Design for Residential Infill In Central Neighbourhoods
Kitchener’s Central Neighbourhoods have character, historical significance, and provide balance to the intensifying areas such as Downtown and Major Transit Station Areas (MTSAs). They represent a variety of eras and styles, and if properly planned and conserved, can contribute toward a unique and desirable condition; pockets of low-rise, historical residential neighbourhoods within walking distance of the city core and light rail transit.

The City of Kitchener's central neighbourhoods are established communities where limited intensification is expected. Due to their central location however, some change is occurring and pressures for additional change will continue. Directing that change in the form of carefully planned infill optimizes the use of existing infrastructure and public transit.

Well-designed residential infill projects integrate harmoniously into their surroundings. Carefully coordinated change can help ensure that the result is compatible development which respects and enhances the character of these neighbourhoods.

This section of the Urban Design Manual is designed to help fulfill the intended design strategies for Kitchener as outlined in the Official Plan and the Residential Intensification in Established Neighbourhoods Study (RIENS).

Intensification areas within this boundary should refer to the Design for Major Transit Station Areas section of this manual and related built form guidelines.

These guidelines will apply to Established Low-Rise Residential and Low-Rise Residential land use designations in the MTSAs or the 'Community Areas' [Urban Structure map in the Official Plan] in the Residential Intensification for Established Neighbourhoods study area, as defined below.
### Safety

Infill projects, through their site design, built form and the public realm design, are to provide clear, continuous and highly visible pedestrian circulation that connects building entrances, parking areas, and shared spaces to the sidewalk and street. This visibility is to be preserved even for infill projects which extend their built form and/or parking areas deep into the lot, particularly on long, narrow parcels.

Design all shared and public spaces to increase the presence of people, and design all sites and buildings to maximize the ability of occupants to provide natural surveillance into these areas.

Prioritize user and pedestrian safety when designing lighting, landscaping and functional elements such as parking, access and servicing areas.

A Crime Prevention Through Environmental Design (CPTED) Report will be required of any proposals featuring ‘cantilevered’ building elements over drive aisles, parking areas, areas of pedestrian circulation and underground parking structures.

### Universal Design

Design sites to better accommodate equitable use for persons of all abilities.

Consider ways to provide enhanced visitability for units, to allow for a greater range of potential occupants while also preserving the ability for friends and family to conveniently and comfortably visit. This includes limiting and simplifying stairs, minimizing pedestrian travel distances, and creating clear, straightforward pathways to and from units.

### Age & Family Friendly Design

Provide the greatest possible mix and variety of unit types and sizes.

Provide amenity spaces which are suitable for families, young children, and the elderly. Design these spaces to be shared amongst different age groups, including making them large and flexible enough to accommodate more than one user type and activity simultaneously.

Consider ways to make storage, bicycle parking and private amenity areas more convenient and accessible to families and persons using mobility aides.

### Social Infrastructure

Central neighbourhoods are often located in close proximity to social services. Residential infill projects should meet or exceed the social infrastructure standards established in the City-Wide Design section of this manual.

### Arts & Culture

Art & Culture is a valuable and often overlooked asset in Central Neighbourhoods. Residential infill projects should meet or exceed the arts & culture standards established in the City-Wide Design section of this manual.
Design residential infill projects to passively provide access to natural light as well as shaded areas and to provide shelter from winds as well as natural air movement through the site.

Provide a mixture of coniferous and deciduous trees. Concentrate deciduous trees to shade south and south-west windows from the summer sun. Concentrate coniferous trees on the north and northwest to screen prevailing winter winds.

Integrate shared space design with landscape design, and consider ways to create, promote and enhance recreation and leisure activities.

Support sustainability and improve environmental performance through the use of low impact design technologies to manage stormwater. This includes enhanced landscaping and the use of permeable surfaces, creating bio-retention areas such as swales and incorporating opportunities to harvest rainwater from rooftops and other hard surfaces for landscape irrigation.

Minimize impermeable surfaces.

In lieu of sod, boulevard plantings could be comprised of native planting species which enhance urban habitats or rain gardens.

Use stormwater for landscape irrigation where possible.

Explore the use of renewable energy systems and energy efficient technologies such as high-efficiency appliances, solar panels, natural ventilation and smart controllability of systems.

Avoid the use of dark surface materials to limit urban heat island effect.

Design building layouts to maximize natural lighting and passive solar gain in the winter to reduce energy consumption. This includes building placement and orientation, landscape design as well as architectural elements such as the location and design of windows and other openings and vertical and/or horizontal shading devices designed for winter sunlight ingress and shade during summer.

Use renewable, sustainability manufactured and sourced materials, wherever possible.

Use reclaimed and recycled materials, particularly those which may be salvaged on-site.

Design for adaptability to changing climate conditions and increasing extreme weather events including high r-value enclosure design, flood mitigation measures where flooding may be a concern, and addressing extreme heat events through both massive and mechanical design elements.

Birds and wildlife share our Central Neighbourhoods and are an important part of the urban environment. Design for wildlife should meet or exceed the standards established in the City-Wide Design section of this manual.
### DESIGN FOR OUTDOOR COMFORT

**Microclimates**

Ensure that all infill development mitigates microclimatic impacts.

Design all sites and their built-forms to proactively limit microclimatic impacts and provide pedestrian shelter through the placement and orientation of building elements, integrated architectural elements, and landscape design. Design to limit the need for ‘extra’ mitigation measures such as screens and trellises which may not suit the project’s architectural vision.

Provide for pedestrian refuge through canopies, colonnades, and sheltered areas to offer protection from rain, wind, snow, and provide shade, particularly at building entrances, outdoor shared spaces, and near transit stops.

Design all built-form to limit shadowing on the public realm and on adjacent properties.

**Four Season & Winter City Design**

Design all infill projects for the safe and convenient winter use of occupants and visitors.

Residential infill projects should meet or exceed the four season and winter city design standards established in the [City-Wide Design](#) section of this manual.

### STREET DESIGN

**Streets in Central Neighbourhoods**

New development should reflect the desirable aspects of the established streetscape character. If the streetscape character is less than desirable, build infill which contributes to an improved pedestrian environment and neighbourhood landscape character.

Emphasize the ground floor and street facade of infill buildings to contribute to an inviting, safe, and accessible streetscape. Design at a human scale and design for pedestrian priority.

Provide human-scaled lighting to minimize light pollution and prevent spillage onto neighbouring properties.

Provide public-level amenities along private streets, including sidewalks and street trees.

Provide boulevard landscaping that includes hardy, salt-tolerant native plant material that can thrive in challenging urban conditions.

Provide adequate soil volumes for all trees to ensure a healthy mature canopy.

Provide creatively designed, well integrated, easily accessible bicycle parking in public spaces.

Minimize points of conflict between pedestrians, vehicles, and cyclists, always prioritizing pedestrians and cyclists.

Design new or re-construct existing streets to meet or exceed the ‘Complete Streets’ standards established in the [City-Wide Design](#) section of this manual.

**Focal Points & Gateways**

Residential infill projects are often visually distinct and often incrementally taller or larger than their surrounding context. They can therefore become neighbourhood gateways or focal points, whether intentionally or unintentionally. Consider these relationships and provide high quality architecture and landscape design which recognize these factors.

Design for focal points and gateways should meet or exceed the standards established in the [City-Wide Design](#) section of this manual.

**Wayfinding**

Wayfinding helps orient and direct all users by providing navigational information throughout the public realm. Design for wayfinding should meet or exceed the standards established in the [City-Wide Design](#) section of this manual.
PARKS & OPEN SPACES

Access & Location
Pursue opportunities to conserve and enhance existing parks and open spaces. New parks and open spaces should also be planned for these areas to accommodate growing populations in and around Central Neighbourhoods in the future.

Existing parks with limited access points or street frontage should explore opportunities to expand frontage on public streets. New parks and open spaces should have a minimum of two street frontages, wherever possible.

Connectivity
Parks and open spaces should be well connected through pathways and sightlines into existing neighbourhoods and transit stops.

Where existing parks have minimal connection points to the greater neighbourhoods, consider the integration of sidewalks, trails, multi-use pathways and enhanced wayfinding.

When designing new parks in existing neighbourhoods, comprehensively consider the active transportation network, including the LRT, local, regional, and commuter rail and bus lines, cycling grids, and all pedestrian connections including sidewalks, trails, and multi-use pathways.

Park & Open Space Design
Parks and open spaces are to be designed to accommodate all users. This includes both active and passive recreation, and equitable programming for all potential users.

Parks and Open Spaces should be designed to meet or exceed the standards established in the City-Wide Design section of this manual.

COMPATIBILITY

Scale & Transition
Provide a built-form which respects and complements existing neighbourhood characteristics, including heights, setbacks, orientation, building width and length and architectural rhythms.

Even where new infill is proposed which is larger or taller its surroundings, provide built form massing and architectural elements which respect the established neighbourhood identity.

New development should reflect the desirable aspects of the established streetscape character. If the streetscape character is less than desirable, design infill which contributes to an improved pedestrian environment and neighbourhood landscape character.

Design the ground floor and street facades of infill buildings to conserve and enhance consistently human-scaled streetscapes.

Provide public-level amenities for private streets, including sidewalks, street trees and seating.

CULTURAL & NATURAL HERITAGE

Heritage Resources
Where possible, conserve and retain built forms that are representative of the established neighbourhood fabric and/or make positive contributions to the neighbourhood identity.

Alterations and additions to cultural heritage resources are to respect and conserve their heritage value or interest.

Alterations and additions should be distinguishable from but visually and physically compatible with the cultural heritage resource, including massing and materials.

Protect and enhance significant views and vistas, including landmark buildings and structures.

Ensure that new additions are designed to not overwhelm the cultural heritage resource. New additions should be distinct from the heritage resource.

Conserve and enhance the continuity of cultural heritage landscapes.

Protect and incorporate all contributing site features with cultural heritage value.

All interventions in Central Neighbourhoods are to meet or exceed the cultural and natural heritage guidelines in the City-Wide Design section of this manual.
Site Design

BUILT FORM

Massing

Design new development to respect the existing scale, height, building length and massing of the neighbourhood.

Ensure new buildings do not appear substantially larger than the existing buildings in the neighbourhood. If larger massing is proposed, the building should be subdivided into smaller, compatible building elements.

When new development is greater height than adjacent buildings, transition building height through the use of stepbacks and manipulation of mass. The transition in height may also be achieved by increasing the separation distance between buildings and/or constructing a mid-range building element between the infill development and adjacent buildings.

Add architectural features such as porches, materials, colours and textures to visually reduce the height and mass of the new building.

Orient new buildings to face and animate public streets.

Orient buildings to respect the primary building orientation of its existing neighbourhood.

Maintain the neighbourhood’s prevailing pattern of lot widths, lot depth and lot area.

Maintain the grade and first floor height of adjacent buildings. Avoid unnecessarily raising or lowering of grade, particularly where it may require retaining walls to accommodate.

Buildings should be oriented in a way that avoids noise attenuation walls for amenity spaces. Amenity areas such as rooftop decks and balconies should be located and designed to respect the privacy of surrounding development.

Complement the existing development pattern of the neighbourhood in terms of building location, building height, landscaping, setbacks, entrances, windows and other architectural elements. The use of repetitive or generic design is discouraged.

Materials & Articulation

New development, when contextually designed, may reflect any architectural style and still be well integrated with the surrounding neighbourhood.

Special design consideration should be given for buildings on corner lots or that form a terminating view on a street.

Development on corner lots and at terminating vistas should address both streets with articulated facades and windows that provides views of the street and/or open spaces from living areas. Blank walls visible from the street, parks or other public spaces are not permitted.

Use materials that are complementary to the neighbourhood context. The replication of older building styles using new materials is discouraged.

Materials which resemble stucco in their finish are not considered as consistent with existing neighbourhood context as stucco was not a part of the historical Kitchener vernacular.

Incorporate site and building elements that complement and offer a visual reference to the existing neighbourhood features.

Respect the rhythm of the design elements of the existing neighbourhood and streetscape. This rhythm can be found through the spacing of houses, roofs, windows, doors and other architectural elements.

On a street where existing elements (e.g. architectural styles, porches, building placement, materials etc.) are recurring, new development should reflect some or all of the key elements, sensitively interpreting these elements to reflect contemporary design approaches.

Rendering: A visualization of potential intensification around the Mill St. ION Stop.
Design entrances that are visible and inviting from the street by:

- Providing a distinct design and/or use contrasting materials;
- Adding elements such as porches to promote street oriented interaction; and
- Minimizing the vertical distance between building entrances and grade.

Design the front entrance of infill buildings to be prominent and well-detailed and located on the front facade.

Where consistent front yard setbacks exist, new development is to match this setback in order to create a continuous public street. Where front yard setbacks are not uniform, new development should be consistent with the prevailing pattern of the street.

Ensure that side and rear yard setbacks are consistent with prevailing pattern of setbacks in that neighbourhood.

If an infill development projects beyond the rear yard setback of the adjacent building:

- Ensure that it does not cast significant shadows into the rear yards of those adjacent properties.
- Design decks, door and balconies to not directly overlook adjacent yards.

Townhouses should be oriented to have their front entrances on a public street in all cases (or alternatively they may front a public park).

Front yard setbacks should accommodate landscaping in the front yard. A minimum of 50% of the front yard should consist of soft landscaping.

The end unit in a townhouse block flanking a street should address the streets with a side elevation that includes windows, doors, porches, and details consistent with the front elevation.

The height and massing of townhouse blocks should be compatible with the character of the adjacent and surrounding neighbourhoods.

Common outdoor amenity areas should be located in a prominent location, visible and easily accessed from all units, and with access to sunlight.

Provide parking and servicing at the rear of units, accessed via a laneway or flanking street, where possible. Where not possible, provide landscaped areas with visual screening between units and parking and services areas. Landscaped areas should include pedestrian pathways that connect directly to the public street.

The distance between townhouse blocks should be a minimum of 3 metres to provide for landscaping. Where a pedestrian mid-block connection is provided the separation should generally be 6 metres.

Provide a min. 7.5 metre rear yard for townhouse units to permit landscaping and private amenity.

Provide accessible walkways between parking (including visitor parking) and main entrances.
### SHARED SPACES

All interventions within Central Neighbourhoods are to meet or exceed the Shared Spaces guidelines in the "City-Wide Design" section of this manual.

#### Outdoor Amenity

Outdoor amenity spaces should be designed to accommodate all users. Amenity spaces should be provided in locations with good natural surveillance from units, public spaces and the street. These areas should be maintained year round.

Avoid locating shared outdoor amenity where it is visually isolated or abuts parking areas, drive aisles or servicing and utility areas. Where this cannot be avoided, provide substantial screening in the form of landscaping and architectural elements and upgrades.

Provide outdoor amenity in the form of large, continuous, dedicated spaces. Avoid dividing up at-grade outdoor amenity into too many smaller spaces where possible. Avoid overly linear (long and narrow) spaces in favour of more equally proportioned spaces that can accommodate a greater variety of programs and recreational and leisure opportunities.

#### Landscaping

Retain and protect existing healthy, mature trees wherever possible.

Use landscaping to provide a buffer between driveways, laneways and parking areas and side and rear property lines.

Limit the widths of driveways to reduce the amount of paved surfaces in the front yard.

Minimize the use of impermeable surfaces. Use permeable materials to design hard surfaces to manage stormwater runoff.

Design infill around existing trees and topography to retain established landscaping patterns and neighbourhood character.

Use hard and soft landscaping treatment to provide a distinction between public and private amenity areas at the front of a building.

Provide continuous pedestrian walkway access from the public sidewalk to the front entrance of each unit or shared lobby.

The use of retaining walls along street frontages, parks and open spaces should be avoided. Where this is not possible and the grade change is greater than 1 metre, the wall should be set back from the property lines and terraced to provide an appropriate transition. Through redevelopment, explore regrading options to reduce or eliminate retaining walls.

#### Public Art

Citizen-led public art projects should be welcomed and integrated into local neighbourhoods. This public art should reinforce and enhance neighbourhood character and assist in creating memorable experiences, provide wayfinding, and enhance social connections.

#### Signs

Signage is discouraged in central neighbourhoods except where it serves a community-oriented public service such as a notification board advertising community events.

#### Lighting

Design site lighting to be carefully implemented such that it does not impact existing neighbourhood character. This includes any architectural accent lighting as well as lighting in parking areas and shared spaces.

All lighting in central neighbourhoods will be full cut-off and designed to minimize light trespass and glare onto neighbouring properties.

Lighting is to be designed to meet or exceed the standards established in Part C of the urban design manual.
SITE FUNCTION

All interventions within Central Neighbourhoods are to meet or exceed the Site Function guidelines in the City-Wide Design section of this manual.

**Vehicular Access & Parking**

Minimize the visual presence of parking by placing it to the rear of buildings, screening with landscaping and architectural elements, and providing the greatest possible buffer between it and surrounding property lines.

Provide landscaping, berms and/or low-architectural walls between parking areas and neighbouring properties, with the intent of blocking light trespass from vehicle headlights into adjacent yards or buildings.

Where vehicular access or parking is provided beneath a cantilevered portion of the building, a CPTED report is required, and those areas are to be thoughtfully designed into the overall architectural expression of the building.

**Driveways**

Minimize the area dedicated to driveways to allow for increased landscaping and amenity space.

Driveways should measure no more than one-third of the total lot width.

Avoid locating driveways in close proximity to property lines where an adjacent property contains a driveway abutting the same property line.

Use contrasting materials for walkways and driveways to provide visual and tactile variety between surfaces and safely delineate pedestrian circulation routes through the site.

On sites with rear lanes and on corner lots, provide parking access from the lane or side street.

Place driveways to the side or rear of buildings, except where they directly align with and are not wider than their related garage.

Limit both the quantity and width of accesses to reduce the amount of paved surface and number of curb cuts. In most cases no more than one driveway will be permitted.

Use permeable paving options wherever possible.

**Parking Structures**

Where the existing streetscape does not contain street facing or attached garages, such garages will not be permitted.

Recess garages behind the front of the building facade and make other architectural features such as balconies, entrances, porches, living areas, shared spaces and landscaping the most visually prominent elements along the streetscape.

Attached garages are to occupy less than half of the building facade width.

Do not locate any portion of the garage below finished grade to avoid sunken driveways.

Provide individual garage doors on houses with double car garages.

Design garages as an integrated part of the overall architectural intent of the building.

**Servicing & Utilities**

Integrate and screen service elements (loading areas, utility meters, transformers, HVAC equipment) into the building and site design so that they are not visible from the street and their impacts are minimized.

Group or consolidate utility boxes, meters, and ventilation elements to minimize their visual impact. Consider innovative ways to integrate services into streetscape features or architectural elements.

**Recycling & Garbage**

Garbage storage areas are to be fully screened from public view, first through thoughtful design of site and building elements (including placement and orientation), then through landscape screening, and finally, if other options do not exist, through enclosure design.

Provide safe and convenient recycling options including secure and generous sorting rooms, options for organic materials, and roll-out or outdoor garbage locations that do not negatively impact the streetscape, shared spaces, or building occupants (noise, odour).
NEIGHBOURHOOD SPECIFIC DESIGN GUIDELINES

SCHNEIDER CREEK/CEDAR HILL

This is a placeholder for Schneider Creek/Cedar Hill, to be completed through a public engagement process with the local neighbourhood, in conjunctions with the completion of the Neighbourhood Secondary Plan.

CIVIC DISTRICT

This is a placeholder for Civic District, to be completed through a public engagement process with the local neighbourhood, in conjunctions with the completion of the Neighbourhood Secondary Plan.

CENTRAL FREDERICK

This is a placeholder for Central Frederick, to be completed through a public engagement process with the local neighbourhood, in conjunctions with the completion of the Neighbourhood Secondary Plan.

ROCKWAY

This is a placeholder for Rockway, to be completed through a public engagement process with the local neighbourhood, in conjunctions with the completion of the Neighbourhood Secondary Plan.

MIDTOWN

This is a placeholder for Midtown, to be completed through a public engagement process with the local neighbourhood, in conjunctions with the completion of the Neighbourhood Secondary Plan.

KING EAST

This is a placeholder for King East, to be completed through a public engagement process with the local neighbourhood, in conjunctions with the completion of the Neighbourhood Secondary Plan.

NORTH WARD

This is a placeholder for North Ward, to be completed through a public engagement process with the local neighbourhood, in conjunctions with the completion of the Neighbourhood Secondary Plan.

BLOCK LINE

This is a placeholder for Block Line, to be completed through a public engagement process with the local neighbourhood, in conjunctions with the completion of the Neighbourhood Secondary Plan.

FAIRWAY

This is a placeholder for Fairway, to be completed through a public engagement process with the local neighbourhood, in conjunctions with the completion of the Neighbourhood Secondary Plan.