



ByWard Market Public Realm Plan Recommendations Report

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8 80 Ciites
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How this document is organized

This Public Realm Plan is organized in five chapters. Each chapter provides a different level of information and detail about the recommendations of the Public Realm Plan. Supporting documents provide more detail on some of this Public Realm Plan's process and recommendations, and are appendices to this report.

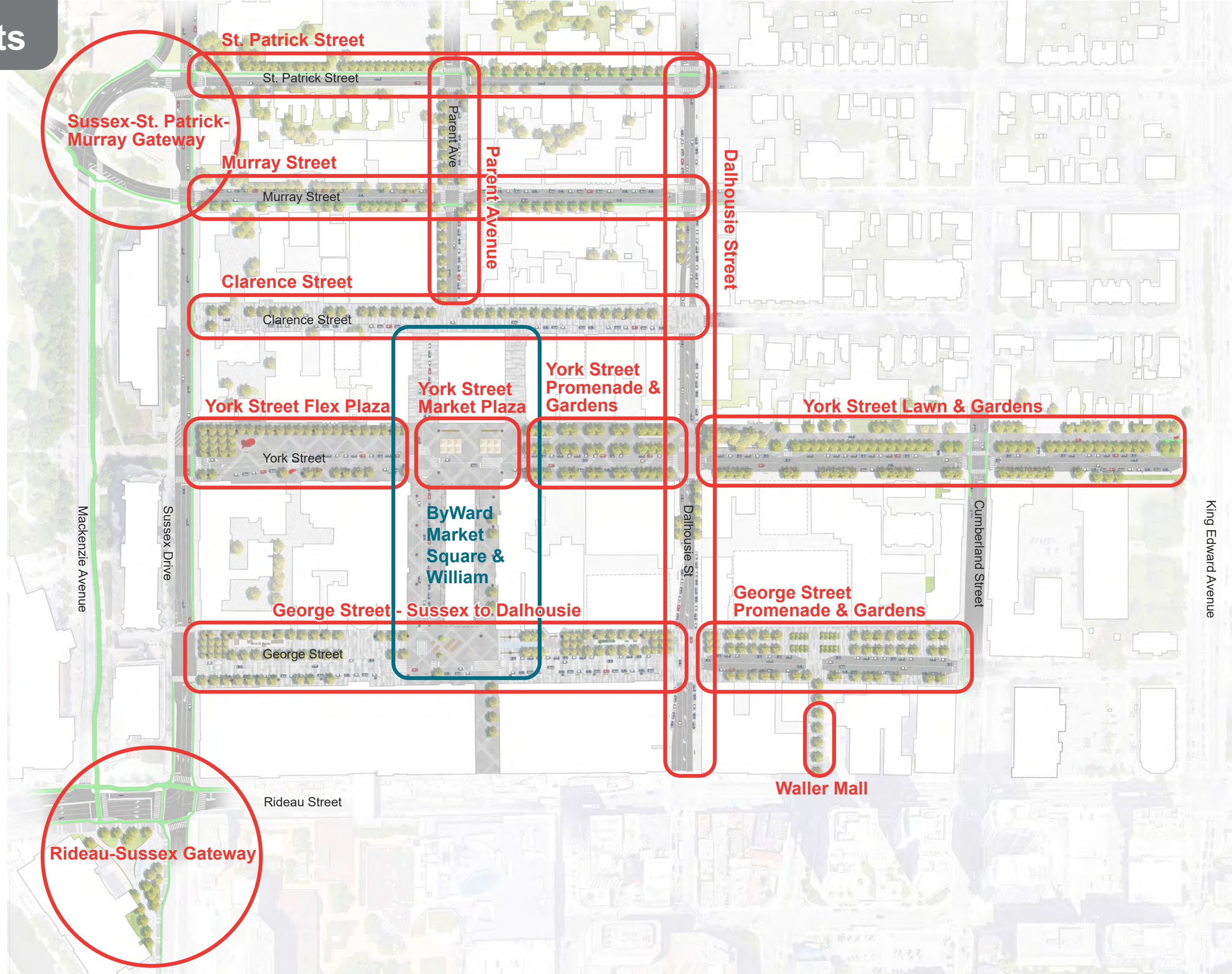
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Appendices

1. **Transportation Technical Memo**
2. **Lighting Design Concept Plan**
3. **Public Life Study Final Report**
4. **Summary of Public Consultation: As We Heard It Reports 1 - 7**

Street Segments

Each of the street segments outlined (right) are presented in detail in Chapter 4.



The ByWard Market Public Realm Plan guides the amenities and use of the streets and public spaces of the ByWard Market. It establishes a vision, guiding principles, a functional plan and conceptual designs that will guide investment and change in the Market for many years to come.



The ByWard Market Public Realm Plan boundary is shown as a dashed line. It is centrally located within Ottawa near Parliament Hill, the Rideau Centre, and Rideau station.

The key goal of the Public Realm Plan is to shift the perception of the Market from a vehicular-oriented space to one where pedestrians come first. This simple idea has far-reaching implications for how space is allocated in the public right of way among its users including pedestrians, cyclists and vehicles. It also leads to re-thinking the quality of the environment including the urban tree canopy, seating, lighting and paving, and how the spaces of the Market can be interesting and active throughout the year.

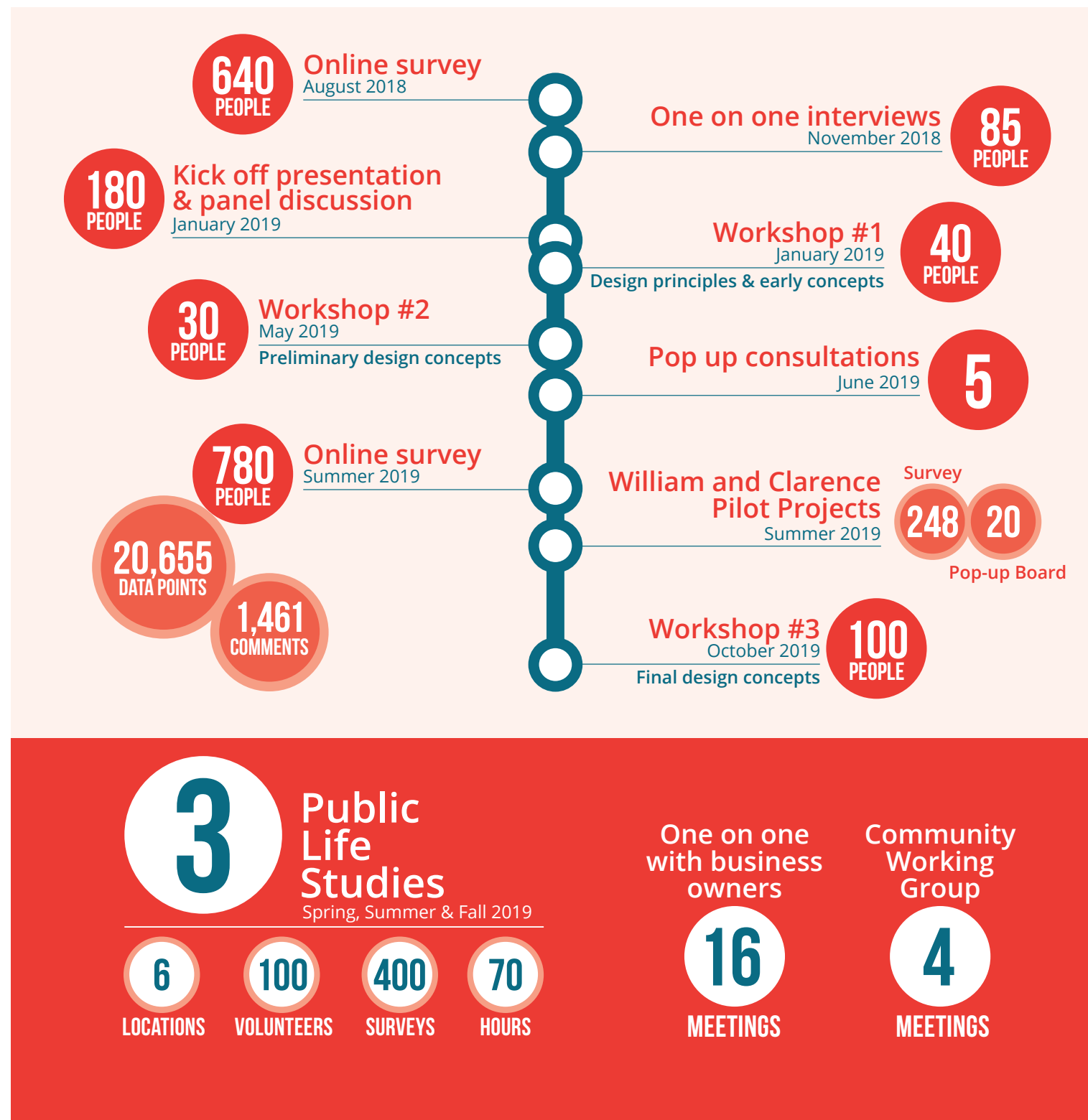
The study area includes the traditionally commercial streets that make up the heart of the Market, some of the more residential streets that are important links or approaches to the Market, as well as two gateway nodes along Confederation Boulevard.

Introduction

This Public Realm Plan was developed by the City of Ottawa in partnership with many stakeholders. The process included an extensive engagement process that included businesses, residents, agencies, Federal representatives, the City of Ottawa and the general public. It also included a Public Life Study that provided a snapshot of the daily rhythms and patterns of the ByWard's public spaces. A multi-modal transportation analysis was undertaken to ensure pedestrian and cycling modes were considered and prioritized, but in balance with transit and vehicular travel. The plan seeks to balance many interests, some competing, among the diverse people who use the Market every day, including residents, shoppers, business owners, tourists, and employees. A full record of the input of public consultation can be found in Appendix 4; a record of the Public Life Study can be found in Appendix 3.

Indigenous peoples have a unique relationship with land and all living things, so it is important that this plan be respectful of that relationship. The emphasis that the plan places on "re-greening" the Market is one small step in acknowledging that relationship. Further collaboration with Indigenous communities will be important in creating spaces that are safe and welcoming to all, and in fostering meaningful, long-lasting relationships. Aside from public art and landscape design, other initiatives such as signs, information, and wayfinding could be explored to ensure that visitors are aware that the ByWard Market is situated on the traditional territory of the Algonquin people.

The plan will unfold over many years and be implemented by many partners. It will be important for stakeholders to work together towards this common vision to realize the transformational change that can elevate the experience of ByWard Market as one of the premier destinations in the City. ByWard Market is unique in Ottawa, rare in Canada, and irreplaceable in any country.



This Public Realm Plan was developed from an extensive stakeholder engagement process and many people gave their time to help inform and shape its recommendations.

Public Health and Resilience

This Public Realm Plan has been prepared during the time of the COVID-19 pandemic. This has posed unprecedented risks to public health, and, consequent changes to patterns of behaviour, interaction with our urban environments, and use of public spaces. At the time of this writing, there is no clarity on the ultimate course of the pandemic itself, nor the long term effects on city building and public spaces.

More broadly, COVID-19 can be seen in the context of public health risks that affect society. Some of these risks are novel, such as the potential for communicable disease. But many are chronic and already here, such as cardiovascular disease, diabetes, and other problems associated with modern lifestyles. Climate change and ecological change, too, pose challenges for our urban environments and for human well-being.

Research has shown that the physical form and development patterns of a community have significant impact on a wide range of elements, including, but not limited to, air pollutants and greenhouse gases, water quality, levels of physical activity, social cohesion and rates of crime, and rates of injuries and fatalities for motorists, pedestrians and cyclists. While these elements may seem disparate, they have direct impacts on our health. Urban environments that have positive correlations to better health outcomes are more diverse and walkable by providing good access to services, recreational opportunities, and the daily needs of living. The ByWard Market exhibits these characteristics and this Public Realm Plan seeks to reinforce them.

A key principle in coming to terms with health risks is to increase the resiliency of our cities. The role of the ByWard Market Public Realm Plan is to provide a framework for the evolution of publicly owned assets, primarily City rights of way. How can the streets and spaces of the ByWard Market become more resilient? How can they be adaptable to changing circumstances and better serve the people of Ottawa, and soon, new visitors?

Three fundamental characteristics of this Public Realm plan serve to foster greater resilience:

- 1 A commitment to providing a significant quantum of pedestrian space, and providing for active transportation in all its forms.
- 2 Ensuring public space and all its supporting infrastructure and operations are of the highest quality.
- 3 Designing pedestrian spaces, roads, and even street

furniture to be flexible so they can be used for different purposes.

These three ideas have far-reaching potential. ByWard Market's public spaces will be designed for people on foot, and using mobility devices. They encourage walking, both as a form of transportation and as a recreation. Broad, tree lined promenades will be beautiful to experience, provide a platform for area businesses, and be community amenities in their own right by providing elements of play, learning, people watching, eating and performance. Spaces can be reconfigured for anything - whether for great events that express the cultural vitality of Ottawa or of responding to the needs of a public health crisis.

Examples of how this Public Realm Plan could benefit the response to the COVID-19 pandemic include:

- very wide sidewalks that accommodate spatial separation and social distancing
- flexibility of street furniture to accommodate different configurations of space, such as identifying different circulation zones within the sidewalk areas
- the ability to ensure seating is more than 2 metres apart
- providing accessible public washrooms at a time when private washrooms are closed; fostering social equity by providing space for temporary washrooms on accessible surfaces (no ramps required at curbs)
- increasing public space almost universally throughout the area with attractive, functional streetscapes and public amenities that encourage greater use of the space and increase safety through casual surveillance
- curbless "table top" treatments that allow spaces to be barrier-free and easily changed from an operational standpoint

While it is premature to draw conclusions from the current pandemic, the Public Realm Plan has the built in flexibility to further increase its public utility, for example, by providing for public health stations where people can get a drink, fill water bottles, and wash hands. Many elements of this Public Realm Plan have this double duty function. Future design teams implementing this master plan should have regard for the needs of public health by including expert advisors who can address lessons learned.

Vision Statement

The ByWard Market's public spaces invite residents and visitors to linger, relax, socialize, shop and explore this unique food market and heritage district within a network of inspiring public places that put pedestrians first. The public spaces are the backdrop against which daily life, festivals, and celebrations unfold; a place for both the everyday and the extraordinary.

Design Vision

- 1 Pedestrian-priority streets and public spaces celebrate ByWard Market's history and set the stage for new stories.
- 2 The food Market serves as the heart of the district, anchoring pedestrian activity on William Street and ByWard Market Square.
- 3 The grand boulevards of York and George Streets support a vibrant street life, facilitate flow through the district, and offer opportunities to linger.
- 4 The surrounding network of streets serve the needs of residents and visitors, striking a balance on mobility.
- 5 The entire district is greened by a significant tree planting strategy.



Sketch of proposed York Street plaza condition

Principles

1 Create a bold and memorable public environment to celebrate the Market and the area's unique character

- Reveal and interpret the area's cultural heritage
- Create a simple, visually striking character
- Define the pedestrian gateway

2 Pedestrians First

- Increase pedestrian space
- Provide amenities for pedestrians
- Create a safe, accessible and connected environment
- Incrementally reduce vehicle travel and parking
- Provide for all types of travel

3 Enhance the Visitor Experience

- Increase programming, events, arts and culture year round
- Have clean and well maintained spaces
- Design public spaces to reinforce the Market's image
- Provide infrastructure for events
- Reinforce the heritage Market building as an anchor to the district

4 Beautify the Market

- Plant more trees
- Improve pedestrian lighting/nightscape in the Market
- Enhance seasonal and event lighting
- High quality

5 Welcome Everyone

- Design for Accessibility
- Provide activities for all ages
- Attractions for kids
- Create space for everyone
- Attract all cultures, ethnicities, genders

6 Support Businesses

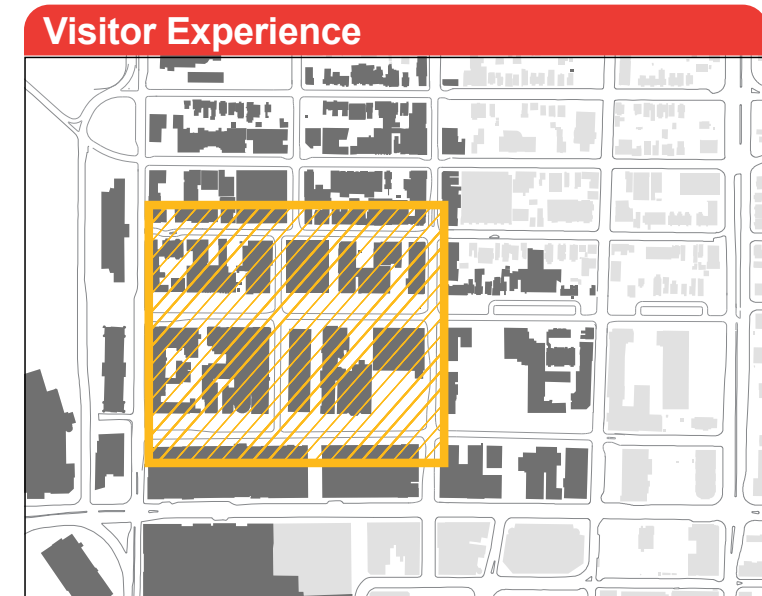
- Support ByWard Market as a distinct food retail experience
- Reinforce the heritage Market building as an anchor to the district
- Provide space for outdoor Market stalls
- Provide space for great patios
- Accommodate deliveries and loading

7 Balance the needs of residents/ tourists and businesses/residents

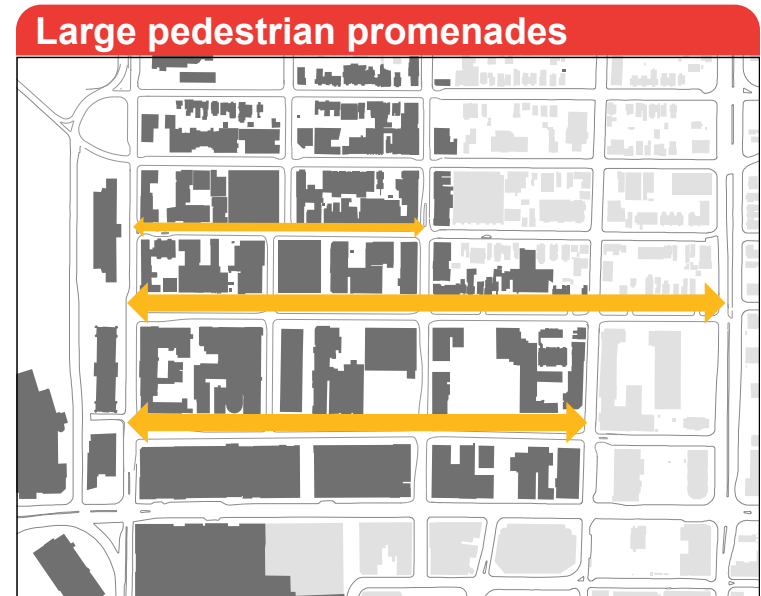
- Ensure amenities and functional design considers the needs of all users

The Big Moves

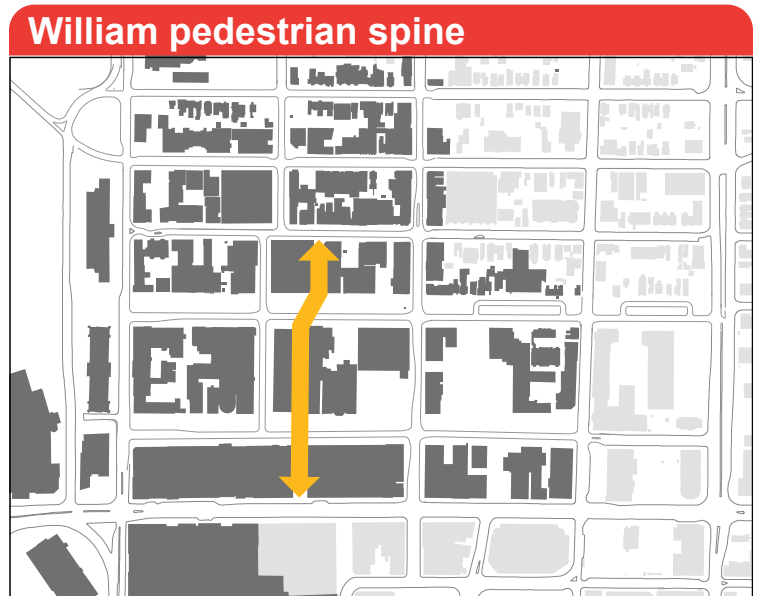
The Big Moves are the key transformative design concepts of this Public Realm Plan. They are the fundamental structuring elements of the public realm that will redefine how people use and enjoy the streets and public spaces of the ByWard Market.



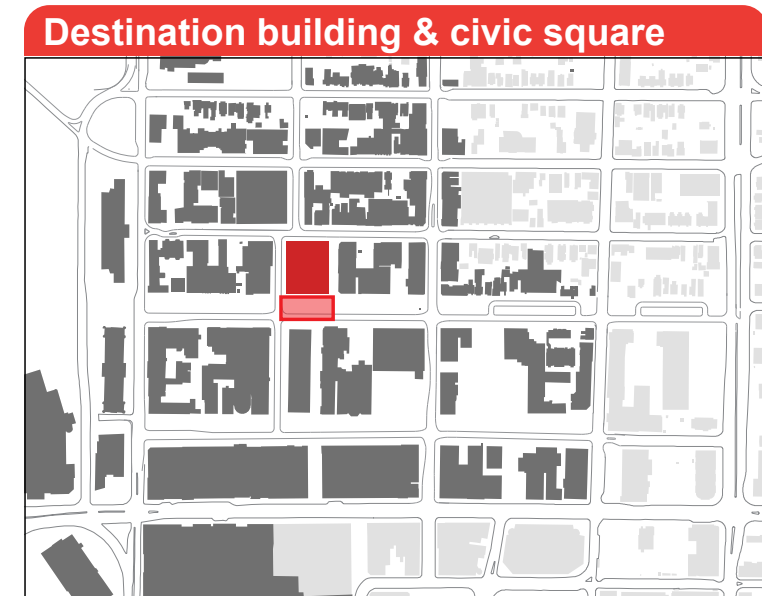
The core of ByWard Market exhibits a high standard of design, programming, maintenance, and operations that create a memorable visitor experience.



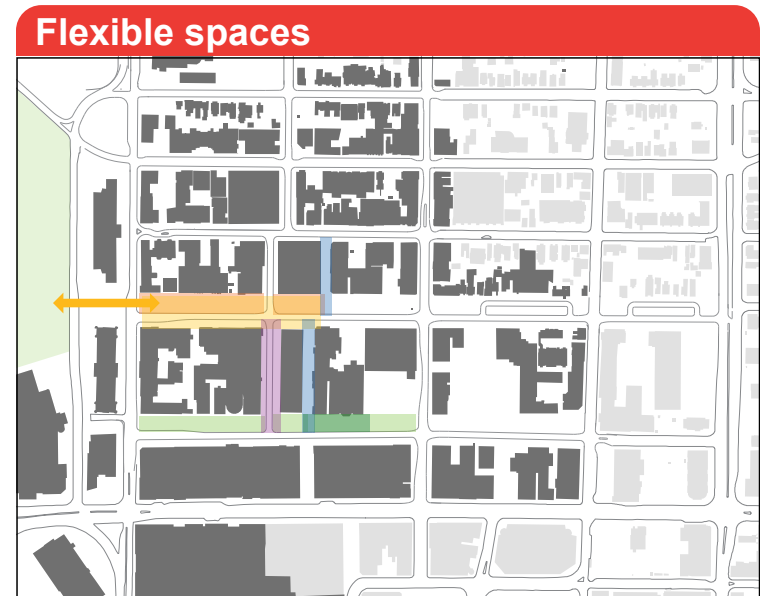
Broad pedestrian promenades on the north side of York, George and Clarence Streets, where sun exposure is highest.



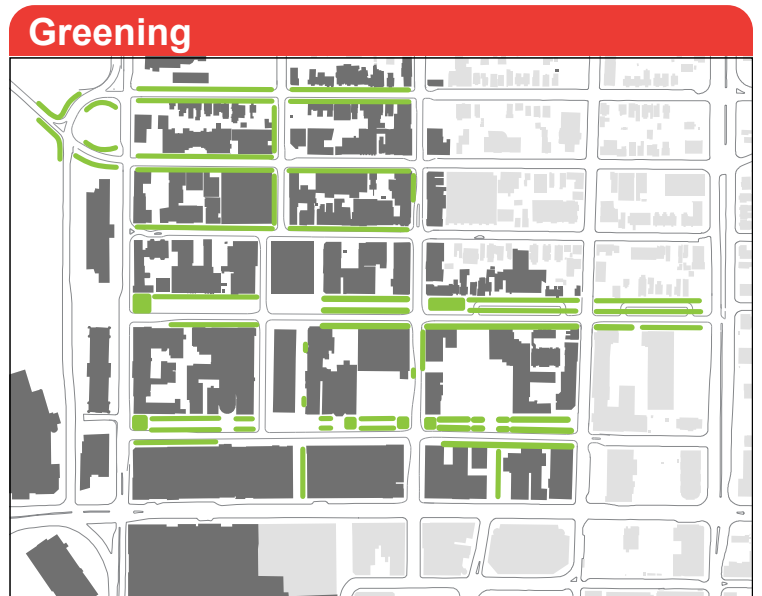
William is a pedestrian corridor through the heart of the Market, linking Clarence Street with Rideau station.



A new destination building complements the ByWard Market, with a new civic square in between as a focal point.



Streets and pedestrian areas are designed for flexible use for both day to day activity and events. A strong connection is created to the York Steps and Major's Hill Park.



All the streets in the Market will have a leafy, green image through comprehensive tree planting.

Master Plan

The Public Realm Plan is a long vision for the ByWard Market district, and includes over 10 hectares of public space. With each implemented public realm improvement project the everyday life of the Market will be reinforced and enhanced with pedestrian and cycling infrastructure that support the needs of one of the City's most dynamic areas. The historic Market building and surrounding streets will continue to be the heart of the neighbourhood, and a new destination building will replace the existing parking garage at 70 Clarence. Parking lots will be transformed into new programmable public spaces and a major greening initiative will add hundreds of new trees to the streets. Widened sidewalks, beautifully lit at night, will support the year round activities and businesses that draw both Ottawarians and tourists to this much loved district.

- 9** streets
- 3** km of streets
- 25** intersections
- 10+** hectares of public space
- 2** gateways
- 4** courtyards



Accessibility in ByWard Market

Accessibility and universal design is a fundamental principle of the design of the ByWard Market public realm.

This is a “Commitment to providing equal treatment to people with disabilities with respect to the use and benefit of services, programs, goods and facilities in a manner that respects their dignity and that is equitable in relation to the broader public. This commitment extends to residents, visitors and employees with visible or non-visible, and permanent or temporary disabilities.” (City of Ottawa’s Accessibility policy)

This Public Realm Plan has had regard for principles of Accessibility. The design recommendations of this plan will make significant improvements for all pedestrians, cyclists and people who use mobility devices by making the Market’s streets and spaces more people friendly. Further, pedestrian clearways, and the potential to accommodate a full suite of accessible design techniques such as navigational guides, grading, furniture, and other elements has been planned for. Accessible design principles will carry through to Detail Design stage. At that time, on a project by project basis, the detailed implementation of grading, textured paving and Tactile Warning Surface Indicators (TWSI’s), provision of accessible parking, and the selection of site furnishings, paving and lighting will be undertaken. The City of Ottawa’s Accessibility Office and the Accessibility Advisory Committee will provide input and guidance to Detailed Design.

The designs for all public spaces in the ByWard Market will implement design and construction techniques that are inclusive of a wide range of ages and abilities, including:

Path of Travel

- A clear path of travel that is unobstructed, with turns as close to 90 degrees as possible. The path’s surfaces should be firm, stable, smoothly graded, slip resistant and free of glare
- Sidewalk clearway zones that are at least 2m in width and much wider where possible. It is estimated that 75% of the clearways in the Market core are over 3m in width.

Surface

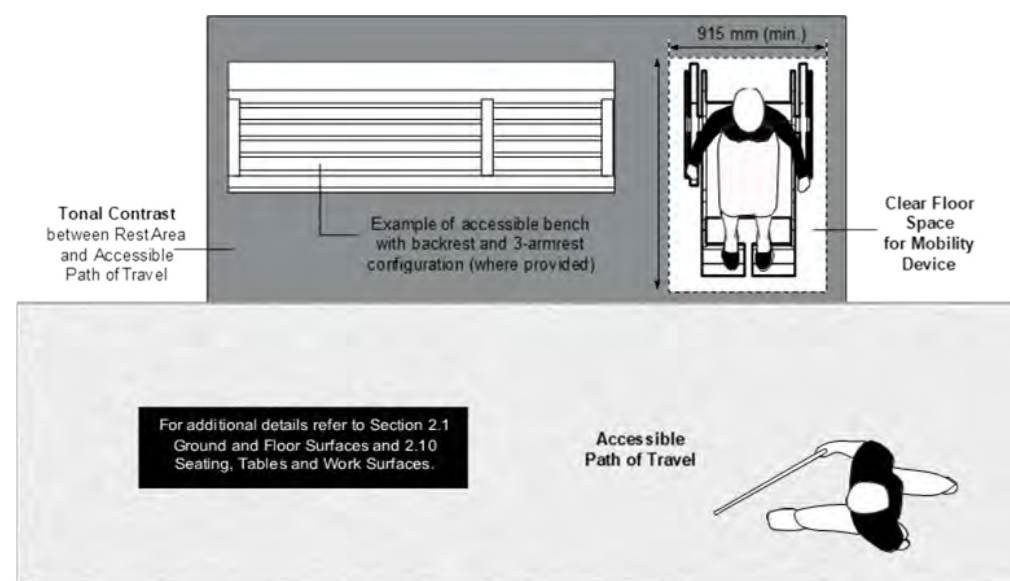
- The use of textured surfaces, bollards, planters and other methods to delineate boundaries between pedestrian and non-pedestrian areas (i.e. vehicular areas, loading and parking)
- Tactile warning strips where pedestrian routes cross hazard areas such as bicycle and vehicle lanes
- High colour-contrast crosswalks
- Colour-contrasting surfaces along the interface between pedestrian travel routes and other uses such as parking
- Accessible paving systems using interlocking units are evolving to meet changing accessibility standards

Furniture

- Provision of street furniture including benches, seating elements, tables, waste and recycling bins, crosswalk call buttons, wayfinding that are accessible for persons using wheelchairs and other mobility devices. This includes some of the play- and family-oriented street elements along George Street
- Street elements such as furniture, outdoor vending tents, and patios is an important animating element for the public realm but shall always be designed and placed to respect the pedestrian clearway.
- Seating will be found at regular intervals. In the Market core, seating opportunities will be less than 30m apart
- Seating will include armrests for assistance, and, clear areas beside them for people using mobility devices

Parking

- Accessible-only parking and/or drop-off spaces will be located throughout the study area and particularly within the ByWard Market core area



Resources

City of Ottawa Accessibility Design Standards documents.ottawa.ca

CNIB Clearing our Path clearingourpath.ca

Design Frameworks

The design frameworks are the large scale, district-wide organizational strategies for various “layers” or elements of the plan. They are intended to support and enhance the visitor experience. Each of the design frameworks, in their own right, address an issue or element of the plan that makes the ByWard Market a more interesting and enjoyable experience. Together, they combine to create an integrated district wide hierarchy of space and function.

The study area is large and includes segments of more than ten streets and several public spaces (over 10 hectares of city-owned land). It is a complex, historic and well-used district. The design frameworks present a hierarchy of spaces and design strategies to help organize and make sense of the many interrelated variables that make up the Public Realm Plan and help stitch this district together.

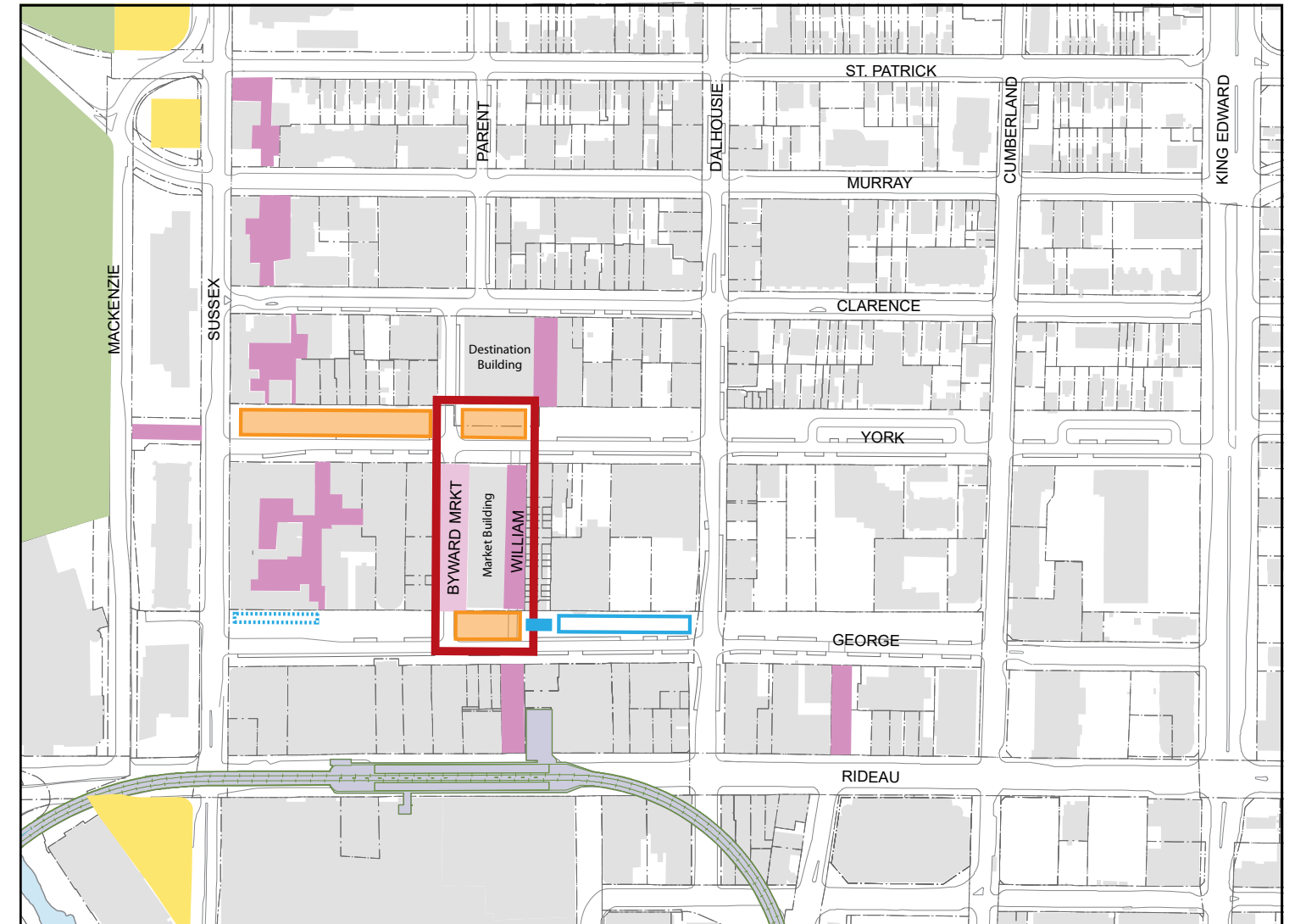
The Public Realm Plan provides nuanced and highly contextual design guidance. Virtually every street and space has a slightly different approach that is appropriate to its urban context but is tied to the larger vision.

There are 15 design frameworks:

- 1 Key Public Spaces
- 2 Character Areas
- 3 Retail/Patio Zones
- 4 Public Art
- 5 Wayfindin
- 6 Paving
- 7 Greening
- 8 Lighting
- 9 Winter Snow Clearing Priority
- 10 Cycling
- 11 Table Tops and Traffic Calmin
- 12 Vehicular Circulation Strategy
- 13 Outdoor Market Strategy
- 14 Power and Water Access
- 15 Heritage Interpretation Strategy

Key Public Spaces

- Flex Plaza
- Market Plaza
- Youth Area
- Family Area
- Courtyard/Link
- Commemorative Plaza
- Water Feature



The streets of the ByWard Market have two roles, one as traditional streets providing access for multiple modes of travel, and another as public spaces for lingering, gathering, activities and special events. A key goal of this plan is to provide flexibility in how public space can be used, for example, as passive green space for seating, or as programmed space for cultural events, or as significant plaza space for large gatherings. The trees, street furniture, roads and surrounding buildings work together to create outdoor rooms that are organized to create a network of different types, sizes and purposes of public spaces. Key design objectives include:

York (Sussex to Dalhousie) - the highest order street and public space. It provides the biggest gathering space(s) and has the most Flex Space to accommodate events of different scales and requirements.

Market - the public space surrounding the existing Market, which overlaps a number of other public spaces, is also a highly flexible, programmable event space, and forms a Market Plaza with the Market building as its focal point.

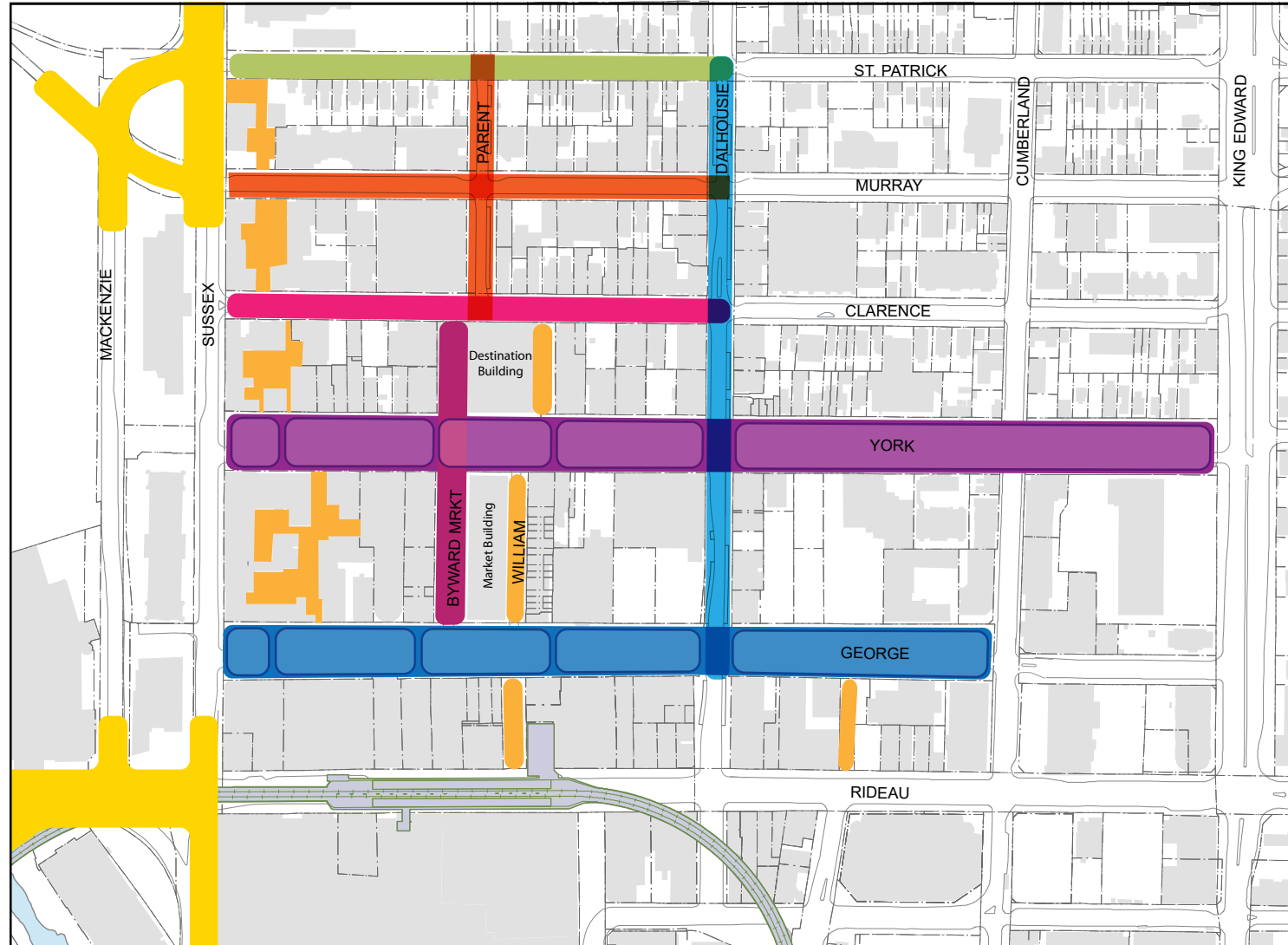
George - provides smaller, flexible gathering spaces and caters specifically to all ages with a special emphasis on a Youth Area, Family Area and Water Feature.

William Street - a pedestrian link from Rideau station to Clarence Street, this Courtyard Link can be animated by a variety of programmed events.

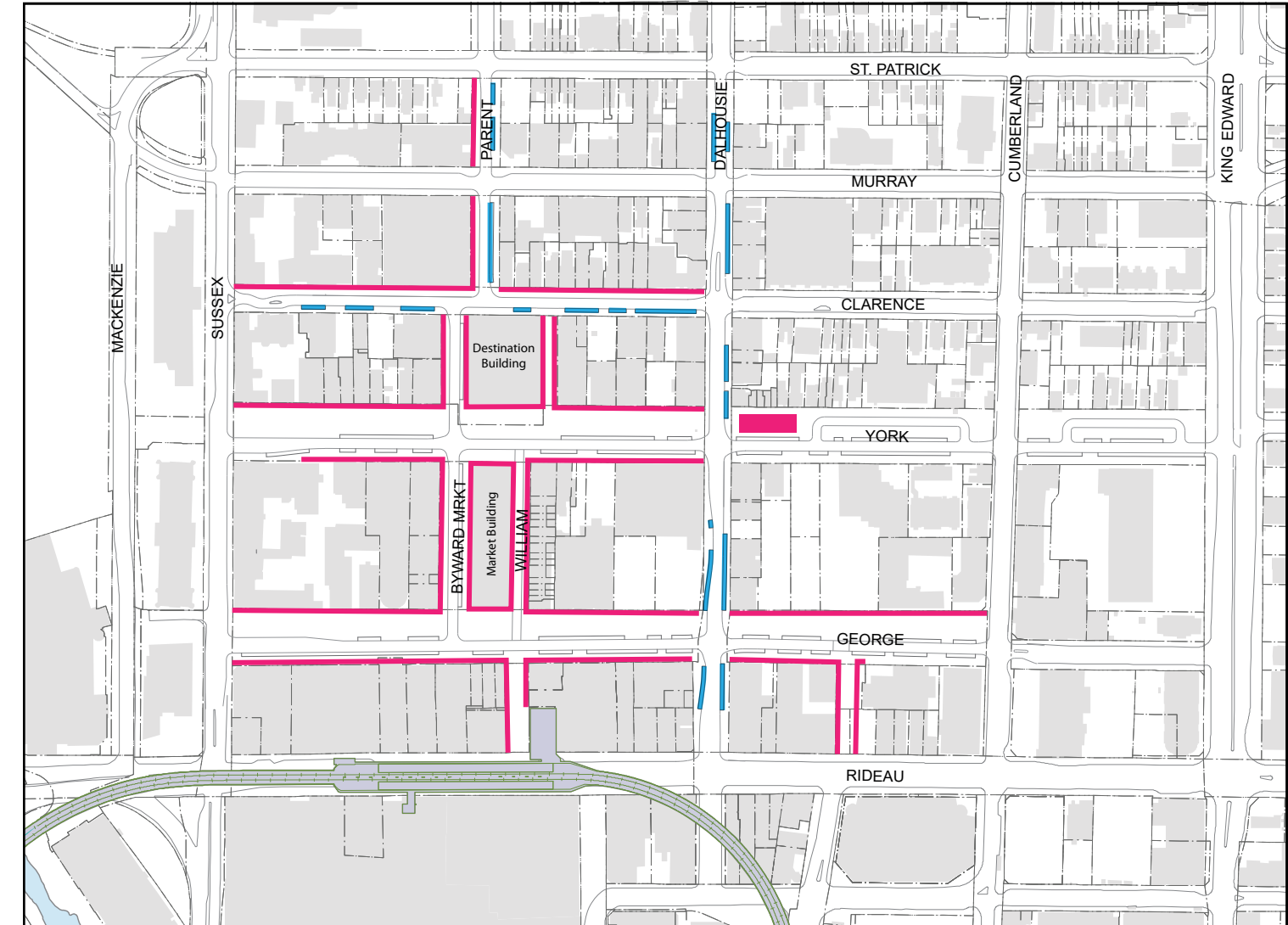
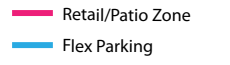
NCC Courtyards - beloved spaces that will have enhanced connections between them and to surrounding streets.

Gateways - Commemorative Plazas characterize the two gateways. The Rideau-Sussex gateway is a key civic link from Upper Town to Lower Town and will transform to a pedestrian friendly gathering space with a significant commemorative opportunity of national importance. The Sussex-St. Patrick-Murray gateway will be enhanced as part of the NCC's Nepean Point improvements.

Character Areas



Retail/Patio Zones



There will be an overall design language that is unique to ByWard Market and defines its character. Within this, different streets will express this character in different ways based on their role and function. York and George Streets, given their wide pedestrian zones, will have a number of smaller character sub-zones that define public spaces, promenades and gateways along their length. Other streets will have a more uniform treatment of their corridors. Key design objectives include:

- York** - as the preeminent destination in the Market, York Street will have its own unique identity, made distinct by its bold visual character, simplicity, and formal, symmetrical design elements.
- George** - the furnishings, amenities and programming along George will be more diverse engaging, and interactive. Each sub-space presents different opportunities for activities catering to full range of age groups.
- William Street and ByWard Market Square** - flanking the existing and potential future destination building, these spaces will emphasize their role at the heart of the ByWard Market and be designed primarily for pedestrians.

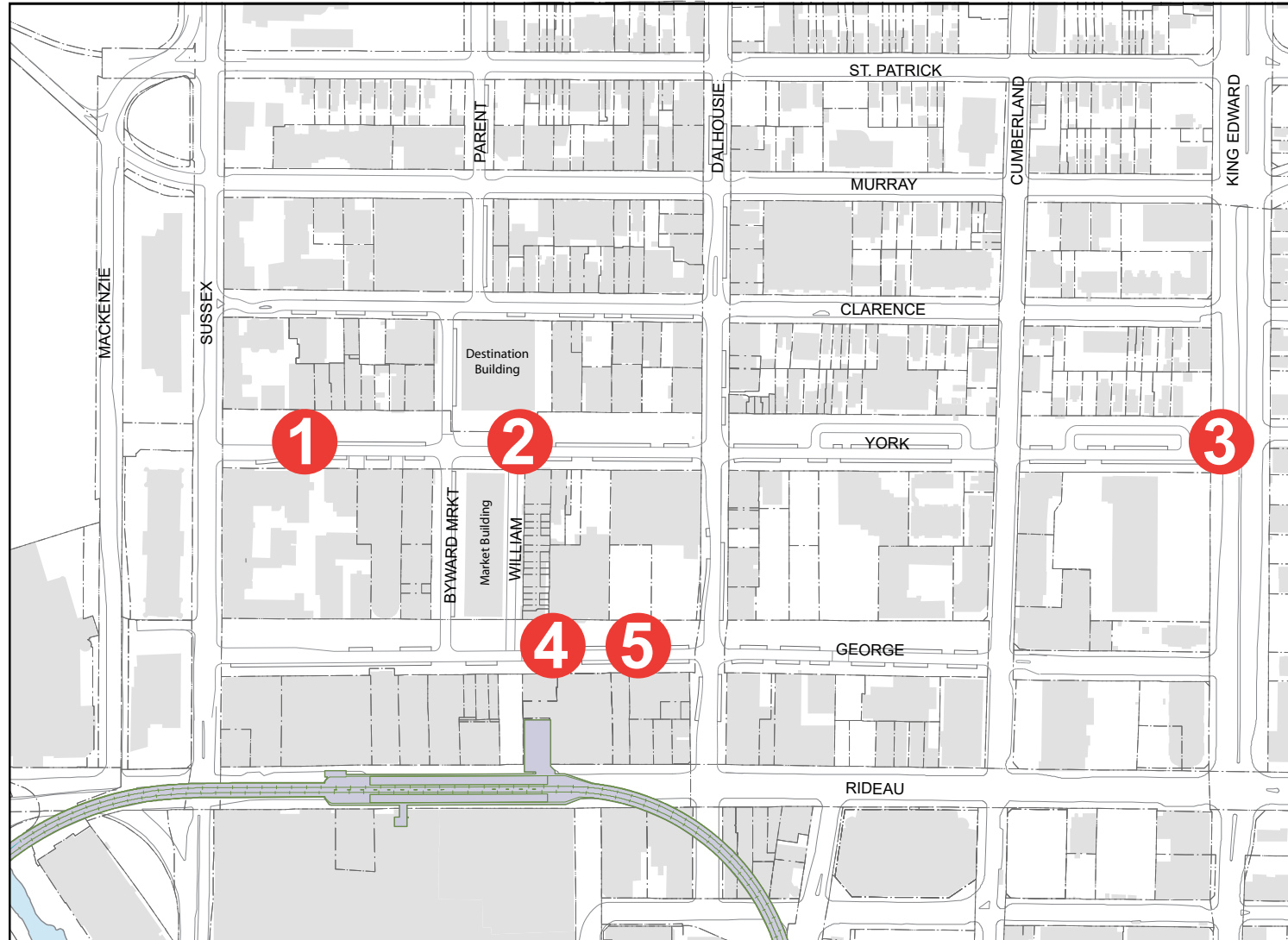
- NCC Courtyards** - beloved spaces that will have enhanced connections between them and to surrounding streets.
- North and South Gateways** - the streets around these spaces are part of Confederation Boulevard and their public realm should be consistent with the capital landscape.

The spill out of retail uses onto the sidewalk animates the public realm. While care must be taken that sidewalks do not become privatized, it is the intent of this plan that all of the Market's wide sidewalks accommodate spill out retail in their day-to-day configurations. Most sidewalks are wide enough to support a retail/patio zone, an area of sidewalk directly adjacent to the building, that can be used by the adjacent businesses for purposes such as display, outdoor retailing, and patios for customers. In particular, Clarence (north side), York and George, can accommodate a retail/patio zone adjacent to the storefront along most of their length. These will often be outdoor patios, but can also include outdoor displays and retailing.

A minimum pedestrian clearway of 2 metres takes precedence over any retail/patio zone. Narrower sidewalks, such as along Dalhousie, cannot support a permanent retail/patio zone.

Some of the curbside space along Dalhousie, Parent and Clarence is designed to be flexible in use. During the summer, these flex spaces can be closed to on-street parking and used as patio space.

Public Art



All of the streets and public spaces of the ByWard Market can, and do, function as places to experience public art. Existing art should be maintained and celebrated (not necessarily in-situ as the context changes) as each phase of the Public Realm Plan is implemented. A key tenet of the Public Realm Plan is that the streets and spaces of the Market are designed to be flexible to accommodate arts and culture, so any area of this plan is capable of hosting temporary and permanent site-specific and -appropriate installations. Specific opportunities identified by this plan include:

- 1. York Street Focal Point:** a significant gateway and landmark site for permanent, large, three-dimensional, interactive art. Viewed along York with Parliament Hill in the background; also viewed from the courtyard system.
- 2. York Street Market Plaza:** a space-defining overhead lighting feature that provides identity and ambiance to the main plaza space.
- 3. York Street Gateway (at King Edward):** at the other end of the view corridor from the York Street Focal Point, above. The two pieces could have a dialogue.
- 4. George Street Water Feature:** celebrating the former Bywash and creating a dynamic night/day landmark display.
- 5. George Street:** the north side of George Street will provide infrastructure and space to host installations of various types including play elements, art exhibits and other cultural expression
- 6. Paving system:** be designed with cultural heritage interpretation and artistic expression, including references to adjacent heritage buildings and the former Bywash.
- 7. The OTTAWA sign:** there are a variety of locations for this iconic sign including in location #1, above, or, in association with the existing Market or future destination building.

Wayfindin

- N** Navigation - directions to key destinations and immediate attractions
- I** Information 'kiosk' - comprehensive sign with maps, directions and visitor information

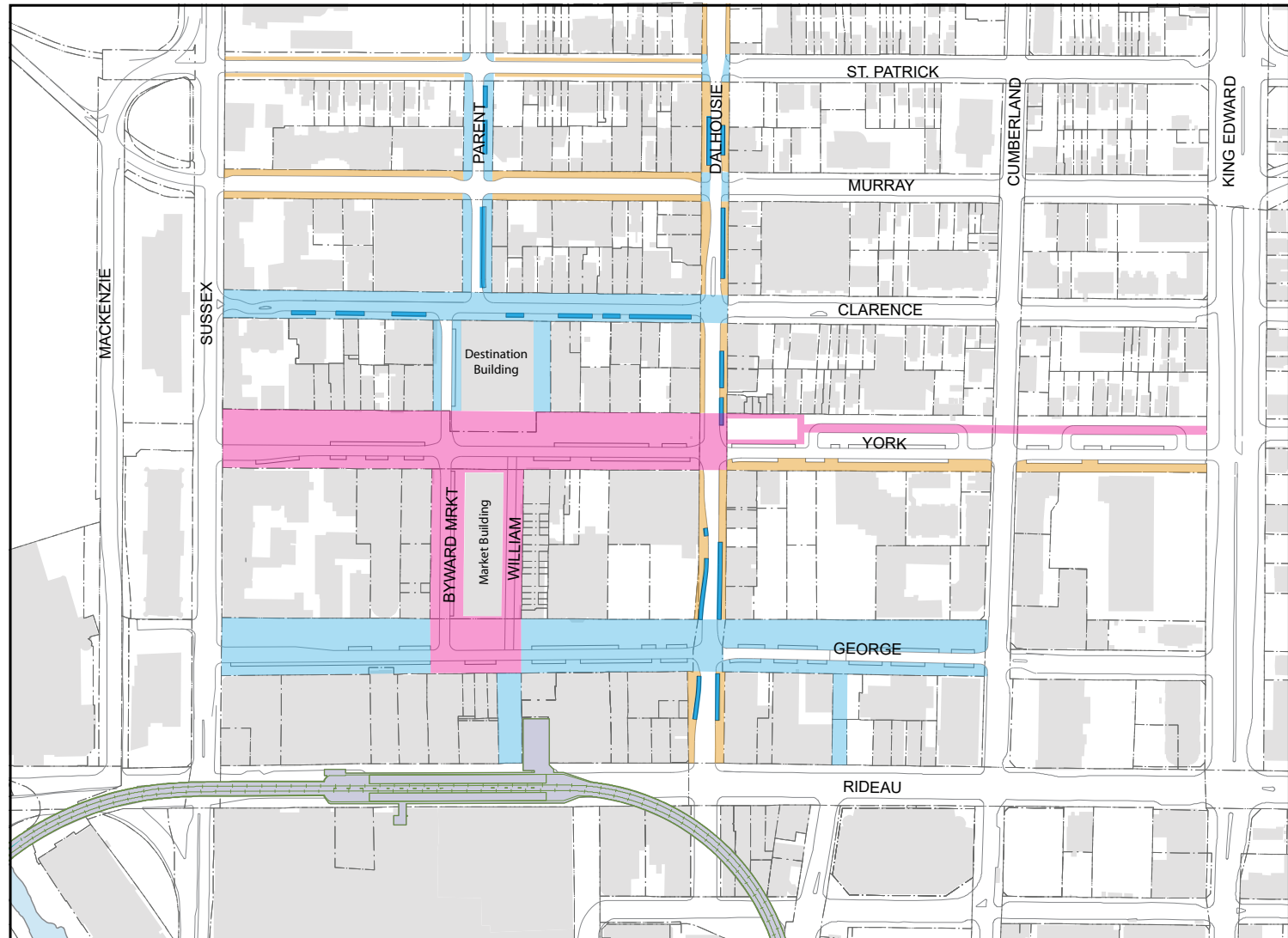


This plan will implement a cohesive public realm language that includes paving, furniture, lighting, greening and sidewalk treatments that will identify the Market as a special place within the city and establish environmental wayfinding cues, announcing a sense of arrival from surrounding districts. Within the Market, the public realm language is highly responsive to its context, and will provide strong visual cues for people to orient to York Street, the Market core, and key pedestrian areas.

Overt wayfinding (signs) should be coordinated with the Ottawa-Gatineau wayfinding Initiative and branding strategy, and a specific plan for the Market should be developed.

Paving

- Unit Paving - Special
- Unit Paving - Typical Market
- Interlock - Curbside Layby
- Concrete Paving - Typical Market

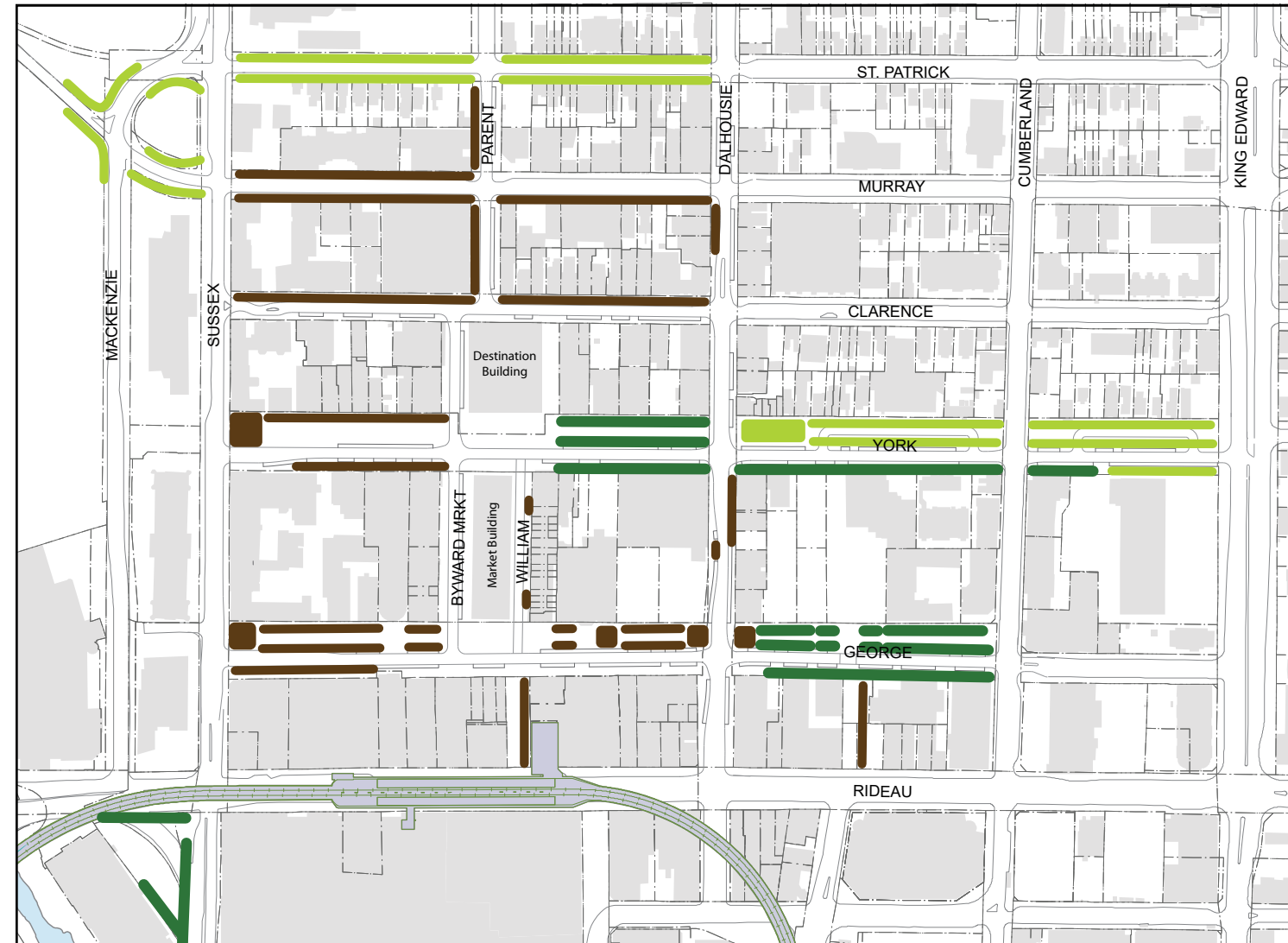


The heart of the Market will be paved in decorative unit paving. This will elevate the streets of the Market above their surroundings, define them as special places, and aid with wayfinding and placemaking. A typical 'ByWard Market' paving pattern should be developed and applied. There could be variations in this pattern to differentiate areas based on context or importance. A special pattern is envisioned for York Street and surrounding the existing Market building, to define this area as the primary pedestrian focus area within the heart of the Market. Other areas of the Market will be poured in place concrete, with a joint pattern that is unique to the Market and of the same design language as the unit paving.

As a designated special district, ByWard Market is an excellent candidate for the use of interlocking, special pavers, especially in the Market core along York, George, William, ByWard Market Square and Clarence. These are the primary destinations for visitors and the quality of the public realm is important. Refer to the implementation section of this plan for more information about approaches to paving.

Greening

- Trees in lawns
- Trees in open planters
- Trees in hard surface



Greening the Market has many benefits for people and the environment, including beautification, providing shade, reducing the urban heat island, providing habitat, and stormwater management. Today the heart of the Market is noticeably grey and lacks trees. This Public Realm Plan seeks to establish 30% tree canopy on almost all streets (except Dalhousie, where space is extremely limited). About 75% of the existing trees in the Market can be maintained based on their location. Some trees must be removed because they are located in areas that will become roadway.

Further consideration of the greening strategies in the two Gateways will be undertaken with the NCC. Refer to the implementation section of this plan for more information about planting approaches and species selection.

Lighting

The lighting strategy is integral to the spatial hierarchy and character areas of the Public Realm Plan, contributing to placemaking and wayfinding. The light fixtures and light level will correspond to the role and function of their spaces they are in. There will be a strong focus on the heart of the Market, and York and George Streets as the primary gathering spaces. These locations will have signature fixtures that can be used in different ways to cast light that highlights the activities and architecture of their spaces. Fixtures in other streets and spaces will be in the same family but at a lower intensity relative to their location.

Lumber, as a formative force in the growth of the area, is the inspiration for most of the light poles. Wood's warm texture receives light well and will help create a rhythm of glowing points in the Market's nightscape. Tall steel bases and simple fixtures in black will create a quiet, contemporary appearance that harmonizes with the other public realm elements. Curved davit arms are not appropriate for this district.

There are two variations on the lighting concept. Option one uses only one type of lighting per zone, with a single fixture type on each pole, which provides clarity and helps establish the character of each space. Option 2 combines multiple types of lighting on single poles, providing tailored lighting for the variety of tasks that may occur in each zone (walking, driving, sitting, events).

Intersections will retain streetlighting and signage on separate poles. New lighting will in principle remain separate from traffic lights and street signage.

For more information refer to Appendix 2: Lighting Design Development Concept (October 31, 2019) by Gabriel Mackinnon.



The glow of light on a wood surface

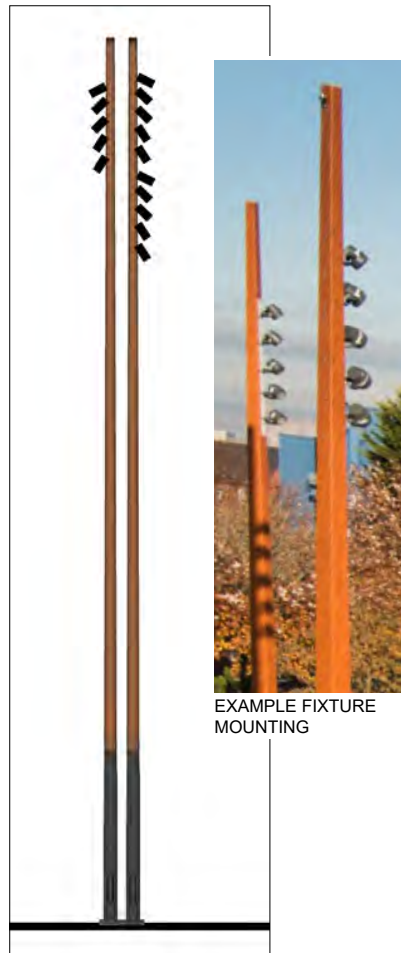


Multiple small heads on a tall mast pole

The City of Ottawa will consider adding one street light and one pedestrian light pole to their approved list, along with the removal of the globe lights. Other poles and fixtures, such as the high mast poles, will need to be owned, operated and maintained by partner organizations.

Type A

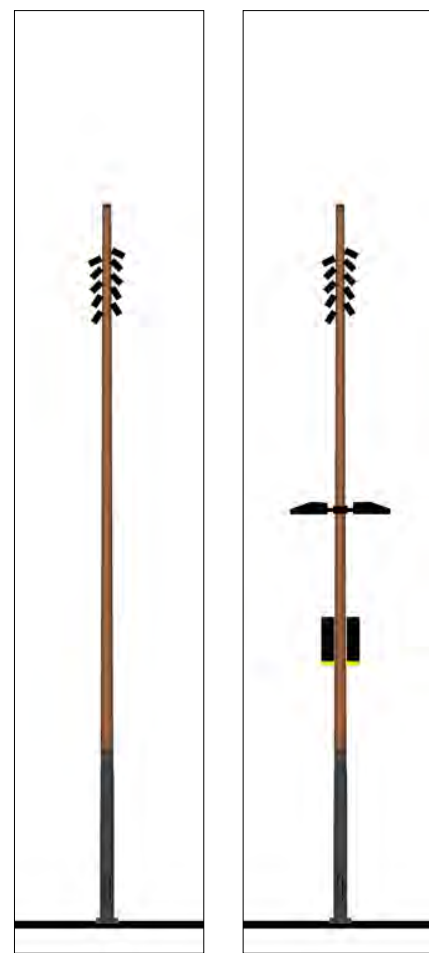
High mast event lighting
York Street Market Plaza



Options 1 & 2

Type B

Smaller scale event area lighting
York and George Streets

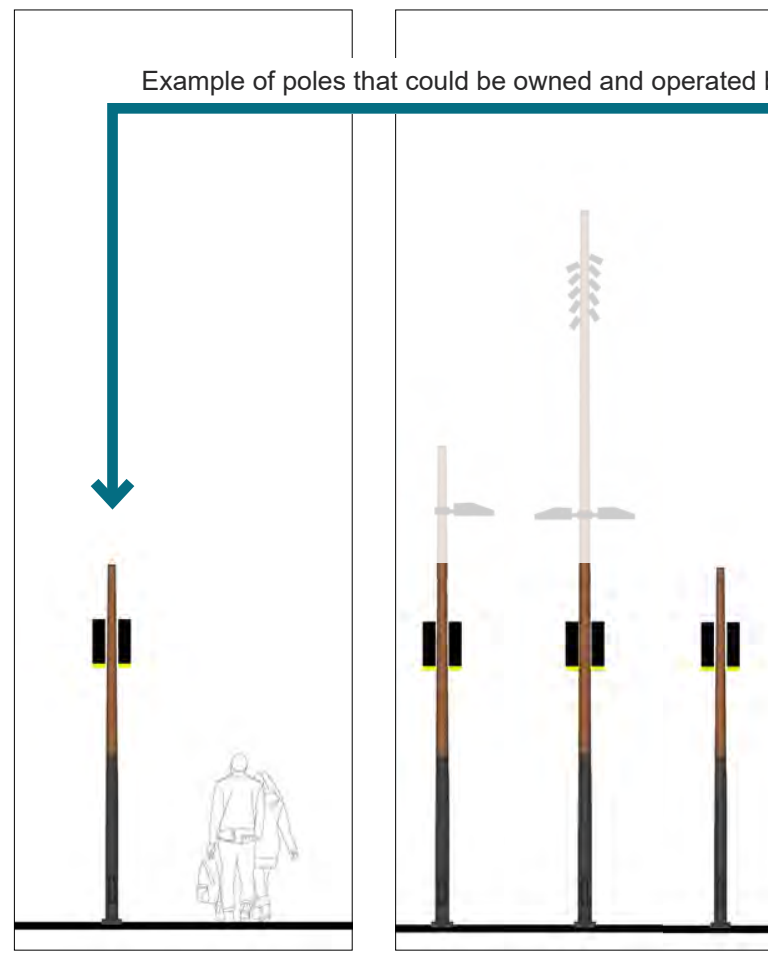


Option 1

Option 2

Type C

Pedestrian scale glow
Market core



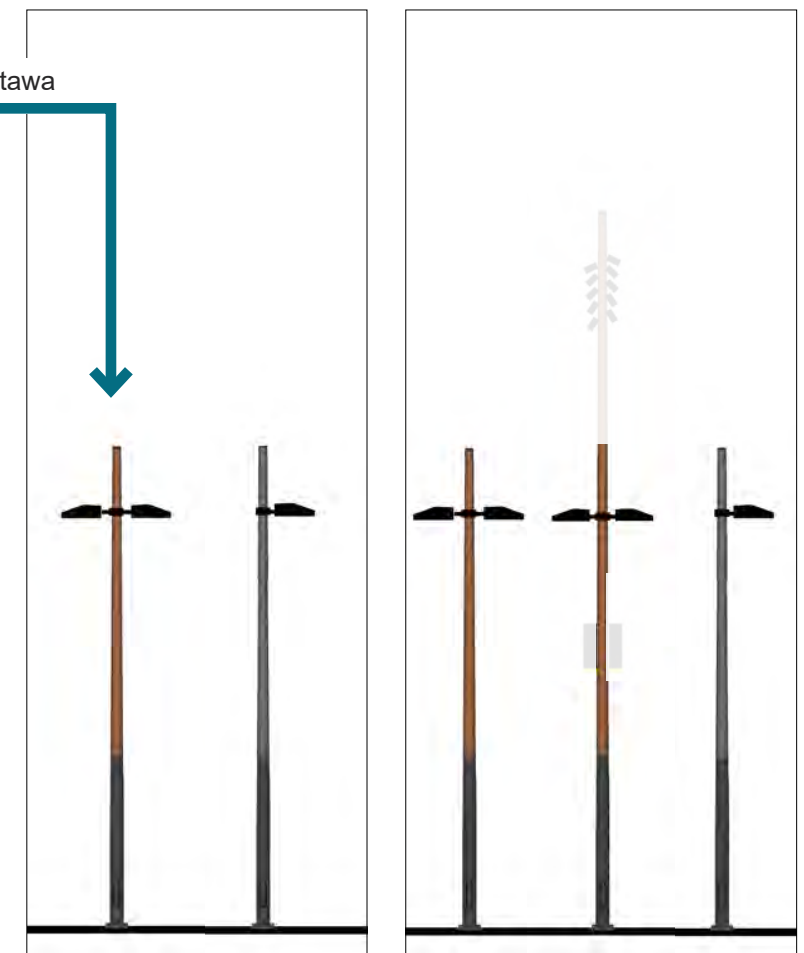
Option 1

Option 2

Example of poles that would be owned and operated by partner organizations

Type D

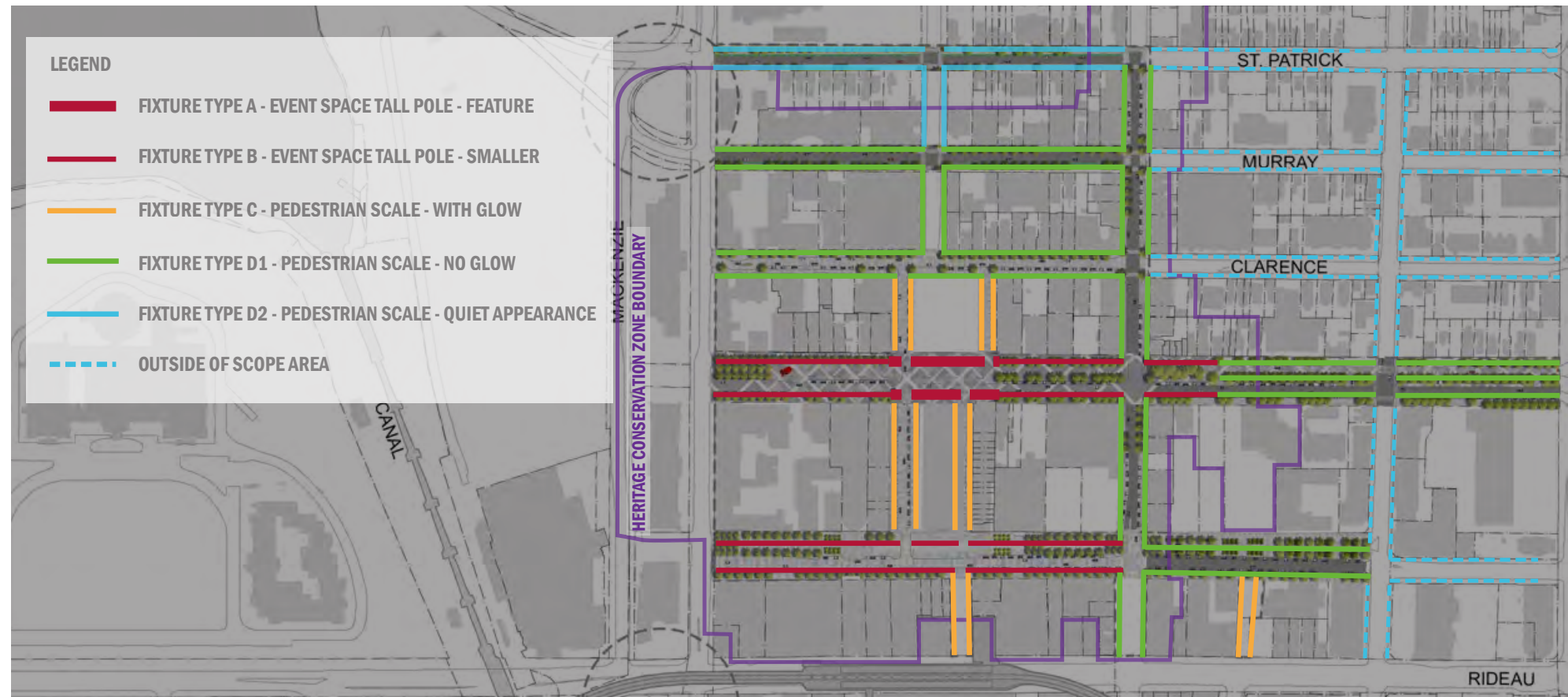
Pedestrian scale, no glow
Clarence, Murray and Dalhousie Streets, areas outside of Market core



Option 1

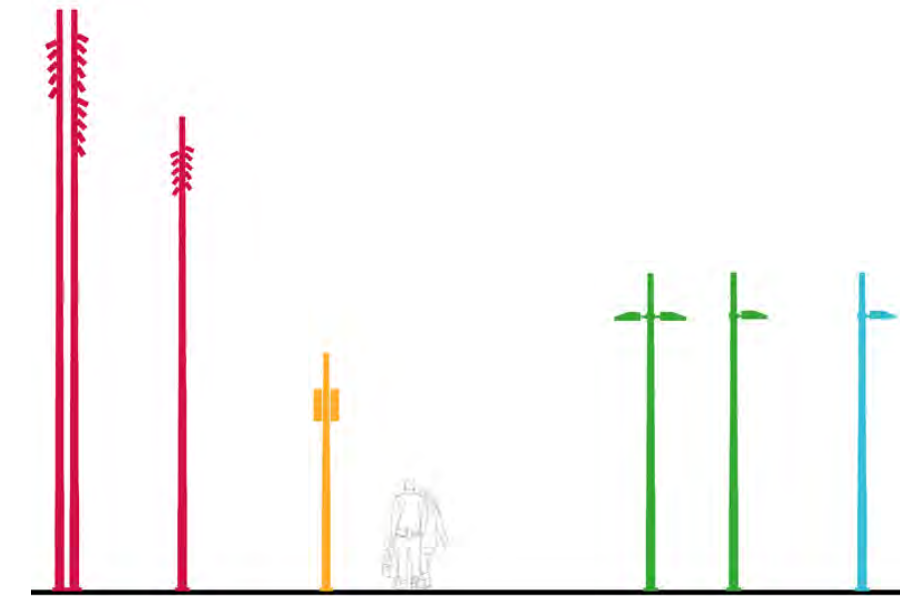
Option 2

Lighting fixture plan illustrating lighting Option 1: Dedicated poles

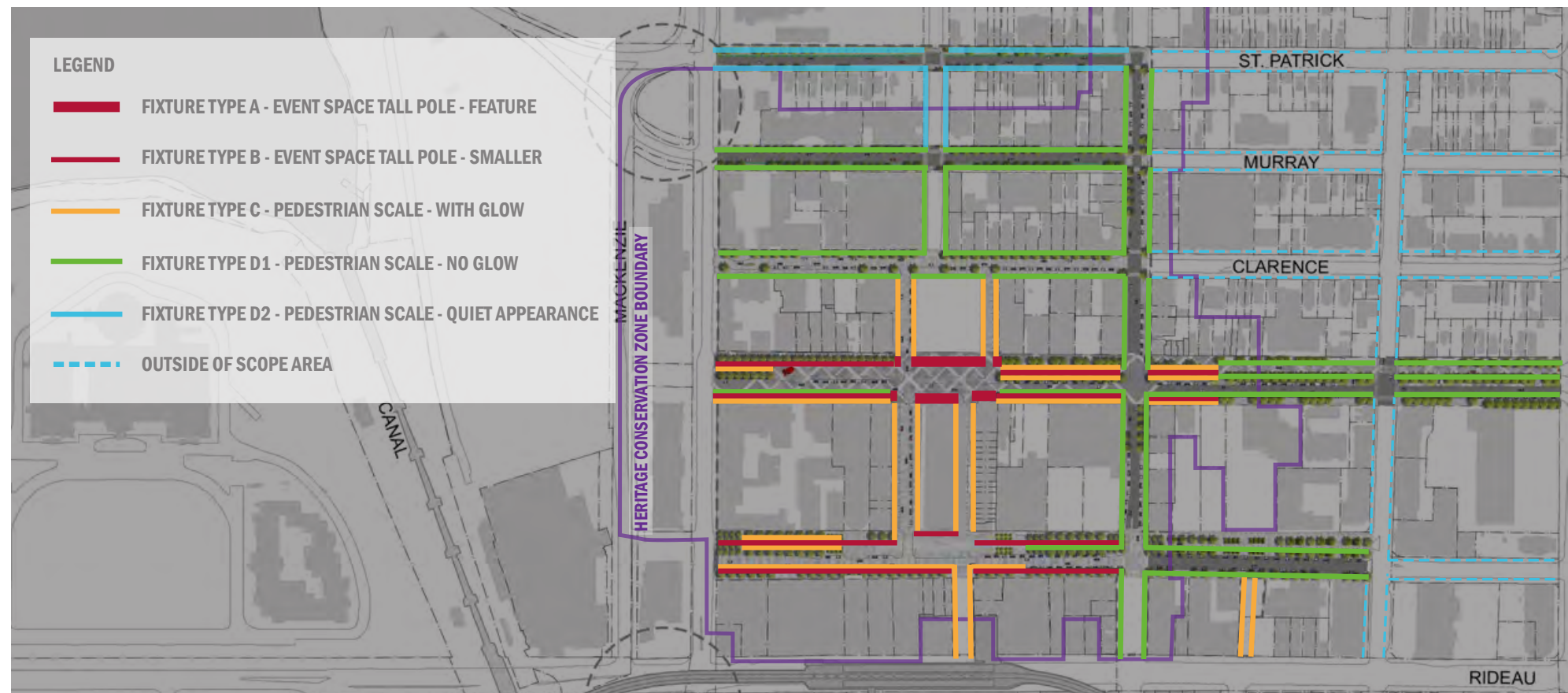


Option 1: Dedicated

Each light pole has one type of fixture.

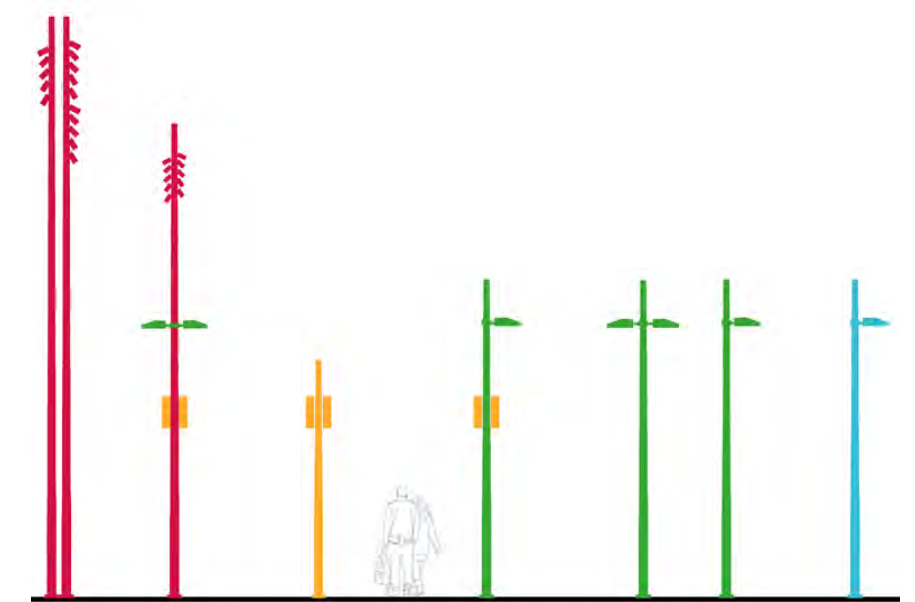


Lighting fixture plan illustrating lighting Option 2: Component poles



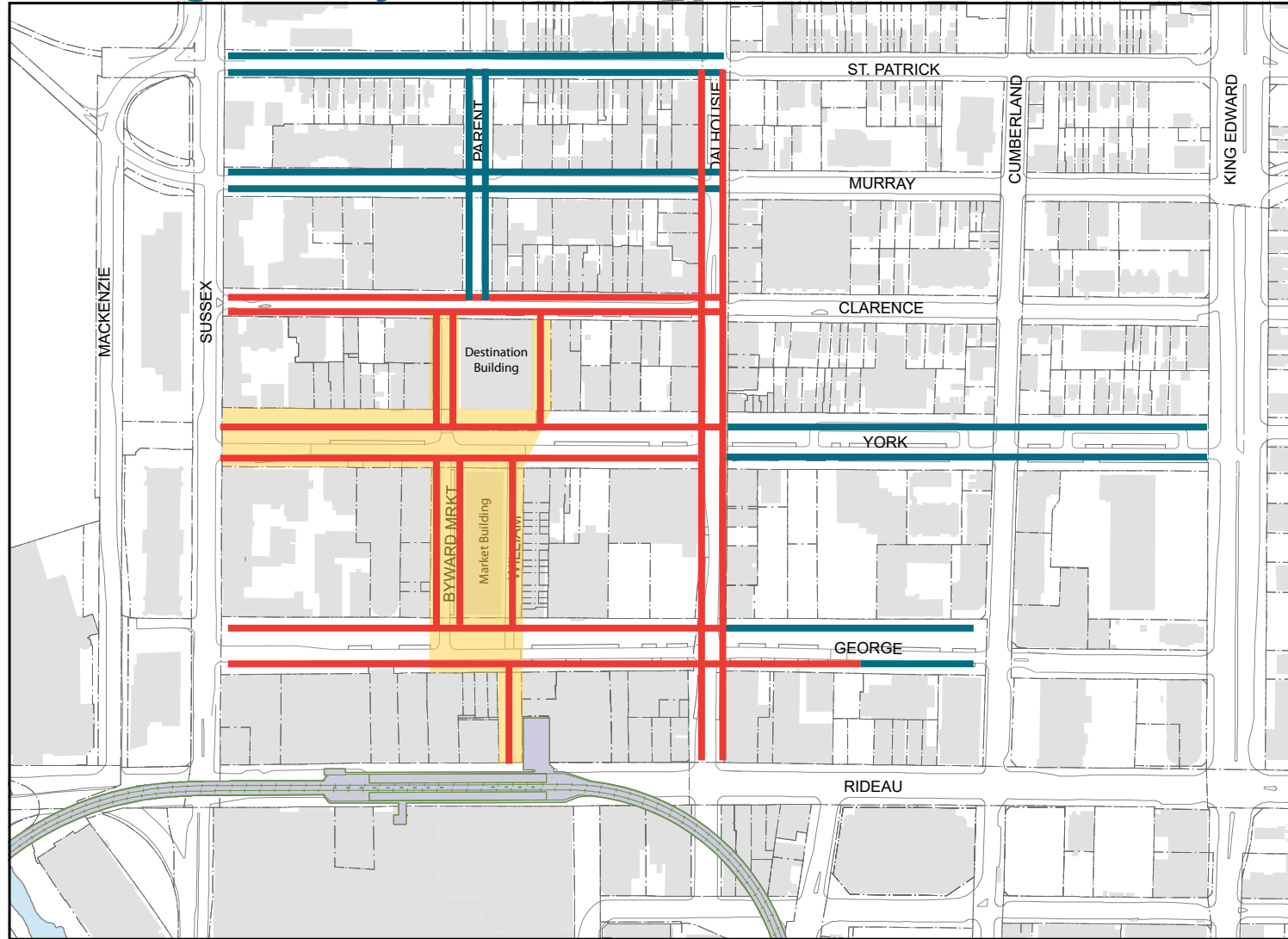
Option 2: Component

Single poles combine multiple types of fixture



Winter Snow Clearing Priority

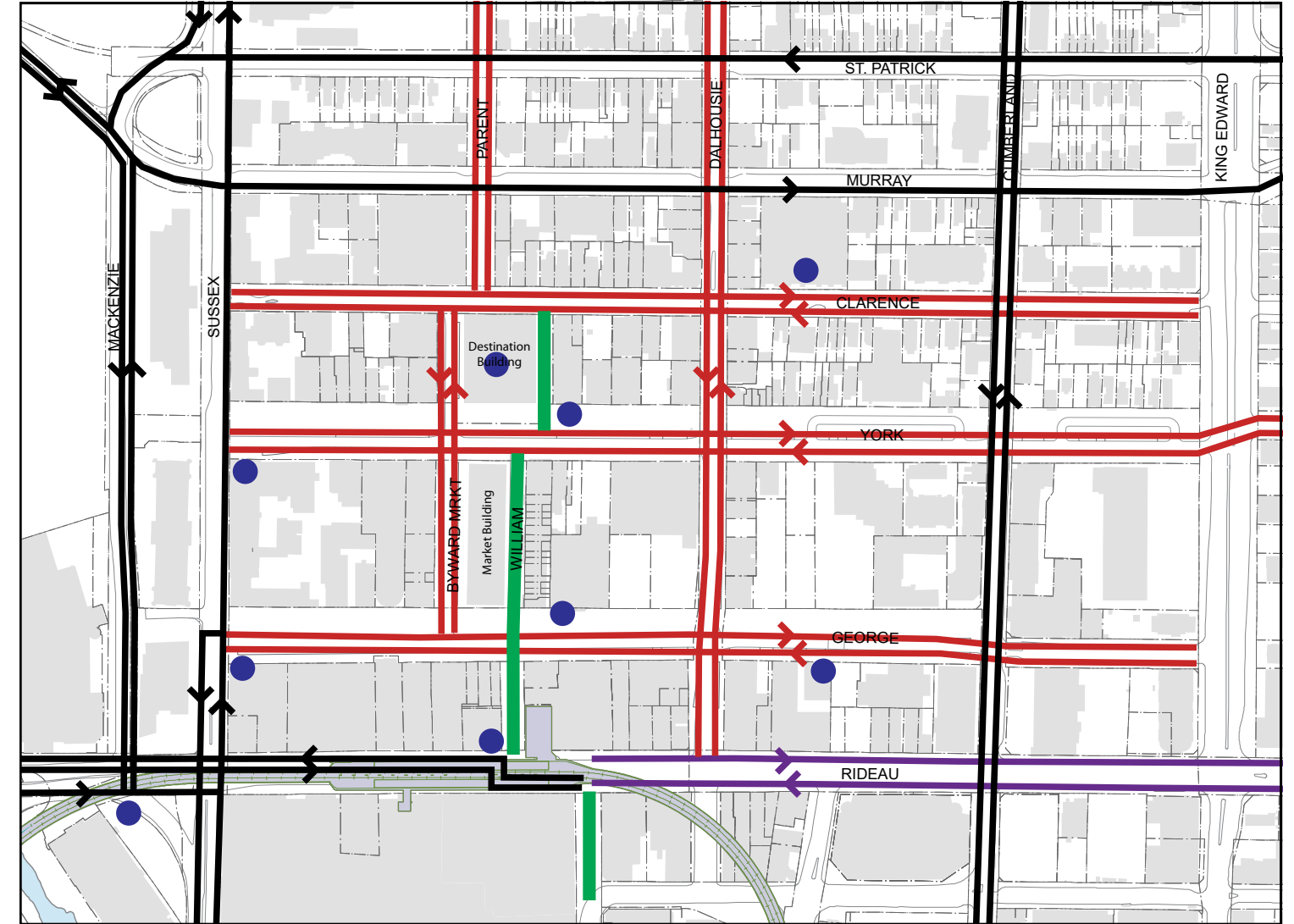
- First priority for plowing
- Second priority for plowing
- Priority removal



Priority for snow clearing from pedestrian areas in the Market's public realm is based on highest pedestrian needs. This is based on existing pedestrian counts and should be monitored over time. The sidewalks of the core Market streets in the primary commercial area should be cleared first, including those on Dalhousie because of their narrowness. This clearing should focus on a minimum 2.0 clear zone. Second priority sidewalks can be cleared after that, again to a 2.0m clear zone. In terms of removal of all snow, the William pedestrian corridor, and the primary programming spaces around the existing Market and on York should be removed first

Cycling

- Separated Facility
- Narrow Shared Lanes (Low Speed, Low Volume)
- Wide Shared Lanes
- Shared Space
- Bike Parking Priority Locations



The City's cycling network will provide choices for cyclists to arrive at, and move through, the Market. Separated cycling facilities surround the Market and provide convenient and safe ways to arrive at it from other areas of the city. Within the heart of the Market, cyclists are welcome on slow speed and low volume roads. In these cases the City will evaluate the benefits of sharrow markings on the roads at the time of implementation. William Street is a shared space for pedestrians and cyclists, somewhat akin to a woonerf-style street, where cyclists will be able to mingle with pedestrians, but where pedestrians have priority. This style of street is generally not demarcated with sharrows.

There are many opportunities for locating bicycle parking around the Market, with the best opportunity being in association with the new destination building in the heart of the Market.

Table Tops & Traffic Calmin

- Table Top Road
- Table Top Pedestrian Area (with vehicular access)
- Table Top Flex Parking
- Raised Intersection/Crosswalk
- Speed Hump

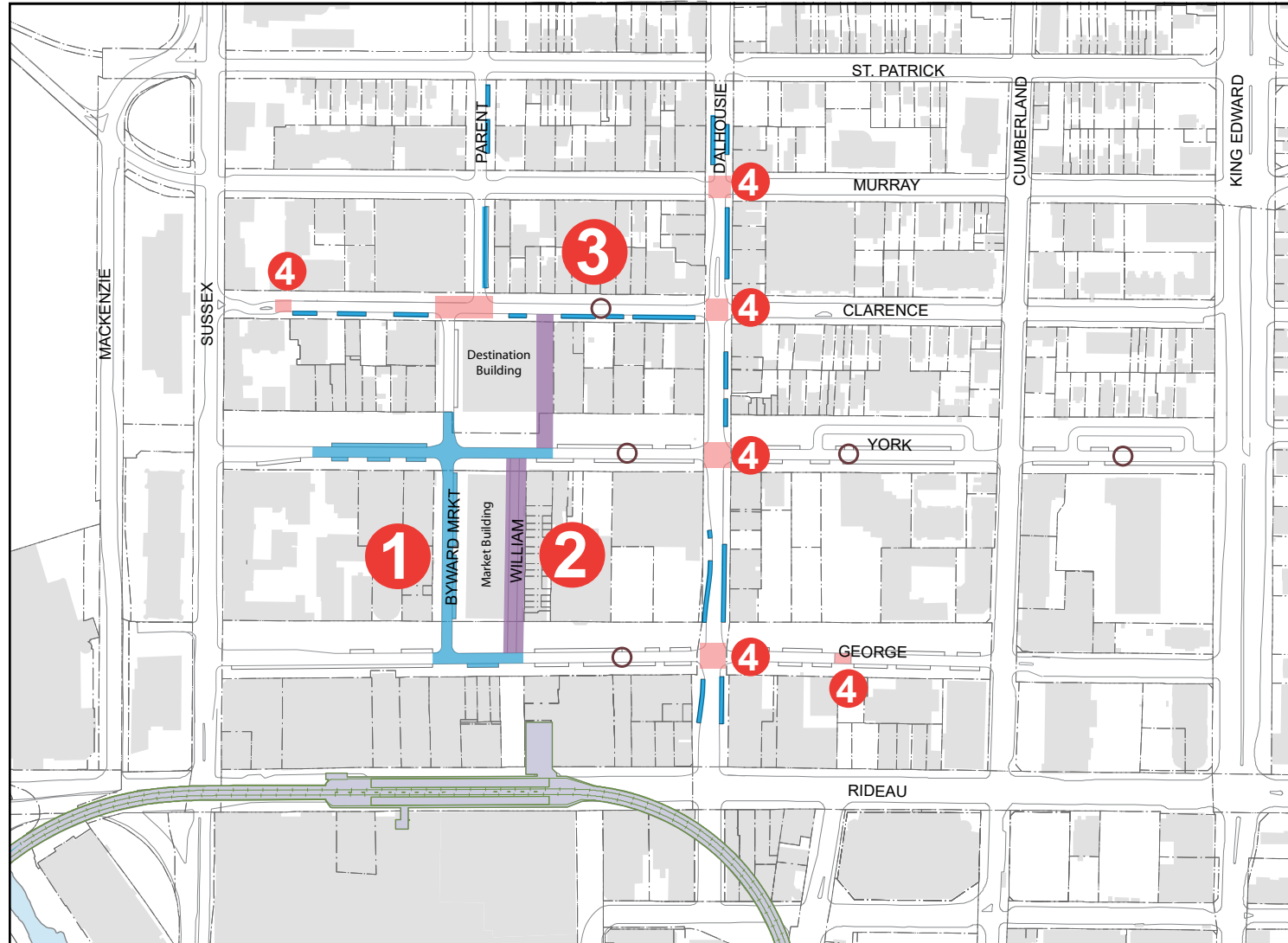
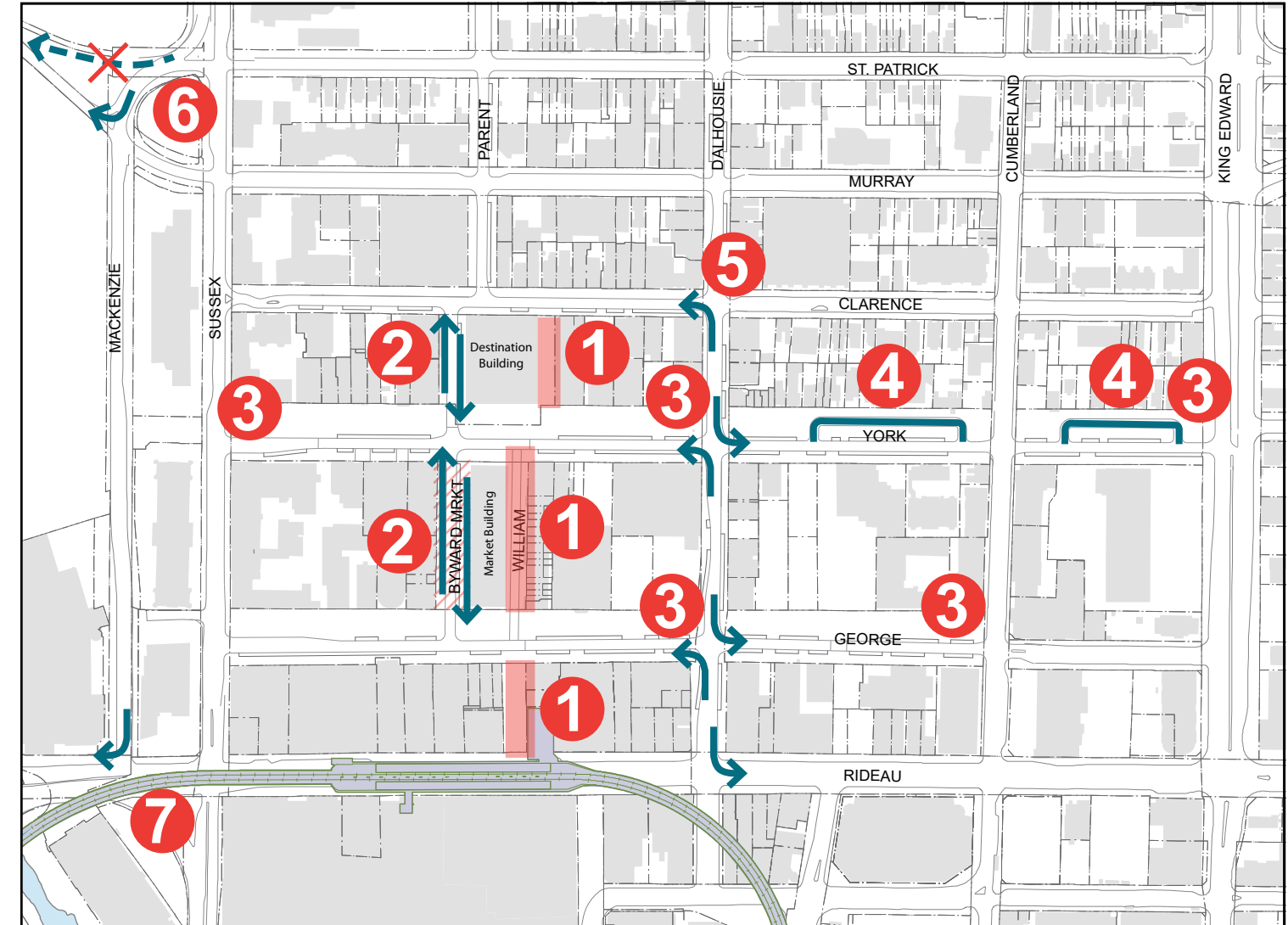


Table tops are areas of paving where the vehicular driving surface and the pedestrian surface are at the same level, and there are no curb separations between them. Vehicular and pedestrian zones are defined by a variety of techniques including bollards, planters (or other barriers), textured paving, high contrast paving, and flush curbs. The intent of the table top is to demarcate a pedestrian priority area, and in some cases also to permit a barrier-free surface for events during road closures.

1. **Table Top Road:** part of York Street, George Street and ByWard Market Square are table top conditions where both the driving lanes and curbside layby lanes are raised to the level of the sidewalk. Table tops on York and ByWard Market Square are intended for flexible use (road closures). The table top on George is intended to calm traffic and provide a pedestrian priority area at this busy crossing.
2. **Table Top Pedestrian Area:** William will be a permanent pedestrian table top, however, it will permit deliveries and EMS/Fire services, and so it will be designed for vehicular travel.
3. **Table Top Flex Parking:** curbside layby lanes along Clarence, Dalhousie and Parent are at the sidewalk level, with a mountable curb along the road. They permit parking and loading most of the time, but can be closed to vehicles during summer for sidewalk or patio uses.
4. **Raised Intersections and Crosswalks:** raised vehicular lanes at intersections and pedestrian crosswalks to slow traffic and promote pedestrian and cycling priority, often used in conjunction with curb bump-outs narrowing the roadway.
5. Speed humps in long blocks.

Vehicular Circulation Strategy

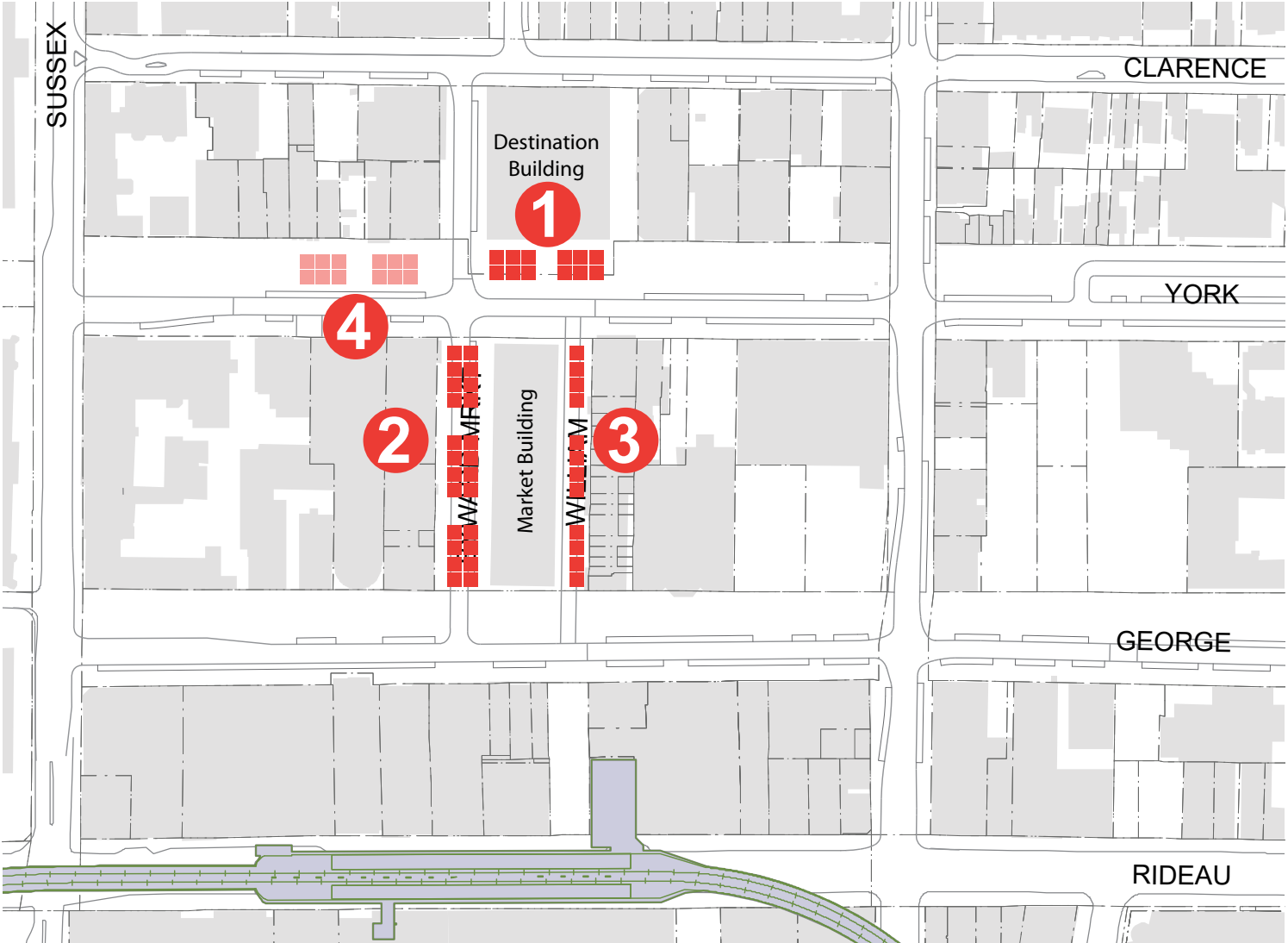


While there will be a significant reallocation of space from parking lots to pedestrian areas as set out in this Public Realm Plan, the transportation network will continue to function similarly to today. Key changes to vehicular circulation will occur around the existing Market building as a result of increased pedestrianization of space.

1. **William:** William street will be entirely pedestrianized from Rideau to Clarence, with the exception of deliveries and emergency vehicles. This results in the removal of travel lanes on William between George and ByWard Market Square. William will be one way southbound for its limited vehicular traffic
2. **ByWard Market Square:** will be converted into a two way street with curbside layby space (on street parking). However, between George and York, ByWard Market Square will be a seasonal street, closed to traffic during the summer.
3. **George and York Streets:** their role within the street network will be similar to today, but their intersections with other streets will shift to accommodate the widened pedestrian promenades on their north sides.
4. **York Street Access:** vehicular access to the properties along the north side of York Street (east of Dalhousie) will be provided by a slip lane, which will be part of a shared pedestrian promenade on the north side.
5. **Dalhousie Street:** dedicated left turn lanes will be provided at some intersections.
6. **Sussex-St.Patrick-Murray Gateway:** as part of the NCC's planned improvements to Nepean Point, the westbound road linkage between St. Patrick and the Alexandra Bridge is being eliminated. There will be a new right turn lane provided from southbound Mackenzie to the Alexandra Bridge access.
7. **Rideau-Sussex Gateway:** the southbound left turn ramp from Mackenzie to Colonel By will be eliminated in order to create an at-grade pedestrian space. Southbound Mackenzie will be right only. There are a number of other vehicular and cycling changes at this intersection which are shown in more detail in the Rideau-Sussex Gateway section of this report.

Further information on transportation background work can be found in Appendix 1.

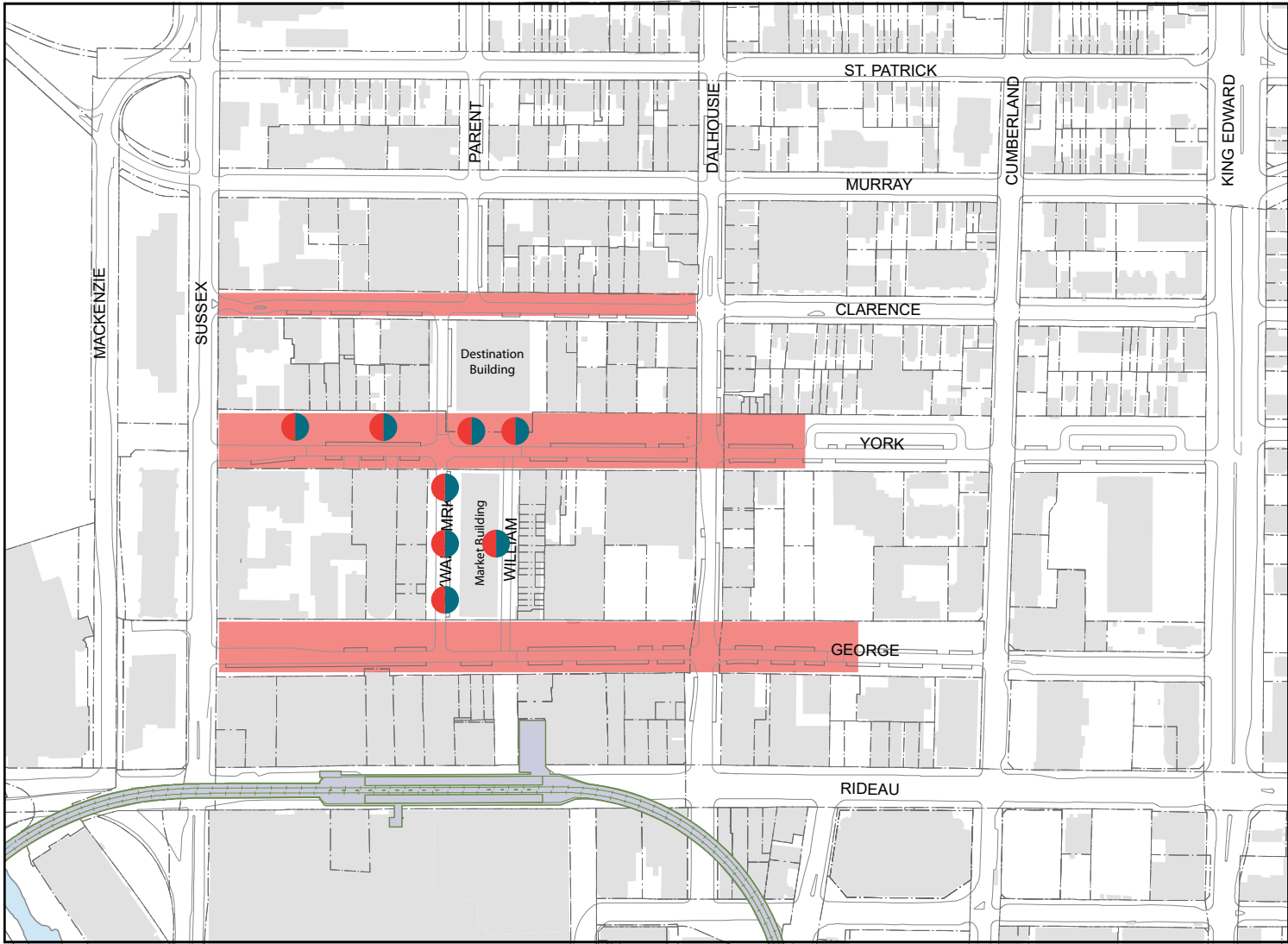
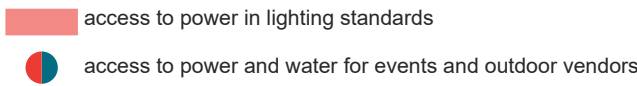
Outdoor Market Strategy



With the flexible approach to public space there are many opportunities for outdoor vending associated with the ByWard Market building. Based on the current strategy articulated by Ottawa Markets, outdoor vending tents are envisioned to be located along York Street and ByWard Market Square in close proximity to the existing building. All tents will have the ability to be moved due to seasonal needs or (on occasion) for events.

- 1. **York Street - Market Square:** the ideal location between the existing Market building and the future destination building, it creates a continuous Market zone in the heart of ByWard.
- 2. **ByWard Market Square:** the tents would occupy this street when it is closed to traffic during the nicer weather. In winter, the tents could be reduced in number or stored and the street open to traffic and parking. Together with William, this is a good location for all-season outdoor vending.
- 3. William Street also has potential for expansion of outdoor vending, short term events and seasonal festivals.
- 4. The York Street Flexible Plaza can also be used for outdoor vending when required.

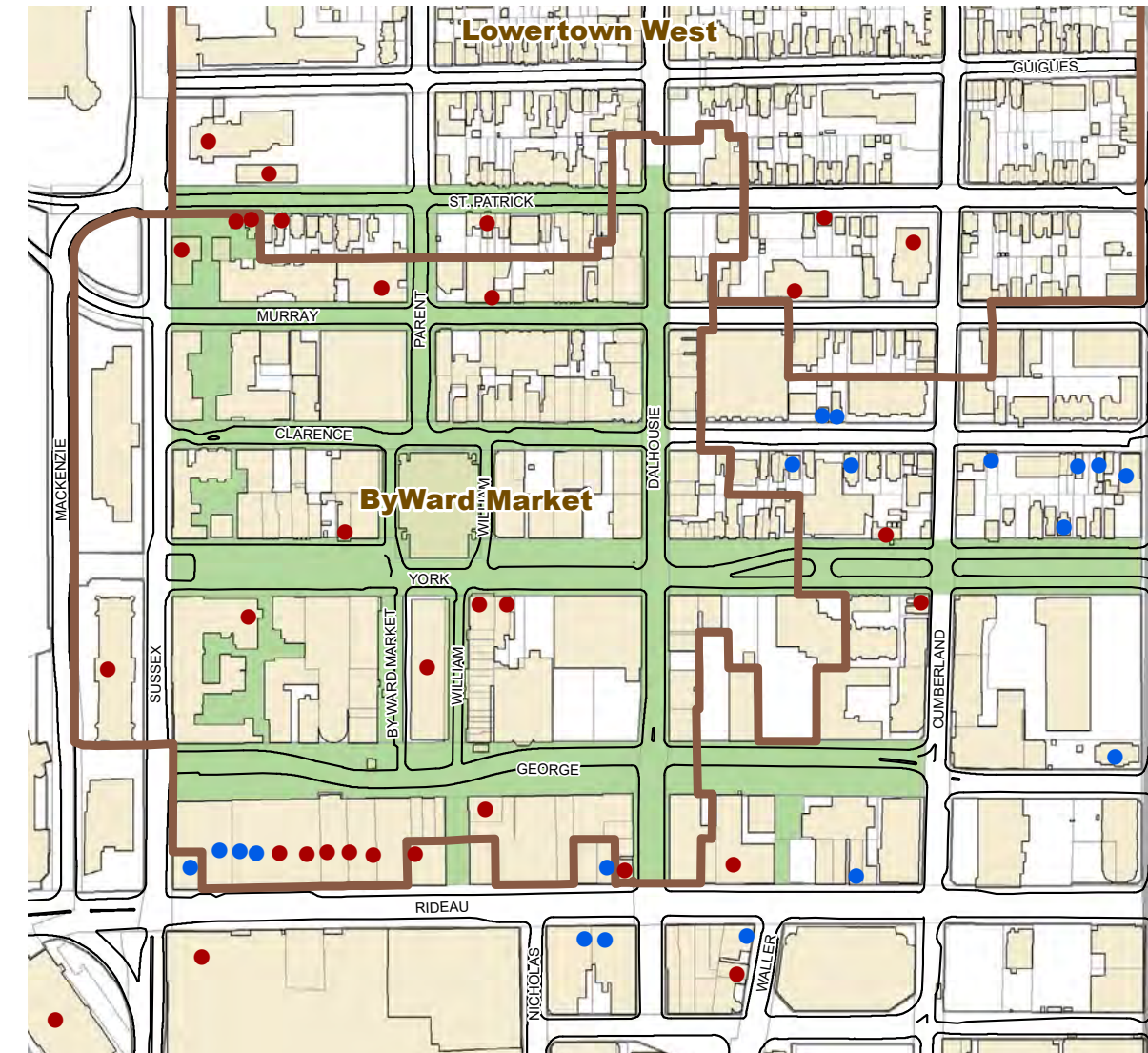
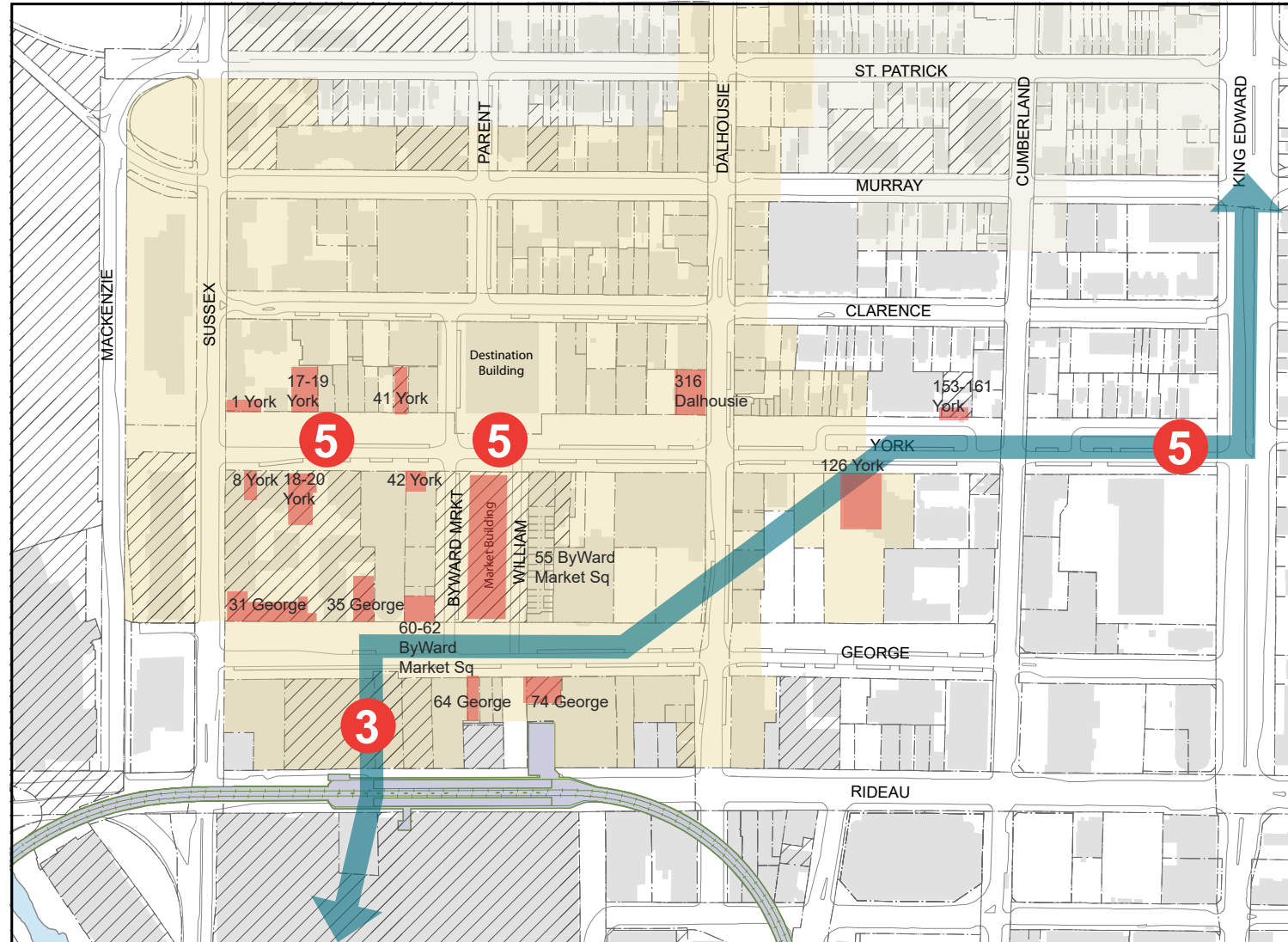
Power and Water Access



Outdoor vendors will need access to electrical power and running water (taps) for their operations. In addition, the plan provides the opportunity for a wide variety of events and programming throughout the core of the Market for a variety of purposes, and access to power, at a minimum, is important for these events.

Heritage Interpretation Strategy

- heritage building of City interest
- approximate route of Bywash
- ByWard Market Heritage Conservation District
- Lowertown West Heritage Conservation District
- Heritage Designated Property



The Public Realm Plan is fundamentally a response to the continued success of Ottawa's oldest commercial centre and provides a platform for further commercial and cultural activities, events, celebrations and daily life. There are a number of overlapping strategies for cultural heritage interpretation in the Market. In addition to the initiatives, below, the Public Realm Plan should include Indigenous opportunities as well, and a strategy for engaging the Indigenous community for specific initiatives should be enacted.

1. **Palette of materials:** Public realm furnishing will use materials that have been associated with the Market since its inception. References to the logging industry will include heavy timbers in seating and light poles. Stone will be used along streets and curbs. Methods of detailing and fasteners will recall traditional techniques.
2. **Heritage building markers:** all of the heritage buildings will be identified by special markers in the paving in front of the building. This could include the building's date, architectural drawings, archival material or other interpretive information.
3. **Remembering the Bywash:** the Bywash was an overland water channel connecting the Rideau Canal and Rideau River, and used to run along George Street for part of its length. It will be celebrated through special paving along George Street, and more literally through a new, multi-purpose water feature.
4. **Lighting:** In addition to the use of wood, the lighting itself will provide a wash of light onto adjacent heritage facades. This can be fine-tuned with the fixtures on each pole based on the immediate context.
5. **Public art opportunities:** there are many opportunities for public art in the Market, permanent, temporary and ephemeral, all of which can have a cultural heritage layer. York Street has three opportunities for large-scale public art. These may be the best candidates to include Indigenous cultural heritage. Refer to the public art strategy.



Example of heritage building markers integrated with paving design

- DESIGN FOCUS AREA / SECTEUR D'INTÉRÊT DESIGN
- HERITAGE CONSERVATION DISTRICTS / DISTRICTS DE CONSERVATION DU PATRIMOINE
- HERITAGE REGISTER / REGISTRE DU PATRIMOINE**
- INDIVIDUALLY DESIGNATED PROPERTIES (PART IV) / PROPRIÉTÉS DÉSIGNÉES INDIVIDUELLEMENT (PARTIE IV)
- HERITAGE REGISTER (NOT DESIGNATED) / REGISTRE DU PATRIMOINE (NON DÉSIGNÉ)

Design Concept

York Street is a Grand Promenade linking upper and lower town. It has a beautiful, unifying paving pattern and is framed by tall arching trees. The Flex Plaza is designed as a flexible public space and accommodates the widest variety of events in the Market, from the large scale to the every day. Most of this plaza area is “table top”, designed without curbs to be flat and accessible

Crosswalk
The north crosswalk across Sussex aligns to the pedestrian promenade and the York Steps

Bosque
The bosque of trees creates a gateway and helps make a connection to Major's Hill Park

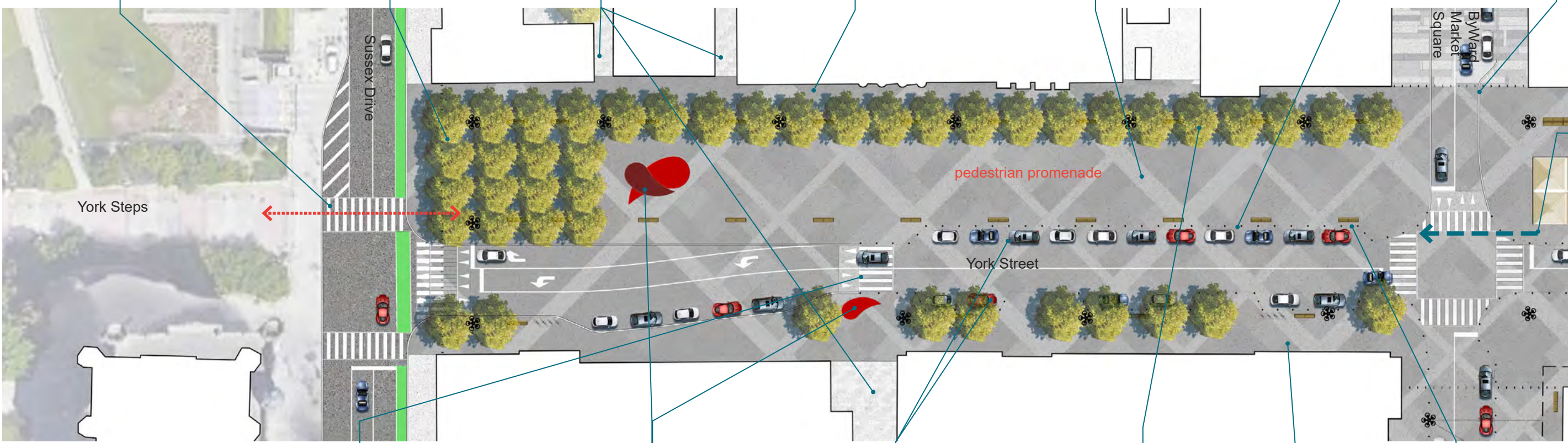
NCC Courtyards
The courtyards will maintain a similar identity and gate features along York

Retail/Patio Zone
A 4m zone on the north side beside the buildings can be used for outdoor retail/patio uses.

Paving
A bold interlocking paving pattern extends across the entire right of way.

Flush Curbs
There are no barrier curbs in the primary plaza area (only near Sussex). This means the entire area is flat, better suited to holding events. Paving bands with contrasting colours and textured paving delineate the road edge

ByWard Market Square
ByWard Market Square is a seasonal street south of York - it is open to traffic and parking for most of the year but pedestrian-only during summer. North of York it is open to traffic and parking year-round



Protected View
The view of Parliament Hill from this vantage point is a Keypoint View identified by the City of Ottawa and a Framed View identified by the NCC. Because of the grade change, the bosque of trees near Sussex will not obstruct the view of Centre Block.

Pedestrian Crossing
A pedestrian crossing is located within the tabletop area of York, connecting the entrances to the NCC courtyards.

Public Art
A major public art piece can terminate the flex plaza space, be a gateway from Sussex, and potentially be a visual link to the courtyards

Parking
On-street parking lines both sides of the street. Removable bollards separate the vehicular and pedestrian zones

Trees
Supercanopy trees line the street to create a grand scale and formality

Seating
Benches are moveable to allow the space to be programmed for events

Retail/Patio Zone
A 2-2.5m zone on the south side, beside the buildings can be used for outdoor retail/patio uses. Width will vary based on sidewalk/furniture configuratio

- What We Heard**
- be bold and creative to attract people
 - pedestrian-only
 - no parking
 - potentially a one way street with parking
 - no loss of parking
 - ensure the trees will grow but not create hiding places or block views

- Public Life Study Summary**
- York Street at ByWard Market Square has the most pedestrians in fall and winter, and is the busiest year-round weekend location studied
 - York Street at Sussex is the most popular location for taking photographs, due to the OTTAWA sign

- Current Issues**
- York Street is an important civic connection, visually to Parliament Hill and physically to Major's Hill Park
 - most of the space is a parking lot
 - great historical buildings line the street
 - almost treeless, except at Sussex
 - hosts a variety of events and programming



Aerial view of design concept



Day-to-day configuration of the York Street Flex Plaza as a promenade space supporting cafes and programming

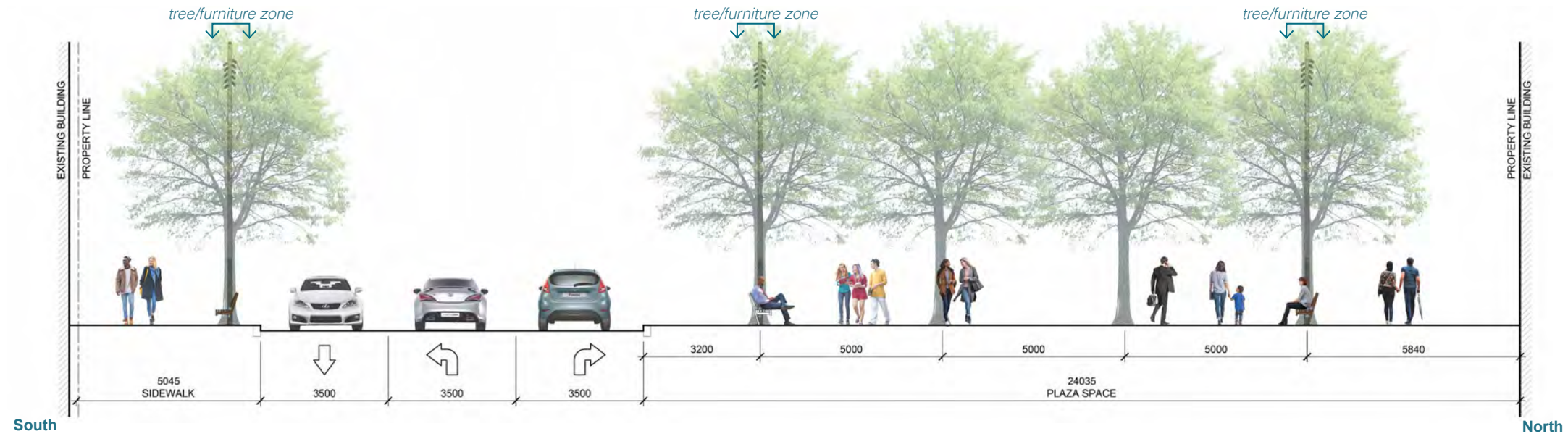


In the bosque of trees near Sussex, looking into the Market

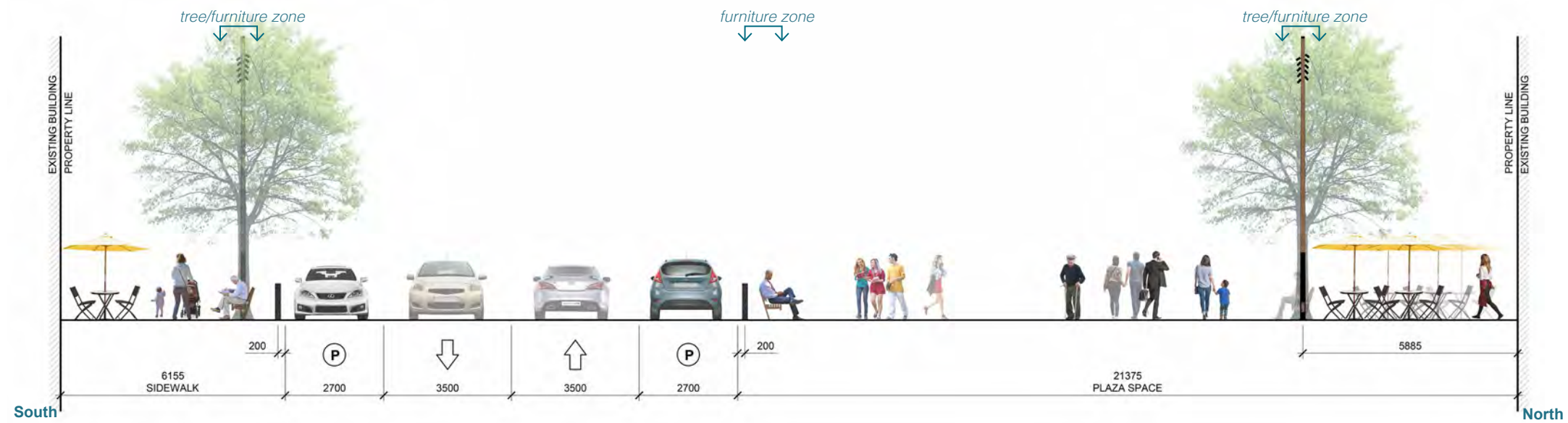


During major events, the York Street Flex Plaza can be closed to traffic and pedestrians can occupy the entire space

Public Realm Design York Street Flex Plaza



South
Cross Section at the Bosque (looking west to Sussex)



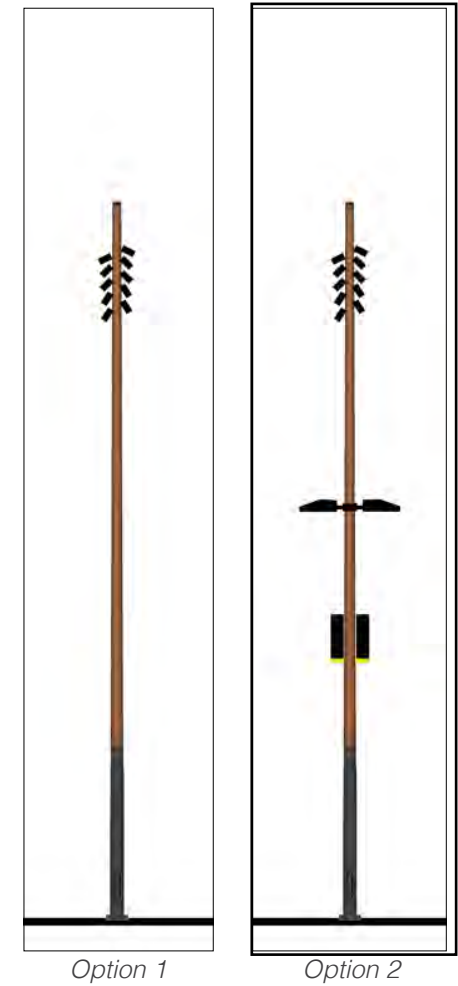
South
Typical Cross Section in the York Street Flex Plaza (looking west to Sussex)

Lighting Strategy

Tall Mast Lighting

York Street will be lit by fixtures on tall poles including special effects heads that can create seasonal and event specific lighting in the plaza, as well as ambient facade lighting if desired. No other lighting will be used. The tall poles marching along the street will contribute to placemaking and visual identity. Panels within the poles' bases provide electrical power for events.

Type B



Furniture Strategy

Seating

Seating will line both sides of the pedestrian promenade on the north side of York, facing inward towards the promenade, as well as curbside on the sidewalk on the south, facing the clearway. Spacing will be 30m maximum between benches. All seating in this area will be moveable for events. Bases of seating designed to be moved with forklift.



Bollards

Bollards, or other separators, will line the edges of the sidewalks near the vehicular lanes (travel lanes and curbside lanes) to keep pedestrian and vehicular traffic separated. Bollards will be removable for events. Within the York Flex Plaza, there is a variety of street furniture, other than typical bollards, that can function to delineate pedestrian and vehicular zones, including planters, seating, or other innovative street elements. Security bollards and other barriers may be required for events and will need to retract or be moveable.



Planters

Moveable planters will be used to supplement the tree planting in the areas that are more open to be flexible for events. The planters can be used along the promenade to define its edge, or clustered to create smaller gathering spaces. Bases of planters designed to be moved with forklift.



Paving delineation

Where curbs are flush, texture strips, tactile warning strip indicators (TWSI's) and contrasting paving can be used with bollards to define pedestrian and vehicular areas.



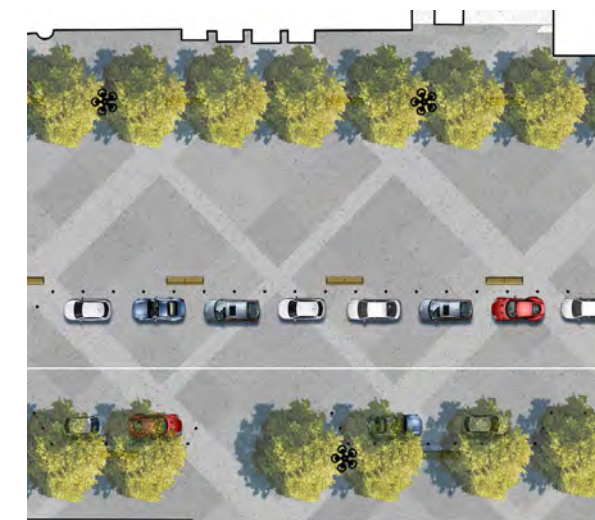
contrasting paving textured paving

Paving Strategy

York Street will have a distinct paving pattern. It should be bold and memorable, extending from building face to building face continuously across the road and sidewalk areas. The pattern will be used (with variation) only on York, and on ByWard Market Square and William Street south of York. The preferred material is granite.

Curbs will be granite including barrier curbs and flush curbs in the table top area.

In the table top area, tactile strips will line the edges of the sidewalks near the vehicular lanes (travel lanes and curbside lanes). Tactile strips are textured paving surfaces that warn people of the transition to vehicular use.



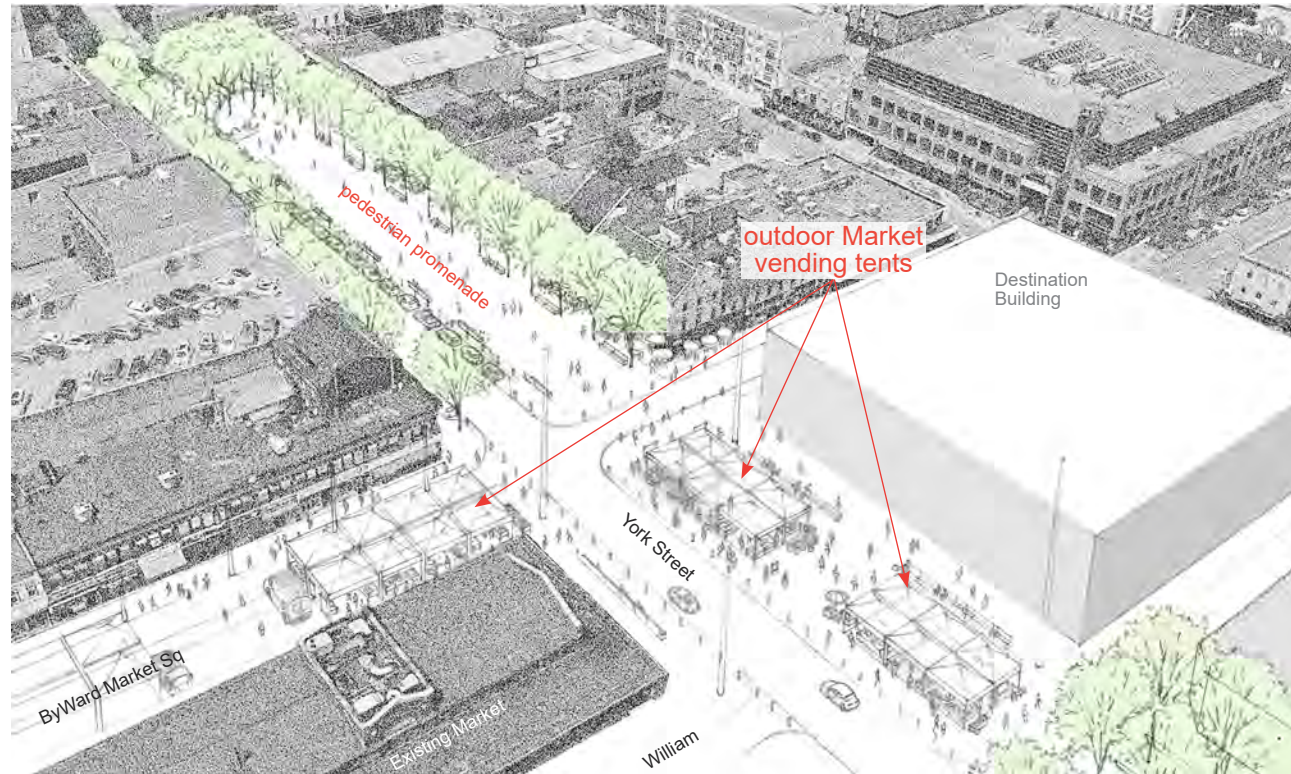
Paving pattern is continuous across the right of way extending building face to building face.

Public Realm Design York Street Flex Plaza

Potential for Programming

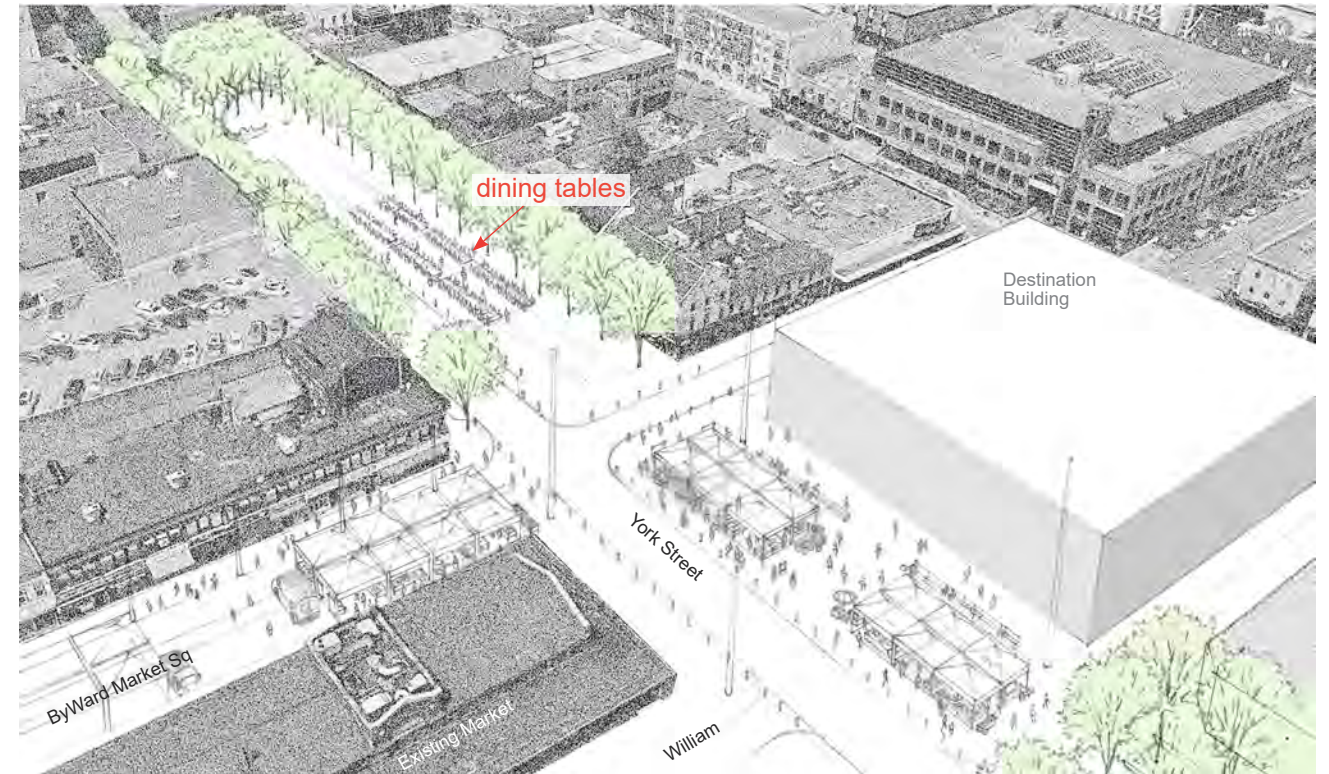
These examples show the potential for York Street Flex Plaza to accommodate a variety of events and programming. The diagrams illustrate how the area might be set up for different purposes, and its capacity in terms of number of people that can be accommodated. Most of the events can take place within the pedestrian promenade area, and do not require the entire street to be closed.

Note these are capacity studies, and actual event configurations will differ and should be designed to suit. Different events may include some portion of each of these configurations



Every Day Use (summer)

Benches line the pedestrian promenade. Outdoor vending tents are located in the Market Plaza and on ByWard Market Square

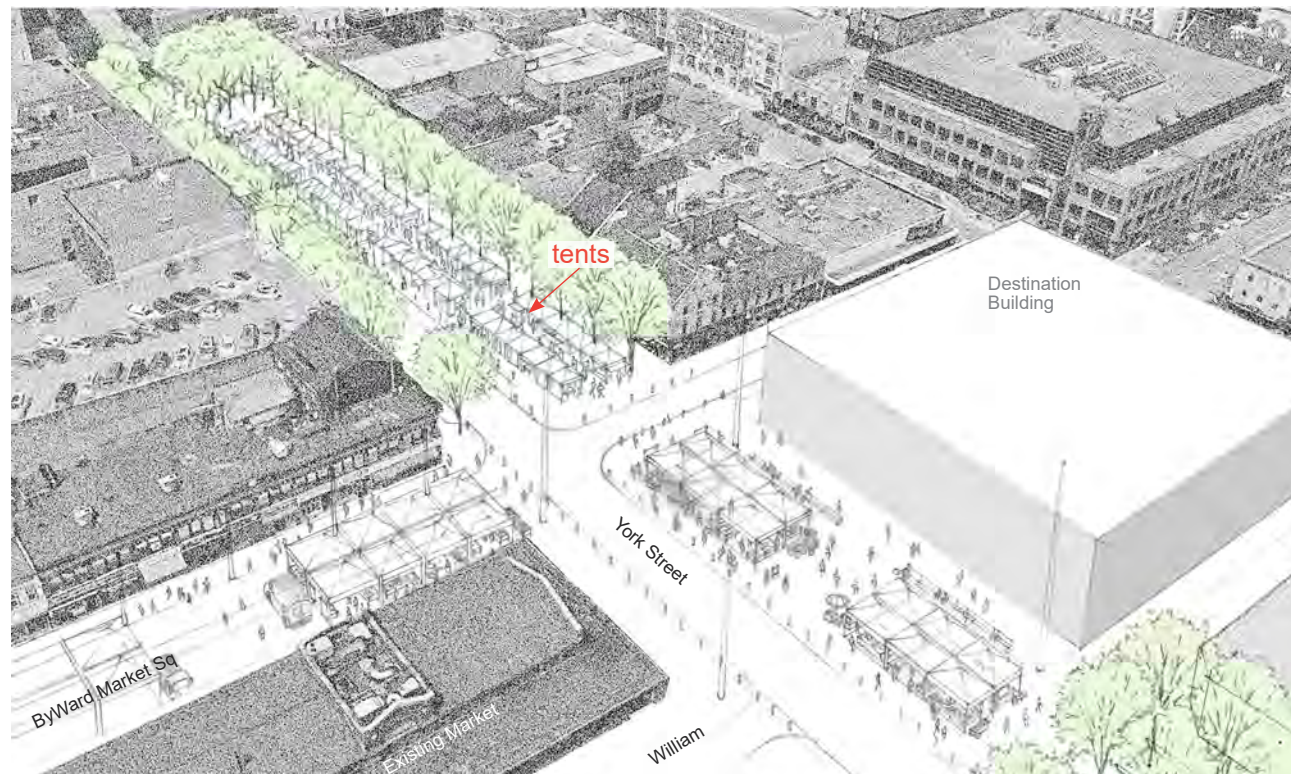


Outdoor dining

Benches line the pedestrian promenade. Outdoor vending tents are located in the Market Plaza and on ByWard Market Square

Shown: 180 chairs

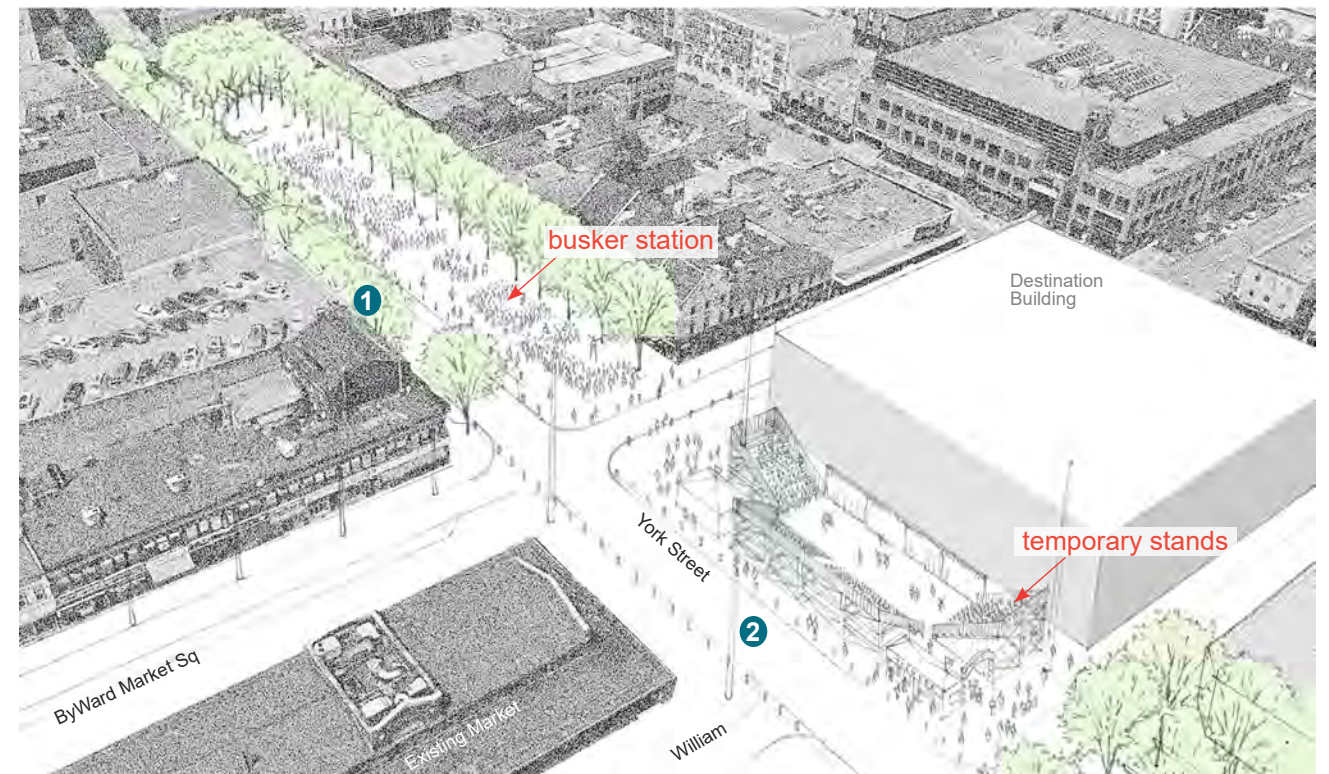
Capacity: 360+ chairs



Tents: Arts Fair, Outdoor Vendors, etc.

Tents of 3m x 3m line both sides of a 4m wide pedestrian promenade (central aisle)

Capacity: 56 tents

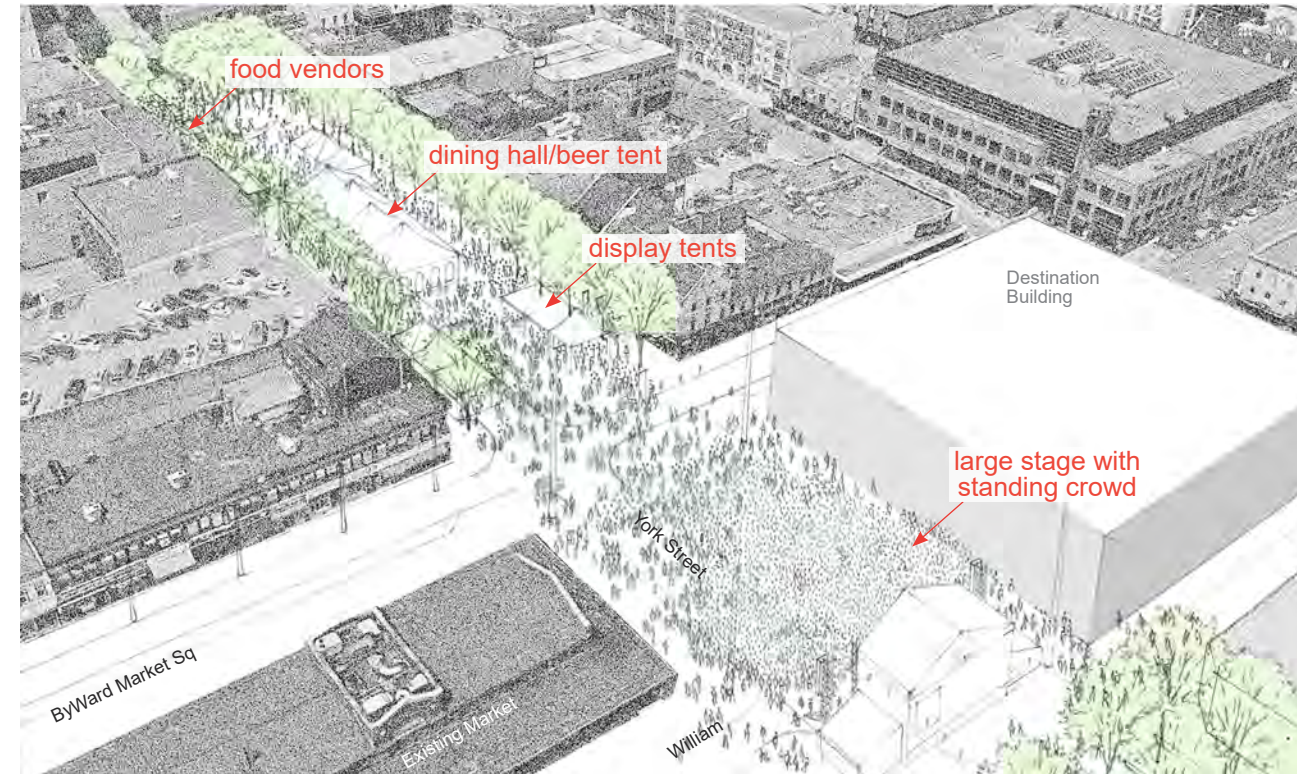
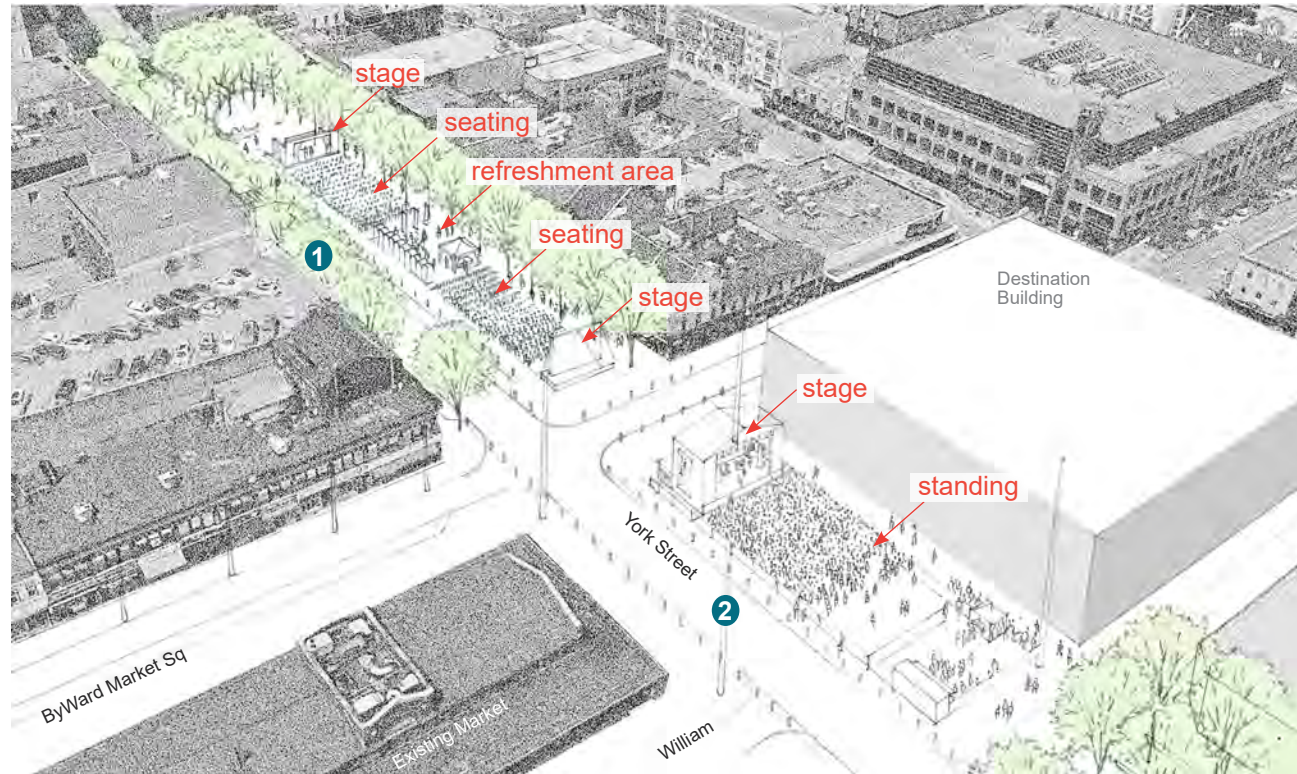


Buskers and Performances

1. Six busker stations.
2. Temporary grandstand seating with large performance area

Capacity (buskers): 250 people each

Capacity (stands): 750 people



Stage Events

- 1. Audience seating in front of a stage or media screen.
- 2. Standing crowd in front of a large stage

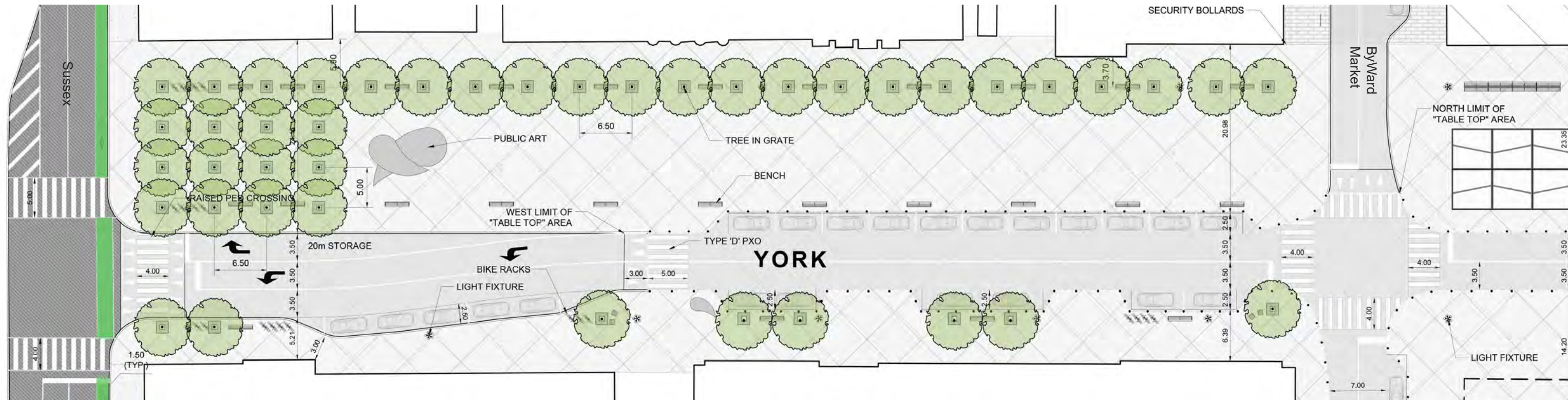
Capacity (seated): 290 people each
 Capacity (standing): 1000 people

Street Festival

York Street is closed to traffic to accommodate food trucks, vendors, performance areas, dining tents, etc.

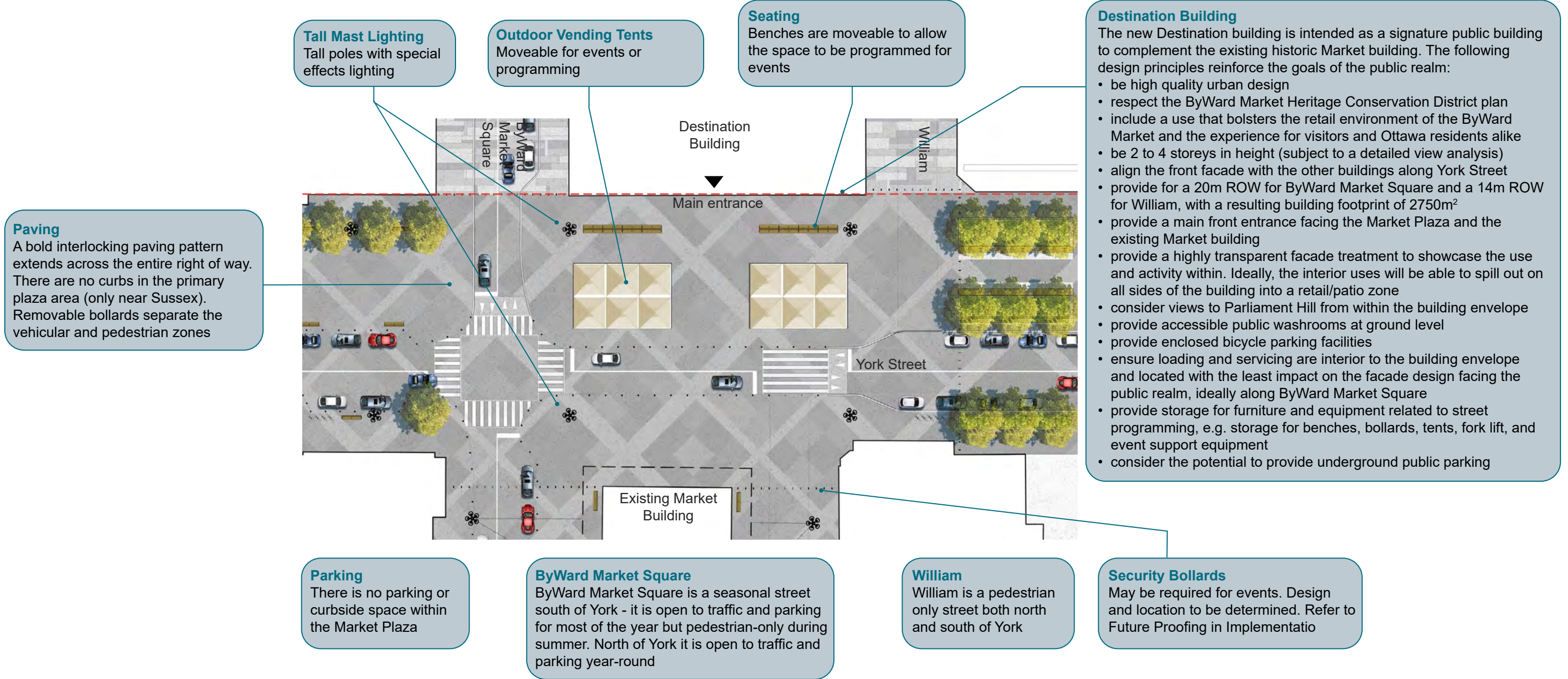
Capacity: 7500 people

Functional Plan



Design Concept

York Street is a Grand Promenade linking upper and lower town. It has a beautiful, unifying paving pattern and is framed by tall arching trees. The Market Plaza is designed as a flexible public space and accommodates the widest variety of events in the Market, from the large scale to the every day. The plaza area is “table top”, designed without curbs to be flat and accessible



What We Heard

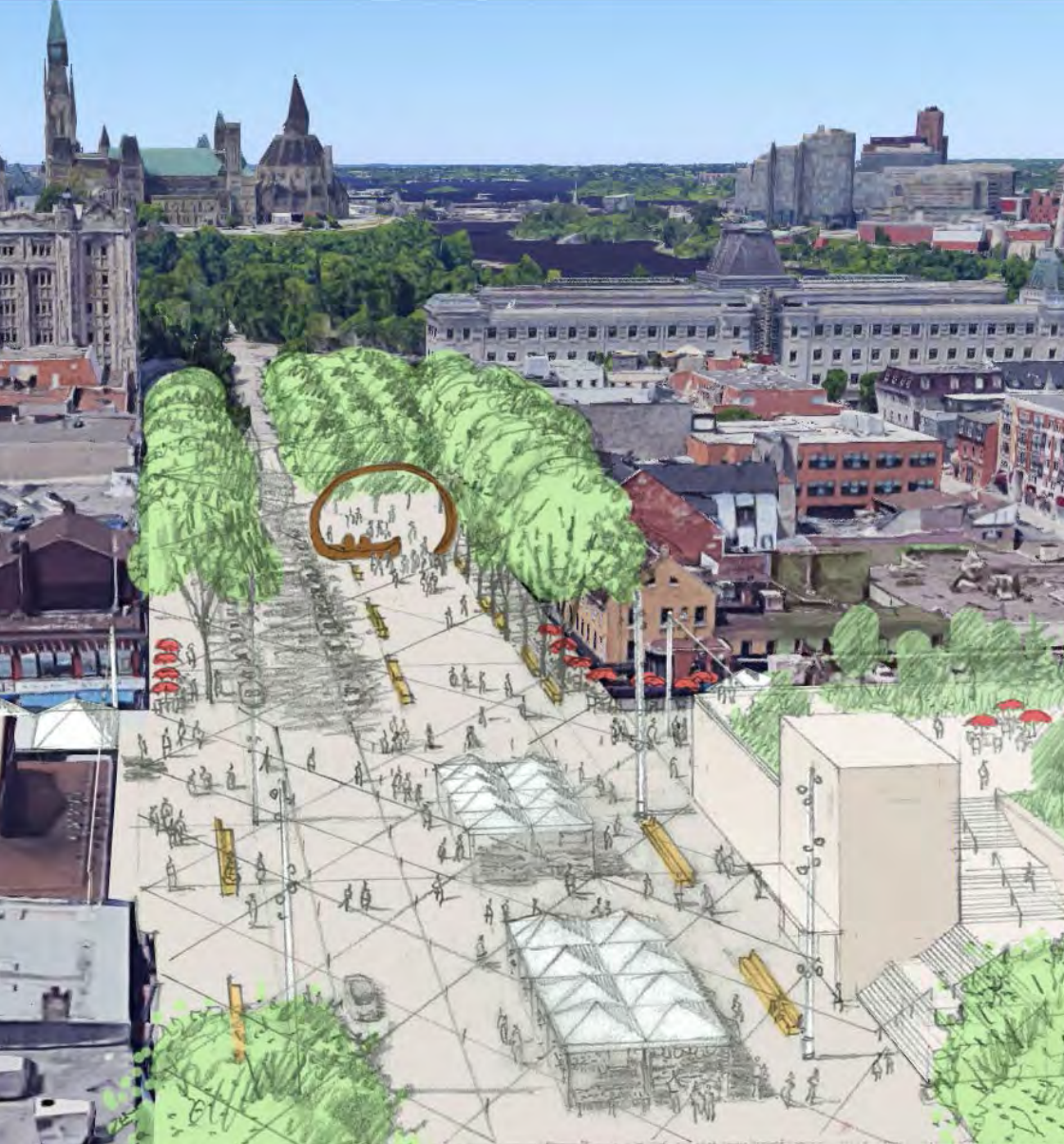
- be bold and creative to attract people
- pedestrian-only
- no parking
- potentially a one way street with parking
- no loss of parking

Public Life Study Summary

- York Street at ByWard Market Square has the most pedestrians in fall and winter, and is the busiest year-round weekend location studied

Current Issues

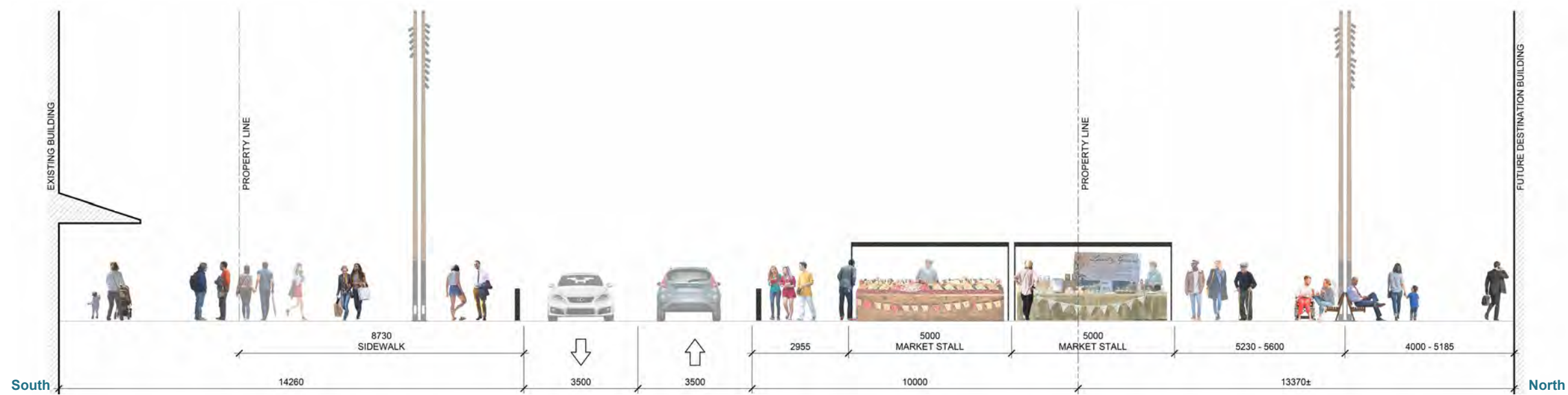
- 70 Clarence will be replaced with a Destination Building containing public uses at ground level
- the retail portion of 70 Clarence projects forward of the historic line of buildings along York



Aerial view of design concept. Day-to-day configuration of the York Street Market Plaza with outdoor vending tents. Conceptual public space shown on the roof of the Destination Building.



Winter festival in the Market Plaza



Typical Cross Section in the York Street Market Plaza (looking west to Sussex)

Public Realm Design York Street Market Plaza

Lighting Strategy

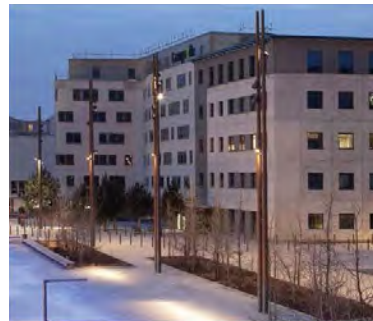
Catenary Feature

This is the primary public plaza and focal point in the Market. Consider a significant public art/lighting feature suspended by a catenary system across the space. This will create a landmark feature for Ottawa's darker winter evenings.



Tall Mast Lighting

Market Square will be the location of the tallest lighting poles, which will be able to light the pedestrian areas and roadway. Special effects lights can be added to create seasonal and event specific lighting in the plaza, as well as ambient facade lighting if desired. Poles are paired in this special area. Panels within the poles' bases provide electrical power for events.



Paired tall mast poles



Special effects lighting

Programming Infrastructure

Power and water provided for outdoor vending
Power provided for programming

Paving Strategy

York Street will have a distinct paving pattern. It should be bold and memorable, extending from building face to building face continuously across the road and sidewalk areas. The pattern will be used (with variation) only on York, and on ByWard Market Square and William Street south of York. The preferred material is granite.

Curbs will be granite and flush in this table top area. Tactile strips will line the edges of the sidewalks near the vehicular travel lanes. Tactile strips are textured paving surfaces that warn people of the transition to vehicular use.



Pattern is continuous across the right of way.

Furniture Strategy

Seating

Long seating will line the north side of the pedestrian promenade, and could also be used on the south side, as well as the south side of York adjacent to the Market building, depending on the configuration of the space.

Bollards

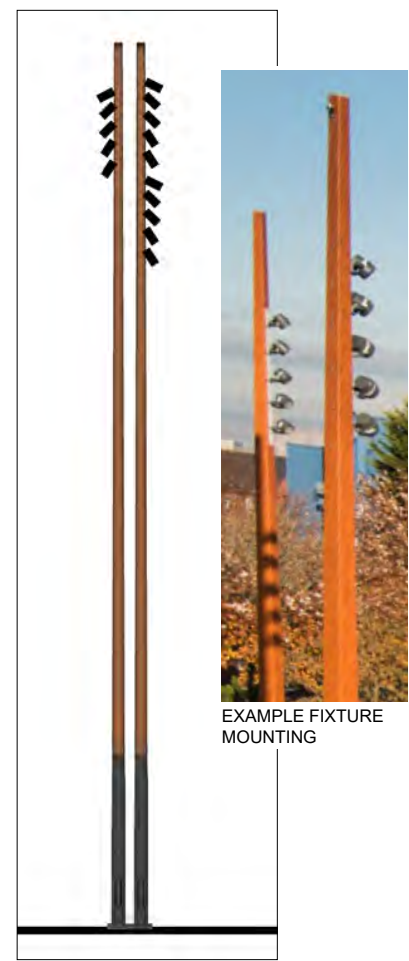
Bollards will line the edges of the sidewalks near the vehicular lanes to keep pedestrian and vehicular traffic separated. Traffic bollards will be removable for events. Security bollards and other barriers may be required for events and will need to retract or be moveable.

Outdoor Vending Tents

Tents should include integrated lighting or a method for installing lighting. Tents should be able to be secured at night.

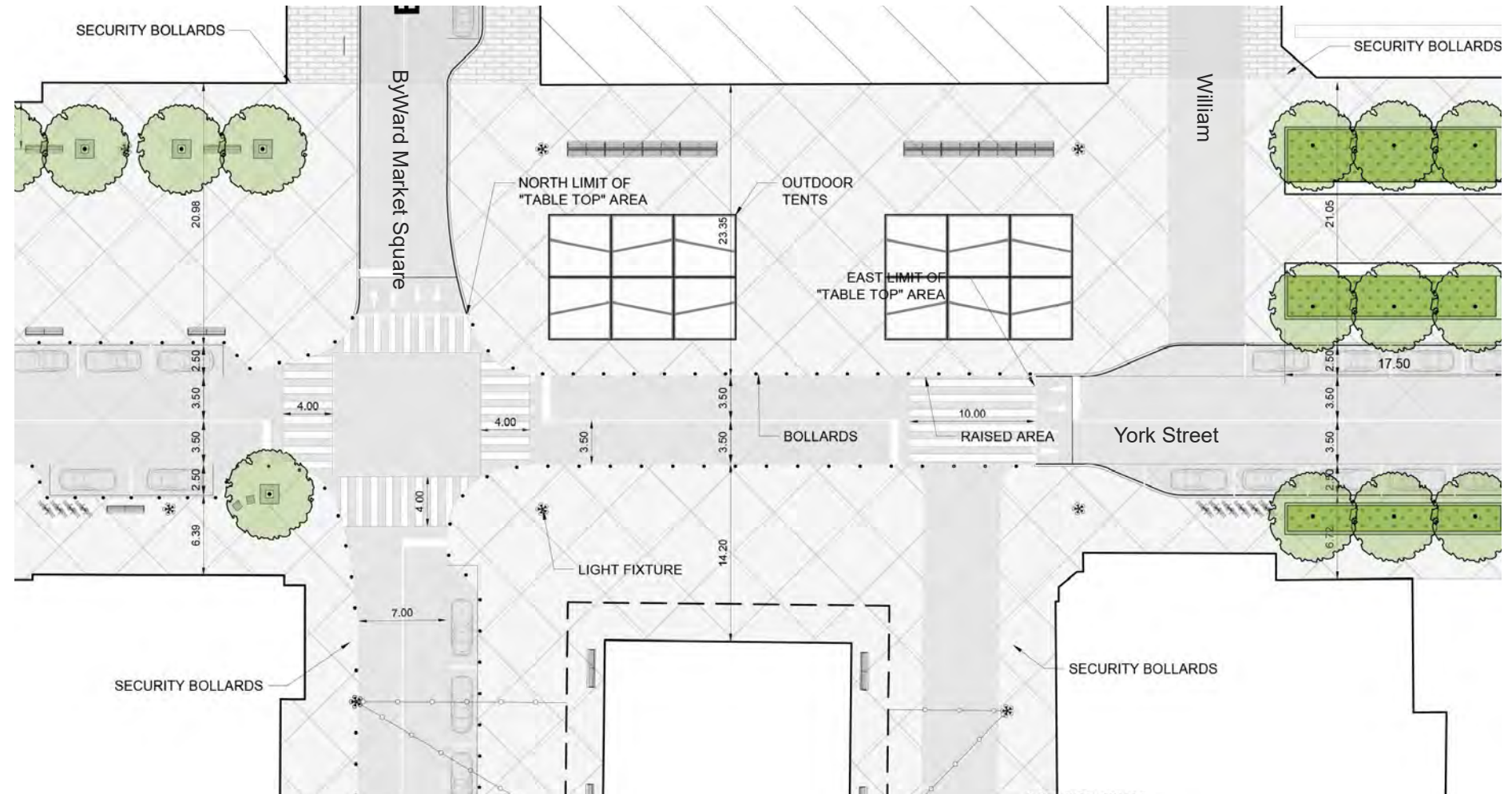


Type A



Options 1 & 2

Functional Plan



Design Concept

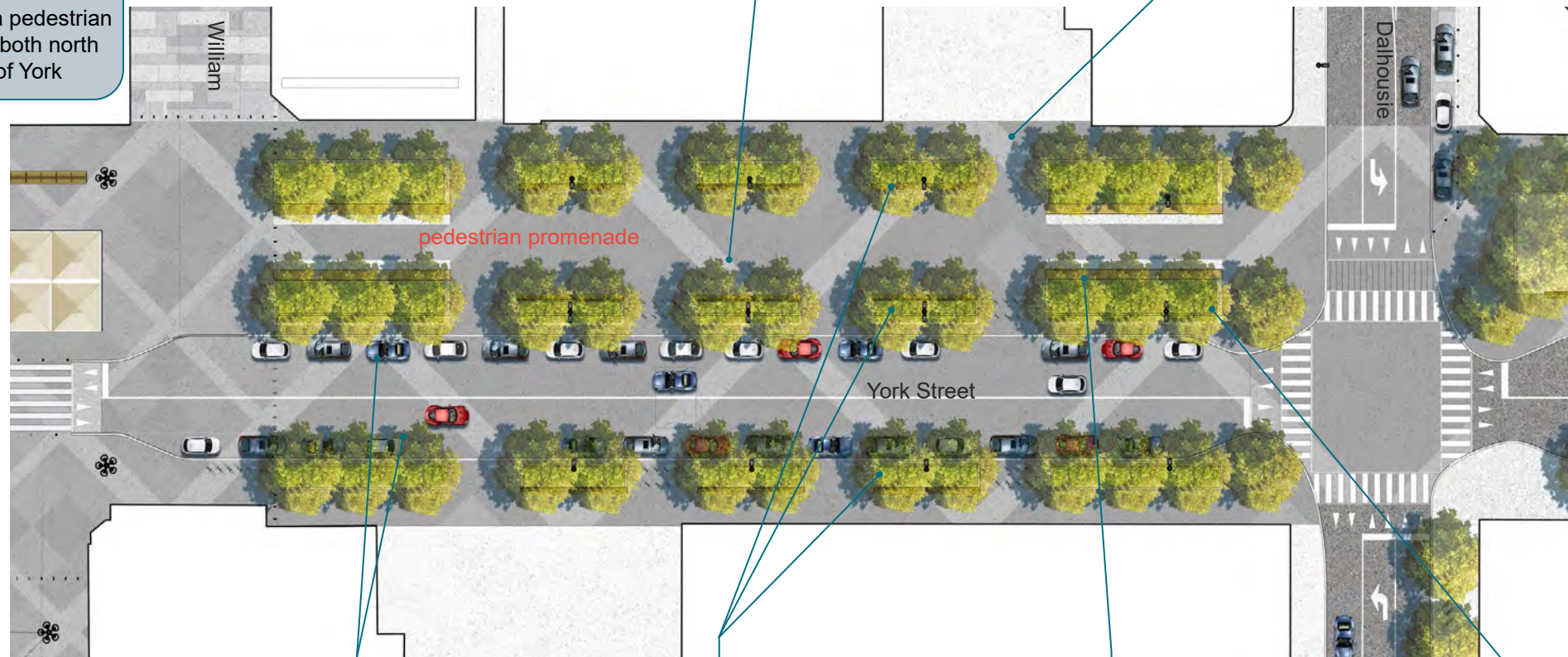
York Street is a Grand Promenade linking upper and lower town. It has a beautiful, unifying paving pattern and is framed by tall arching trees. The Promenade and Gardens area begins the transition to a greener street moving eastward and provides lots of seating.

William
William is a pedestrian only street both north and south of York

Barrier Curbs
York Street has standard barrier curbs along the roadway in this area

Paving
A bold interlocking paving pattern extends across the entire right of way

Retail/Patio Zone
A 4m zone on the north side beside the buildings can be used for outdoor retail/patio uses



Curbside Space
On-street parking lines both sides of the street. Timed, short term delivery zones can help serve businesses along William

Trees
Supercanopy trees line the street to create a grand scale and formality

Seating
Long benches are provided along the edges of planters all along the pedestrian promenade

Planters
Raised, open planters with understorey planting and trees

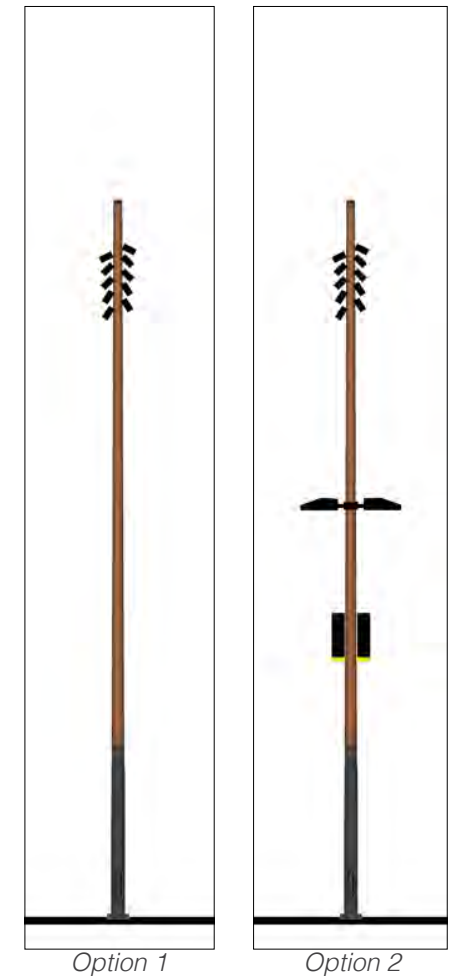
Gateway
The interlocking paving is continuous across Dalhousie Street, creating an 'urban carpet' and gateway feature that draws people in to the Market's heart

Lighting Strategy

Tall Mast Lighting

York Street will be lit by fixtures on tall poles. The tall poles marching along the street will contribute to placemaking and visual identity. In this area there will be no special event lighting. Panels within the poles' bases provide electrical power for small scale programming.

Type B



What We Heard

- be bold and creative to attract people
- pedestrian-only
- no parking
- potentially a one way street with parking
- no loss of parking
- ensure the trees will grow

Current Issues

- Current location of outdoor vending tents which may not be needed in future
- Perpendicular parking along the road makes this area feel like a parking lot

Public Realm Design York Street Promenade & Gardens

Paving Strategy

York Street will have a distinct paving pattern. It should be bold and memorable, extending from building face to building face continuously across the road and sidewalk areas. The pattern will be used (with variation) only on York, and on ByWard Market Square and William Street south of York. The preferred material is granite.

Standard barrier curbs in granite will define the vehicular area.



Pattern is continuous across the right of way.

Furniture Strategy

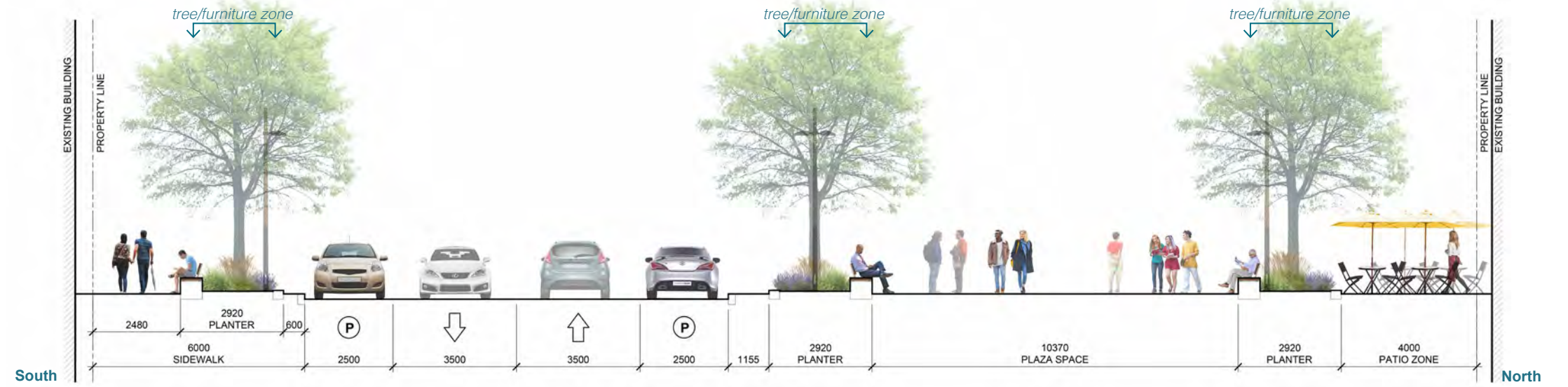
Seating

Seating will line both sides of the pedestrian promenade on the north side of York, facing inward towards the promenade, as well as curbside on the sidewalk on the south, facing the clearway. Spacing will be 30m maximum between benches.

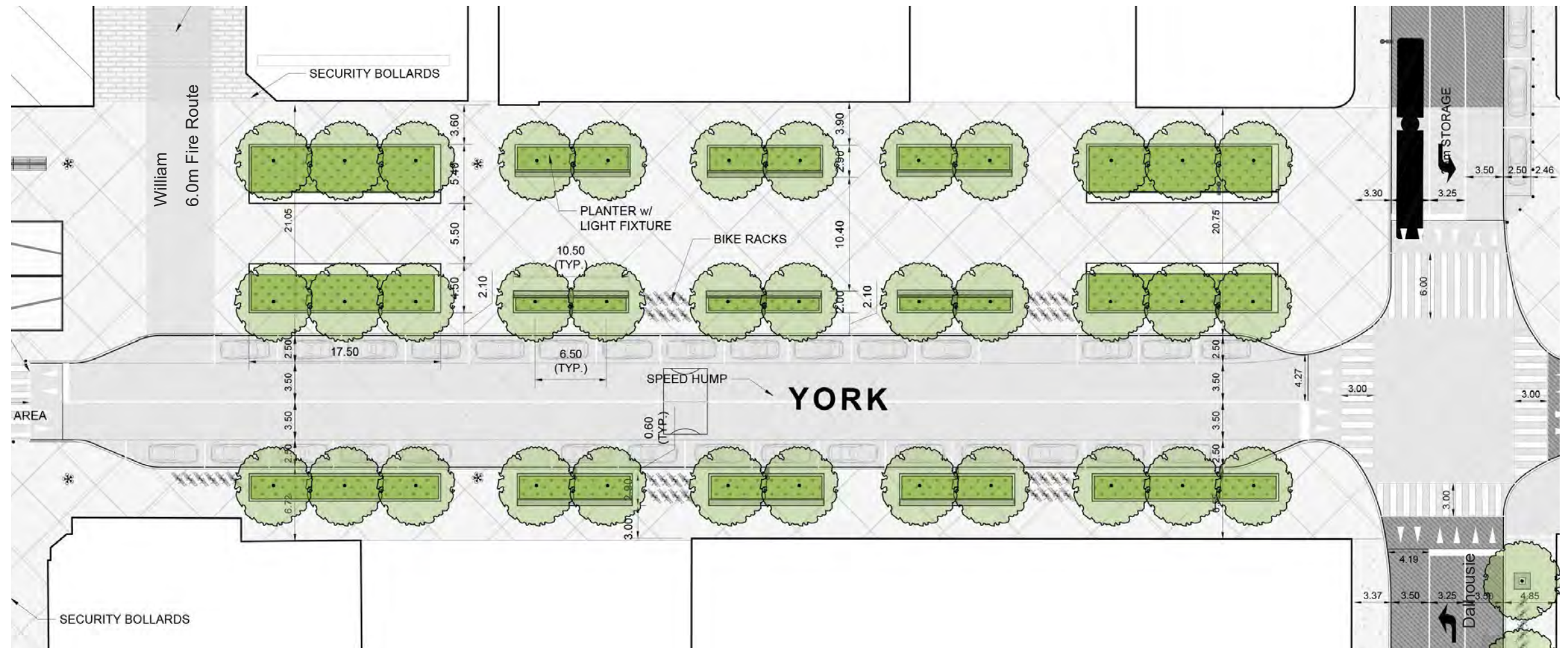
Along the north side, seating will be integrated with the raised planters. Generally seating will face the promenade, but can also be incorporated along the sides where they can form smaller, more intimate spaces, or even facing the buildings where appropriate.



Typical Cross Section in the York Street Promenade and Gardens Area (looking west to Sussex)



Functional Plan



Design Concept

York Street is a Grand Promenade linking upper and lower town. It has a beautiful, unifying paving pattern and is framed by tall arching trees. The Lawn and Gardens is a garden street with seating with expansive green lawns.

Parkette
The existing trees are maintained in a small parkette with pea gravel surface surrounded by unit paver sidewalks. Tables and chairs provide seating

Barrier Curbs
York Street has standard barrier curbs along the roadway in this area

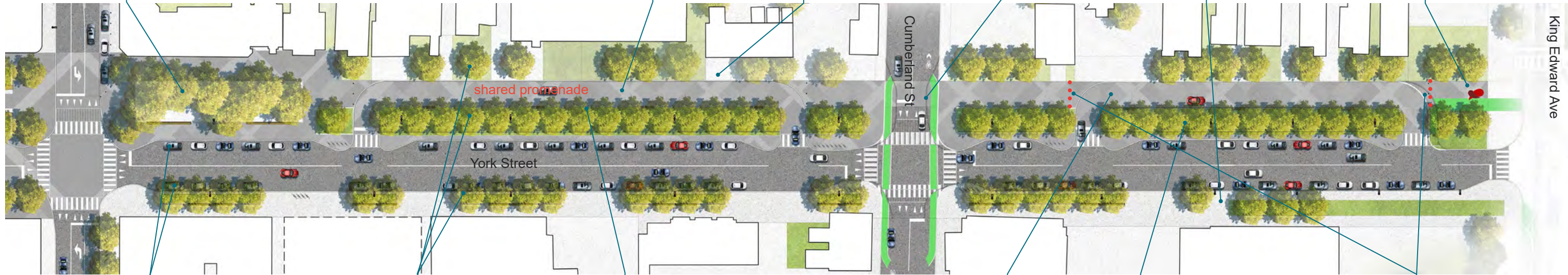
Paving
A bold interlocking paving pattern is provided along the pedestrian promenade

Lawns and Driveways
Existing driveways and lawn areas are maintained along the north side of the promenade

Cumberland Crossing
Details on the pedestrian promenade crossing of Cumberland to be determined at Detailed Design stage

Sidewalk
On the south side, the sidewalk jogs to preserve existing trees along York near King Edward

Gateway
A seating area and public art opportunity terminate the promenade at King Edward



Parking
On-street parking lines both sides of the street

Trees
Supercanopy trees line the street to create a grand scale and formality. Existing trees are maintained wherever possible

Seating
Benches are provided along the promenade

Shared Promenade
The pedestrian promenade is 6m wide and is designed to be shared with vehicles in the centre of the blocks, in order to provide vehicular access to existing properties on the north side of York. At block ends, the promenade is pedestrian only. Promenade paving is flush, there are no curb depression

Lawns
Lawns are large, long, consolidated areas that provides large soil volumes for trees

Bollards
Bollards at each end of the shared vehicular portion of the promenade define the driving area and guide vehicles to/from York Street

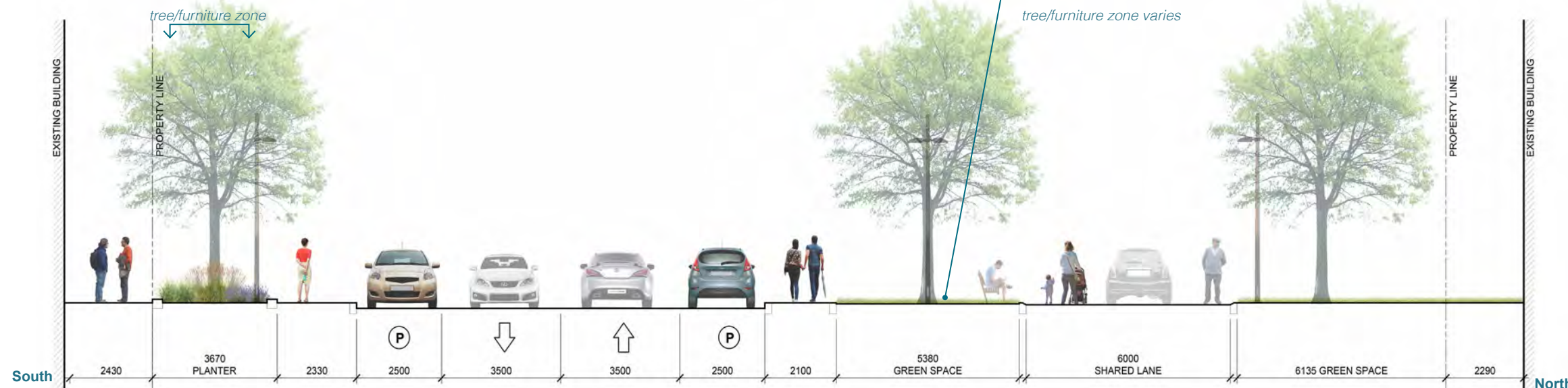
What We Heard

- be bold and creative to attract people
- pedestrian-only
- no parking
- potentially a one way street with parking
- no loss of parking
- ensure the trees will grow

Current Issues

- Angle parking along the road makes this area feel like a parking lot
- The central grass island is surrounded by roads and parking, making it more difficult to access and less desirable as public space
- More predominantly residential uses with some commercial

Typical Cross Section in the York Street Lawn and Gardens Area (looking west to Sussex)





Aerial view of design concept. Gateway feature at King Edward can include public art and a seating area

Lighting Strategy

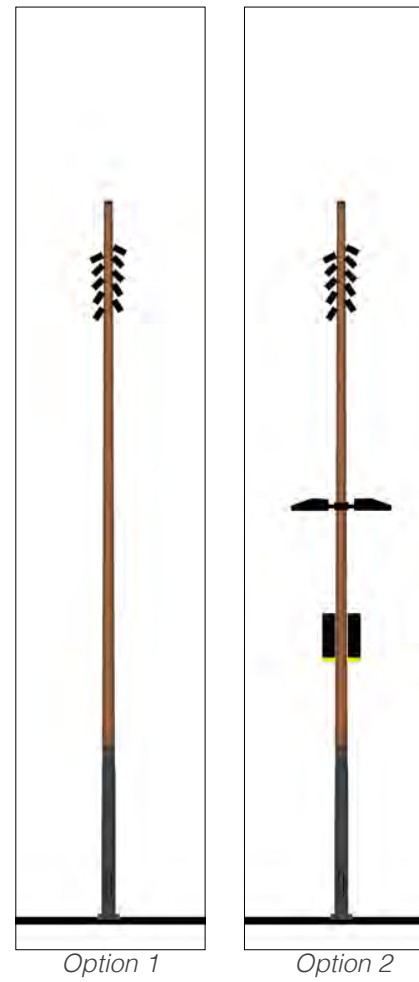
Tall Mast Lighting

The tall poles will march along York Street, and cross Dalhousie to illuminate the parkette at the corner. East of that point, the poles will become pedestrian scaled.

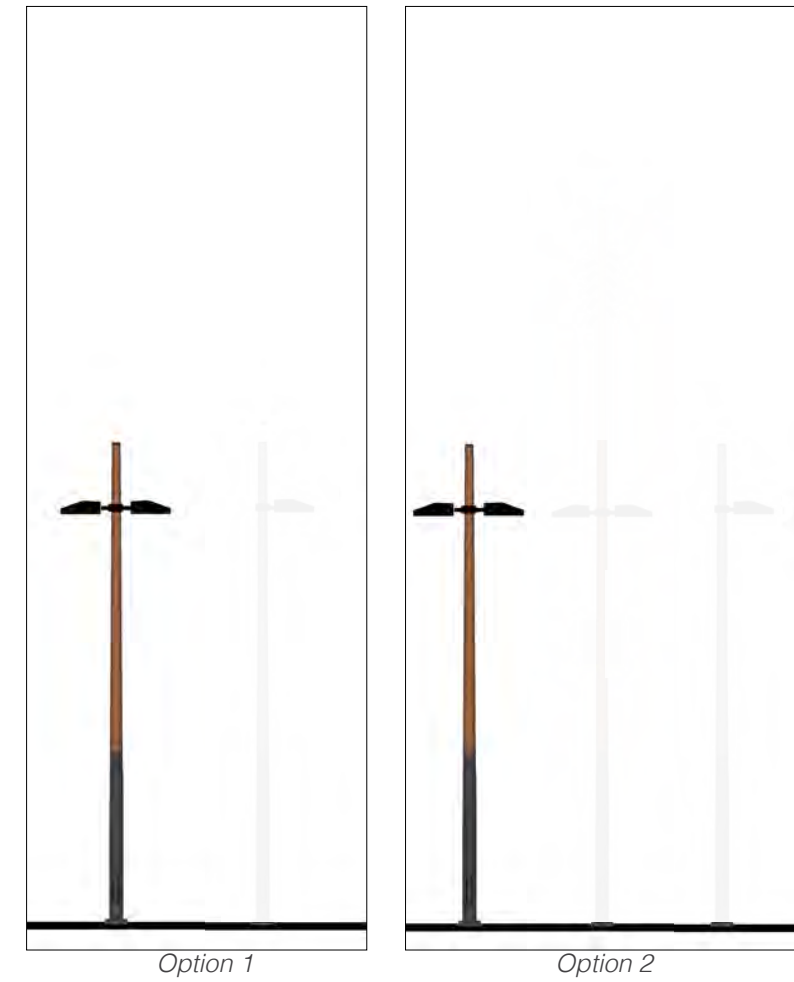
Pedestrian Scale Poles

Low-glare, functional lighting for sidewalks and roadways, with a wood pole for continuity with the rest of York.

Type B



Type D1



Paving Strategy

This area of York Street will continue the bold and distinct paving pattern in a broad promenade along the north side of York. The paving will not extend across the entire right of way. The road surface will be asphalt and the sidewalks concrete.

Standard barrier curbs in granite will define the vehicular area.



Pattern is used within the shared promenade area

Furniture Strategy

Seating

Seating will line both sides of the pedestrian promenade on the north side of York, facing inward towards the promenade, as well as curbside on the sidewalk on the south, facing the clearway. Spacing will be 30m maximum between benches. Seating will be permanent benches.



Design Concept

The heart of the Market focuses on the two public buildings and provides opportunities for the activities inside to spill out. Both William and ByWard Market Square are designed to be simple spaces with minimal permanent site furniture, to allow them to be flexibly used and programmed by the Market.

What We Heard

- provide shade in summer, accessible washrooms, programming and public art
- consider parking
- don't create empty gathering spaces that aren't needed
- the pedestrianization of William Street as a pilot project was successful
- ensure that business operations, loadings and deliveries along William and George are supported, e.g. timed window of deliveries for William

Public Life Study Summary

- York Street at ByWard Market Square has the most pedestrians in fall and winter, and is the busiest year-round weekend location studied
- the George Street plaza is most active on both weekdays and weekends, and supports the most diverse range of activities. Pedestrian traffic peaks after 6 p.m. People enjoy sitting and the commercial activity

Current Issues

- Both streets are heavily traveled by pedestrians but devote large areas to vehicles and parking
- the George Street plaza is very busy, the street crossing can be chaotic at peak hours
- Outdoor standholders require vehicle access for set-up/take down of their tents twice per day during peak vending seasons

Pilot Project

- On an average weekend over 16,000 visitors passed through or spent time on William Street (2019)
- Pedestrian volumes were low in the morning but increased by nearly 5 times as much until 1pm

ByWard Market Square

ByWard Market Square is a seasonal street south of York - it is open to traffic and parking for most of the year but pedestrian-only during summer. North of York it is open to traffic and parking year round. The street is two way with curbside layby, to promote ease of navigation, slow traffic, a foster greater activity along the street

Curbs

ByWard Market Square has barrier curbs north of York and flush curbs south of York. In areas of flush curbs, removable bollards separate the vehicular and pedestrian zones

Paving

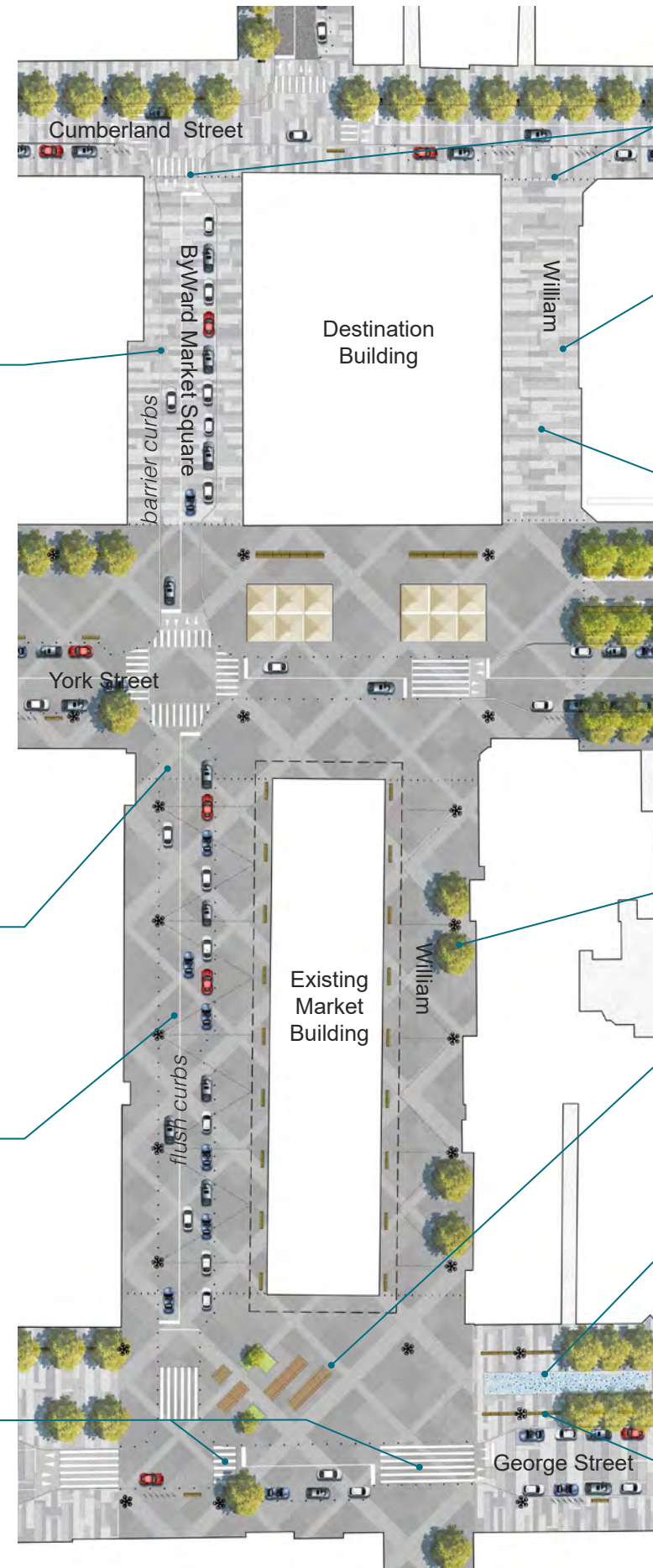
South of York, bold interlocking paving pattern extends across the entire right of ways and links with the paving pattern along York. This helps define a special central area or heart within the Market

Outdoor Vending Tents

Outdoor Market vendors are located along ByWard Market Square (and potentially William if there is demand)

Crosswalks

There are wide pedestrian crosswalk across George tied to a traffic sign



Security Bollards

May be required for events. Design and location to be determined. Refer to Future Proofing in Implementation

William

William is a pedestrian only street both north and south of York

Paving

North of York, interlocking paving pattern extends across the entire right of ways and ties into the general pattern for the Market

Curbs

Paving on William is flush across the space

Trees

William has opportunities for tree planting in a row or in clusters along the east side

Outdoor Eating

Moveable, accessible picnic tables for eating can be located around the existing planters and trees

Water Feature

Flush jets in the pedestrian promenade recall the former Bywash along George Street. It can be both an ornamental water feature as well as a play feature

Seating

Moveable benches and picnic tables are located along side of the water feature

Beavertails

Beavertails is a beloved Ottawa institution and they can remain at their existing location for the foreseeable future, until these public realm improvements are implemented. At that time, consideration can be given to an equally or more prominent location such as within an improved historic Market building, in the new Destination building, or in one of the flexible plaza space opportunities of this plan

Poles

Minimize the number of poles and signs in the right of way to reduce conflict between north-south pedestrian flow and east-west vehicular movement. Avoid visual obstruction to some of the best people-photography in Ottawa



William is pedestrianized

ByWard Market Square is closed to traffic in summer and has outdoor vending tents



Aerial view of design concept. Potential winter festival along William



Lighting Strategy

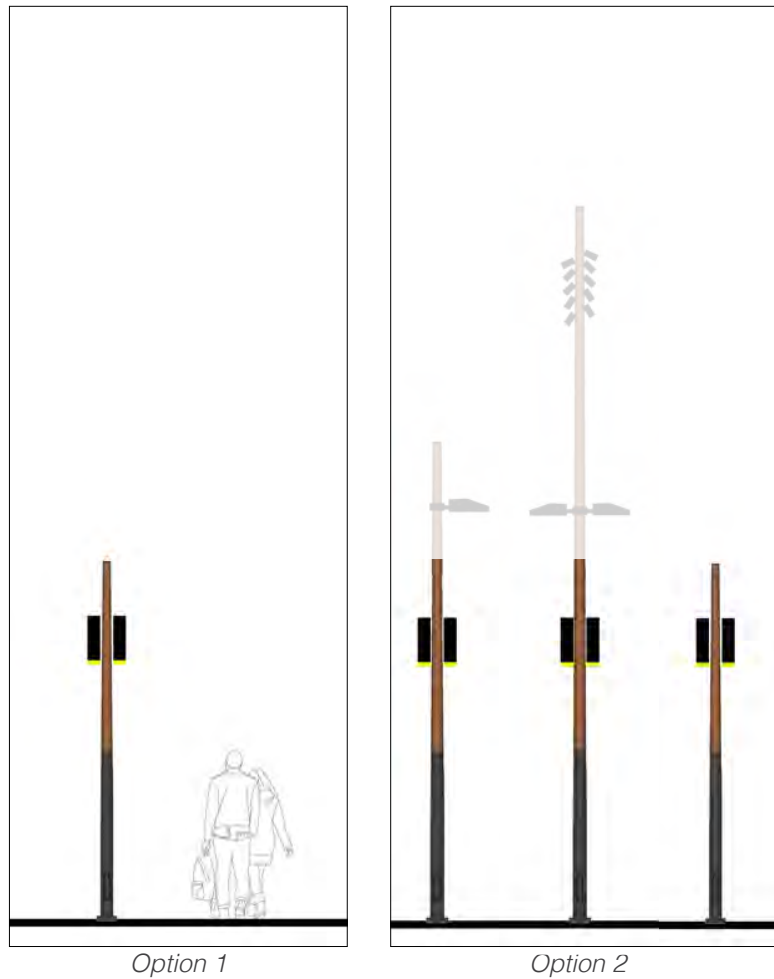
Catenary Lighting

Both streets are lit from overhead fixtures on catenaries. The catenary system can be mounted building face to building face, or, span from the existing Market to poles on the opposite side.

Pedestrian Scale Poles

A smaller scale fixture with glow along the bottom edge is used to lend a living room effect to pedestrian scale streets, indicating to vehicles and pedestrians to slow down, explore and enjoy.

Type C



Furniture Strategy

Furniture is intended to be temporary and moveable, brought in based on season and programming. There is no permanent furniture on these streets. The goal is to provide seating every 30m. Seating configurations for different types of events will need to be considered, for example:

- summer time, lots of outdoor vendors
- winter time, fewer outdoor vendors
- holiday or seasonal events.



Bollards

Bollards will line the edges of the sidewalks near the vehicular lanes (travel lanes and curbside lanes) where there are flush curbs to keep pedestrian and vehicular traffic separated. During the time that ByWard Market Square is pedestrian (seasonally), bollards will control access at each end of the street. Bollards will be removable for events. Security bollards and other barriers may be required for events and will need to retract or be moveable.

Outdoor Vending Tents

Tents should include integrated lighting or a method for installing lighting. Tents should be able to be secured at night.

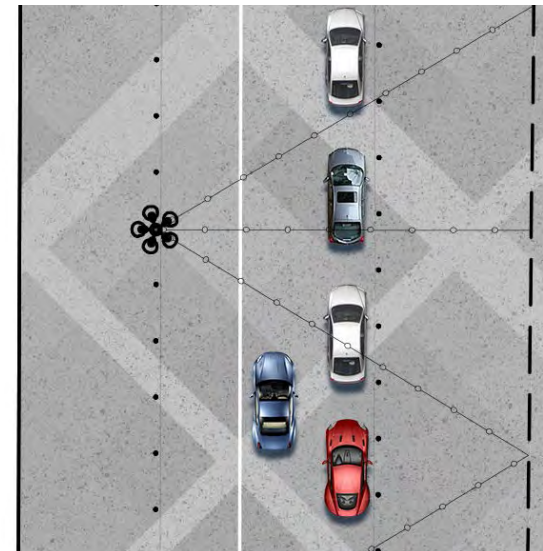


Paving Strategy

Both spaces will have a distinct paving pattern. It should be bold and memorable, extending from building face to building face continuously across the road and sidewalk areas. The pattern will be used (with variation) only on York, and on ByWard Market Square and William Street south of York. The preferred material is granite.

Curbs will be granite including barrier curbs and flush curbs in the table top area

In the table top area, tactile strips will line the edges of the sidewalks near the vehicular lanes (travel lanes and curbside lanes). Tactile strips are textured paving surfaces that warn people of the transition to vehicular use.

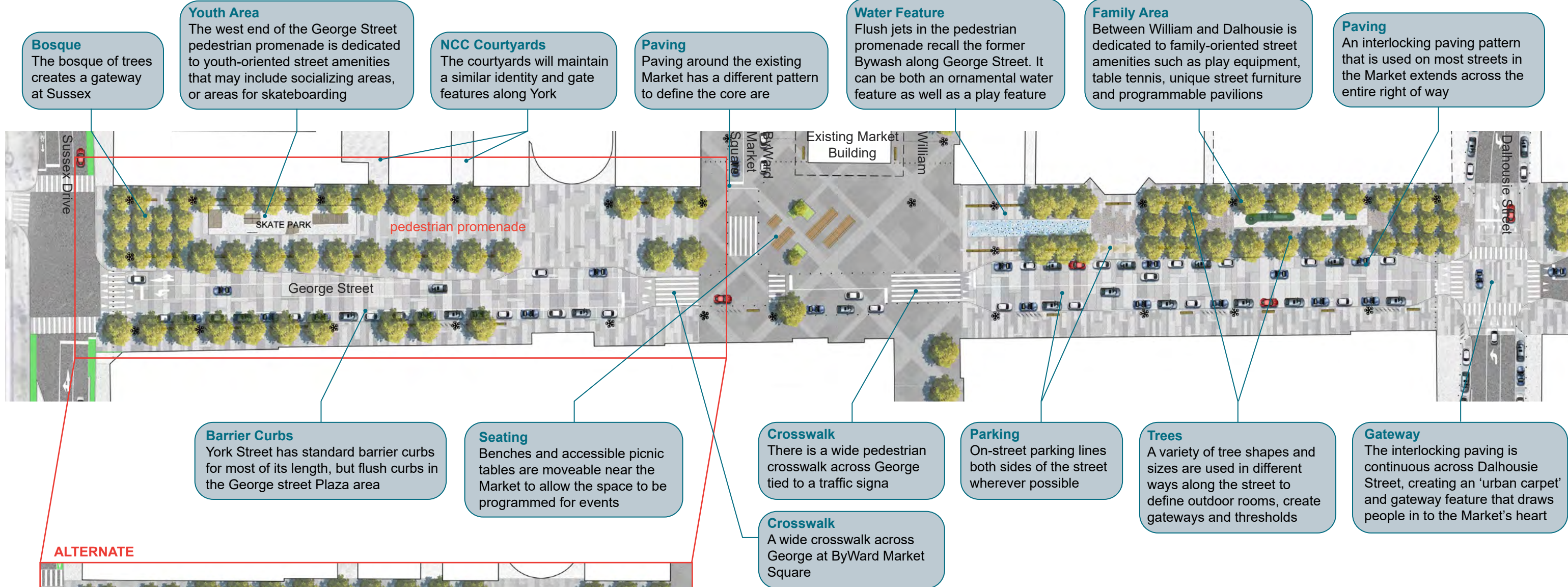


Pattern is continuous across the right of way.



Design Concept

George Street is a Promenade designed as a flexible public space to accommodate a variety of programming. It has dedicated areas for youth and families. At the Market building, the street is a “table top”, designed without curbs to give pedestrian priority.



ALTERNATE



What We Heard

- dedicate a lot of space for pedestrians
- close the street to traffic, make it all pedestrian
- one way streets
- keep the parking
- provide public art

Public Life Study Summary

- the George Street plaza is most active on both weekdays and weekends, and supports the most diverse range of activities. Pedestrian traffic peaks after 6 p.m. People enjoy sitting and the commercial activity

Current Issues

- the George Street plaza is very busy, the street crossing can be chaotic at peak hours
- George at William and at Sussex are major pedestrian gateways into the Market
- most of the space is a parking lot
- some great historical buildings line the street
- very few trees (lack of shade); plaza is hot in summer
- Hudsons Bay has loading docks for large trucks directly from George
- food-related businesses have frequent deliveries



George Street includes a fountain element and programmable pavilion structures



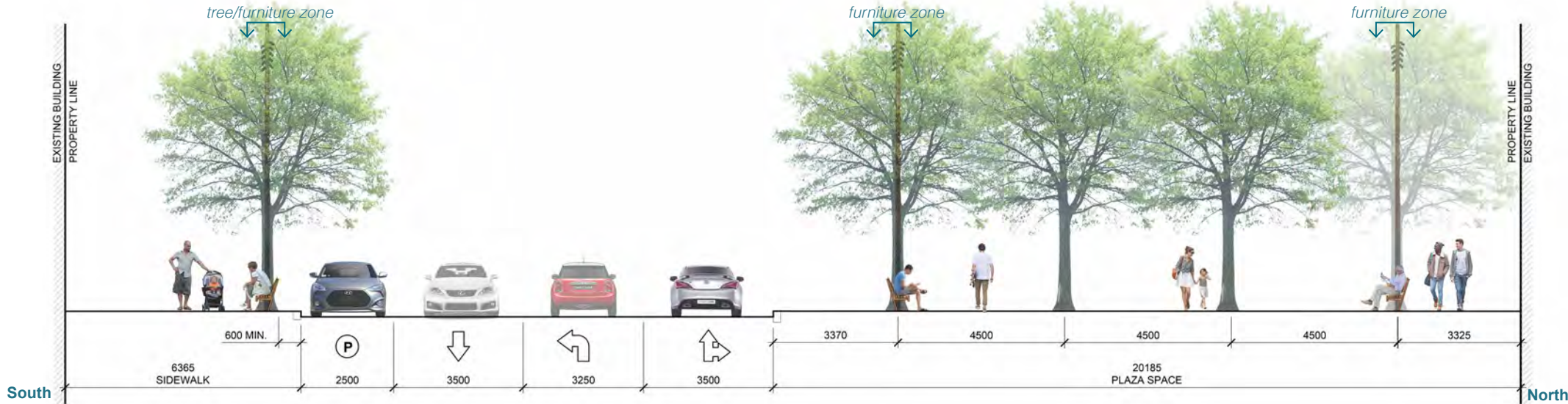
The family area can be active in winter



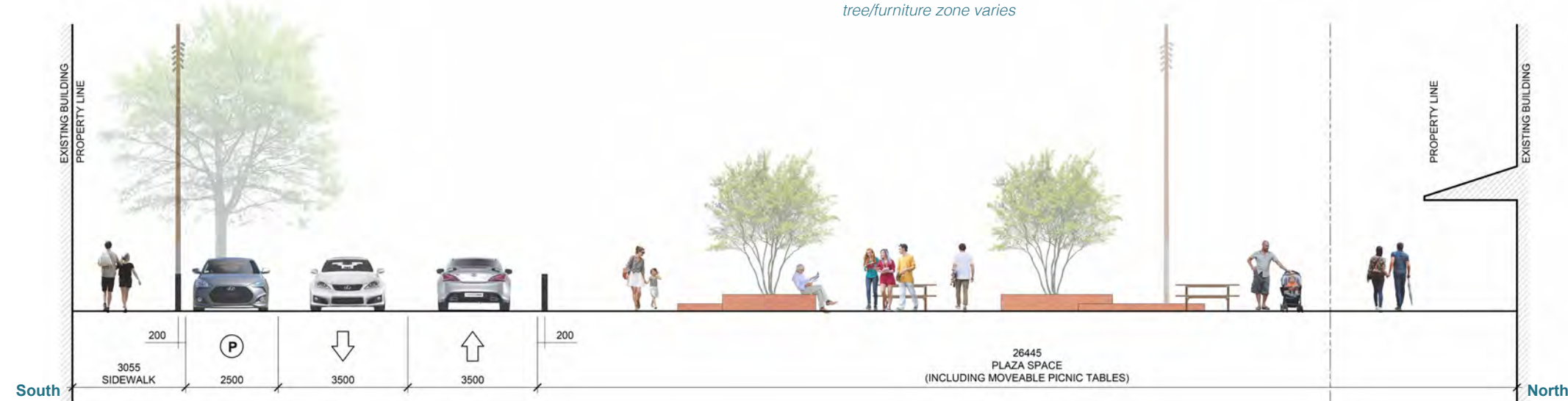
Aerial view of design concept. Different tree species will provide a variety of fall colour.

Public Realm Design George Street - Sussex to Dalhousie

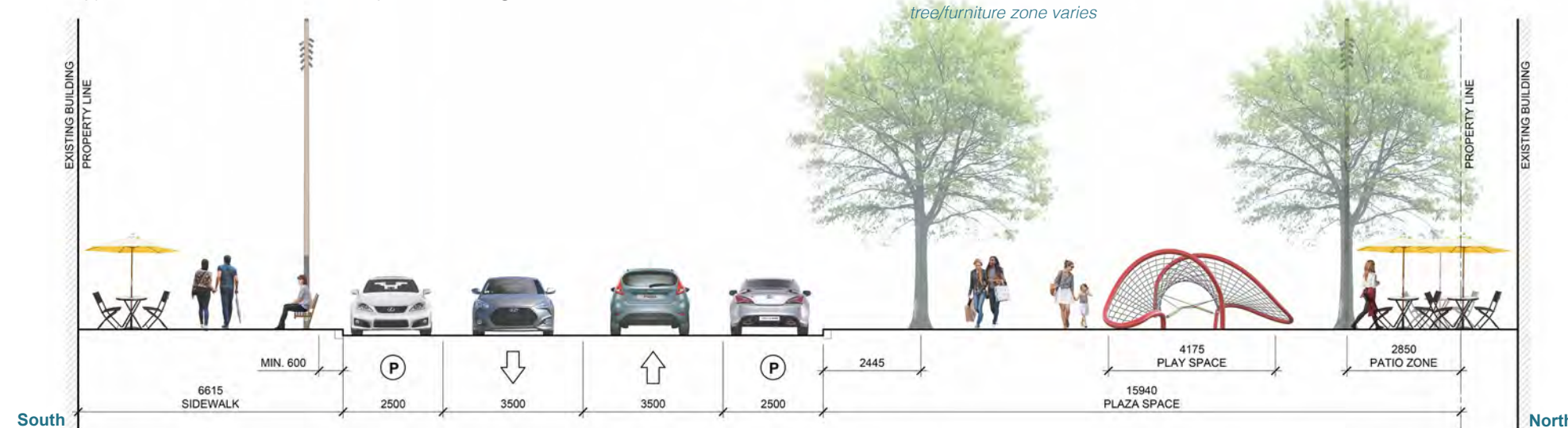
Cross Section in the Youth Area (looking west to Sussex)



Cross Section in the George Street Plaza (looking west to Sussex)

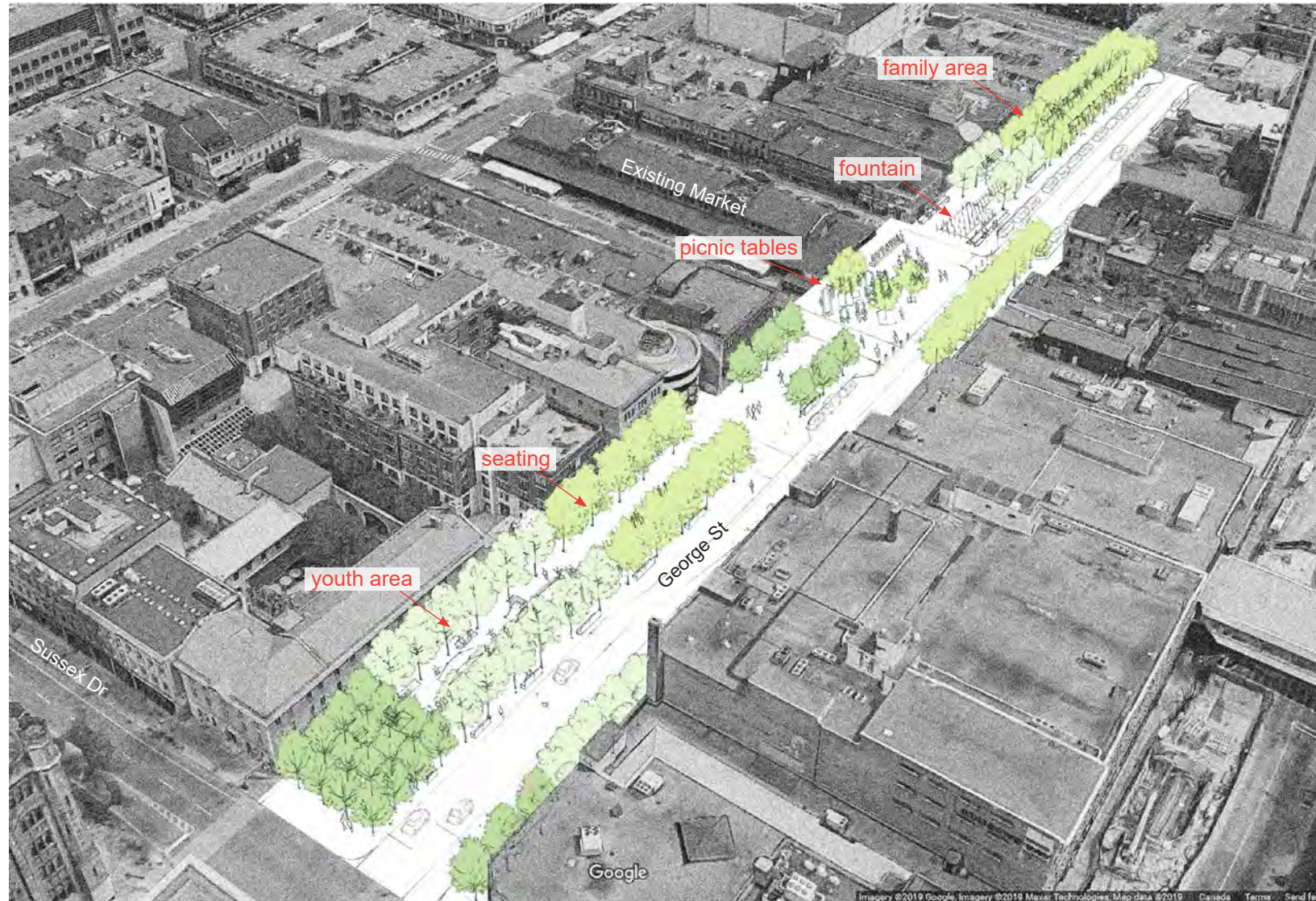


Typical Cross Section in the Family Area (looking west to Sussex)



Top: the long term preferred concept assumes the existing loading doors on the south side of the street are no longer needed for long vehicles (currently The Bay).

Bottom: if the George Street public realm is implemented while the loading is still required, there is an alternative, northerly alignment for George Street



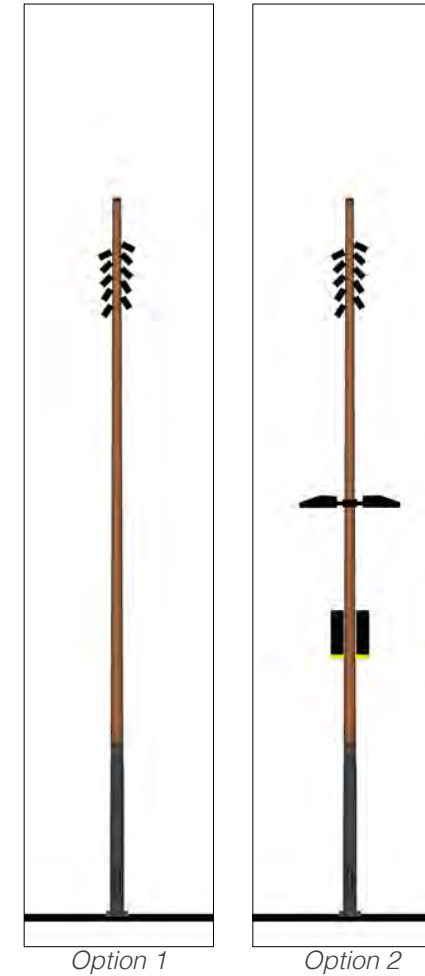
Every Day Use (Summer)

Youth area: skateboarding ramps and rails, seating
Family area: play fountain, programmable pavilions, play furniture

Lighting Strategy
Tall Mast Lighting

George Street will be lit by fixtures on tall poles. Special effects lights can be added to create seasonal and event specific lighting for promenade and sidewalk areas, as well as ambient facade lighting if desired. No other lighting will be used. The tall poles marching along the street will contribute to placemaking and visual identity. Panels within the poles' bases provide electrical power for events.

Type B



Paving Strategy

George Street will have a distinct paving pattern that is the secondary paving pattern in the Market, after York and the Market core. It will extend from building face to building face continuously across the road and sidewalk areas. The preferred material is concrete unit pavers.

Within the pedestrian promenade, the paving pattern should make reference to the former Bywash.

Curbs will be granite including barrier curbs and flush curbs in the table top area

In the table top area, tactile strips will line the edges of the sidewalks near the vehicular lanes (travel lanes and curbside lanes). Tactile strips are textured paving surfaces that warn people of the transition to vehicular use.



Pattern is continuous across the right of way.

Public Realm Design George Street - Sussex to Dalhousie

Furniture Strategy

Seating

Seating will line both sides of the pedestrian promenade on the north side of George, facing inward towards the promenade, as well as curbside on the sidewalk on the south, facing the clearway. Spacing will be 30m maximum between benches. Seating is permanent, except in the plaza area, where it will be moveable to accommodate events.

The family area will include unique, more playful seating elements meant for larger groups and socialization.



Seating will also include moveable tables and chairs that can be set up for events and/or positioned by users.



Picnic Tables

The plaza area in front of the existing Market can have moveable picnic tables, including some that are accessible, to provide people with a place to eat and sit. They can also be placed near the fountain area, or configured based on the needs of events.



Water Feature

The fountain will function as both a significant decorative landmark feature and a play feature. It can reference the former Bywash that ran along George Street.



Pavilions

Structures that create a simple framework for programming will line the edge of the family area. The framework should be designed to accommodate seating, hanging, and display materials. Consider providing power connections integrated with the framework.



Play Elements

The family area will also include playful elements for children. These can take many forms, both permanent and temporary. Consider safety zones and soft surface requirements appropriate to the type of play element.



Youth Elements

The youth area could include seating, socializing areas, or street furniture designed to accommodate skateboarding. Consider safety zones and setbacks to the primary pedestrian clearway.

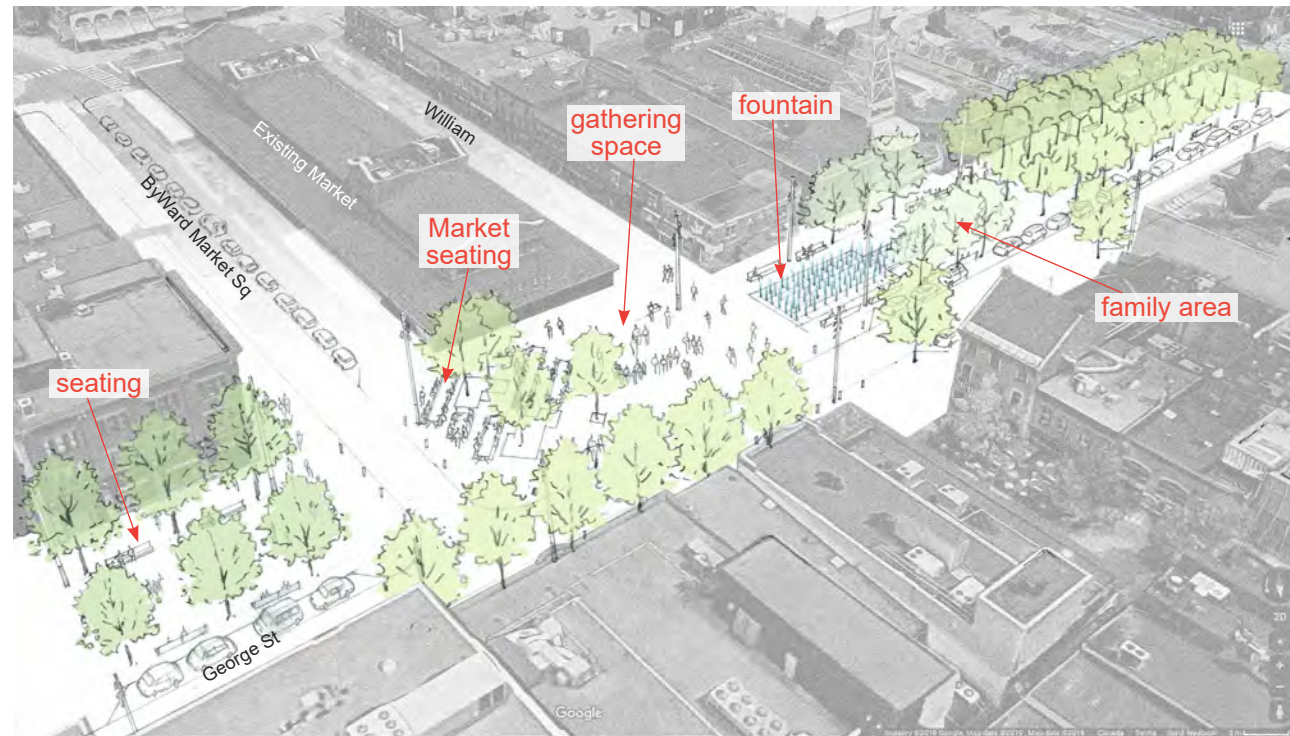


Bollards

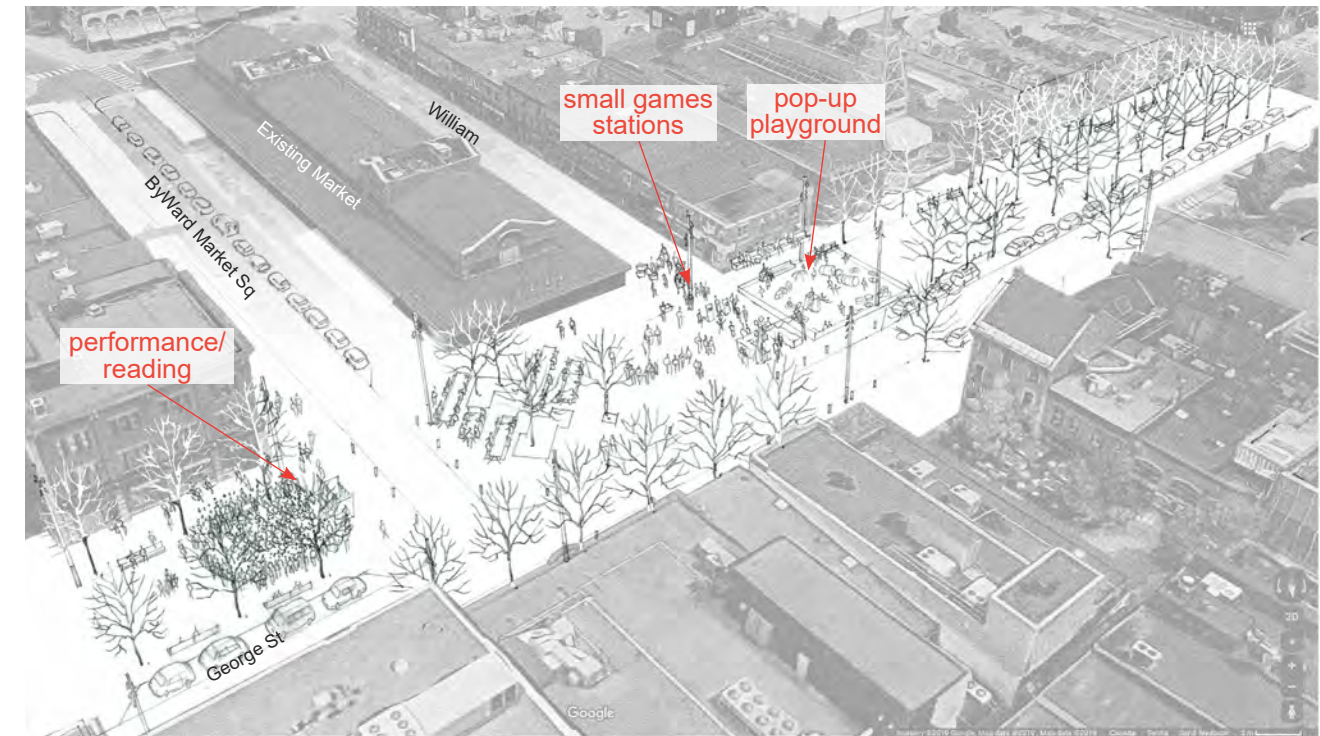
In the table top area, bollards will line the edges of the sidewalks near the vehicular lanes (travel lanes and curbside lanes) to keep pedestrian and vehicular traffic separated. Bollards will be removeable for events

Potential for Programming

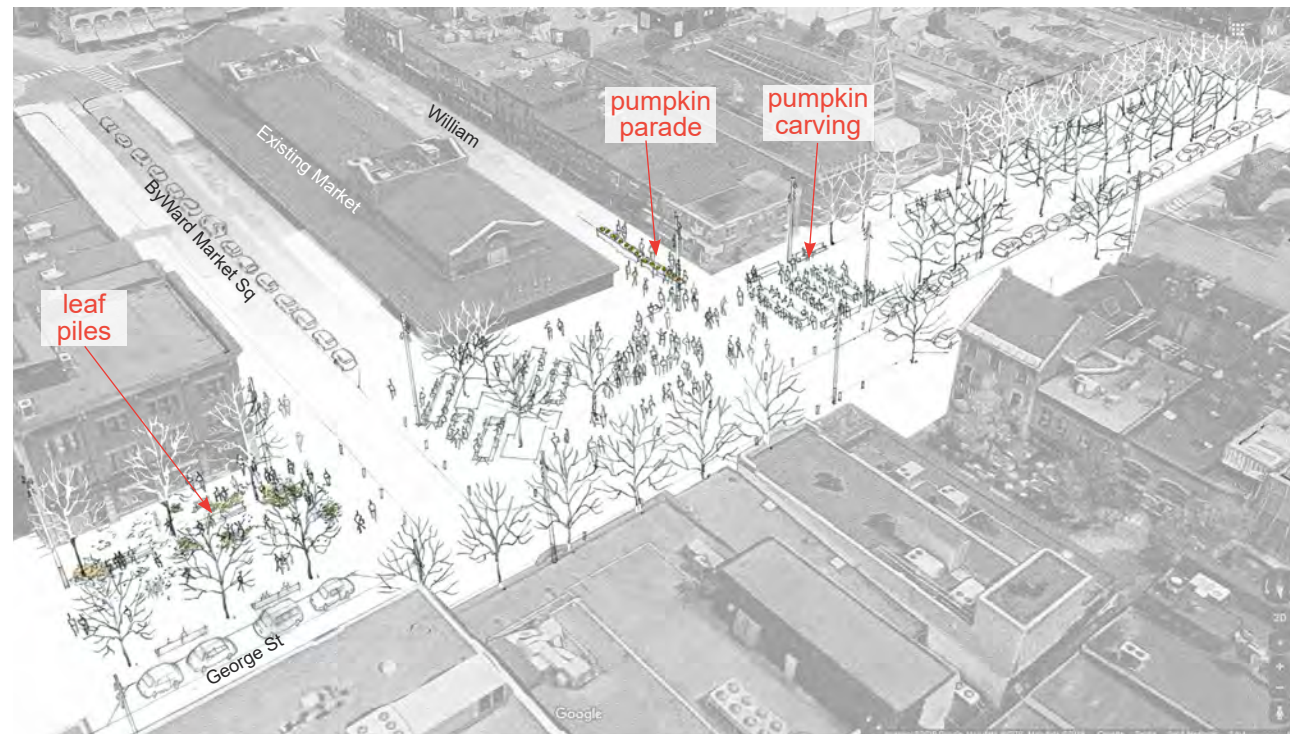
These examples show the potential for George Street to accommodate a variety of events and programming for families. The events are typically smaller in scale than those envisioned for York Street.



Every Day Use (Summer)



Children's Event (Fall)

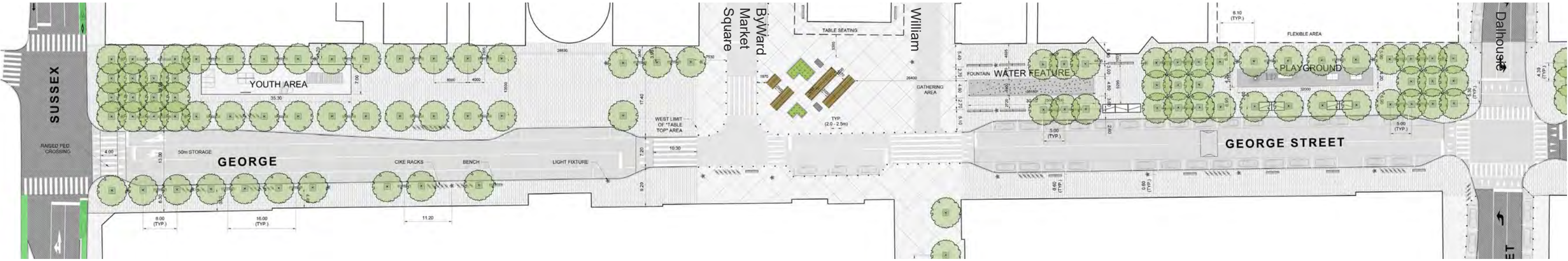


Halloween Event (Fall)



Holiday Event (Winter)

Functional Plan



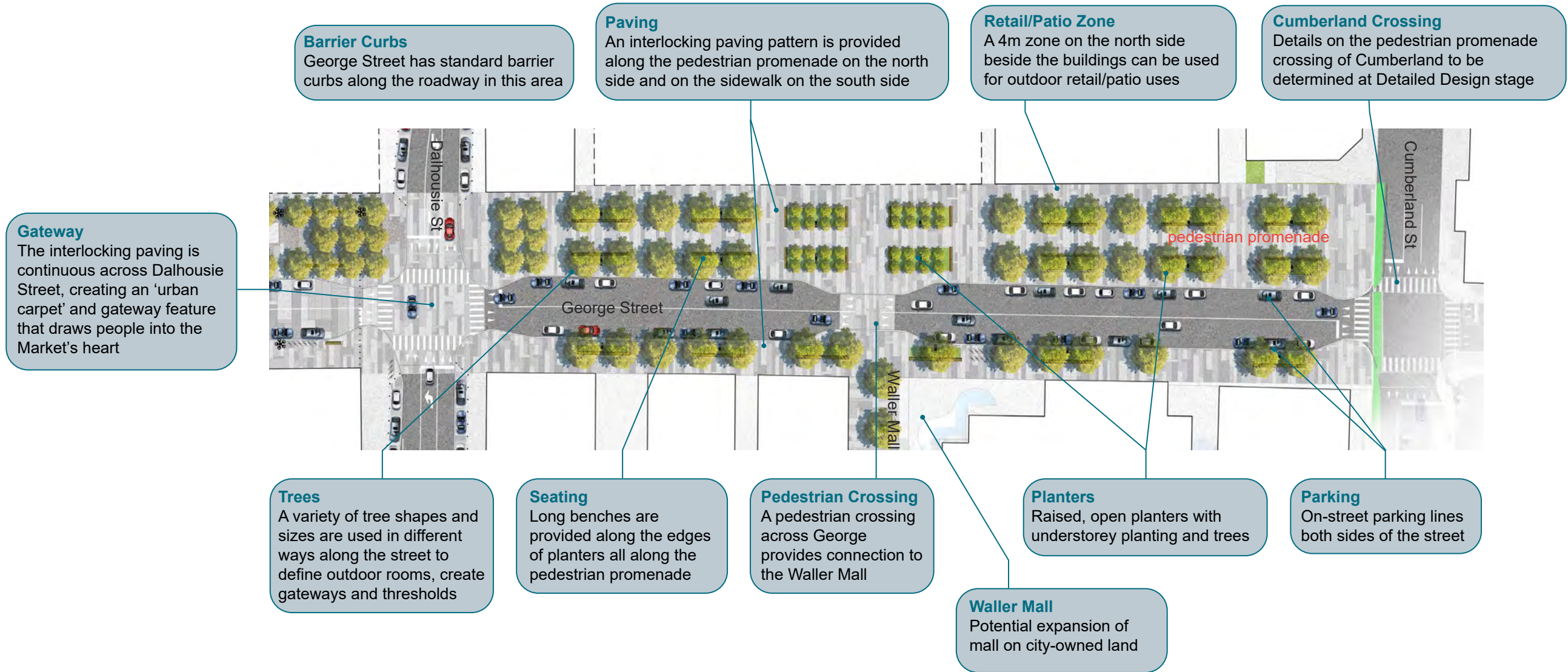
Functional Plan (Alternate)



Design Concept

George Street is a Promenade designed as a flexible public space to accommodate a variety of programming. It has dedicated areas for youth and families. The Promenade and Gardens marks a transition to a greener street and provides lots of seating.

The long term preferred concept assumes that buildings will infill what are currently parking lots on the north side of George Street.

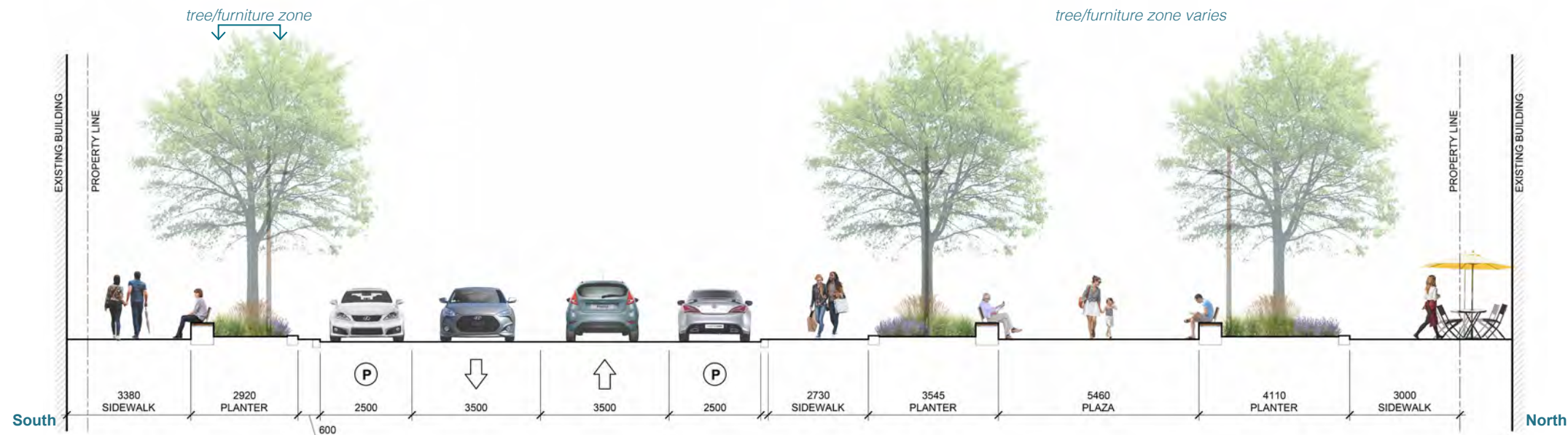


What We Heard

- dedicate a lot of space for pedestrians
- close the street to traffic, make it all pedestrian
- one way streets
- keep the parking
- provide public art

Current Issues

- today this area is not perceived as part of the core Market area, but it has tremendous potential to infill and intensify
- some residential uses without retail at grade
- traffic/pedestrian/cyclist safety concerns - high collision rate
- opportunity to reclaim portions of city-owned land by Waller Mall (used by condominium)

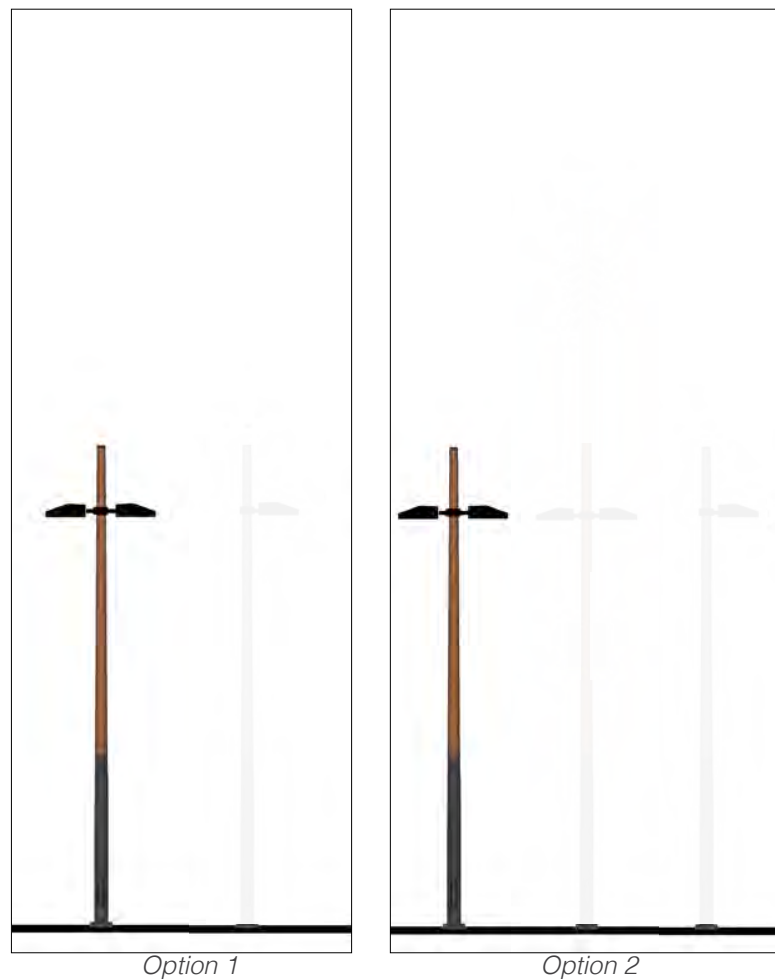


Lighting Strategy

Pedestrian Scale Poles

Low-glare, functional lighting for sidewalks and roadways, with wood poles in the commercial area and metal poles in the residential areas.

Type D1



Paving Strategy

George Street will have a distinct paving pattern that is the secondary paving pattern in the Market, distinct from York and the Market core. It will extend from building face to building face continuously across the road and sidewalk areas. The preferred material is concrete unit pavers.

Within the pedestrian promenade, the paving pattern should make reference to the former Bywash.

Barrier curbs will be granite.



Pattern is continuous across the right of way.

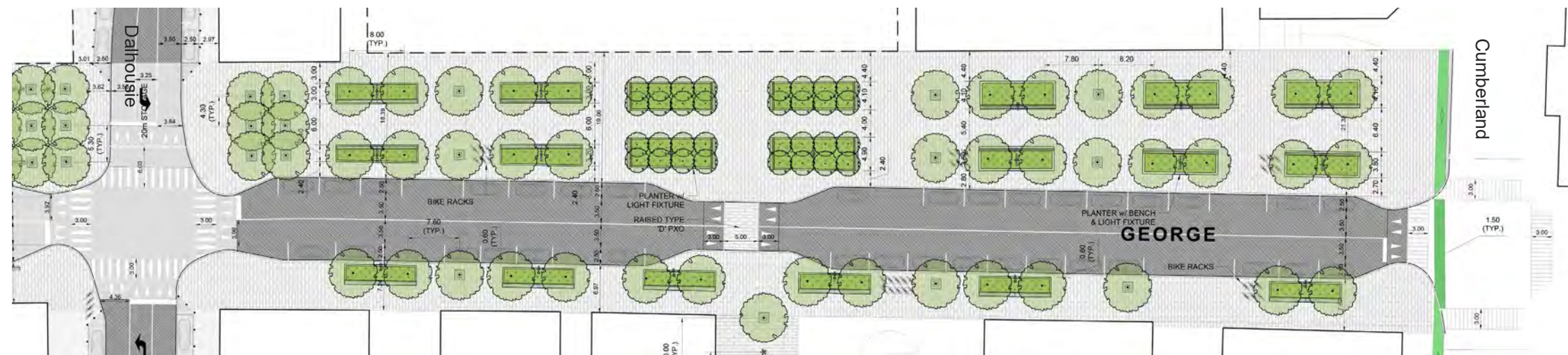
Furniture Strategy

Seating

Seating will line both sides of the pedestrian promenade on the north side of George, facing inward towards the promenade, as well as curbside on the sidewalk on the south, facing the clearway. Spacing will be 30m maximum between benches.

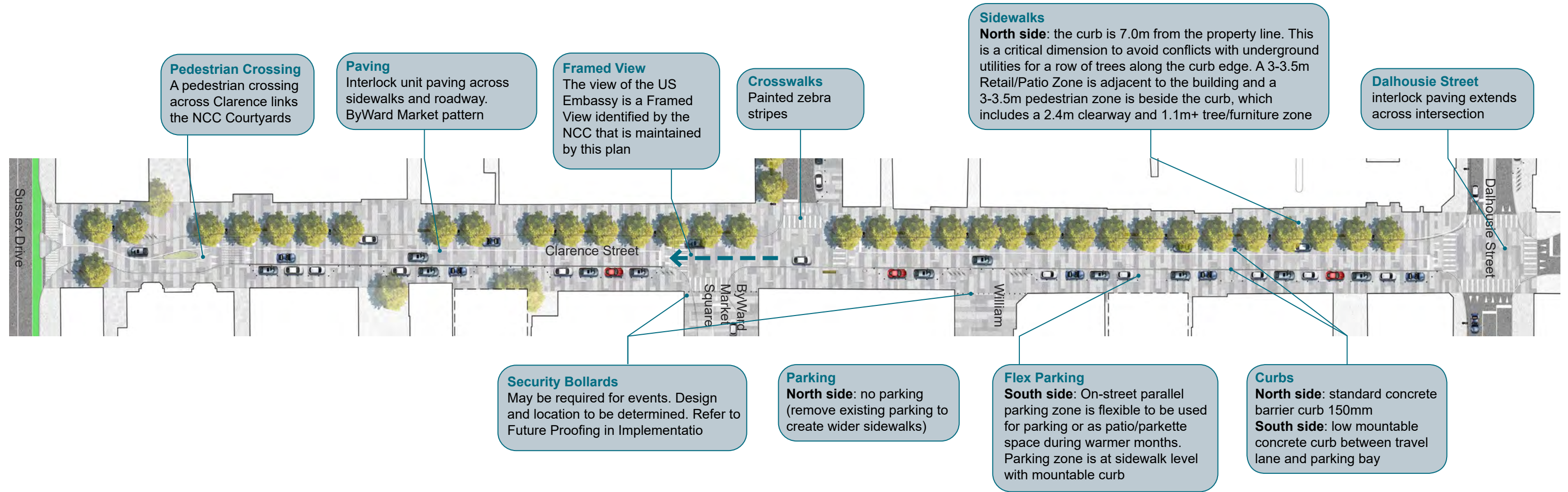
Along the north side, seating will be integrated with the raised planters. Generally seating will face the promenade, but can also be incorporated along the sides where they can form smaller, more intimate spaces, or even facing the buildings where appropriate.

Functional Plan



Design Concept

Clarence Street is designed with the flexibility to work in all seasons, including accommodating patios in the summer while maintaining generous pedestrian sidewalks. Paving across the whole street identifies its specialness



What We Heard

- keep the street flexible to be closed to traffic (in summer or for events)
- ensure the patios do not obstruct public space and access
- potentially a one way street
- more parking, keep the parking
- no parking, pedestrian only
- pedestrian focus

Public Life Study Summary

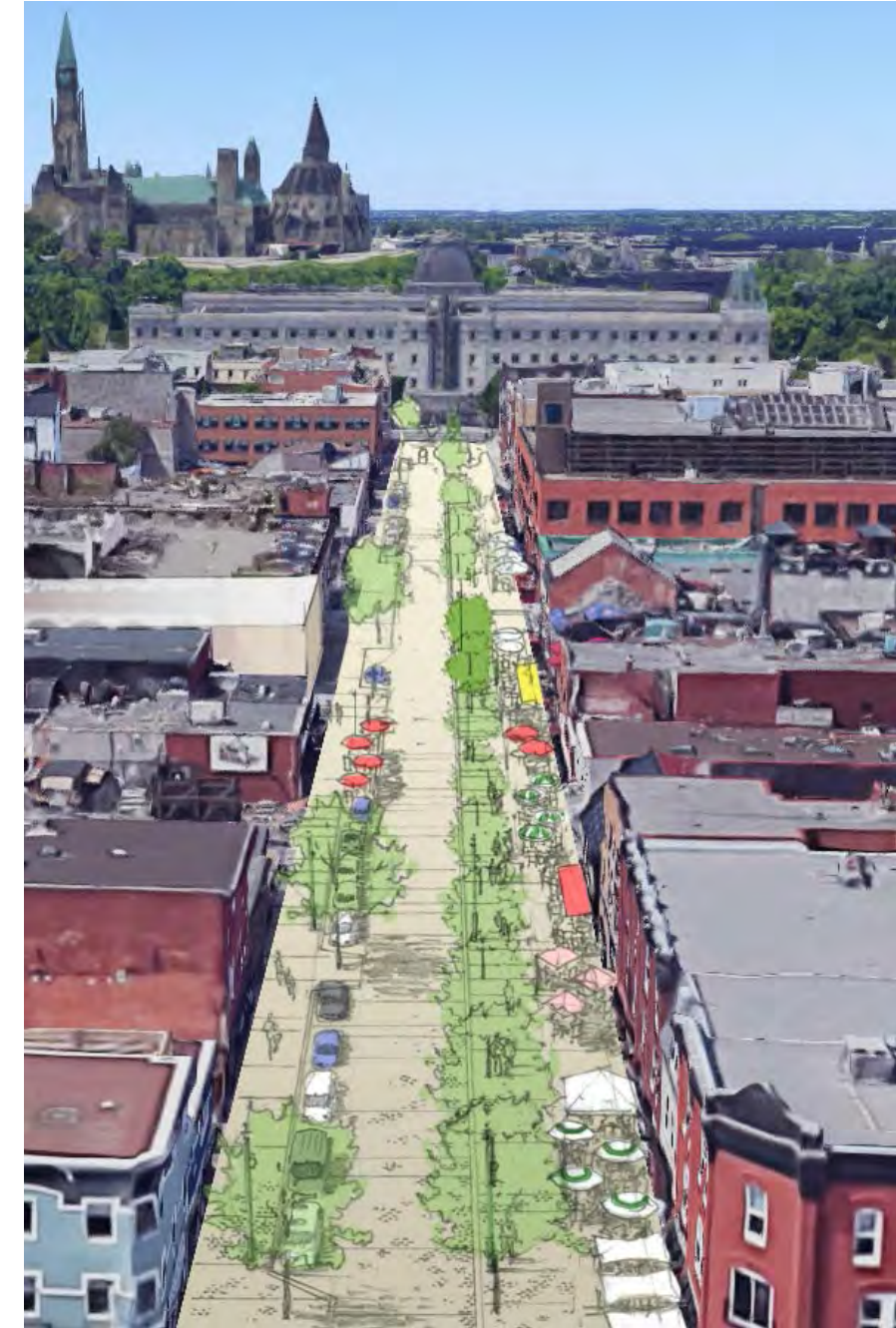
- Clarence Street sees the greatest increase in pedestrian traffic on weekends, compared to the Market as a whole

Current Issues

- existing elevated patios obstruct minimum 2m pedestrian clearway
- chicane in street design near Sussex must remain (US Embassy security)
- double row of parking and travel lanes in narrow (19m) ROW do not permit generous sidewalks

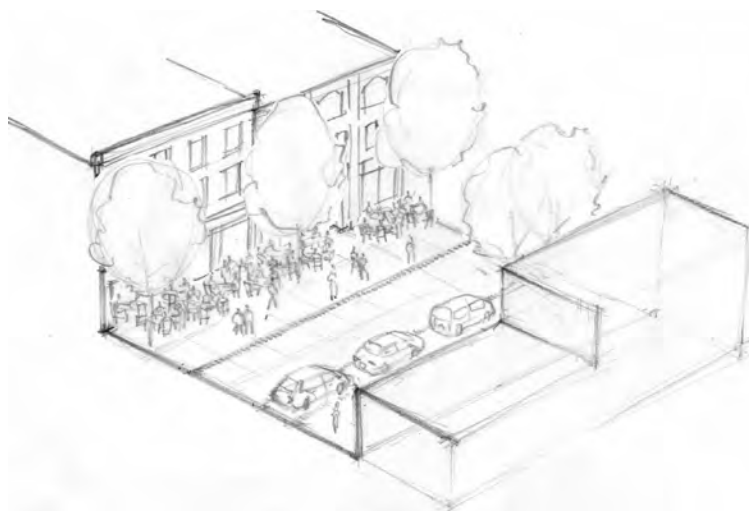


Clarence will have much wider sidewalks, with street trees, benches, and space for patios and retail spill out.

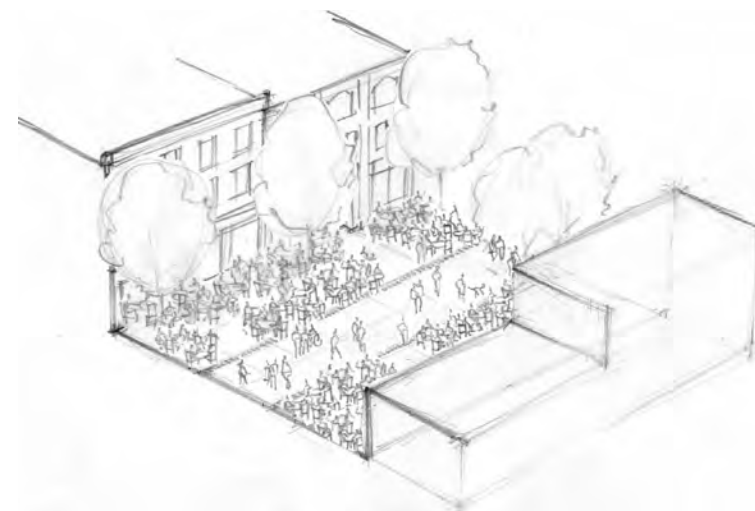


Aerial view of design concept

Flexibility in the Street Design



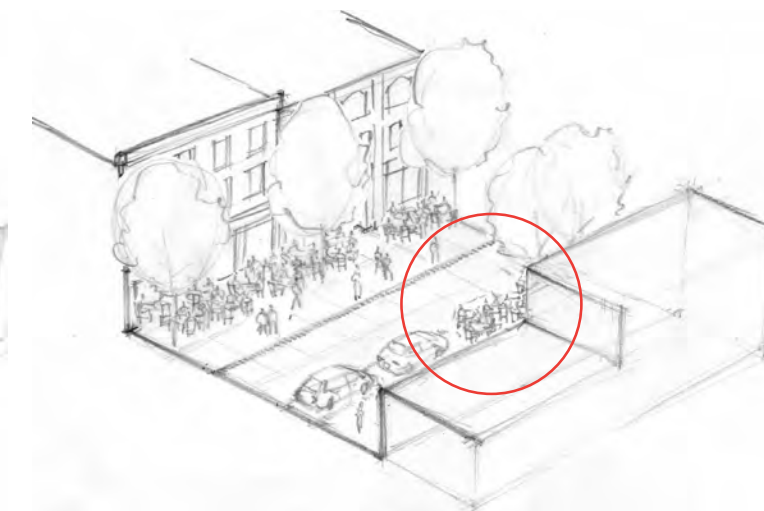
Day-to-day configuration (summer)



Closed to traffic, people walk in centre, patios can expand



In winter, the north side sidewalk is for pedestrians only



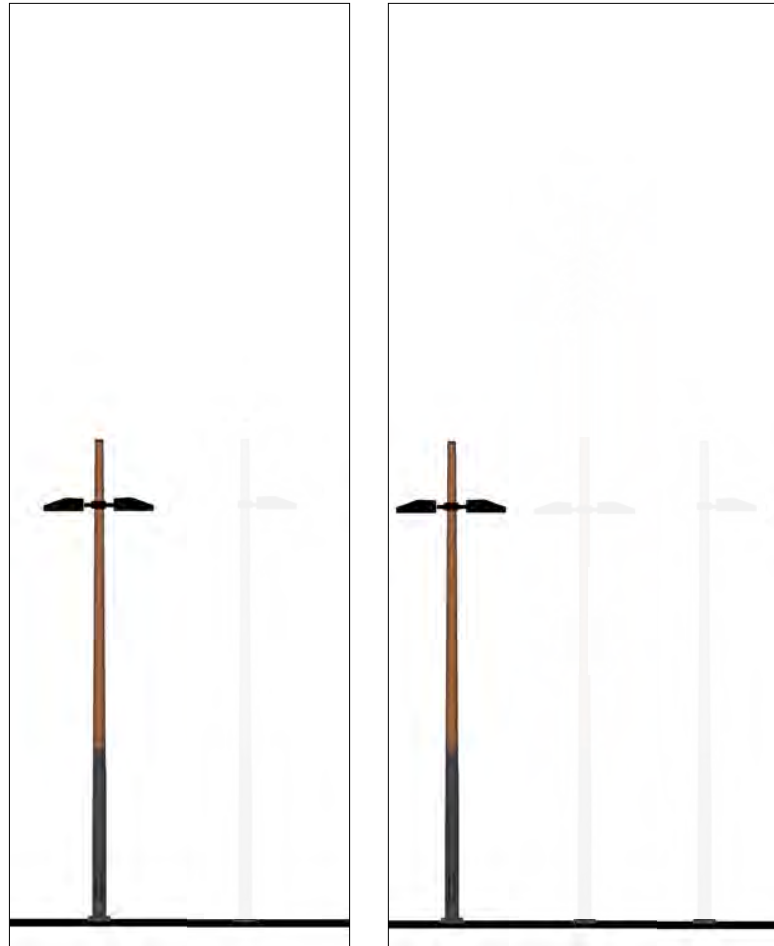
Patio in flex parking zone

Lighting Strategy

Pedestrian Scale Poles

Low-glare, functional lighting for sidewalks and roadways, with wood poles in this commercial area.

Type D1



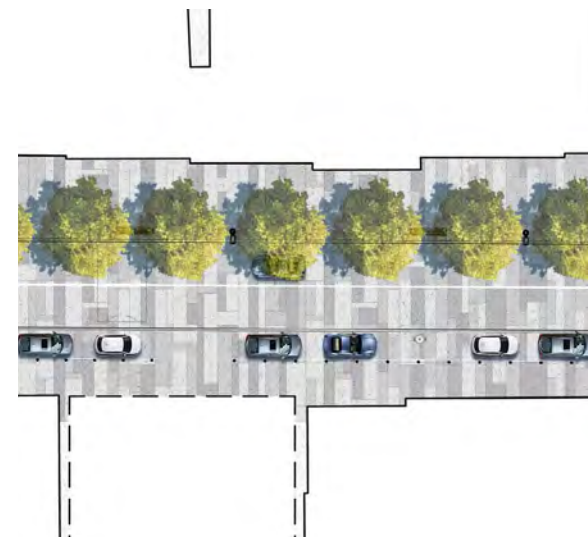
Option 1

Option 2

Paving Strategy

Clarence Street will have a distinct paving pattern that is the secondary paving pattern in the Market, distinct from York and the Market core. It will extend from building face to building face continuously across the road and sidewalk areas. The preferred material is concrete unit pavers.

Barrier curbs will be granite.



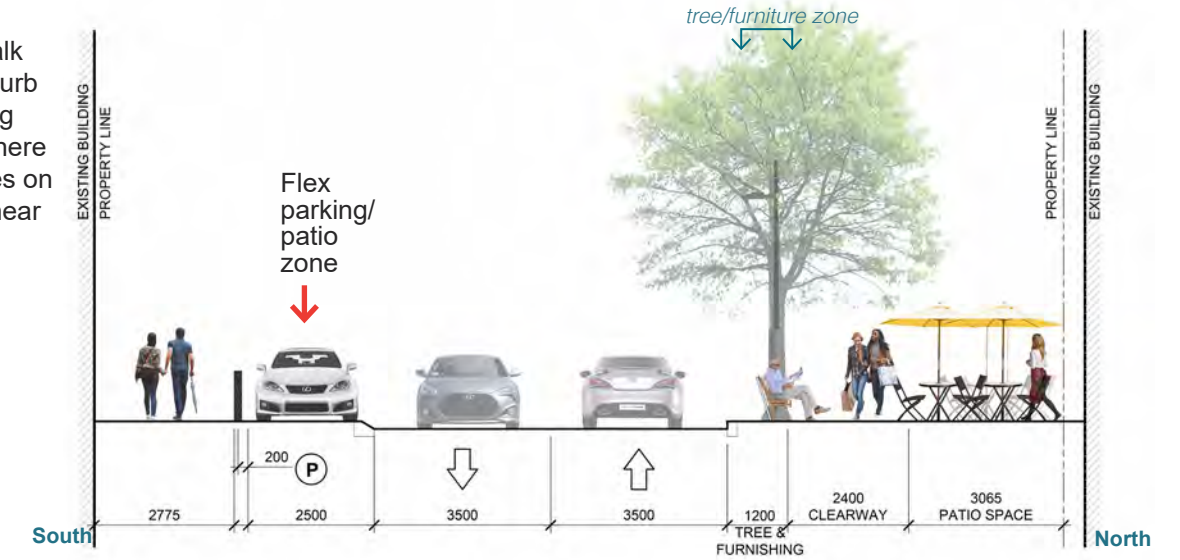
Pattern is continuous across the right of way, building face to building face.

Furniture Strategy

Seating

Seating will line the wider north side sidewalk along Clarence. It will be located near the curb facing inward towards the clearway. Spacing will be 30m maximum between benches. There may be opportunities for one or two benches on the south side where the sidewalk widens near intersections.

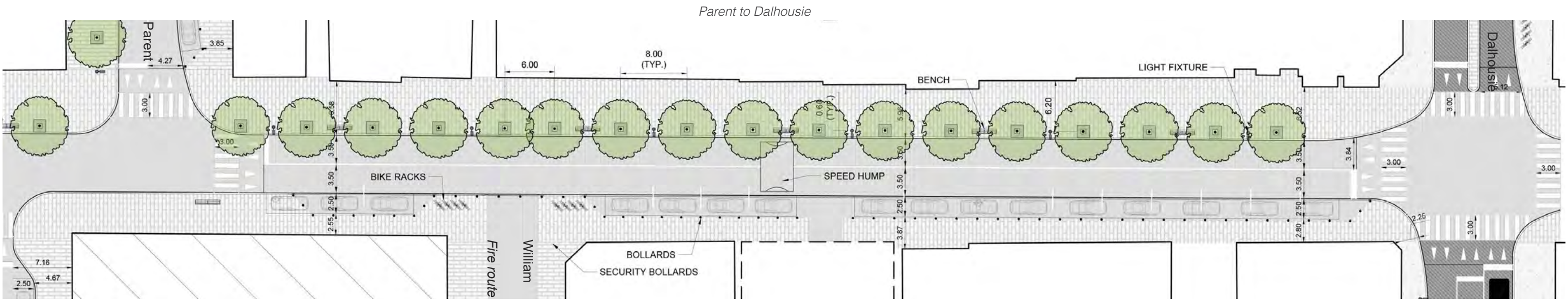
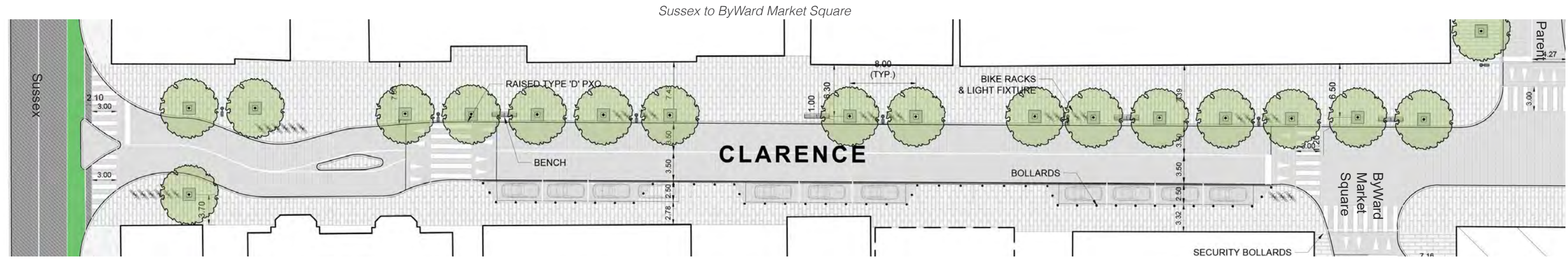
Typical Cross Section (looking west to Sussex)



Tree Location

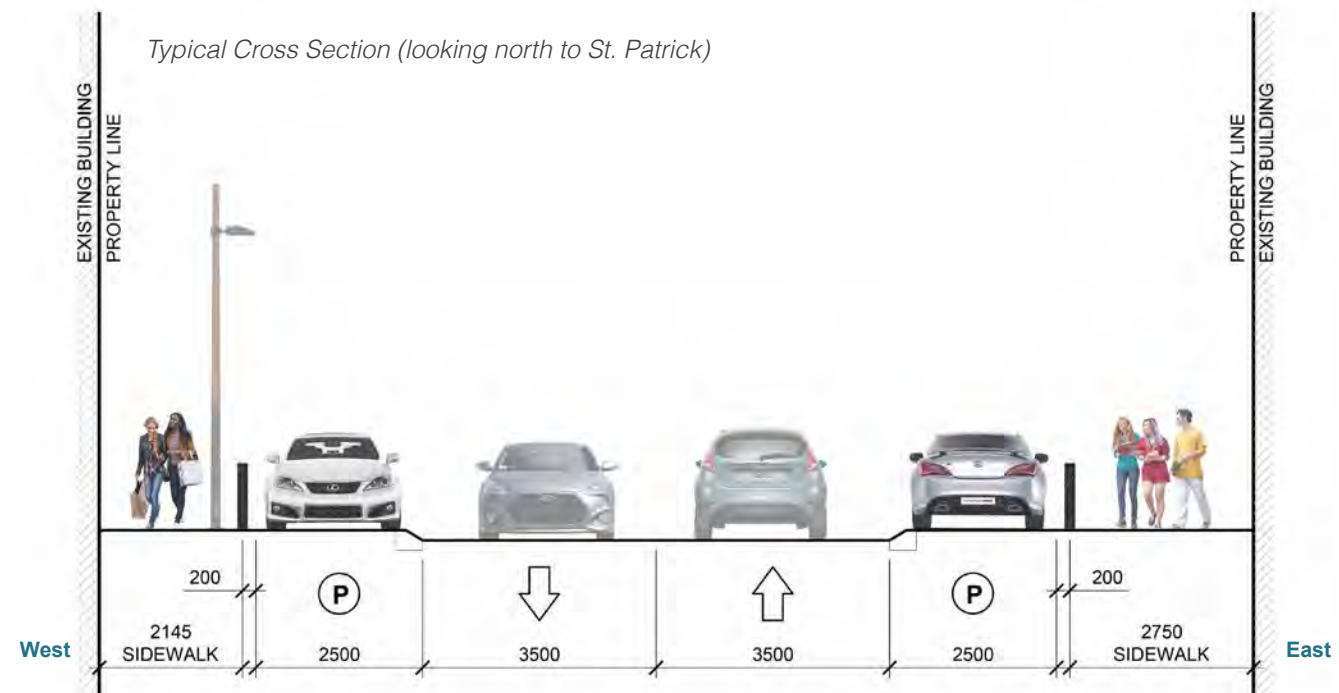
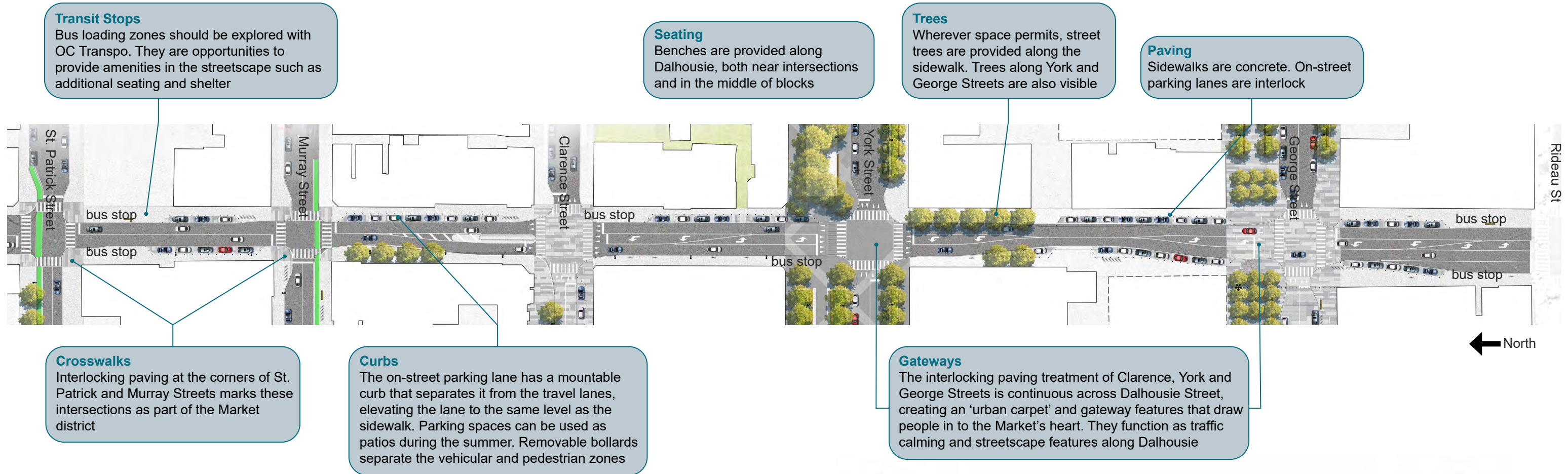
The curbside location of street trees on the north side promenade of Clarence is a result of minimizing conflict with underground utilities. Other locations were explored but deemed incompatible. The proposed realigned curb is located close to the trees in order to ensure there is sufficient room for the roadway, flex curbside lane, and south sidewalk in the balance of the right of way. Detailed Design should consider mitigation strategies for grading design and selection of hardy, salt tolerant species. On the south side, there is less room for street trees, but they should be planted where there is opportunity.

Functional Plan



Design Concept

Dalhousie Street is enhanced as a neighbourhood main street with new trees and plenty of seating.



- What We Heard**
- busy and congested but works well
 - consider all modes of travel
 - more trees wherever they are feasible

- Current Issues**
- The narrow right of way works hard to accommodate travel lanes, on-street parking on both sides and sidewalks
 - There are very few trees along Dalhousie
 - traffic/pedestrian/cyclist safety concerns - high collision rate



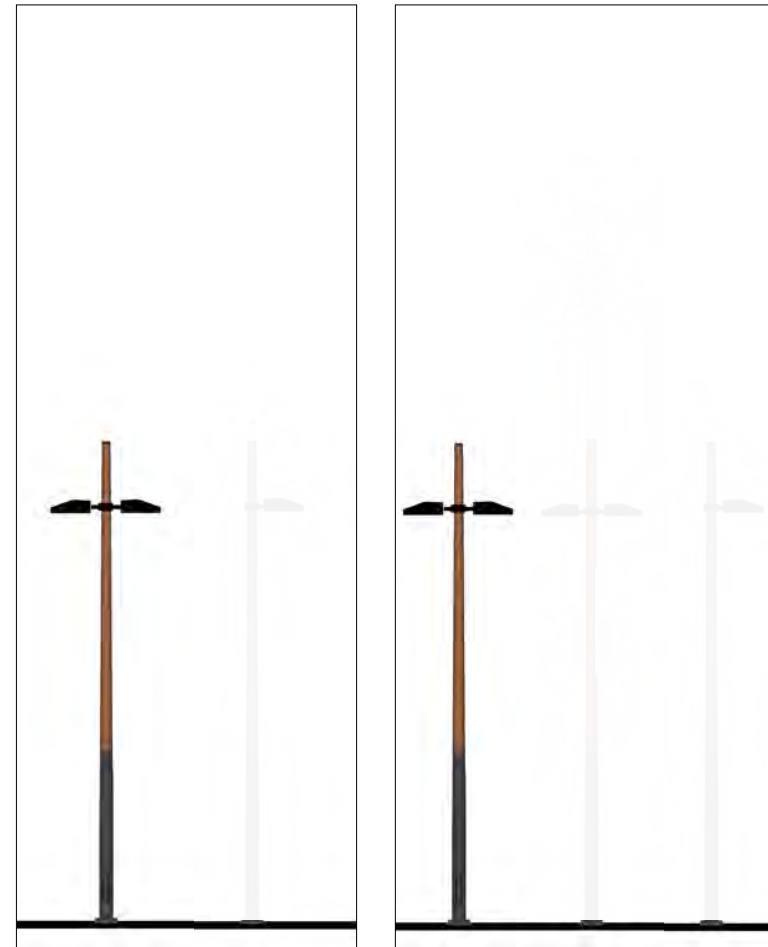
Aerial view of design concept

Lighting Strategy

Pedestrian Scale Poles

Low-glare, functional lighting for sidewalks and roadways, with wood poles in this commercial area.

Type D1



Option 1

Option 2

Paving Strategy

Every intersection along Dalhousie will feature interlocking paving. This will help define a special character for Dalhousie. At the intersections of George, York and Clarence streets, the paving treatments of those streets will extend continuously across Dalhousie and create gateways to the heart of the Market. At Murray and St. Patrick, the interlocking paving will include the four corners, and the crosswalks along Dalhousie. The balance of the sidewalks along Dalhousie will be poured in place concrete.

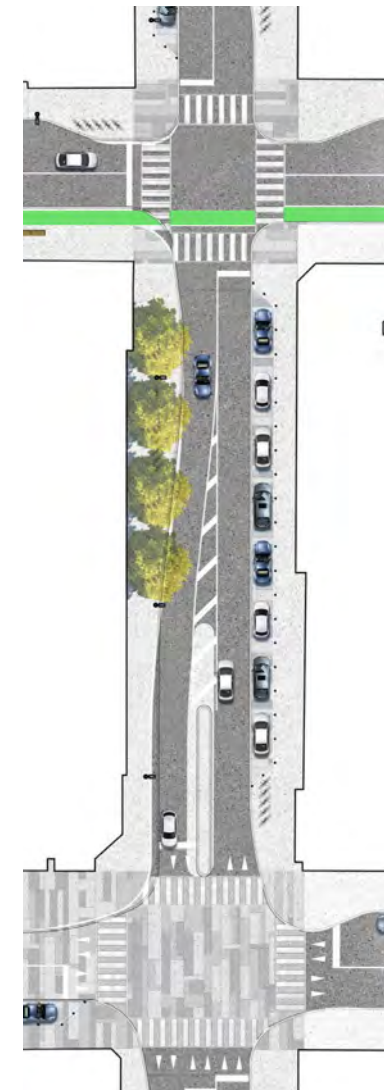
The curbside lanes along Dalhousie will be partly raised from the street level by a mountable curb, and be paved with interlock. In the summer, parking spaces can be converted to patio areas, temporary parks or seating areas.

Curbs will be concrete.

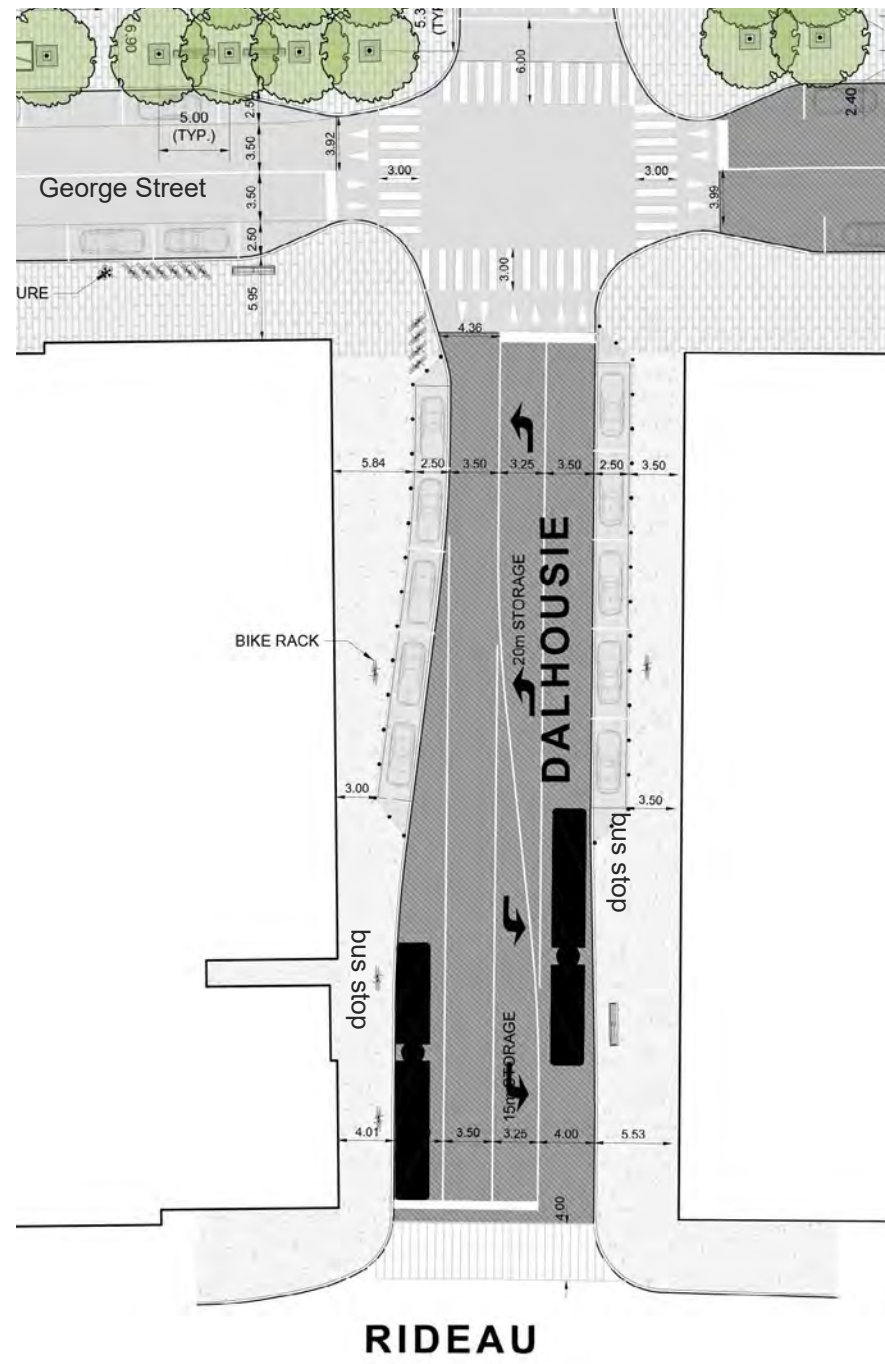
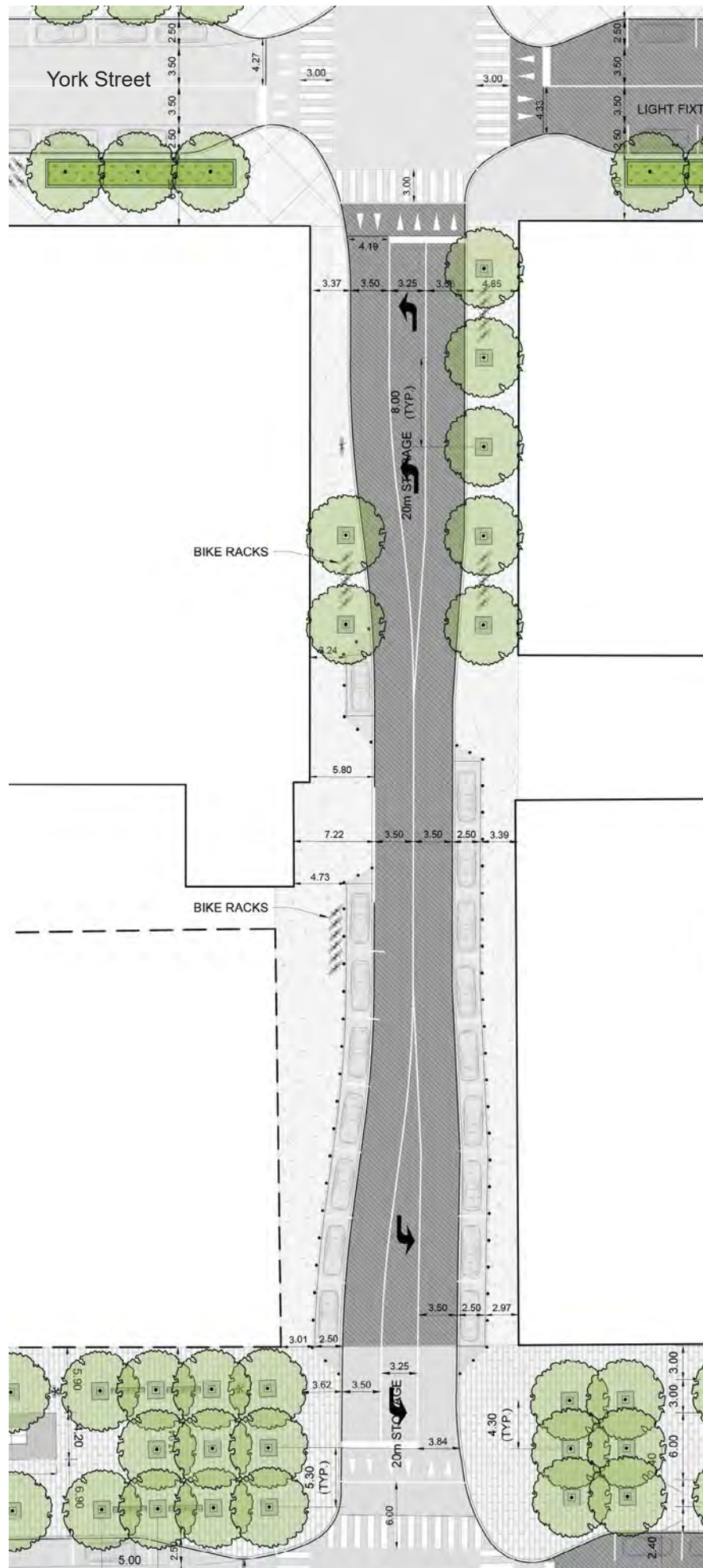
Furniture Strategy

Seating

The goal is to provide benches in every block along both sides of Dalhousie, located near the curb and face inward to the clearway and/or in association with bus stops. Sidewalk space is limited along Dalhousie and bench locations will need to be further explored at Detailed Design.

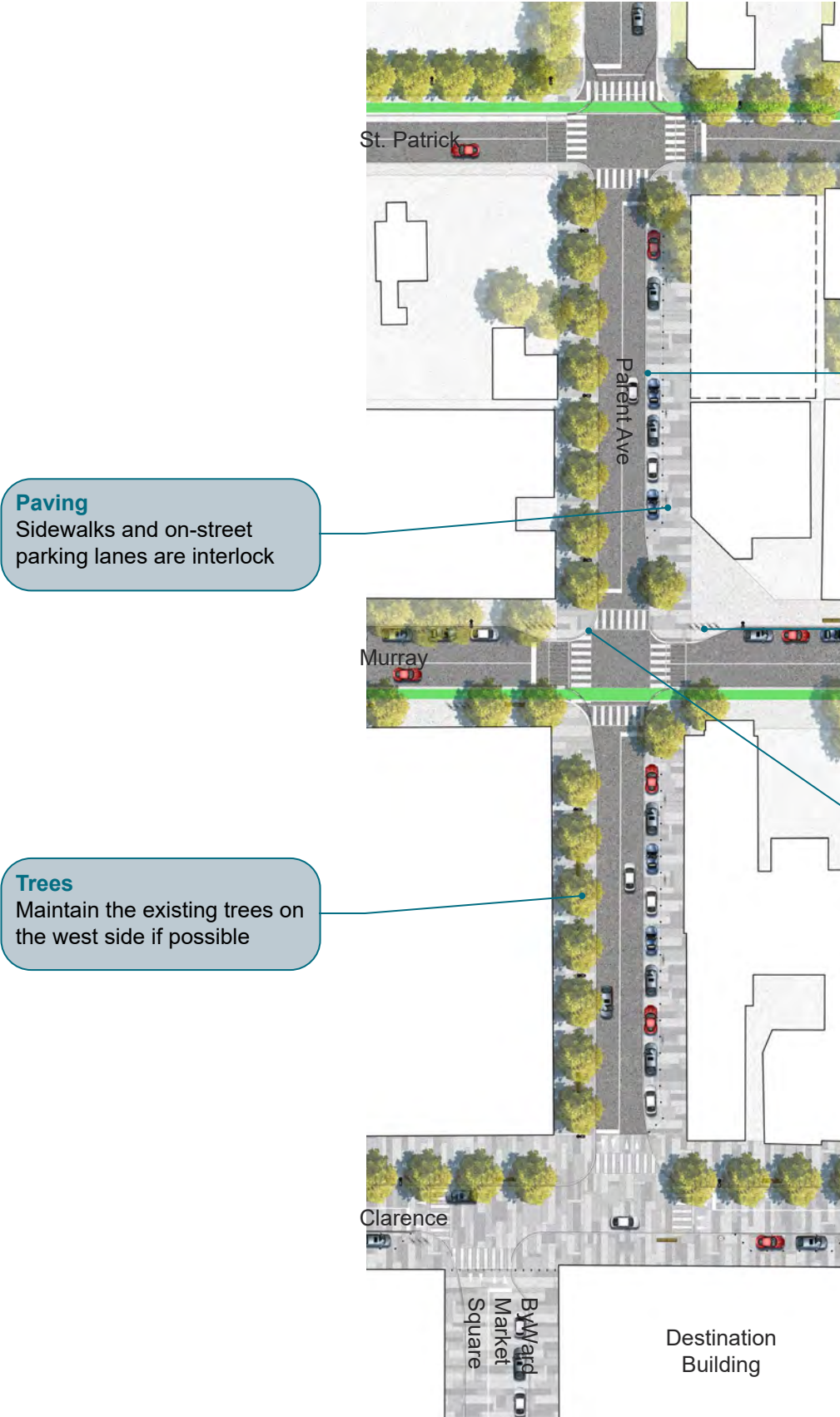


Special paving at intersections and in the curbside lane.

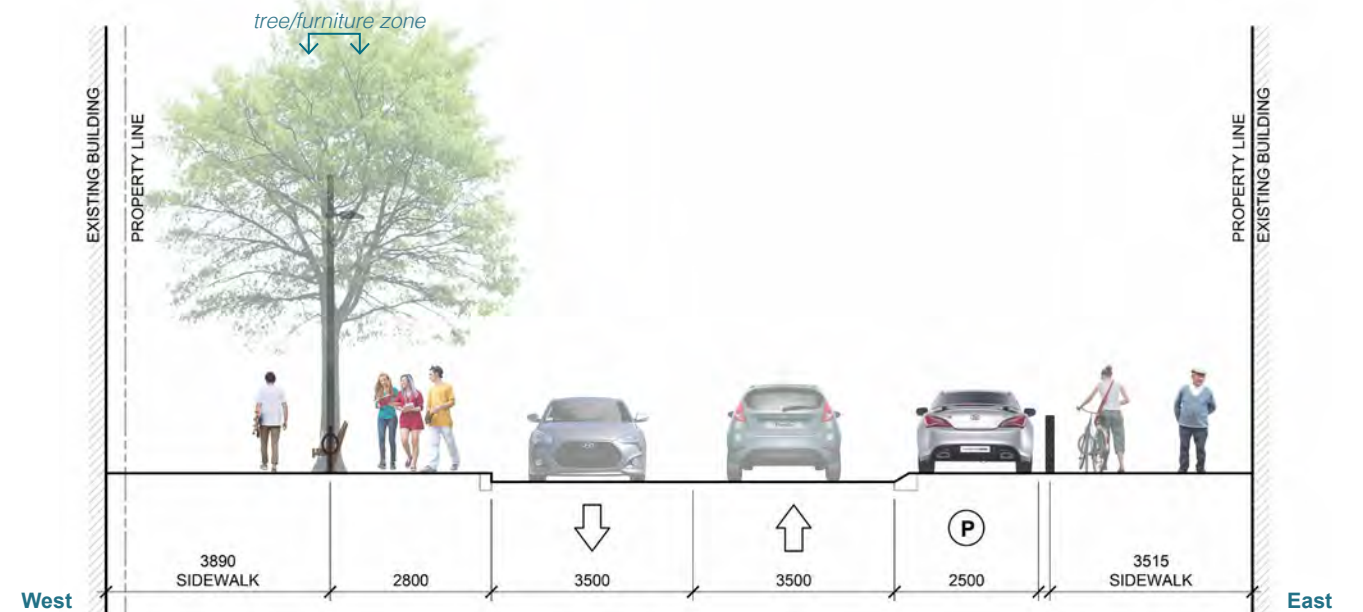


Design Concept

Parent Avenue is enhanced as a neighbourhood connector with new trees, seating and interlocking paving.



Typical Cross Section (looking north to St. Patrick)



What We Heard

- improve the connection between the Market and the neighbourhood

Current Issues

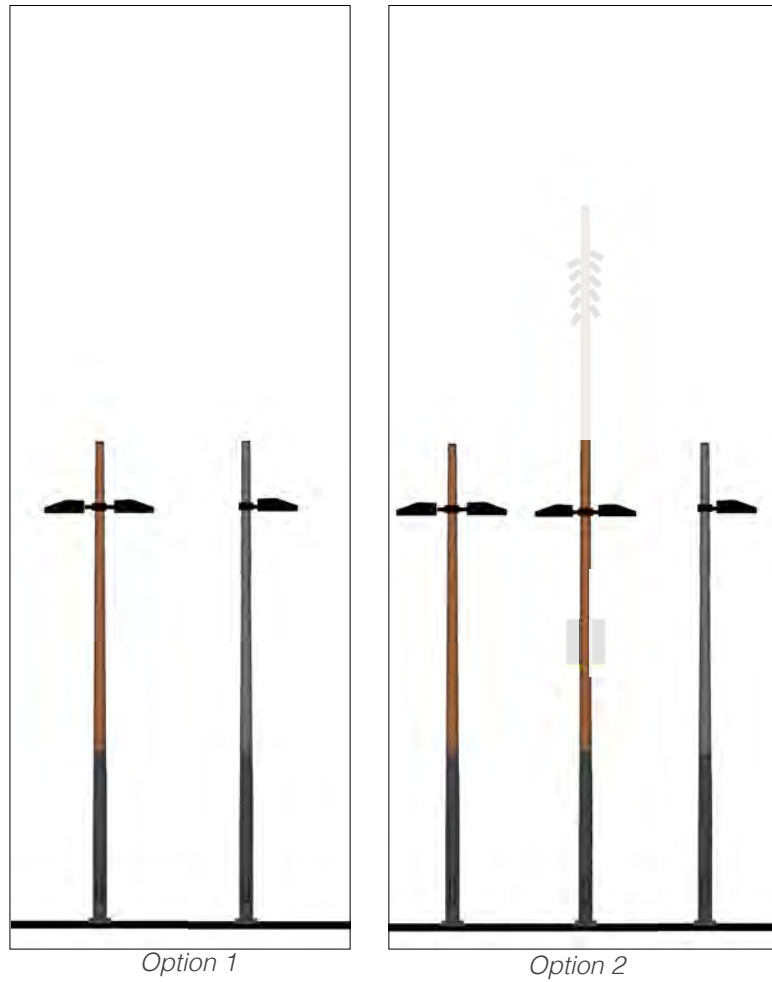
- The street does not feel like it is part of the Market except near Clarence

Lighting Strategy

Pedestrian Scale Poles

Low-glare, functional lighting for sidewalks and roadways, with wood poles in the commercial area and metal poles in the residential areas.

Type D1 & D2



Paving Strategy

The sidewalks along Parent will feature interlocking paving to define a special character. The curbside lanes along Parent will be raised from the street level by a mountable curb, and be paved with interlock. In the summer, parking spaces can be converted to patio areas, temporary parks or seating areas. Together, the interlock sidewalk and curbside lanes will create a highly pedestrian character for the street.

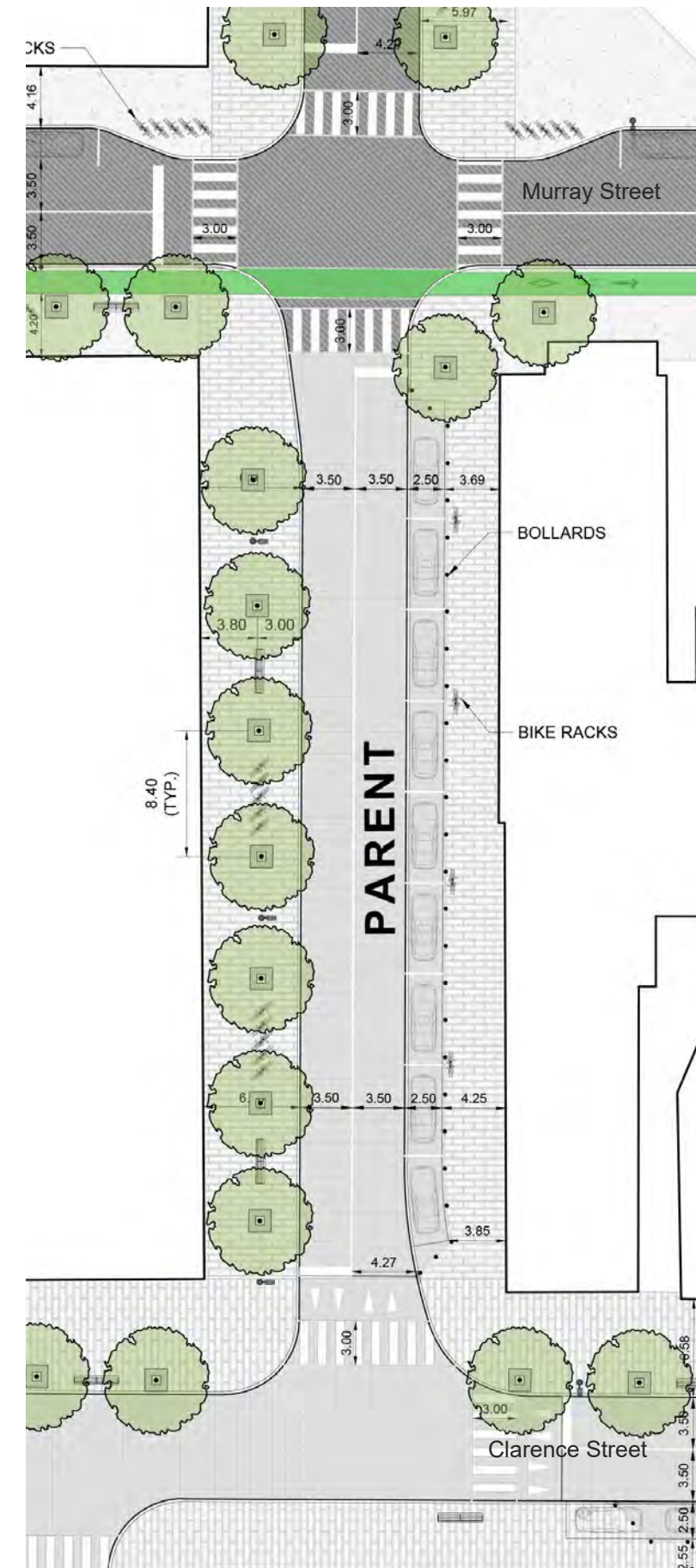
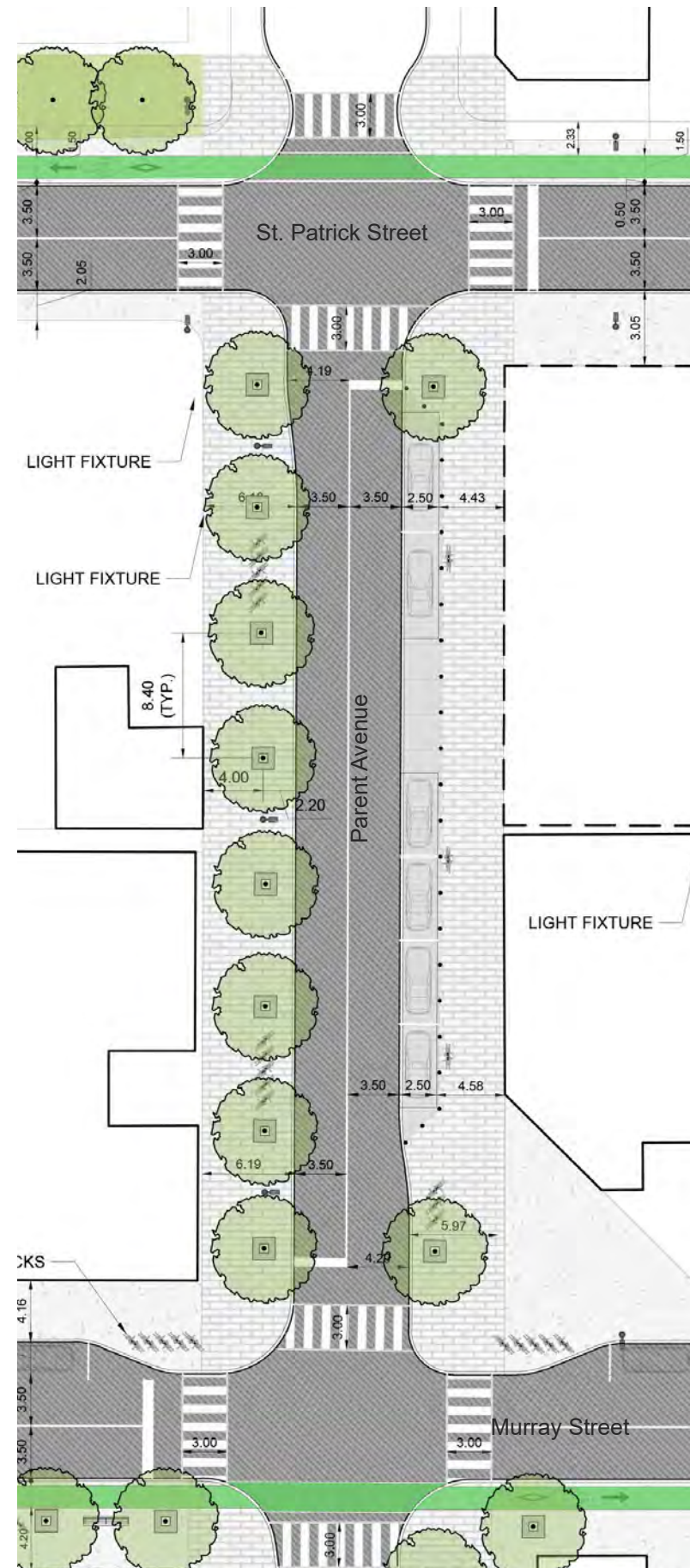
Curbs will be concrete.

Furniture Strategy

Seating

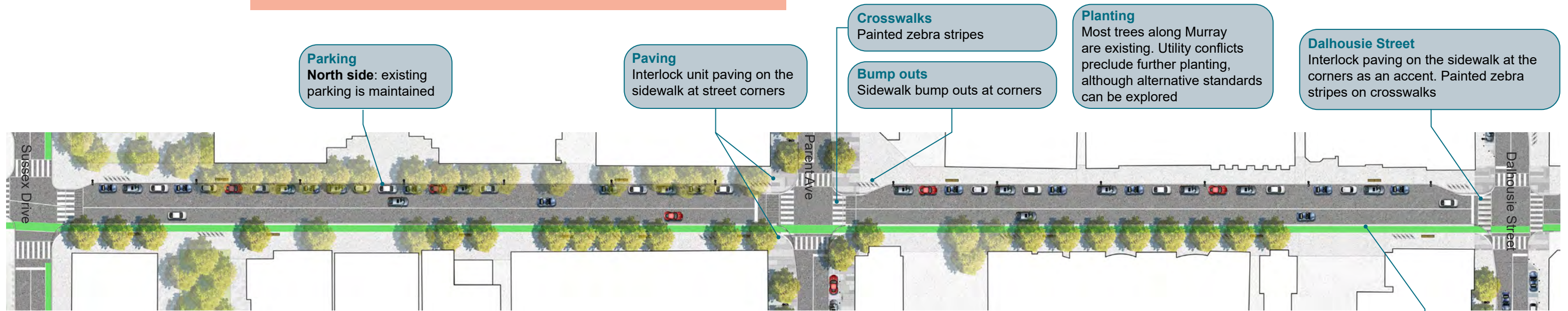
Benches will be provided in every block along both sides of Parent. It will be located near the curb and face inward to the clearway.

Functional Plan



Design Concept

Provide a cycling connection along Murray Street, and public realm enhancements at intersections. Maintain the commercial character with concrete sidewalks extending building face to curb.



Barrier Curbs
Murray Street has standard barrier curbs along the roadway

Courtyards
Pedestrians need to cross Murray at St. Patrick; the street is an arterial and no crosswalk is possible

Lighting Strategy
Pedestrian Scale Poles
Low-glare, functional lighting for sidewalks and roadways, with wood poles in this commercial area.

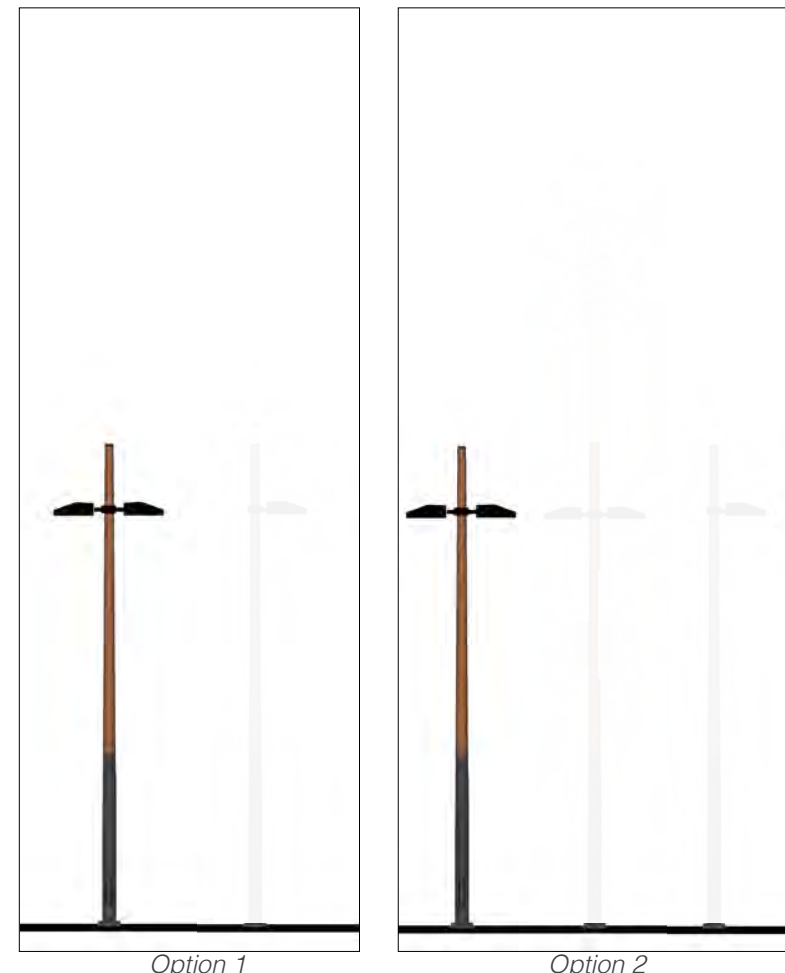
Paving Strategy
The sidewalks along Dalhousie will be poured in place concrete. Intersections will feature interlocking paving to help identify Murray as part of the Market area.

Curbs will be concrete.

Furniture Strategy
Seating
The goal is to provide benches in every block along both sides of Murray, located near the curb and face inward to the clearway. Sidewalk space is limited in places along Murray, and bench locations will need to be further explored at Detailed Design.

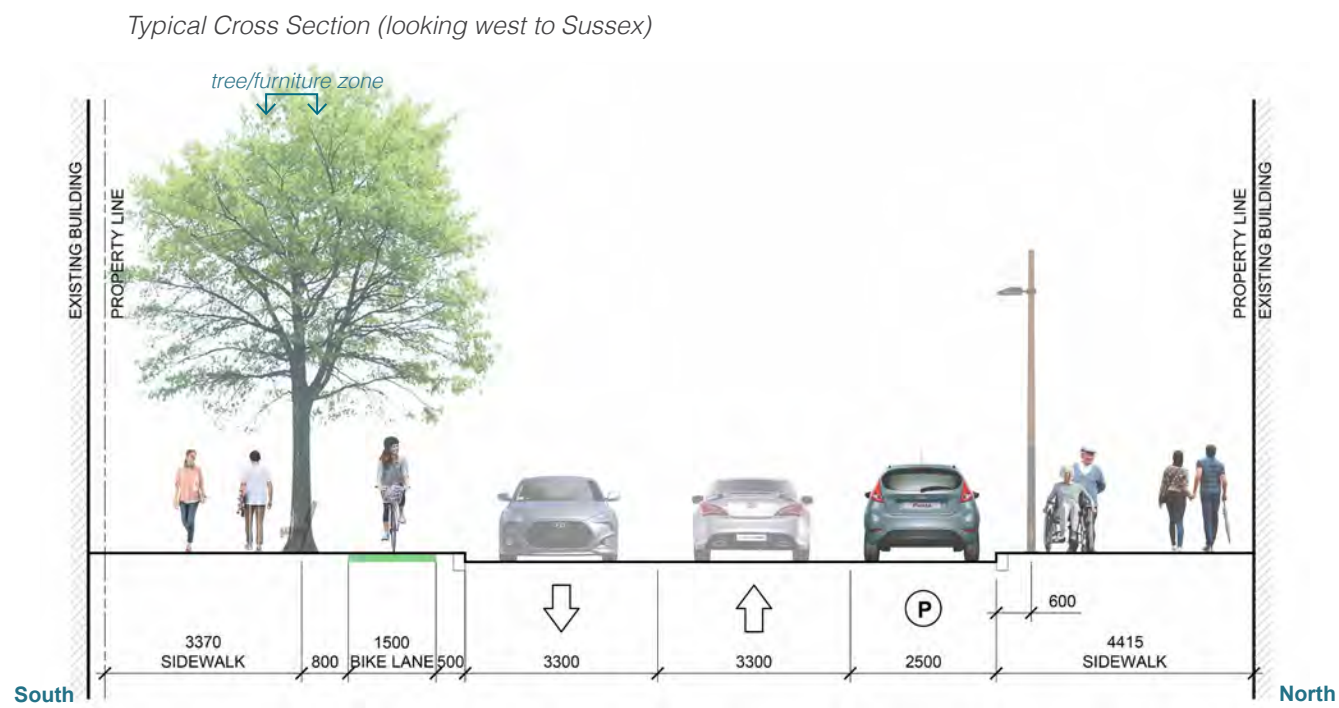
- Current Issues**
- Murray is designated as an arterial road and a cycling route
 - Current sidewalks work well for retail uses even with the high traffic volumes
 - Narrow right of way makes it challenging for street trees and to add a cycle track
 - emerging desire for sidewalk cafes on the north side, from some businesses

Type D1

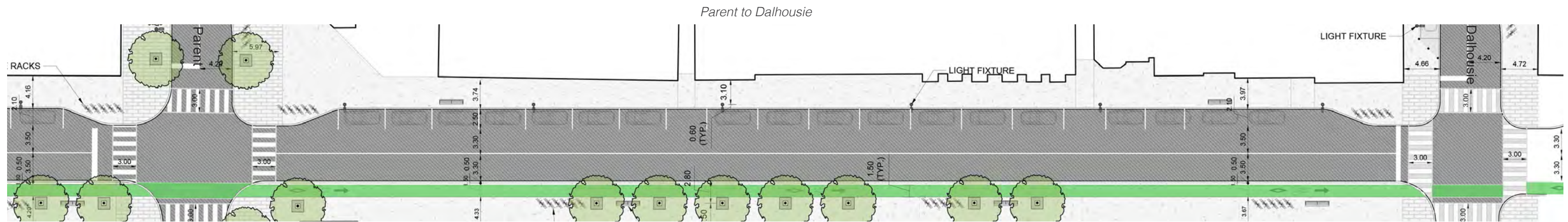
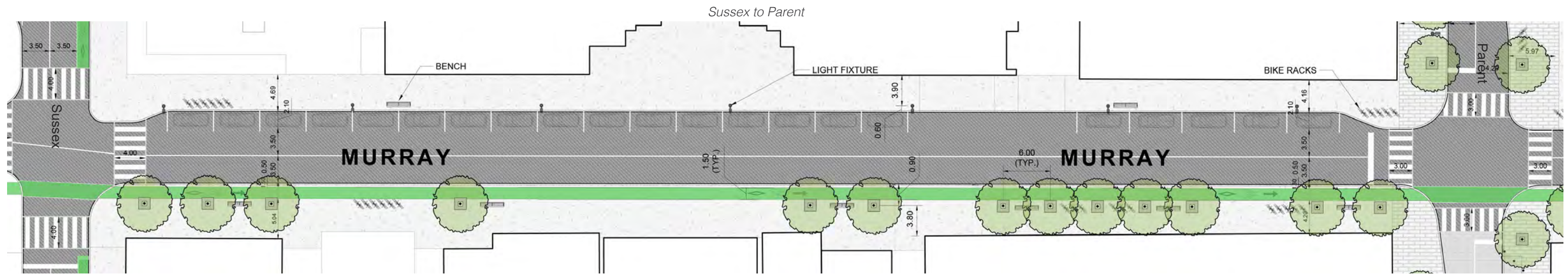


Retail/Patio Zone
A retail/patio zone should be accommodated wherever sidewalk width permits, subject to maintaining a minimum 2.0m clearway

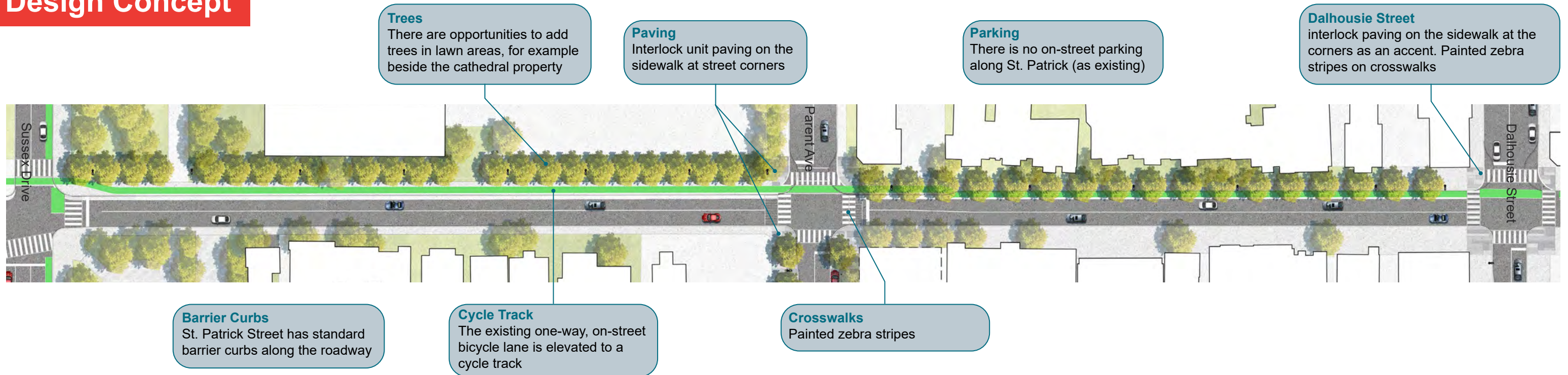
Cycle Track
The on-street parking on the south side of the street is removed to provide a one-lane, one-way cycle track



Functional Plan

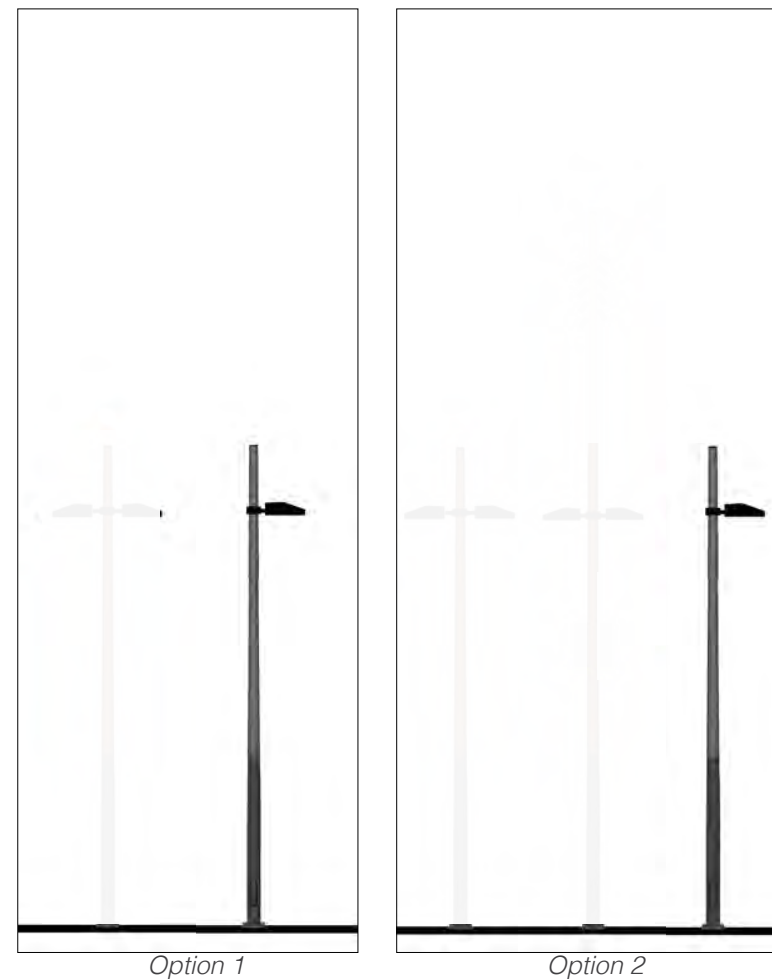


Design Concept



Lighting Strategy
Pedestrian Scale Poles
Low-glare, functional lighting for sidewalks and roadways, with metal poles in this residential area.

Type D2



Paving Strategy
The sidewalks along Parent will be poured in place concrete. Intersections will feature interlocking paving to help identify St. Patrick as part of the Market area.

Curbs will be concrete.

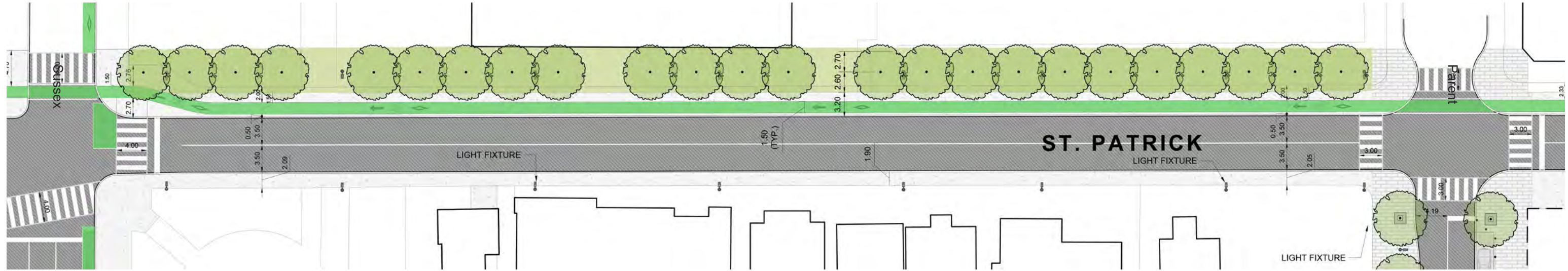
Furniture Strategy
Seating
As a primarily residential street, no benches will be provided along it.

! Current Issues

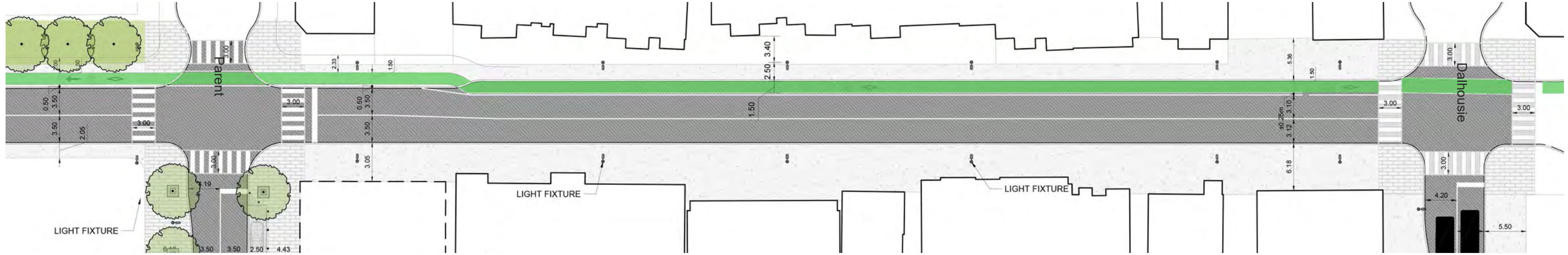
- St. Patrick is designated as an arterial road and a cycling route
- Existing cycling lane
- Narrow right of way makes it challenging for street trees
- Primarily residential

Functional Plan

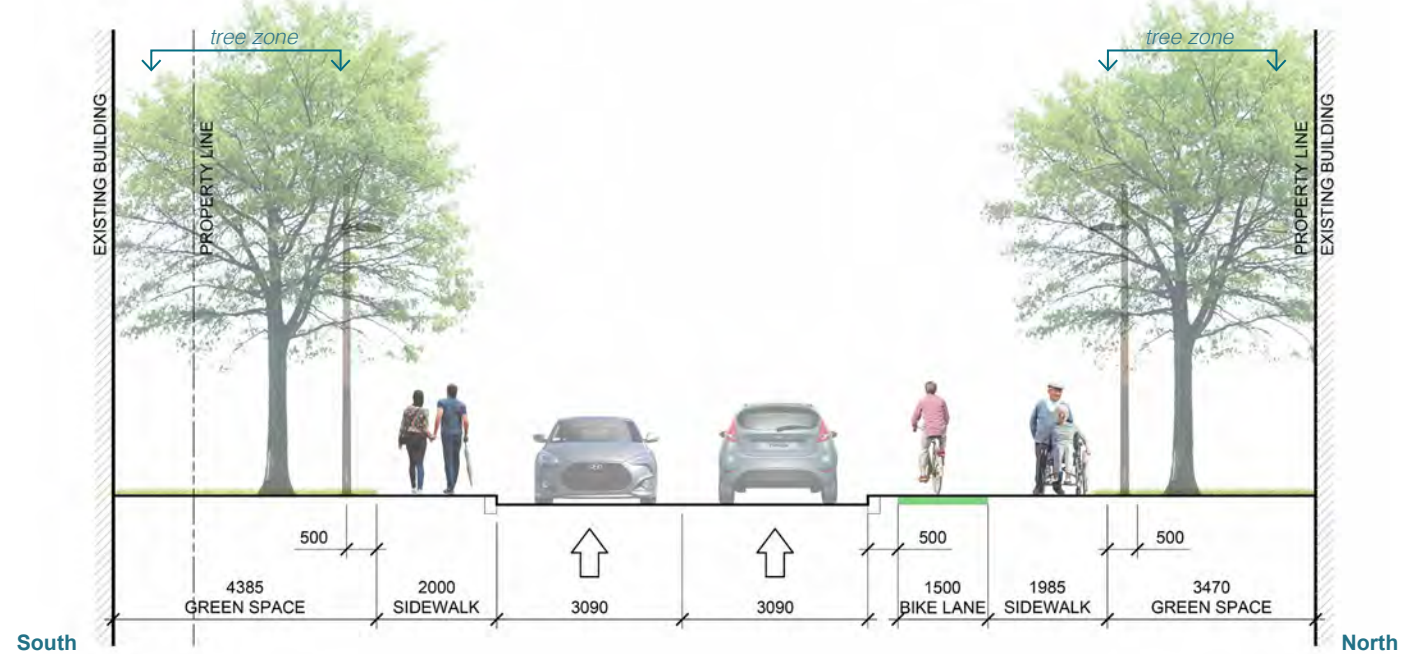
Sussex to Parent



Parent to Dalhousie



Typical Cross Section (looking west to Sussex)



Design Concept

The landscape concept is to be as simple as possible to maintain good sight lines and flexibility of use: interlocking paving with a row of trees and lighting. Coupled with removal of existing visual obstacles, this maximizes surveillance potential.

Ultimately, the success of the Waller Mall may depend on the reconfiguration of adjacent buildings and spaces to become more active, with windows and direct entrances to the mall, similarly to William Mall.



Paving

Bold interlocking paving pattern extends across the mall and links with the paving pattern around the Market and along York. This helps define a special central area or heart within the Market

Retail/Patio Zone

A 4m zone on both sides beside the buildings can be used for outdoor retail/patio uses

Trees

A single row of high-crown trees in paving maintains sight lines and accessibility throughout

Existing Art Medallion

Re-integrate the existing art medallion in the paving.

Waller Mall Expansion

Explore the potential to integrate City-owned land with Waller Mall

Current Issues

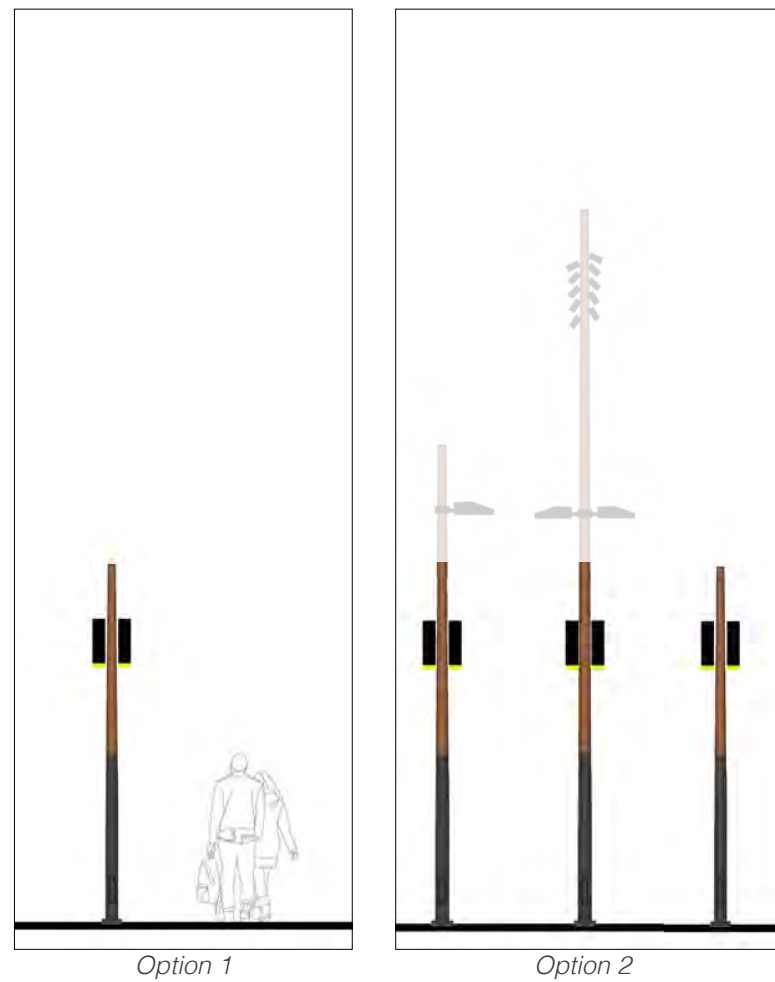
- closed due to safety issues
- poor sight lines due to existing gates and vegetation
- adjacent buildings and spaces are inactive or blank

Lighting Strategy

Pedestrian Scale Poles

A smaller scale fixture with a bit of glow along the bottom edge is used to lend a living room effect to pedestrian scale spaces, indicating to pedestrians to slow down, explore and enjoy.

Type C



Paving Strategy

Waller Mall will have a distinct paving pattern that is the secondary paving pattern in the Market, after York and the Market core. It will extend from building face to building face continuously across the mall area. The preferred material is concrete unit pavers.

Furniture Strategy

Seating

Benches should be considered when the space is functioning safely.

Design Concept

This design concept is one possible demonstration of the potential of this space, based on a visioning framework established by the NCC. This design concept illustrates how key design principles, on the following pages, could be addressed to shape public space. Overarching goals include:

- implement the Confederation Boulevard streetscape along Wellington and Colonel By
- create better interface with the former train station through active uses
- leverage the change in grade to create a memorable urban form
- provide Accessible routes through the space

What We Heard

- the vehicular ramp southbound to Colonel By divides the space
- there are no sidewalks on Wellington
- poor cycling connection from Elgin to ByWard Market
- underpass can feel unsafe due to anti-social behaviour

Public Life Study Summary

- most consistent level of pedestrian traffic across season
- by far, fewest people linger here

Current Issues

- this is a key pivot between Upper and Lower Town: a busy vehicular, cycling and pedestrian intersection
- pedestrians space is below-grade
- implementing changes that are pedestrian and cycling friendly have impacts on traffic
- bi-direction bike lane being implemented on Rideau
- further study of this intersection is needed to understand impacts
- creating active public space is challenging because of the surrounding arterial roads and blank facades
- there is a 4 metre grade change across the site

NCC Vision

- dynamic urban space for future commemoration
- integrate federal and civic realms
- improve pedestrian movement through the space
- iconic, symbolic, monumental and commemorative
- human activity and interaction
- sense of place, unique identity and character
- links to other places
- express social, historical and cultural community qualities



Crosswalk
New pedestrian crosswalk across Wellington to Mackenzie

Cycling
Cycle tracks are located along the edges of the space, parallelling the vehicular lanes

Paving
Pattern along Confederation Boulevard (Wellington and Colonel By) is distinct from the interior

Seating
Long benches follow the curves of walls and planting areas

Active Use
New building edge along the former train station. Uses should animate the public space, e.g. restaurant, cafe, institutional

Public Gathering
A level area is created by a retaining structure, which can be celebrated as a design feature wall, perhaps including a fountain element

Lighting
Lighting consistent with Confederation Boulevard. Preferred location is between the cycle tracks and the pedestrian clearway

Design Competition
It is recommended that a national design competition be held to determine the public space concept for the Rideau-Sussex Gateway. The demonstration design illustrated here is meant to inform the City and NCC in defining objectives when they prepare the competition brief.

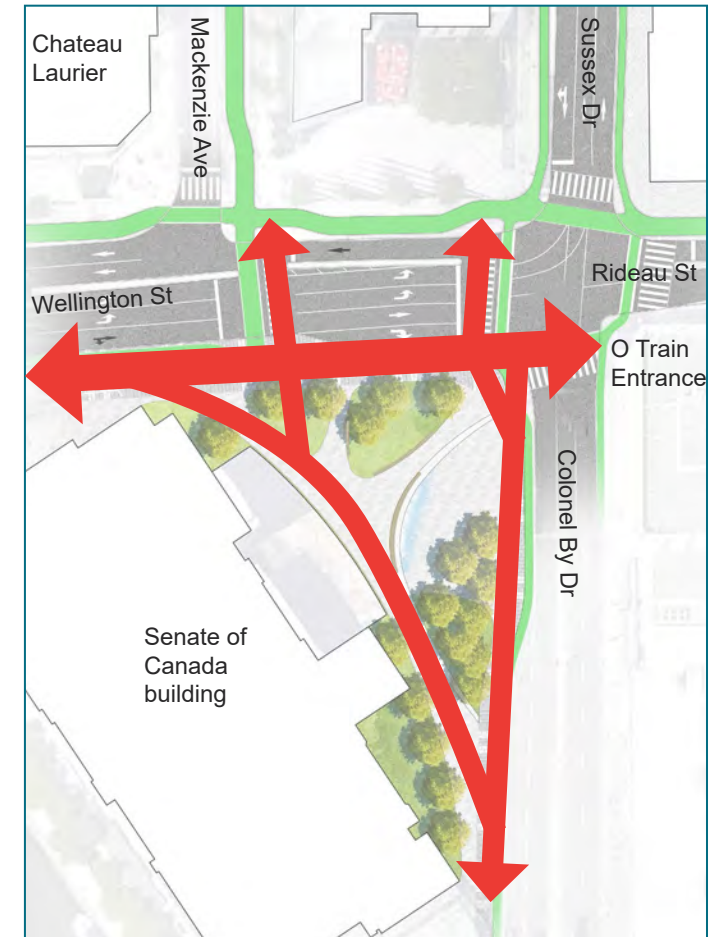
Functional Plan



Design Principles

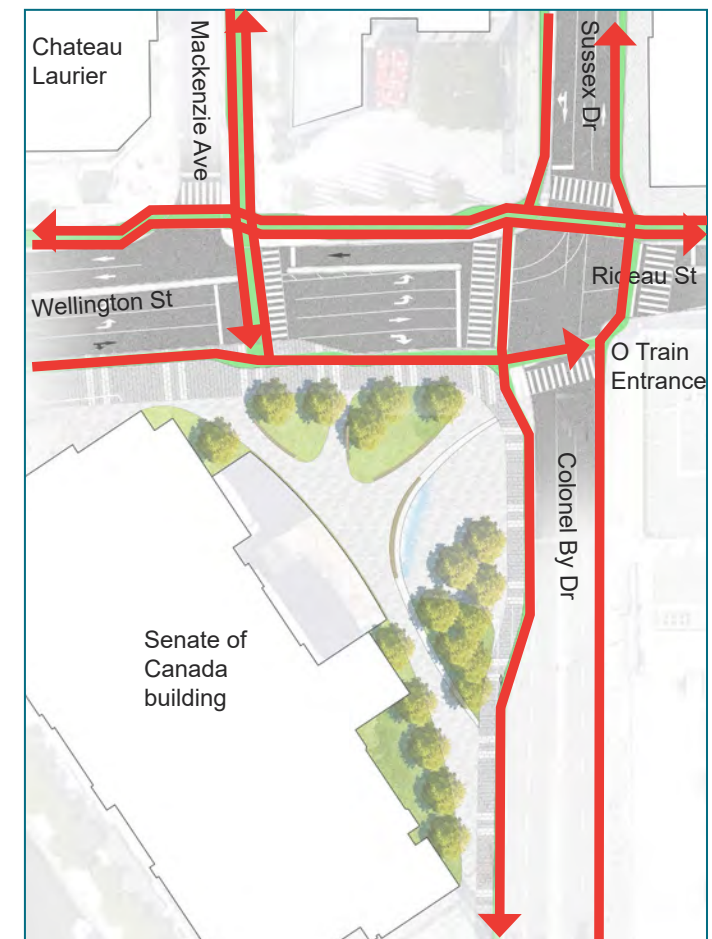
Pedestrian Movement

This space accommodates high volumes of pedestrian movement on a daily basis. Wide clearways should be provided along all desire lines.



Cycling Movement

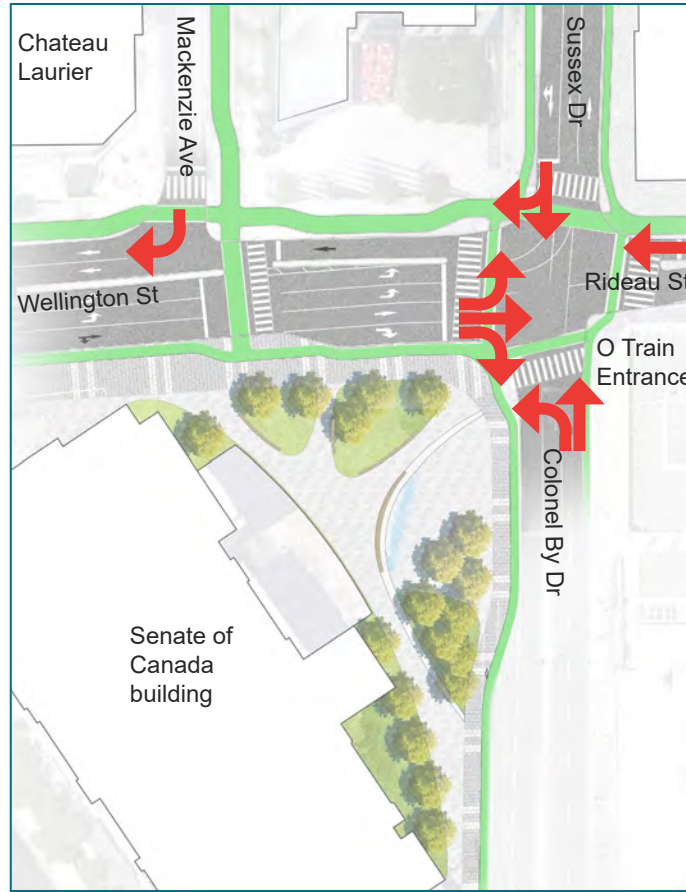
There are several cycle tracks in this area. They are located beside sidewalks and the gateway plaza, in clearly marked zones.



Public Realm Design Rideau-Sussex Gateway

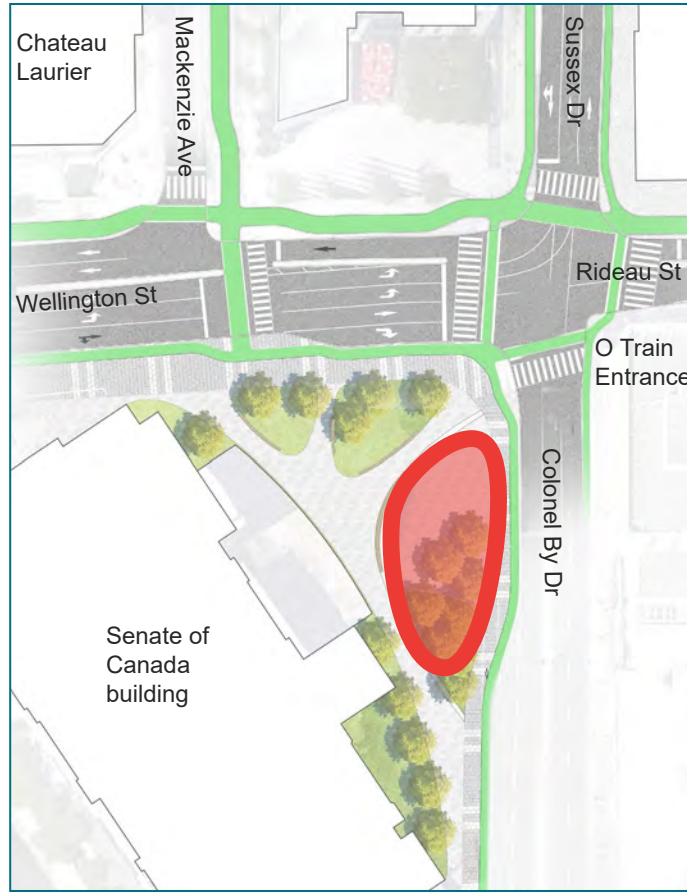
Vehicular Movement

Removing the current ramp from southbound Mackenzie Avenue to southbound Colonel By Drive facilitates the consolidation of pedestrian space adjacent to the former train station and enables pedestrians to be returned to ground level, instead of having to use the underpass. Vehicular lane adjustments are required.



Accessible Routes

Given the 4m change in grade from the former train station to the Rideau Street/Colonel By Drive intersection, a 5% grade along the street edge may not be possible. However, an accessible route can be provided indirectly through the plaza to link the Rideau/Sussex intersection with the high point in front of the former train station.

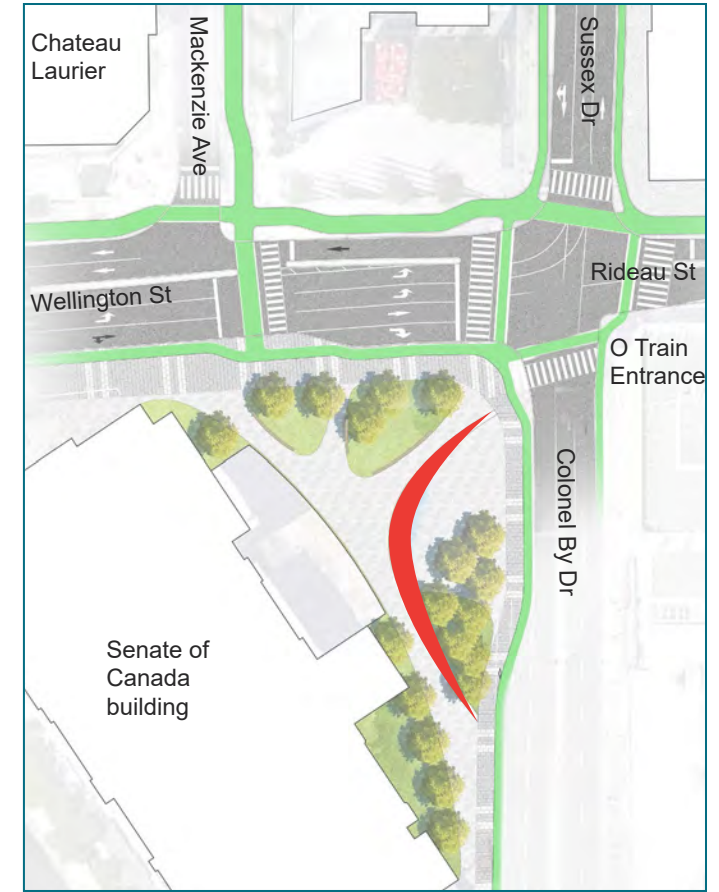


Level Gathering Space

A relatively level space for public gathering will need to be carved out with the use of retaining walls.

Feature Wall

The retaining wall along the edge of the gathering space has the potential to be a significant feature in the space. For example, it could incorporate interpretation of Ottawa's geological features, provide seating, or become an integrated water feature. It may also be appropriate to integrate it with the commemorative strategy.



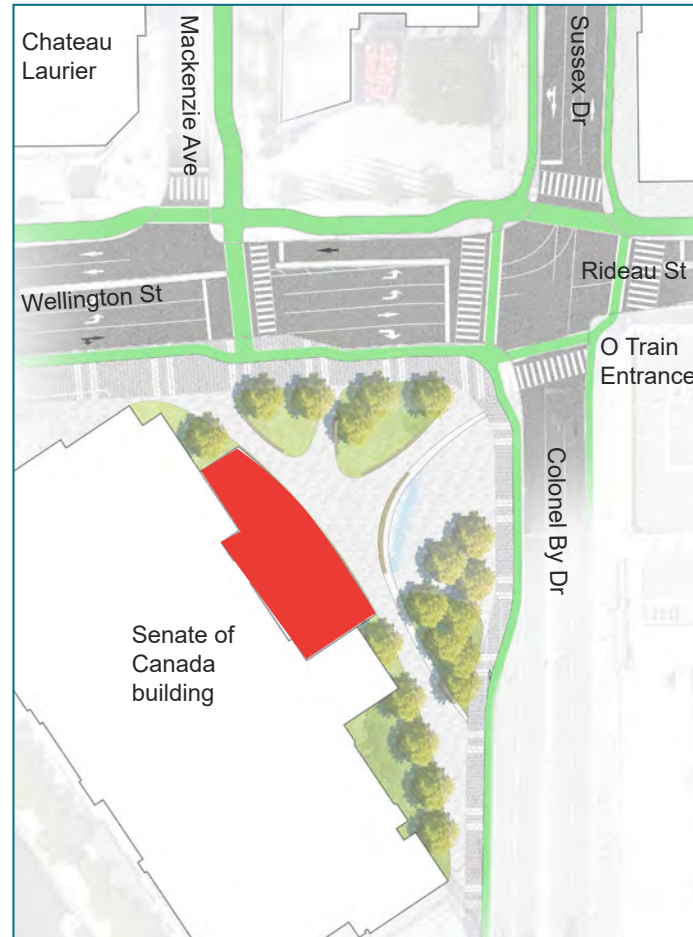
Planting in Masses

Group trees where they define the edges of space and can share large soil volumes.



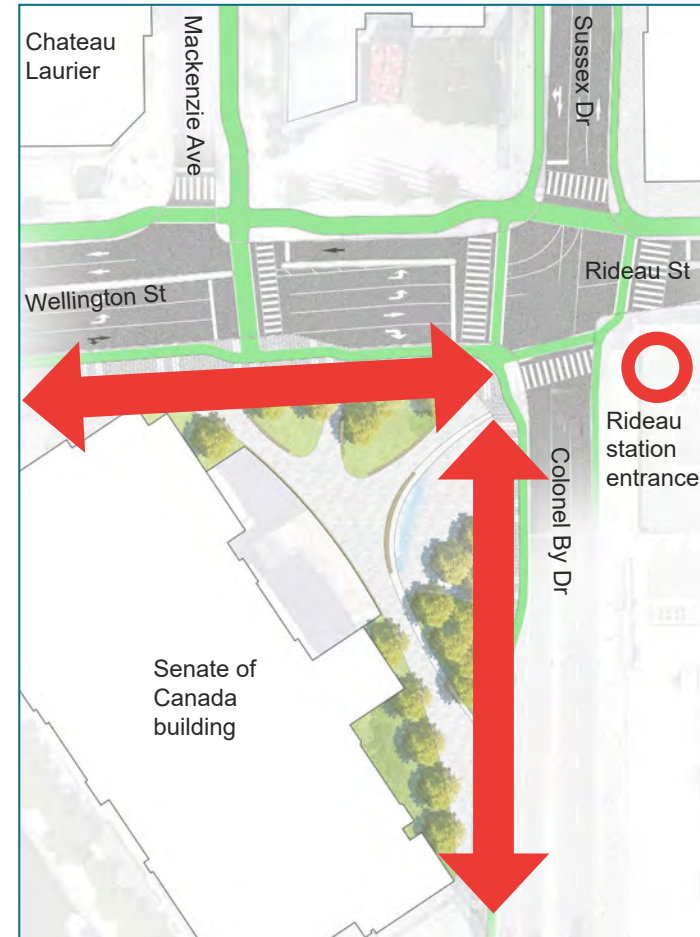
Active Edge

For the gateway to function as more than a movement space, an active building edge is important to animate the public space and provide year round activity. An active building edge refers to ground floor uses that generate pedestrian activity (a cafe or institutional uses, for example), is highly transparent so that indoor activity becomes part of the space, and has one or more principal entrances.



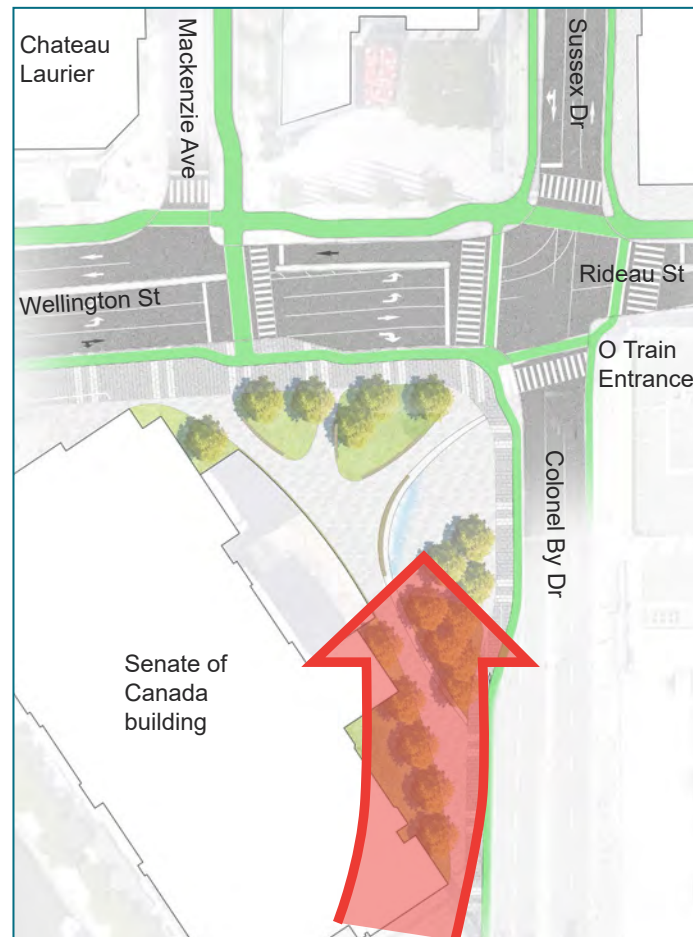
Confederation Boulevard

The streetscape treatment along Wellington Street and Colonel By Drive should feature paving, furniture and lighting consistent with the treatment of Confederation Boulevard through the capital.



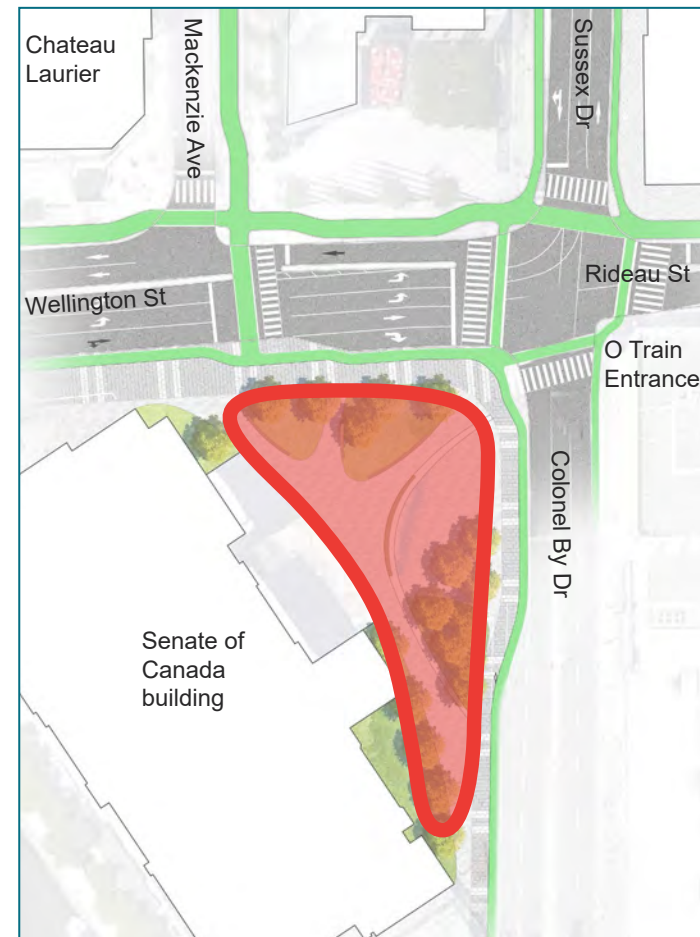
Parkway Landscape

The green, treed landscape along Colonel By Drive and the Rideau Canal should be expressed within the space. This includes the language of robust furniture and planting along the Rideau Canal Pathway opposite the Shaw Centre.



Gateway Space

The internal space should have a distinct palette of paving, furniture and lighting, separate from the Confederation Boulevard edges, but compatible with it.



Design Concept

- ensure NCC changes maintain a high level of connectivity for pedestrians and cyclists into the Market



- ! Current Issues**
- a complex intersection of arterial routes including the Alexandra Bridge
 - recent cycling and pedestrian improvements have made the intersection easier to navigate
 - set in an institutional landscape including the National Gallery, Notre Dame Cathedral Basilica, Peacekeeping monument, and Major's Hill Park

- 🕒 NCC Vision**
- remove the St. Patrick Street access lane to the Alexandra Bridge
 - expand the Taiga Garden gateway
 - part of a comprehensive plan to revitalize Nepean Point and create a connection to Major's Hill Park

NCC's winning competition entry for Nepean Point, showing the removal of the St. Patrick Street slip lane toward the Alexandra Bridge and the expanded Taiga Garden.

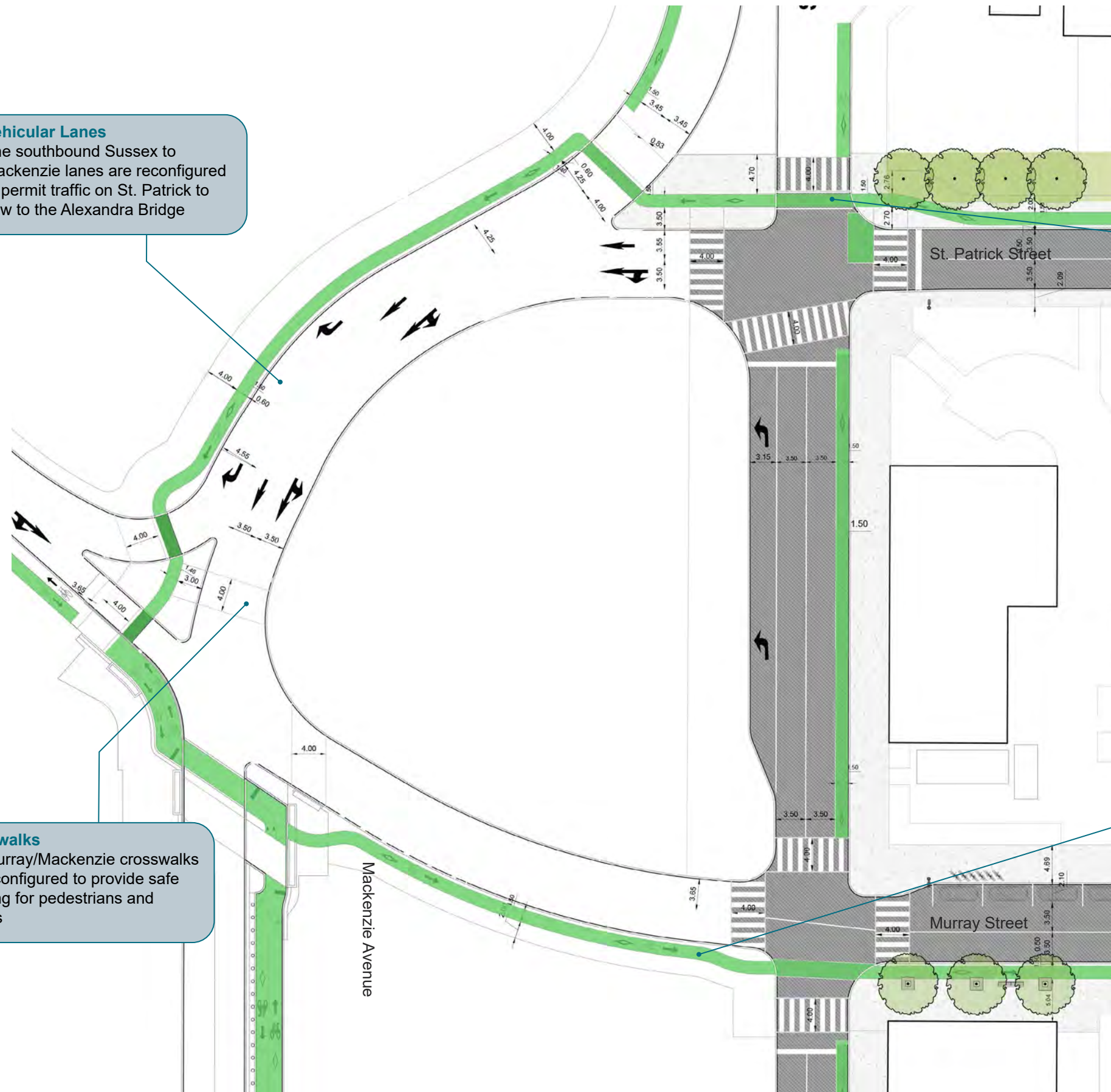
Functional Plan

Vehicular Lanes
 The southbound Sussex to Mackenzie lanes are reconfigured to permit traffic on St. Patrick to flow to the Alexandra Bridge

St. Patrick Cycle Track
 A new cycle track links to existing routes on Mackenzie and Sussex

Crosswalks
 The Murray/Mackenzie crosswalks are reconfigured to provide safe crossing for pedestrians and cyclists

Murray Cycle Track
 A new cycle track links to existing routes on Mackenzie and Sussex



Introduction

The implementation strategies of this Public Realm Plan provide an overview of building, activation and greening techniques of the public realm of the ByWard Market, including:

- 1 Activation Strategy
- 2 Visitor Experience
- 3 Phasing and Implementation
- 4 Pilots
- 5 Curbside Space
- 6 Future Proofing
- 7 Tree Preservation and Greening Strategy

Activation Strategy

The core Market streets have been designed to be flexible for a range of programming, events, and informal activities. It is very important to encourage both organized and informal activities from a variety of groups and individuals, including businesses, arts and culture organizations, community organizations, interest groups, the City of Ottawa, the Government of Canada, the Province of Ontario, and national events and celebrations. Compared to other places in Canada, Ottawa is fortunate to have many organizations who are active in the community and who promote the enjoyment of outdoor spaces. ByWard Market has a great opportunity to leverage these community resources to activate its streets and spaces with a vibrant retail and cultural life, throughout the year.

Most of the streets in the ByWard Market have a “Retail/Patio Zone” along the building face (identified on the Retail/Patio Zones map). The Retail/Patio Zone accommodates outdoor display, retailing and patios for adjacent businesses. This is a very important activity to accommodate in the warm weather as it provides interest, animation, and broad appeal on a daily basis.

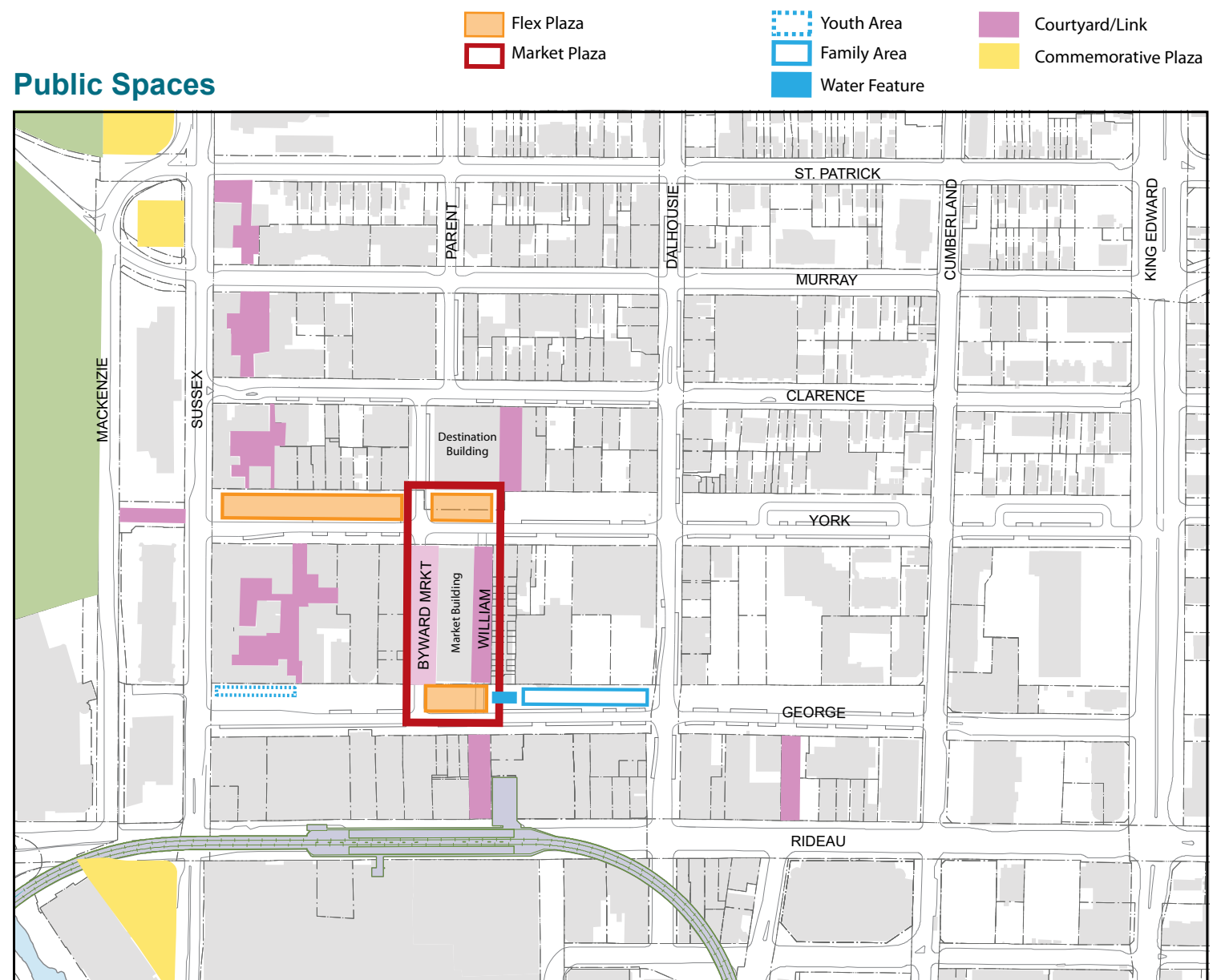
The general approach to activation and programming of the Market’s streets and public spaces includes:

- 1 Promote varied experiences that surprise and delight the senses including sight, smell, sound, taste and touch.
- 2 Seek programming that engages as many senses as possible during the year.
- 3 Be flexible to opportunities for spontaneous interaction and unexpected outcomes (e.g. street art) and do not sanitize the Market with overly curated events. Vet ideas with a few simple principles including public safety and inclusiveness.
- 4 Activate space with very small events of a few square metres that engage pedestrians in small groups, and with large gatherings of thousands of square metres accommodating thousands of people. York Street, William and George Street have the primary spaces to accommodate large events.
- 5 Incorporate fixed infrastructure into event spaces where feasible, such as power and water access.
- 6 Incorporate perimeter protection measures for large street gatherings and celebrations (e.g. for street festivals, potential placement for hardening measures would be at York and Sussex, York and Dalhousie, and ends of event site(s) at William and Byward Square. Bollards (both permanent and retractable) lining pedestrian promenades and at perimeters are incorporated into the designs and become an important safety consideration regardless of the scope/scale of programming.

- 7 Maintain a 6m emergency lane with no affixed infrastructure for Ottawa Fire Services during events; there is some flexibility
- 8 Consult applicable by-laws for all qualifying events (e.g. Special Events on Public and Private Property By-Law, the Special Events on City Streets By-Law and the Municipal Alcohol Policy). Notify Event Central (at City of Ottawa) before booking qualifying events for coordination and resourcing purposes

The following outlines specific approaches to activation and programming for each key space in the Market.

Public Spaces



York Street flex plaz (3500 square metres)

ByWard Market Square to Sussex Drive, north side of vehicle lanes, within pedestrian promenade area

Capable of hosting most small/medium events such as buskers, art fairs, performances, sidewalk sales, etc.

- 1 Leave York Street open to traffic for these event
- 2 Maintain the Retail/Patio Zone (retail spill out and patio area) during events
- 3 Reconfigure the moveable street furniture including benches, planters and bollards within the space or move to other areas of the Market
- 4 Provide programmable tall mast lighting to support a variety of programming and festival options through custom light colours and displays
- 5 Provide power in light pole bases and separate power panels in all lights
- 6 Plant trees to minimize physical obstructions in the plaza area and maximize the useable paved area (e.g. plant trees in paving)
- 7 Close the street from ByWard Market Square to Sussex to double the available space to 6,000 square metres, e.g. for a street festival

York Street flex plaza (1500 square metres)

ByWard Market Square to William, north side of vehicle lanes, within pedestrian promenade area

This is one of two key locations for outdoor vending under tents, and the preferred location for winter outdoor vendors. The tents should generally stay in place during events, i.e. plan events around the outdoor vendors, except for the largest gatherings. Tents can be removed when there is a need for larger infrastructure (e.g. large concert) that exceeds the capacity of the Flex Plaza. Outdoor vendors create a north-south "Market corridor" that includes the existing Market building, summertime outdoor vendors along ByWard Market Square, and the future Destination Building.

- 1 Provide access to power and water through utility connections in the pavement
- 2 Provide programmable tall mast lighting to support a variety of programming and festival options through custom light colours and displays. This includes the potential for a significant overhead or catenary public art lighting installation that defines a unique character over this space
- 3 Provide power in light pole bases and separate power panels in all lights

Seasonal outdoor farmers' Market stands and vending stalls in the York Street Plaza and along ByWard Market Square should:

- 1 Anchor fixed vending structures or stalls into ground
- 2 Include security features that permit locking-up at night
- 3 Slope roofs of structures to control snow accumulation and direct rain fall
- 4 Include awnings (for inclement weather)
- 5 Permit ability to vend from one to three sides of vending structure
- 6 Level structure surface to permit an easier set-up / take-down
- 7 Ideally include solar-powered lighting
- 8 include a 50-amp service connection to enable winter sales
- 9 Ideally City flushes storm sewer more than twice per season or after any heavy rainfall to prevent rats and harsh smells

George Street (6000 square metres)

Sussex Drive to Dalhousie Street, north side of vehicle lanes, within pedestrian promenade area

The north side of George includes a youth-themed area near Sussex, a flexible plaza area directly south of the existing Market building, and a family-themed area between the Market and Dalhousie

- 1 Provide a permanent infrastructure of trees, seating, pavilions, a fountain, and skateboarding along the promenade on the north side of George
- 2 Keep other areas open to be flexible for activities and programming
- 3 Locate street trees to create a series of smaller outdoor rooms along the promenade, to accommodate a range in programming. The programming along George is envisioned to be smaller in scale than along York
- 4 Provide programmable pavilions in the family area. They are permanent framework structures that can host a variety of activities including exhibits, street furniture, play equipment, and public art
- 5 Develop a process to keep the pavilions programmed as much as possible throughout the year, potentially including ties to sponsors
- 6 Provide moveable dining or picnic tables for outdoor eating in proximity to the Market within the flexible plaza area south of the existing Market building
- 7 Design tree planting to minimize physical obstructions in the plaza area and maximize the useable paved area, i.e. trees in paving

William (2500 square metres)

George Street to Clarence Street

William will become a dedicated pedestrian zone, providing opportunity for more passive and informal programming such as seating, eating, and family activities. In the short term it can accommodate some of the programming ultimately intended for George Street.

- 1 Consider catenary lighting to create a festive character adjacent to the Market building and to remove poles from the narrow pedestrian street
- 2 Create opportunities for temporary art installations

ByWard Market Square (2700 square metres)

George Street to York Street

- 1 Close ByWard Market Street to traffic during warm weather for outdoor vending
- 2 Provide access to power and water through a utility connection in the pavement
- 3 Consider catenary lighting to create a festive character adjacent to the Market building and to remove poles from the narrow pedestrian street
- 4 Provide curbside layby lanes for on-street parking on the east side only, which have the potential to be used in winter by spill out activities from the Market building

Clarence Street

Sussex Drive to Dalhousie Street

The public realm treatment is primarily focused on businesses along Clarence and the need to provide adequate clearways.

- Provide a wider promenade on the north side to include space for outdoor patios. Ensure the clearway is a minimum of 2.0m. The clearway will combine with pedestrian space around benches and trees to create a wider pedestrian zone than just the clearway, typically 3.5m.
- Allow businesses on the south side to utilize the flexible curbside lane as patio space in summer
- Avoid raised decks and opaque railings on patios

NCC Courtyards

The courtyards are activated by a variety of programming, including patios and small events. Their current configuration and use works well, and continued activation by the National Capital Commission will complement ByWard Market.

Phasing & Implementation

Long Term Plan

The Public Realm Plan illustrates the preferred long term public realm configuration. The vision is based on the City's goal of transforming the Market to a pedestrians-first environment. The plan is based on extensive stakeholder consultation and what is known about patterns of use, transportation, and servicing. It is anticipated to be implemented over decades (for more information about stakeholder consultation, refer to Appendix 4).

- Dimensions on the functional plans show the general placement of infrastructure and landscape.
- Refinement of these designs will occur at detailed design phase(s) of this plan. Refinements could include, for example, the placement of trees due to underground utilities or geotechnical and hydrogeological considerations, the location of light standards based on photometric calculations, or the configuration of patio zones based on the desires of restaurant operators.
- The plan assumes that existing parking lots on private properties will infill with street-edge buildings over time. Therefore, the current locations of driveway accesses are not shown.
- If public realm projects are implemented in areas where there are existing parking lots or driveways, the plan will need to be adjusted. Efforts should be made to maintain the general placement of soil cells, trees, planting, lighting and street furniture while accommodating both existing and future driveways.

Phasing of the Public Realm Plan is dependent on capital budget allocation, infrastructure renewal, strategic initiatives and/or partnerships. The following map provides an overview of the general phasing intent to maximize the transformative impact for pedestrians.

York Flex Plaza (Highest Priority)

This space has the potential to make a large and immediate impact on the public realm, as it redefines the use of space, creates a high quality environment, and provides the flexible space that is fundamental to the plan. It is centrally located and large enough to demonstrate the greater potential of the full implementation of the public realm vision. It can generate excitement and momentum for the future.

The York Street Market Plaza and Destination Building, ByWard Market Square and William (High Priority)

The new building and public space should be linked and implemented at the same time. The new building edge along York must be set back from the existing location of 70 Clarence in order to create the plaza zone and provide space for the tents. The destination building, depending on its final use and program, is the most appropriate location for accessible public washrooms, covered bicycle parking, potential EV charging stations and storage of equipment (e.g. forklift, stage equipment, planters, benches).

George Street (ByWard Market to Dalhousie – Medium Priority)

This area of George Street includes the water fountain feature and the family area. This area has a lot of potential to attract families to the Market, which has been identified as a missing element. It also provides a lot of permanent infrastructure that expands the cultural and activity potential of the Market for all ages.

Clarence Street (Medium Priority)

Transforming Clarence Street is a relatively simple project that has a big impact for its modest scale and capital expenditure. Considering its importance as a food and nightlife destination, Clarence Street is currently very unfriendly to pedestrians and people with mobility aids who must navigate private patios, sandwich boards, patron line-ups and a squeezed sidewalk space.

The other streets and spaces of the Market are considered less essential in terms of their impact on the public realm and transformation of the Market's image. Implementation projects can be more opportunistic, perhaps following infrastructure renewal or adjacent development.

George Street Timing (Sussex Drive to ByWard Market Square): North or south alignment of George Street due to The Bay's loading doors

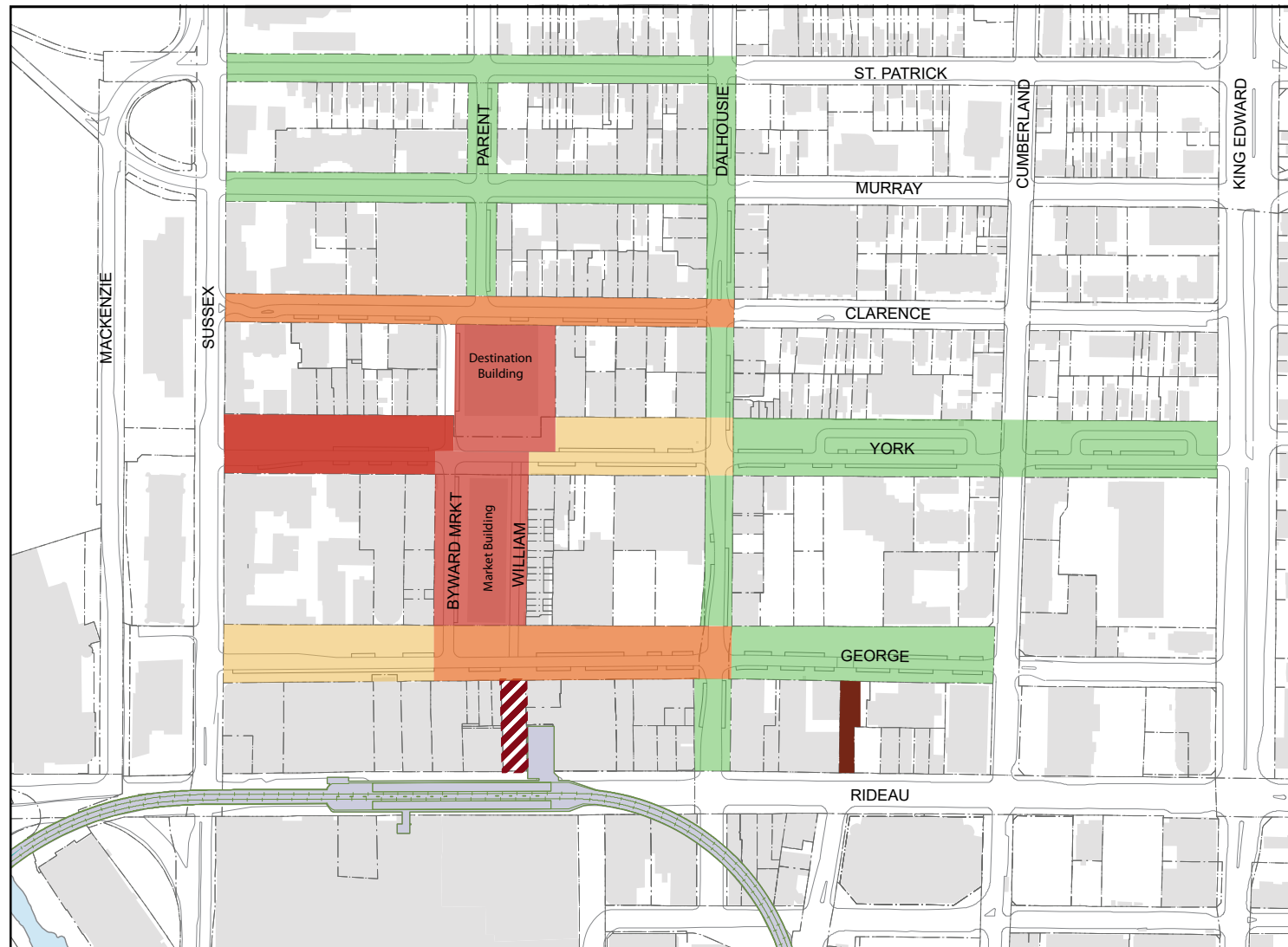
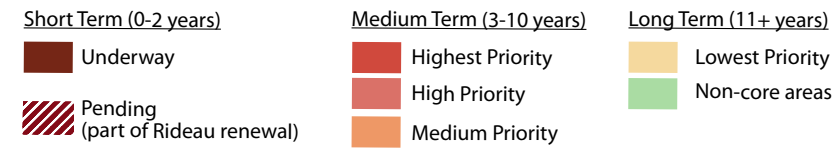
At such an important pedestrian gateway to ByWard Market, it is not appropriate to have loading doors for 53' trailers facing onto George Street. In future, loading should be accommodated by other means, such as smaller trucks, layby loading, late-night loading or from loading space interior to the building. This will allow the vehicular lanes along George Street to be located in the southern half of the right of way, and create the wide pedestrian promenade on the north half of the right of way envisioned by this Public Realm Plan.

However, this Public Realm Plan recognizes that for the foreseeable future The Bay may require access to its loading doors as it does today. An alternative plan for a northerly street alignment for George is provided. In this case, the large loading zone and turning radius becomes a flexible plaza area when not in use by trucks.

Beyond the Study Area

Transitions to the ByWard Market from the surrounding urban fabric are seamless and can be gradual. The Market is embedded in the Lowertown neighbourhood. Streets like Clarence, Murray and Dalhousie continue their use and character beyond the boundary of this Public Realm Plan Study Area. The design language recommendations in this plan related to paving, furniture, tree planting, lighting and special features can be extended to encompass these transitional streets.

Phasing



Project Priorities

The ByWard Market Public Realm Plan is the sum of many projects. While this plan shows the ultimate build out, to get there requires testing, pilot projects, incremental changes to streets, parking, and public realm, and capital improvements to infrastructure. The following table presents a number of short, medium and long term projects that can be implemented by the City of Ottawa and its partners. There are a number of inexpensive, quick wins that can be implemented on the heels of this plan to keep momentum moving forward.

Short Term Projects (0-2 years)		
Project	Type	Responsibility
Launch Working Group on economic recovery (2021)	Minimal cost	City of Ottawa and Partners
Pilot projects until larger investment is secured (2021)	Affordable and achievable Quick start	City of Ottawa and Partners
William Street pilot and enhanced crosswalk » pedestrianize William from George to York	Affordable and achievable Quick start	City of Ottawa (crossing, signals) and Partners (programming, enhanced maintenance)
ByWard Market Square pilot » pedestrianize as a seasonal street from George to York	Affordable and achievable Quick start	Partners (closure, programming, vending tents, enhanced maintenance)
Destination Building Request for Information for 70 Clarence (Q4 2021) » assess partnership, business and public benefit opportunities	Minimal cost Understand Market potential	City of Ottawa and Ottawa Markets
New district-wide governance model for programming, place-keeping, and operations (Q2 2021) » define roles and responsibilities	Minimal cost	City of Ottawa and Partners
Waller Mall detailed design (2021) and construction (2022)	Cost share	City of Ottawa, development proponent, existing condominium
Seek out funding for York Flex Plaza (2021) and complete detailed design (2022)		
Rideau-Sussex Gateway concept (2021) » complete network transportation study » understand and ratify transportation impacts	Study	City of Ottawa
National design competition for Rideau-Sussex Gateway (2022)	Honorarium costs	City of Ottawa and NCC
New Maintenance Standards	Affordable and achievable	City of Ottawa and Partners
Beautification and Seasonal Display » enhanced flower baskets, holiday lighting	Affordable and achievable	Partners
Improvements to ByWard Market Building	Modernization	Ottawa Markets

Medium Term Projects (3-10 years)		
Project	Type	Responsibility
York Street Flex Plaza (Sussex to ByWard Market Square)	Capital improvement Transformative project Infrastructure renewal	City of Ottawa
ByWard Market Square seasonal street	Capital improvement	City of Ottawa (capital improvements) and Partners (programming, tents)
Existing heritage Market building renewal (55 ByWard Market Square)	Capital improvement	Partners
Destination building	Capital improvement Potential public-private partnership	City of Ottawa, development partner and Partners
York Street Market Plaza (ByWard Market Square to William) and William Street pedestrianization (York to Clarence)	Capital improvement Potential public-private partnership Tied to Destination building Infrastructure renewal	City of Ottawa, development proponent and Partners
George Street family zone (ByWard Market Square to Cumberland) » promenade and public realm improvements » family-oriented and playful furniture and amenities » family programming	Capital improvement Transformative project Tied to development applications Infrastructure renewal	Development proponent and City of Ottawa
High Mast Lighting » stand alone or part of York or George Street improvements	Capital Improvement	Partners
Clarence Street	Capital improvement	City of Ottawa
Rideau-Sussex Gateway » ramp removal, lane reconfiguration, cycling infrastructure and public plaza	Capital improvement	City of Ottawa and NCC

Long Term Projects (11+ years)		
Project	Type	Responsibility
George Street (Sussex to William)	Capital improvement Infrastructure renewal	City of Ottawa
York Street (Dalhousie to King Edward)	Capital improvement	City of Ottawa
Dalhousie Street	Capital improvement Infrastructure renewal	City of Ottawa
Murray Street	Capital improvement Incremental	City of Ottawa
St. Patrick Street	Capital improvement Incremental	City of Ottawa
Parent Street	Capital improvement	City of Ottawa
Sussex-St. Patrick-Murray Gateway	Capital improvement	NCC as part of Nepean Point revitalization

There will be opportunities to implement segments of this Public Realm Plan over time by leveraging other construction and capital improvement projects in the area including:

- infrastructure renewal
- development applications
- Federal infrastructure or tourism initiatives

Whenever these initiatives occur, the City should consider concurrent investments in the public realm to extend their impact. For example, a developer may implement promenade and roadway public realm construction adjacent to their site, and the City could consider extending the public realm across the entire right of way.

Many of the projects of this plan will require funding and assistance from multiple sources. For some of these projects, while the City of Ottawa may be responsible for capital improvements to the public realm, partners such as Ottawa Markets and the Business Improvement Areas will be involved in programming (events, installations, play furniture, outdoor vending, beautification) and operations (supplementing street cleaning, garbage pick up, event logistics). In some cases, a special BIA levy can fund specific projects such as streetscaping or public art.

Further Studies

The ByWard Market is a unique district in the City of Ottawa with significant historical importance. It plays an important role as a tourism destination and mixed use district. To maintain and enhance its character, role and function within the City, it warrants status as a Special District. Exceptions to standard City design standards, operations, and maintenance operations are required.

Indigenous Co-design

Further exploration of the importance of first peoples and the Algonquins to the Ottawa area and to ByWard Market needs to be explored and reflected in the detailed design and character of the public realm landscape. Showcasing and celebrating this culture can include the selection of native and traditional planting, incorporation of Algonquin motifs, imagery and public art, and designing spaces to be inclusive and supportive of Algonquin gatherings. The ByWard Market public realm has the potential to be more than this, and can layer in themes that tie back to the Indigenous world view by promoting ways of managing landscapes and ecosystems, and interacting with the world through artifacts and structures, that achieve ecological sustainability.

Patio By-law or Guidelines

ByWard Market has a high concentration of sidewalk patios, and this is an important part of its ambiance and economic success, and they should be supported. This plan expands Retail/Patio zones along many street frontages by widening the adjacent sidewalks. Even on narrower sidewalks, if minimum pedestrian clearways can be maintained, narrow patios should be considered. It is a goal of this plan to provide an environment where patios are seamless with the adjacent clearways with few barriers or obstructions. A special patio By-law for the Market should be considered. The new By-law should prioritize Accessibility and cane detectability, as the current By-law does.

Curbside Space

Flexible curbside vehicular space has been provided throughout the Market to serve many functions: on-street parking, short-term deliveries and loading, passenger pick up and drop off, and tour bus loading. The role of all of these uses is important and supports the economic and cultural success of the Market. Because the Public Realm Plan will be implemented over many years, likely in discrete phases, a continually evolving plan for use of curbside space will be required. As an example, in the pedestrianization of William, it will be important to maintain deliveries to those businesses. This can be accomplished with a timed delivery window, such as before 10a.m., when trucks are permitted to access William for servicing purposes. This will require businesses to re-schedule how they receive deliveries. In addition, designated short term loading on York or George can accommodate those trucks who cannot make the 10a.m. delivery window. All use of curbside space should be further considered at Detailed Design.

Lighting

Lighting is a complex consideration for the Market, which includes a network of vehicular streets and intersections, wide pedestrian promenades, historic assets, and the desire to use lighting to create a unique, special character for the district. A more detailed strategy is required to understand where lighting is required, its photometric performance standards, and its desired character. There will be areas where lighting will need to be very deliberately controlled, for example where residential or sensitive uses are in proximity to commercial or historic uses. This strategy may include the timing of the lighting and special guidelines for events.

Waste & Recycling

A program for the capacity, location and collection schedule for waste receptacles should be established. The City should establish a baseline schedule, with supplementation from the BIA or Ottawa Market. In general, waste receptacles should be located in the furniture zone near the curb for easy access for collection trucks. There will be a greater concentration of waste receptacles in the Market core than at the periphery. Waste receptacles are preferably located at street corners, and within gathering areas.

Paving

The City of Ottawa recognizes the value of decorative paving in special locations across the city and is working to establish an approach to the use of interlocking paving. Interlocking or decorative paving plays an important role in delineating ByWard Market as a special district within the City. In the Ottawa context, there are two general concerns with interlocking paving: its performance in winter, including heaving and wear from snow plowing; and, its performance as an Accessible surface, including smooth grading and visual contrast.

These issues are important and further study is required in the Ottawa context. In other jurisdictions, interlocking paving has been used successfully and has performed well when measured against these concerns. With respect to heaving and wear, it is important to assess fairly against standard concrete and asphalt treatments, both of which exhibit these stresses over long time periods.

Techniques that have proved successful include:

- providing a concrete base to unit paving which minimizes movement and keeps the surface smooth
- using road-grade unit paving wherever there is a possibility of vehicular use
- ensuring unit paving is coloured through, so that regular wear and minor nicks are not as visible
- using textured unit paving to delineate boundaries between pedestrian and vehicular zones

- using high contrast unit paving in combination with poured in place concrete to delineate pedestrian clearways and crosswalks
- embedding cane-detectable markers within unit paving

Further consultation with CNIB and other Accessibility groups is warranted to define standards for colour, contrast, texture and delineation.

Programming and Events

The City of Ottawa will need to understand best practices for hosting events, including logistics and servicing. Electrical and water services should be code compliant and be functional for a variety of programming.

Street Geometry and Subsequent Street Design Work

The public realm plan is based on an underlying draft geometric design for pedestrian, cycling and vehicular realms that captures the over-arching vision for the district, one that has made best efforts to achieve a pedestrian-focused and traffic-calmed result for the Byward Market. It establishes a framework for coordinated construction over the lifetime of this plan, some 20 years into the future.

Also, the local street network will be managed by the City as 30 km/h street speed limit streets. On this basis, the following geometric objectives are evident in the plan:

- Accessible routes, approaches and crossings, with tactile warning measures;
- Wider sidewalk zones (for people, trees, furnishings, infrastructure);
- Reduced crosswalk lengths (shorter crossing);
- Increased crosswalk widths (more capacity);
- Direct, wide walking routes to Rideau LRT station (to promote wayfinding, mode choice)
- Combination of shared-lane and separated cycling routes (geared to the planned function of segments);
- Flex parking in some segments (flexibility for non-parking uses);
- Choices to program parking spaces as parking or loading or other uses (to meet varying demands);
- Shared streets in some segments (capable of seasonal or permanent pedestrian-focus, restrictions to general traffic use);
- Bus stops with clear sidewalks (for unencumbered front and rear door loading);
- Tighter vehicle turning corner radii (to slow turns, provide more landing space at crosswalk ends);

- Narrower vehicle lanes (to free up space for wider sidewalks, manage speeds);
- Narrower, defined private approaches (to clarify the driveway locations)
- Raised intersections and mid-block traffic-calming measures (for vehicle speed reduction); and
- Fewer one-way streets (for connectivity, trip length reduction).

The design has attempted to strike a balance between all street users, and varies across the district in response to the planning designations and unique contexts of each street and block. Having said this, it is important to note that the ultimate design of each street segment that advances toward reconstruction will undergo a subsequent preliminary and detailed design phase. Those more-detailed designs will be completed in an incremental manner, following the City's strategic investment and life-cycle renewal and funding programs. Those designs will include a refreshed analysis that is in keeping with lessons learned from initial phases of construction, and ever-changing design standards. The subsequent geometric designs will be informed by the following considerations and supporting analyses:

- further study of Area Traffic Management as well as impact and benefits assessments for all modes
- Multi-Modal Level of Service (MMLoS) studies to assess road and intersection designs as well as the impacts of new development in the area;
- Large vehicle turning radius studies;
- Traffic calming investigations
- Street-specific curb-side use studies (parking, loading, taxi, police, tour bus parking, etc);
- Municipal Servicing engineering designs; and
- Subsurface utility conflict investigations

Finally, it is recommended that the City continue to monitor transportation conditions in the ByWard Market throughout the years of public realm renewal, including the following measures: pedestrian, cycling and vehicle volumes at intersections; transit ridership (on Dalhousie Street), accidents (all users), and public parking utilization. It will be important to understand the time-series results of the incremental renewal investments, and to reflect any trends or lessons learned in the preliminary and detailed designs on a project by project basis.

Detailed Design & Construction

Prequalification of Contractor

Prequalification of contractors should be done to ensure

- Capacity of the contractor to undertake a phased project of this scale
- Demonstrated commitment of resources
- Experience working in a highly urban environment
- Experience with projects of similar scope and including similar streetscape elements (water play features, hard surfaces, interlock paving in the right of way, high quality execution, etc.)

The prequalification process can be administered at the same time as detailed design work is being undertaken by the design consultant team to save time.

Consultant Team

A multi-disciplinary consulting team will be required to undertake detailed design work to further evolve and define this Public Realm Plan. The first major project will set standards for furniture, lighting, paving, planting and other elements of the public realm that will carry through the entire build-out. It is recommended that sufficient time is allocated to the consultant team to work through these defining details. The team should include:

- Landscape Architect
- Transportation & mobility
- Accessibility consultant
- Indigenous representation
- Electrical engineer
- Lighting consultant
- Water/mechanical engineering
- Structural engineering
- Civil engineering
- Cost consultant
- Play ground design
- CSA Specialist
- Geotechnical and hydrogeological engineering
- Architect
- Irrigation
- Security expert
- Arborist
- Public art consultant or artist
- Programming and events consultant

Geotechnical and Hydrogeological studies can be conducted prior to commencement of detailed design to ascertain soil and groundwater conditions, and make preliminary recommendations based on the public realm design plan. These studies should determine if there are any contamination concerns given the area's history and make recommendations for next steps.

Public Art

There are a number of specific public art opportunities identified by this Public Realm Plan, including three significant placemaking moments along York Street, envisioned to be sculptural elements at the Sussex and King Edward gateways, and a lighting element above the York Street Market Plaza. There are further opportunities for art treatments and cultural heritage interpretation that can be integrated with public realm furniture and decorative paving, such as the pavilions, play elements, and water feature. In addition, other creative opportunities should be considered.

- 1 Integrate one or more public art opportunities at the detailed design stage to be implemented with the construction of the relevant street segment. Options for achieving this could include the requirement for a team to include public artists, or to propose a selection process for an artist(s), such as an international competition. The City of Ottawa may also have a process depending on the administering department.

The Existing Market (55 ByWard Market Square)

Ottawa Markets has a Strategic Plan and Strategic Implementation Plan that outlines projects and priorities for rejuvenating the Market experience. It will include management (e.g. vendor mix) and capital improvement (e.g. building renewal) recommendations. Close coordination with Ottawa Markets will be important in implementing the public realm, operations and maintenance recommendations of this Public Realm Plan.

Rideau-Sussex Gateway Public Space

There are a number of variables that could have significant impacts on the design of the public space, including:

- Further study of transportation impacts on all modes of travel and subsequent decision on appropriate balance
- Timing of the vehicular ramp removal
- Timing of the Senate's return to Parliament Hill and future use of the building, including the potential for the future use to better interact with the public space through entrances and windows
- Long term plan for the truck loading/servicing area on the east side of the building which occupies some of the public space
- Nature of the commemoration envisioned by the NCC

- Feasibility of adding active uses (e.g. café) into the space
- Security needs

This Public Realm Plan demonstrates a design concept that promotes a high quality pedestrian environment based on assumptions that can be made today:

- The vehicular ramps will be eliminated (Mackenzie to Colonel By), with appropriate lane reconfigurations to surrounding streets
- Bike routes will be implemented connecting Elgin, Wellington, Rideau, Mackenzie and Sussex. Bike routes will be along the road edges, not through the middle of the public space
- Implementation will occur prior to the Senate vacating, and the truck loading/servicing area will remain
- The commemorative element can be layered in at a future time, for example, as a stand alone sculptural element
- A permanent or temporary building that has a supporting use can be placed along the edge of the Senate building
- No security measures are needed

The demonstration plan is useful in identifying design concepts that respond to the transportation network assumptions, the topography of the site, the implications of the site's position along Confederation Boulevard, as well as potential design themes related to the site's natural geography and cultural history. It allows for an order of magnitude cost estimate to be prepared based on those assumptions. Recommendations for the Rideau-Sussex Gateway include:

- 1 Hold a design competition to determine the public realm design for this gateway space because of its significance, its context in Ottawa's urban fabric, and the importance of the future commemorative element.
- 2 Ensure that decisions on transportation, use, and public art create a well defined framework for designers to respond to. There must be certainty with respect to the location of the lanes and curbs that define the edges of the space

There are a number of formats for holding a national design competition, and the City should consider its objectives in defining the process. A suggested format would include:

- Commitment and capital budget allocation to constructing the vehicular and bicycle network changes
- Definition of the nature of the commemorative element. This could be something determined by the NCC, or left to competition entrants based on a statement of objectives
- Definition of a program for the space (e.g. activation strategies, circulation requirements, event requirements, and pedestrian amenities such as seating)

- Public consultation
- A two stage juried competition:

Stage 1

- » General call for teams, including qualifications and past experience
- » Shortlist to 3-5 teams

Stage 2

- » More defined competition brief provided to all teams including capital budget
- » Submission of conceptual design concept and cost estimate, potentially including an interview
- » Selection of winning team

Governance of the ByWard Market area

There have been several governance reviews of the ByWard Market neighbourhood over the past decade, leading recently to the formation of Marchés d'Ottawa Markets in 2018. From our stakeholder interviews, it is clear that there is a need for greater clarity of the roles and responsibilities of the City of Ottawa, the ByWard Market Business Improvement Area, and Marchés d'Ottawa Markets. These parties must be organized under a single, clearly defined vision and mandate befitting that of a district. This concept is reinforced by the City of Ottawa's recently released draft Official Plan that notes that the ByWard Market area should operate under a distinct policy regime. Consideration should be given to consolidating organizational mandates such that there is more focused and accountable leadership that can regulate, program, and speak on behalf of the many stakeholders that make up one of the city's most special and economically important places.

Of consideration in a governance review are the following priority areas for discussion and realignment:

- baseline standards for maintenance and beautification
- ongoing operation and maintenance of many of the special public realm features (e.g. catenary lighting, fountains, bollards) set out in this plan
- marketing and spokesperson of the district
- event coordination and support
- use and permitting of the right of way for special events, retail or restaurant use
- implementation of public realm pilot projects
- integration of district activities with the operation of the Farmer's Market
- support towards the implementation of the capital projects in this Plan
- coordination with other boards and organizations
- revenue generation from levies, fees, rental of space, etc.

Pilots

Pilot projects are a great way to explore ideas and manage change, and an inexpensive way to test the recommendations of the Public Realm Plan. Observations and feedback from pilot projects can help refine the Public Realm Plan over time. Pilots can provide a level of comfort to existing businesses and users in the face of change.

- 1 William Pedestrian Street:** The summer 2019 pilot project closed William (George to York) to traffic and parking – to make a fully pedestrianized space. Tables, chairs, kids activities, greening, additional vending stalls.
- 2 Clarence Sidewalk Widening:** The summer 2019 pilot project closed the curbside layby lane on the north side of Clarence (Parent to Dalhousie) to parking by providing planters along the edge. This created a widened pedestrian area on the north side; ramps between road level and sidewalk level were also installed.

Potential new pilot projects include the following.

- 3 ByWard Market Square Seasonal Street:** Similar in concept to the William pilot, close the street to traffic and parking in the summer. Combined with the continuation of the William pilot, this would create a pedestrian area around the entire existing Market building. The outdoor vending tents can be moved to the middle of the space to create two, double-sided vending/retail zones.

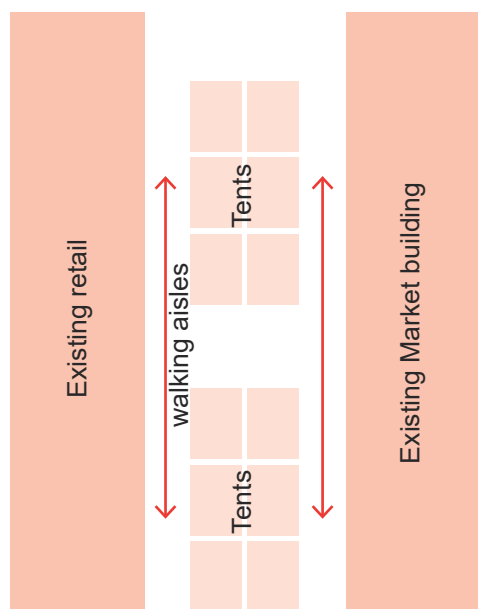


Diagram of potential Byward Market Square Seasonal Street pilot project

- 4 George and York Street Transformations:** This pilot would be more complicated. Changes to traffic patterns (including changes to signage, signalization, curbs, lane markings), and other vehicular controls would be needed. Creating the large, flat pedestrian spaces in these streets would require large areas of temporary decking or paving. Despite these challenges, piloting one or more of these transformations for a year or two could provide useful feedback in terms of implementing the permanent capital improvements. It is recommended that other, easier to implement pilots be pursued first
- 5 Bicycle parking:** Temporary bicycle parking racks, supervised or secure parking, covered parking, bike lockers, and/or bike repair stations could be provided around the Market to understand where preferred locations are and what the operational challenges might be.
- 6 Programming and Animation:** Explore partnerships with community and business organizations for sponsorships and volunteers. Any of the programming ideas listed earlier can be piloted. Work with the BIA, Ottawa Markets and local businesses to create a pop-up retail program:
 - » As an opportunity for current or prospective vendors to try out a new concept or start a new business
 - » Create a temporary 'permit' to operate with no or minimal permits, licenses or taxes
 - » Establish retail in empty storefront and parking lots in vending kiosks, vending trucks, or shipping containers
 - » Consider a dedicated space that allows for a constant evolution of new entrepreneurs and artists – this could be ideal for animating the Waller Street Mall. The goal of pop up retail is to provide the opportunity for experimentation. If successful, invite operators to join the business community.
- 7 Patio pilots:** experiment with different standards and regulations about patios to see what works and what doesn't, for both existing conditions and as portions of the Public Realm Plan are implemented. For example, narrow patios, patios that may expand at certain times, and patios without barriers may enhance business success while complementing the public realm ambiance.
- 8 WiFi:** Provide a public WiFi zone around the Market building and/or within the Market core. Consider signage and advertising if provided by a third party.

Curbside Space

Curbside space has been provided along almost every street in the Market with the exception of St. Patrick Street. Curbside space is a non-through lane for vehicles, and is usually intended for vehicle storage. The programming of curbside space refers to how the space is allocated among many uses including accessible parking, public parking, loading/deliveries, passenger pick up and drop off (PPUDO), tour bus loading, temporary patios and public events, and other uses. It also includes how those uses are timed, for example, areas that are loading in the morning and PPUDO in the afternoon and evening.

As this Public Realm Master Plan will be implemented over many years, the role and function of curbside space throughout the Market will change, and will need to be evaluated and adjusted over time. While this plan makes allocation recommendations based on what is known today, patterns of use will continue to evolve based on transportation technologies, personal preferences, land use change, and other factors.

Parking and Loading in the Public Rights of Way: Strategic Objectives

- 1 On-Street Parking:** Provide short-term on-street parking in strategic locations and in support of businesses and tourism, understanding that there will be an incremental reduction in the number of surface spaces. Ensure that any reductions in public short-term parking will not negatively impact support for businesses, institutions and tourism in the area.
- 2 Right-of-Way Surface Parking Lots:** Eliminate existing surface parking lots within the street rights-of-way incrementally, in favour of creating public realm space.
- 3 Passenger Pick Up and Drop Off:** Consider establishing special zones for the pick-up and drop-off of passengers.
- 4 On-Street Loading:** Increase the amount of on-street loading spaces provided in strategic locations and with a particular emphasis on George Street, which also serves uses along Rideau Street. Consider timed loading zones in strategic locations that change over to short-term parking after the designated time, for example, after 11 a.m.
 - Establish a loading zone window along William from 5 a.m. to business opening at 10 a.m. Provide a short term loading zone along York or George, near William, during the day when William is closed to delivery trucks.
 - Establish a similar, potentially shared, arrangement for ByWard Market Square when it is closed to through traffic during the summer.

- 5 Off-Street Parking:** Eliminate the parking garage at 70 Clarence, implemented with a plan for affordably priced replacement spaces in locations near but outside of the core of the Market.
- 6 Tour Bus Parking:** Provide short term PPUDO space within the Market, but relocate long-term tour bus parking to streets outside of the core of the Market.
- 7 Flex Parking:** Design on-street parking spaces to be used for outdoor patios or street spots along certain streets, while also creating wider sidewalks and open spaces to increase the propensity for the parking spaces to remain available for parking.
- 8 Accessible Parking:** Designate on-street spaces for persons with disabilities and/or ParaTranspo.

Parking Replacement Strategy

One of the key objectives of this Public Realm Plan is to reassign space that is currently used for parking to pedestrian space. In addition, the City will replace the parking structure at 70 Clarence with a new destination building. This will result in the loss of parking.

This plan will be implemented over many years, and so the loss of parking will be gradual and phased by project. In parallel, there will be changes to people's transportation choices, for example, with the operation of the LRT.

The City is committed to replacing the loss of parking with new parking, to be located outside of the Market core. The parking will be convenient to the Market without compromising its new, pedestrian focus.



- █ Reserved Accessible Parking
- █ All Day Short-Duration Loading
- █ Daytime Loading / Evening Parking
- █ Tour Bus Parking
- █ General Parking

Future Proofing

Anticipating future needs and conditions in the Market can help to determine what infrastructure and operating procedures to implement as part of the public realm improvements. This will help avoid additional costs and disruption later. While this is a good general goal, caution should be exercised, as accurately predicting future technological or societal conditions is uncertain.

Information and Communications Technology (ICT)

The Market should support innovation and future-readiness through early adoption of advanced technologies. Proving WiFi in the public realm or 5G cellular technology can enhance the usability and enjoyment of ByWard Market, and provide a competitive advantage for the Market over other areas of the city and over other cities in Canada. These technologies, today, use both wired and wireless systems, such as conduit for fiber optics and transmitter/receivers. There has been a trend of increasing need to provide fiber optics to transmitters, which have become more numerous and closely spaced. Of the two technologies, conduit is more important in terms of planning ahead and implementing concurrently with the reconstruction of the public realm.

Depending on whether this infrastructure is to be publicly or privately owned and operated, the appropriate electrical and technology experts should prepare a master plan for the infrastructure requirements of ICT in the Market, as best as it can be determined. The standards for 5G networks are evolving, and so assumptions will need to be made.

From a design perspective, it is important to minimize the visual and physical intrusion of ICT on the public realm. Transmitters should be consolidated to planned light standards or attached to buildings wherever possible, rather than adding additional poles that create clutter and reduce the flexibility of space. Conduit should be oversized to anticipate future additions or changes. If there is a need for larger facilities, for example for computing and gateways, they should be located within the existing Market or future destination building.

The City may consider crowd counting technologies if appropriate, as determined by City standards and directions, remaining sensitive to privacy and identities issues.

Transportation

There are a number of technology and lifestyle driven changes to the way people use vehicles that have impacted the use of space within public rights of way in downtowns across Canada. In addition to these, some people are predicting further changes will occur because of technologies that are being investigated and developed. These existing and potential changes include the following.

Deliveries, Waste & Recycling – there has been increased use of curbside space and even lanes of traffic by delivery vehicles. If this trend continues, the role and function of curbside space and loading zones will need to be considered differently than in the past. There may be a need to increase the number of short term loading zones available for delivery and City service vehicles.

Ride hailing – the development of ride hailing services such as Uber and Lyft have, reportedly, increased traffic on streets in downtowns. In addition, passenger pick up and drop off uses curbside space, though typically for a shorter duration than delivery vehicles.

An important principle of this Public Realm Plan is flexibility, and this applies to the use of curbside space as well. All streets in the Market have been designed with curbside space. This includes permanent, dedicated curbside vehicle space, and curbside flex space, which is generally allocated to vehicles but can be converted to pedestrian space or Market/patio space as the City deems appropriate. These spaces are 2.5m in width, located adjacent to the travel lanes.

Based on historical trends, the majority of curbside space has been used for on-street parallel parking. This is controlled by by-laws and signs. As noted above, more curbside space may need to be allocated for deliveries, loading, and passenger pick up and drop off. This should be determined through ongoing monitoring of traffic operations in the Market. If warranted, by-laws and signs can be changed.

Electric vehicles – there has been an increase in the number of electrically powered vehicles in operation. Electricity is currently supplied to vehicles by on-board batteries. It is not the intention of this Public Realm Plan to provide curbside electrical supply for battery recharging. Providing this infrastructure would be costly, create clutter in the public realm, and further limit the flexibility of the public realm for pedestrian purposes. Providing electrical supply may be a consideration for existing and future public parking structures in and near the Market.

Autonomous vehicles – there are a number of initiatives seeking to develop vehicles that do not require a human operator. Media attention has focused on a number of autonomous vehicle programs and trials. As yet there is no widespread application of autonomous vehicles in cities. There appear to be a number of uncertainties related to this technology, including the timeline for its deployment (5G networks or their successors, for example, are one potential link in the chain that may be required to implement autonomous vehicles), safety, legal framework, and impact on traffic, transit, parking and urban form. These uncertainties make it difficult to predict what, if any, spatial responses or infrastructure should be provided in the Market at this time. One potential impact of autonomous vehicles could be additional need for curbside space for passenger pick up and drop off. It will be prudent to monitor the development of the technology and lessons learned from any deployment throughout the lifespan of this Public Realm Plan.

Terrorism

It is a challenge for the design and infrastructure of the public realm of the ByWard Market to protect against acts of violence aimed at members of the public enjoying the amenities of the Market's streets and spaces because of their large surface area, multiple access points, and the need to allow the free flow of people, goods and vehicles that make the Market a success in the first place. It is a goal of the public realm design to provide a level of protection against moving vehicles for large gatherings and events, or "hostile vehicle mitigation."

A defined perimeter of heavy and/or properly anchored street furniture can prevent vehicles from entering a crowd zone at speed during events. This can be accomplished by using a combination of planters, street furniture, security bollards, security gates, and temporary barriers (such as jersey barriers). When strategically placed across streets, and combined with existing building edges, they can create zones where vehicles are not able to enter, but which are permeable for pedestrians. The design of the west end of Clarence Street, and the perimeter of the United States Embassy, are an example of hostile vehicle mitigation techniques.

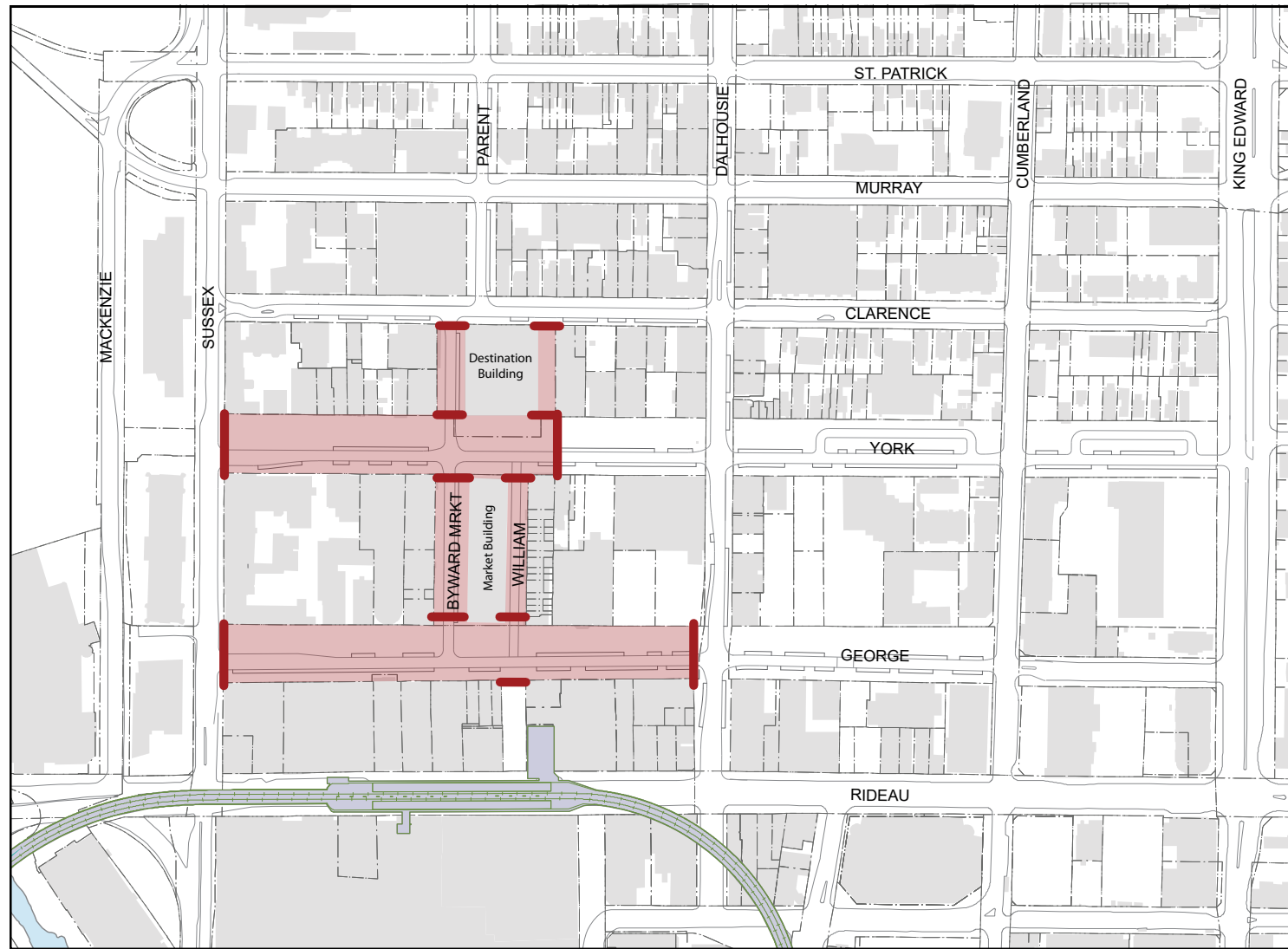
It is a goal of this Public Realm Plan to ensure there is a balanced approach to public safety, one that prioritizes attractiveness and day to day functionality of streetscapes equally to the 'armouring' of public space.

Because the design of the Market provides many flexible, overlapping and inter-related configurations of public spaces for both day-to-day use and for public gatherings, many possible configurations of anti-vehicle perimeter are required. The accompanying diagram illustrates a series of anti-vehicle security measures that can be deployed in combinations to define different perimeters for public gatherings, based on the size of event and the portion(s) of streets they require.

Qualified security experts would be required at the detailed design phase and implementation of the public realm to ensure the correct measures are accounted for appropriate to the level of threat and anticipated frequency of need. For example, the [Register of Security Engineers and Specialists](#) is the only body who promotes excellence in security engineering by providing a benchmark of professional quality against which its members have been independently assessed. Qualified security professionals would likely be on this Register.

Security

- Reinforced perimeter security measures
- Potential pedestrian areas within secure perimeter



Different configurations of secured perimeter allow for different configurations of anti-vehicle space within the Market. For example, the gathering spaces of York Street can be secured on their own, or, in combination with ByWard Market Square, William, and/or George Street.

ByWard Market Tree Preservation & Greening Strategy

Existing Trees

Conditions in the Market vary widely. There are some locations where mature, reasonably healthy street trees provide the benefits desired of the urban forest: beautifying, enhancing property value, moderating the microclimate, stormwater attenuation, and wildlife habitat. These locations tend to be on the periphery of the Market where the trees have access to larger soil volumes and are planted in soft surfaces. There are a few locations where trees are planted in paved conditions with smaller soil volumes and the trees are thriving – they are growing towards their mature condition and full potential. These locations are scattered throughout the Market, but they also tend to be towards the periphery. In the heart of the Market there are both fewer trees, and, those trees are struggling due to reduced soil volumes and disease. There is no continuous urban forest in the heart of the Market.

Greening Strategy

A key goal of the Public Realm Plan is to provide significant greening, with the target of achieving 30% tree cover in the Market (with the exception of Dalhousie Street). In particular, the plan provides tree planting on the Market's busiest streets: George, York and Clarence, where the fewest trees are today. This is an imperative given the anticipated tripling of high heat days by 2050.

The proposed transformation of space on these three streets, from what is today a vehicular dominated environment, to a pedestrians-first, balanced environment, holds tremendous potential to establish a thriving urban forest in the heart of the Market. It will provide large areas of space that were formerly lost to vehicular circulation and parking, that can now be used for soil volumes to support healthy tree growth.

It must be recognized that this bold reorganization of space in the interest of creating a high quality pedestrian environment shifts the road location (driving and layby lanes) for all three streets. This will, unfortunately, result in the loss of some existing trees. The plan has been designed, however, to minimize these cases and allow for preservation of existing trees.

- 1 Ensure trees are maintained in situ wherever possible, where those trees have potential to mature into healthy specimens that contribute to the urban forest. Of the approximately 200 existing trees on the streets of the study area (excluding the gateways and courtyards), it is estimated that over 150 trees, or 75%, meet the criteria of being able to be maintained based on their location in the plan.

Best Management Practices

For both existing trees to be preserved and new trees to be provided, the best management practices established by the American National Standards Institute (ANSI) and the International Society of Arboriculture (ISA) should be adhered to wherever possible. These management practices cover a wide range of topics such as soil conditions, planting practices, and ongoing care. Some key considerations include:

- 1 Manage existing trees – planning, design, pre-construction, construction, and post construction considerations to identify healthy trees, as well as those with potential for retention; practices for conservation, protection zones, barriers, erosion controls, compaction controls, monitoring, reassessment and remediation.
- 2 Manage soil quality – promoting root development, enhancing soil biodiversity, maintaining moisture and nutrients, managing pests and promoting growth through amendments, compaction mitigation, soil loosening, addition of organic matter, fertilization, pH management, and proper drainage.
- 3 Plant trees carefully – outlining conditions for planting and post-planting care including stock selection, root conditions, site preparation, planting depth, orientation, amendments, backfilling, pruning, and watering
- 4 Prune for best health and development in context – to promote tree health, reduce breakage, enhance views, create clearways, and increase flowering using pruning techniques for cleaning, thinning, raising, canopy reduction, restoration, and structural development.

Planting Conditions

Due to the variety of urban conditions within the Market, there are three general planting typologies proposed.

- 1 Trees in open lawns are located primarily located along York Street east of Dalhousie. Open lawns provide large soil volumes with good access to water and gas exchange. The lawns include areas in front of residential buildings and broad boulevards along the street. In these areas pedestrian traffic is less, and, people will tend to stay on sidewalks provided, meaning compaction is not as significant an issue. Grading can ensure that salt is directed away from trees.
- 2 Trees in open planters are located in areas of higher pedestrian traffic. It is important to ensure that soil does not experience compaction from people walking on planting areas, which limits the ability of soil to absorb water and exchange gas. By grouping trees in large, open planters, it provides large soil volumes with good access to water and air. Planter edges are defined by raised seat walls or

curb details that separate them from the primary pedestrian circulation and help prevent salt from infiltrating. Soil surface is grade level and root balls below grade.

- 3 Trees in hard surface are located in areas of the Market where pedestrian traffic volumes are high, and where flexible space is needed for programming and events. In these cases, the paving comes right up to the tree in order to maximize space available for pedestrians.
 - a) Provide structural soil cells to achieve large soil volumes. Soil cells support the weight of the paving above while providing large voids underground for un-compacted soils. Soil cells extend under the sidewalk paving above them.
 - a) Design a grading detail to ensure that meltwater does not drain into openings in the paving where the trees are planted. Access points (small holes) should be provided in the paving for nutrients and watering. The high salt use on Ottawa streets and sidewalks in winter time contaminates meltwater and will kill a street tree.

Soil as Infrastructure

The substrate or medium in which trees are planted – their soil – is the critical factor to ensuring the long-term healthy growth of the urban forest in the Market.

- 1 Develop a site-specific soils strategy for each planting typology: in lawns, planters, and hard surface. Appropriate soil engineering can mitigate compaction and allow the soil to detain stormwater, retain stormwater, provide passive irrigation for trees, and facilitate biological processes that result in soil, as opposed to dirt.
- 2 Achieve a minimum of 30m³ of soil per canopy tree to support long term healthy growth of trees on George, York and Clarence, areas of excessive pedestrian volumes. This can be reduced where a number of trees share the same soil volume, but a minimum of 20m³ of soil average per canopy tree is needed.
- 3 Use smaller, ornamental trees where, due to roadway geometry or underground utilities, large soil volumes are not able to be achieved
- 4 Limit maximum depth of soil to 2.0m, as tree roots tend to be near the surface to access water, air and nutrients. The minimum soil depth for large canopy trees is 1.2m, and 1.4m is ideal. For ornamental trees, minimum soil depth can be 0.6m. Soil depth must be appropriate to the type of tree.
- 5 Add bio char at installation to provide a long-term substrate for microorganisms. Mycorrhizal inoculation targeting multiple genus helps form symbiotic relationships that assist with water and nutrient uptake.

- 6 Add amendments to soil over time including standard fertilizers (N, P, K) and micronutrients. Care should be taken not to dig around tree roots; techniques such as air injection are preferred. Long term feeding of the soil is important. If soil becomes sterile through loss of its biological agents, it is unable to support tree growth.

Diversity

Planting as many species as possible is important to maintain the resilience of the urban forest. Pests and diseases are increasing, and planting a monoculture of one (or few) tree species in the Market leaves it vulnerable to catastrophic tree loss if – or when – disease strikes. By mixing species as much as possible, it reduces the ability of disease to spread, and, when disease does claim one species, it leaves many other trees in the urban forest that keep the streets green.

The International Society of Arboriculture (ISA) recommends the following guideline:

- No more than 10% of trees from the same species
- No more than 20% of trees from the same genus
- No more than 30% of trees from the same family

This is an excellent goal but will be difficult to achieve for two reasons: finding trees that are proven to be adaptable to the toughest urban conditions, and, finding trees that are hardy in Ottawa's climate. For these reasons the goal of tree diversity in the Market is:

- 1 No more than 20% of trees from the same species
- 2 No more than 40% of trees from the same genus
- 3 No more than 60% of trees from the same family

Further, this diversity should be highly intermixed along streetscapes, so that trees of one species alternate regularly with trees of other species.

- 1 Cluster trees with similar forms, textures, or growth rates for visual coherence
- 2 Do not create themed streets with monoculture planting.
- 3 Provide diversity in the context of the many benefits it can bring, including:
 - as sources of nectar for pollinators
 - as sources of food for insects, birds and desirable urban wildlife
 - as a source of beauty through different textures, flowers and fall colours

Design Objectives

All sidewalks in the Market are intended to support high crown street trees to provide greening, shade in summer, stormwater management and bioamplification benefits. On the busiest streets, trees will have a very urban planting condition with hard surfaces underneath them. On the busiest days, and for events such as street festivals, performances, or art fairs, sidewalks are so busy that all available space is used for people standing, walking, and sitting.

- 1 Select all new trees to have a pruned crown that is a minimum of 2.5m above the sidewalk. This leaves the ground plane as open and flexible as possible, and creates clear sight lines.
- 2 Select all new tree species for each street based on the overall design objectives for the street and their immediate context.
- 3 Select super-canopy trees along York Street, the “Grand Promenade” of the Market. York Street will have a formal character to create a strong frame for the public spaces along it. The selected street trees shall be the tallest possible, with an arching, vase-like shape to elevate the ceiling of the space, such as elms.
 - Sussex to William will be a flexible gathering and outdoor Market space and will accommodate the largest events in the Market. Trees will be in hard surface and will be planted in a regular rhythm.
 - Between William and Dalhousie the street begins to transition, and an additional row of trees is introduced. Here, trees are in open planters.
 - East of Dalhousie York is a garden street, with trees in large, consolidated lawns and a central promenade, and some variation in the rhythm is possible.
 - Given the three planting conditions that transition from busy and hard surface in the west to quieter and softer surface in the east, there will be increasing options in species selection from west to east.
- 4 Select trees on George Street to reinforce distinct outdoor rooms. Trees will line both sides of the wide promenade on the north side, framing it. At moments trees will pinch in, or there will be a bosque through which people walk, each signalling a new experience and new outdoor room, which in turn can be reflected by species selection
 - Vary tree species, form, height, branch pattern, leaf index, texture, and colour to accentuate transitions and help to create variety along the street, paralleling the street’s programming.

- Include trees with low, horizontal scaffold branches such as oaks, to create a ceiling and bring down the scale of the space, for example in the family play area.
 - Consider selecting species associated with food or edible nuts and berries as a way of celebrating the history of the food Market and educating the public.
- 5 Clarence Street should select other, less commonly planted trees since George and York Streets will have a mix of the most common, robust and appropriate trees in the Ottawa context. This will create additional diversity in the Market as a hedge against future pests.

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This document is a culmination of efforts made by many people, across many sectors, who came together despite differences and challenges because of their deep connection to ByWard Market and their commitment to create a plan worthy of ByWard Market, its public spaces and its future.

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BYWARD MARKET
Public Realm Plan

MARCHÉ BY
Plan du domaine public