the parking and loading requirements are provided in Section 6.0 of the Zoning Bylaw. Some uses require a certain number of parking/loading spaces based on building floor area. Others uses require a certain number of parking/loading spaces for gross floor area, and other uses have a minimum number of parking/loading spaces for gross leasable floor area.

Parking requirements in other commercial districts, including Direct Control Districts (DCD) differ compared to those provided in Section 6.0 of the Zoning Bylaw. In all Direct Control Districts that consist of big-box oriented commercial development, the parking / loading requirements are the same in DCD-3, DCD-5, and DCD-6. The regulations state that one parking / loading space is required for every 20 m² of gross floor area for all permitted and discretionary uses.

High Frequency Transit Corridors

The reduction to the minimum parking requirements for multiple-unit dwellings applies to sites located along the high-frequency transit corridors is provided in the City's zoning bylaw as follows:

“Where a transit terminal is located on a shopping centre site, the number of required parking spaces for the shopping centre shall be reduced at the rate of one space for every 20 square metres of site used exclusively for the transit terminal.”

Bicycle Parking

The City of Saskatoon already provides for bicycle parking by use and zoning district.

Recommendations

It is recommended that the City of Saskatoon consider the following:

- (1) With the exception of the Direct Control Districts (DCD-3, DCD-5, and DCD-6), the City of Saskatoon's parking requirements vary significantly, based on either building floor area, gross floor area, and leasable floor area. Consideration should be made to undertaking a parking study evaluating and comparing minimum parking requirements in all commercial districts.
- (2) Prioritize parking requirements and impacts in light and heavy industrial areas (e.g. potential for reduced parking requirements in these zones).
- (3) Encourage the development of underground parkades right to the edge of the property line, provided the landscaped portion of the overlying roof is developed as a green roof. The encouragement of such development could be achieved through density bonussing (additional height bonussing), as provided in the B6 commercial district. Consideration could also be given to allowing for additional bonussing through FAR bonussing.
- (4) Provisions that allow for a reduction in the total number of parking spaces for business and other uses (including retail uses), if an application is made to share required parking between 2 or more businesses operating at different peak-usage times (e.g. office building / civic facility and evening entertainment facility, educational institution and movie theatre). This would require a provision in the Zoning Bylaw which would allow for a Development Officer with the option to recommend a reduction in the number of parking spaces, if it is determined that two businesses propose to share spaces. An application to share parking spaces would need to identify how the spaces would be utilized at different peak times. It would be appropriate to consider these provisions within the following zones: B6, B5B, M4, and B5C.

With respect to bicycle parking, that the City of Saskatoon recently amended to the zoning bylaw (in 2022) to provide for bicycle parking by use and zoning district, no further amendments are recommended at this time.

Electric Vehicle Parking Standards

Existing Regulations

Bylaw No. 8770 does not currently provide definitions or regulations as it relates to EV charging stations, or associated infrastructure.

Recommendations

To provide for electric vehicle parking and charging infrastructure, definitions for charging stations and other infrastructure are required.

It is understood that the City of Saskatoon is currently developing a Community Electric Vehicle Adoption Strategy. While it is essential that the proposed requirements align with the strategy recommendations, the following recommendations are made:

- (1) Definition for electric vehicle charging station (EVCS) be added to the bylaw.
- (2) Allow for any required parking space to be substituted with an EVCS.
- (3) Non-residential land uses which require 20 or more parking spaces should have at least one barrier-free EVCS.
- (4) For new multiple unit residential developments, it is recommended that an energized electrical outlet capable of providing Level 2 EV charging for a minimum of one parking space per dwelling unit be required.

Dark-Sky Compliant Lighting

Existing Regulations

Bylaw 8770 states the following:

“Outdoor lighting for all developments shall be located and arranged so that no direct rays of light are pointed at nearby properties, or interfere with the safe operation of nearby roadways or traffic control devices.”

Recommendations

It is recommended that for outdoor lighting in residential areas around the outer edges of the City, consideration could be made to requiring dark-sky compliant lighting, as defined by the IDA Fixture Seal of Approval. This could reduce demand on the energy grid and prevent negative impact on wildlife migratory patterns.

Grey Water Re-use

Existing Regulations

Recycling gray water is becoming more and more commonplace. It reduces the burden on urban sewage treatment along with protecting a quickly dwindling natural resource. Current regulations limit the use of raw and grey water (e.g. for landscape irrigation).

Recommendations

Should the City of Saskatoon wish to allow for recycling of grey water, a mechanical engineer would be required to sign and seal any plans to provide for grey water re-use (which would result in an increase of cost of construction). Furthermore, the process review is undertaken via the building and plumbing permit bylaw and is not regulated through zoning.

Given the existing regulatory framework in the City of Saskatoon, it is not recommended that any changes be made to the zoning bylaw to provide for grey water re-use at this time.