City of Guelph
Downtown Streetscape Manual &
Built Form Standards

Section 4.0

St. George's Square Conceptual Design

July 2014

BrookMcIlroy/

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CITY OF Guelph

Making a Difference

4.1 Introduction

St. George's Square, Circa 1885.

St. George's Square, Circa 1902.

St. George's Square, Circa 1925.

St. George's Square, Circa 1964.

Overview & Background

Conceptual Design Plan for St. George's Square

Introduction

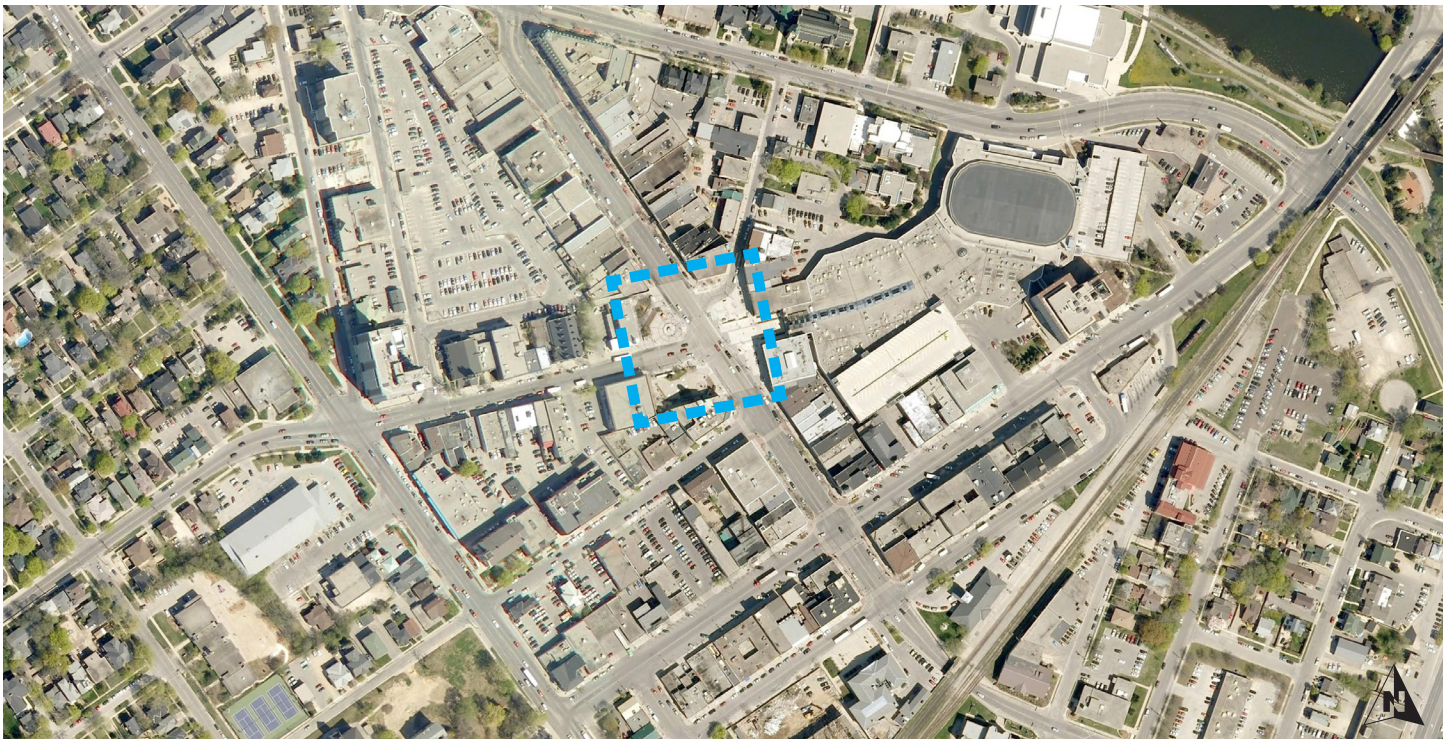
The Conceptual Design Plan for St. George's Square has been developed, in conjunction with the updated Streetscape Design Manual and Built Form Standards, to guide the redesign and redevelopment of St. George's Square. Section 4.1 of this document provides an introduction which considers the history and evolution of the Square, current patterns of daytime and evening use, the findings and recommendations of the Downtown Strategic Assessment, other opportunities; and lessons learned from recent and relevant case studies.

Conceptual Design Plan

Section 4.2 of this document provides an overview of the Conceptual Design associated with the redesign and redevelopment of St. George's Square. The Conceptual Design outlines six guiding principles, objectives of the Plan, a description of the concept, an illustrated plan and rendered perspective, design guidelines, and a summary of resulting impacts on pedestrians, transit, traffic, and operations.

Implementation Strategy

Section 4.3 of this document provides an overview of the implementation strategy associated with the redesign and redevelopment of St. George's Square. The Implementation Strategy includes an overview, a phasing strategy which considers both short and long-term strategies, and a summary of proposed order of magnitude costing.



History & Evolution

St. George's Square has a rich and varied past

St. George's Square, at the mid-point in the length of Wyndham St., provides a focus for the Downtown. In 1827, John Galt designated the rising ground in the centre of the Square as a site for the Church of England. The first St. George's Church was built of frame and stucco in 1833-34. A new stone church on the same site was only partially completed in 1850. Following protracted negotiations between the Church, the Town Council, and Wyndham St. merchants, this building was demolished in 1872 (and the present St. George's Church erected on Woolwich St.), eliminating the detour around the church and permitting traffic through the central axis.

The Original St. George's Square

The resulting 80 metre by 80 metre Square was, at first, a rather bleak open space with dirt roads, wooden sidewalks and few amenities until 1884 when J.B. Armstrong, a local manufacturer, donated the Blacksmith Fountain for a centrepiece. Concrete sidewalks were installed in 1891 and the Street Railway was introduced in 1894 with the tracks going around the fountain. 1907 saw the installation of sewers under the square and the streets were paved with blocks.

Introduction of the Streetcar

By 1922 the "blacksmith" was moved to Priory Square so that the railway tracks could go directly through the centre of St. George's Square. In the same year small buses were introduced in the square which slowly replaced the streetcars and were themselves replaced by larger buses in the mid-20th century.

St. George's Square, Circa 1909.

St. George's Square, Circa 1914.

St. George's Square, Circa 1932.


St. George's Square, Circa 1940.

Period of Major Change

The period of 1960 to 1975 was a time of major change and demolition when Modernist building designs (i.e. Bank of Nova Scotia, Woolworth's store, new CIBC and new Royal Bank and Royal Trust Bank buildings) began to replace the once impressive, mid-late Victorian architectural fabric of the square. This period saw the removal of: (1878/1902) Customs/Post Office, (1856) Bank of Montreal and bank manager's house, original Imperial Bank of Commerce, (1875) Hearn Block, (1882) Tovell Building.

Quebec Street Mall and Bus Relocation

The most ambitious reconstruction was begun in 1981 to make St. George's Square a "people's place" for civic activities. In 1982 Quebec Street was closed and the Eaton Centre Mall was constructed. After the Family Fountain was installed in the northwest quadrant of the square in 1985, the Eaton Centre was replaced by the Old Quebec Street Mall in 2003. By 2012, bus stops had been removed from St. George's Square to Guelph Central Station on Carden Street.

Evolution of St. George's Square

1847 Wellington Hotel built in Square

1850 Wooden sidewalks laid on Square

1853 Bond Hardware Building Erected

1856 Bank of Montreal erected

1859 Victoria Hotel built with 2 storeys

1873 St. George's Church removed

1875 Hearn block built at south-west Corner

1876 Victoria Block and Federal Bank erected

1877 Third storey added to Victoria Hotel and Wellington Hotel Removed

1878 Customs/Post Office building built with 2 storeys and Mansard roof

1882 Tovell building built

1885 Blacksmith Fountain erected

1885 Federal bank taken over by Trader's Bank

1891 Concrete sidewalks built

1894 Street Railway introduced

1902 Post Office adds 3rd storey and clock tower but there is no clock

1906 Post Office clock added to tower

1907 Sewers installed under street

1907 Asphalt block paving on Square

1914 Metropolitan Bank taken over by the Bank of Nova Scotia

1922 Street Railway goes directly through Square and Blacksmith Fountain removed

1922 Small buses introduced and slowly replace streetcars

1937 Street Railway removed

1946 Bond Hardware Building burns down but is rebuilt

1954 Large buses replace small buses

1961 Post Office building torn down and Bank of Nova Scotia building is built

1963 Demolition of old Bank of Montreal building and new building erected

1963 Woolworth store is built

1968 CIBC building is torn down and replaced by a new bank building

1972 Royal Bank replaces Hearn Block

1975 Royal Trust building replaces Tovell building

1982 Quebec St. is closed and the Eaton Centre Mall is erected

1985 Family Fountain erected in Square

2003 Old Quebec Street Mall opens, replacing the Eaton Centre Mall

2012 Buses moved out of St. George's Square to Central bus terminal on Macdonell Street

St. George's Square, Circa 1951.

St. George's Square, Circa 1981.

St. George's Square in 2013

Site Analysis

How St. George's Square is used today

With the relocation of buses, the use of St. George's Square has changed. In general, there are fewer people in the Square. However, on average users are staying longer.

Daytime Usage

The diagram on the following pages gives a good snap-shot of how the Square is being used in the daytime. It shows that much of the activity is concentrated in the centre of the Square and around the corners of the intersection. On the other hand, there is comparatively less use around the edges and in the corners of the Square. Seating areas that are close to the hubs of activity are well used in comparison to seating opportunities in the less well-used areas.

Nighttime Usage

The Square is used less during the evening and nighttime. Much of the nighttime activity appears to be concentrated around the Hot Dog Cart and the access to the ATMs in the banks. More walk-through traffic is observed when compared to other activities.

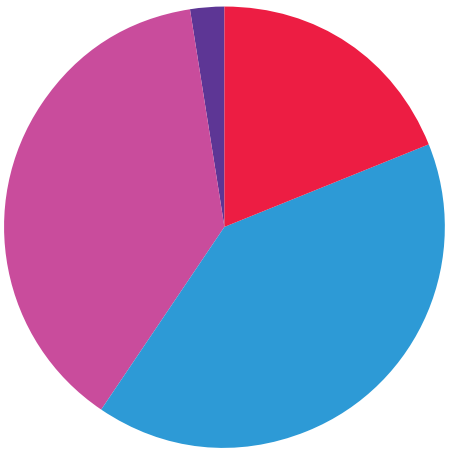
Stroller

Standing

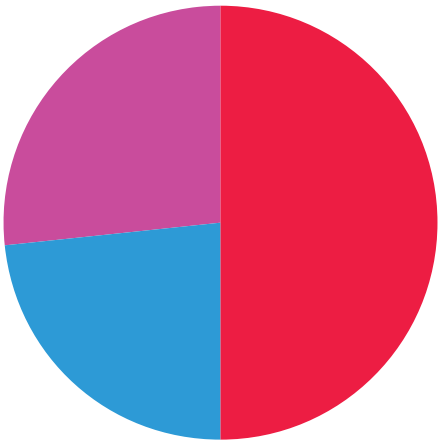
Sitting

Walking

Snap Shot - Activities of people in St. George's Square



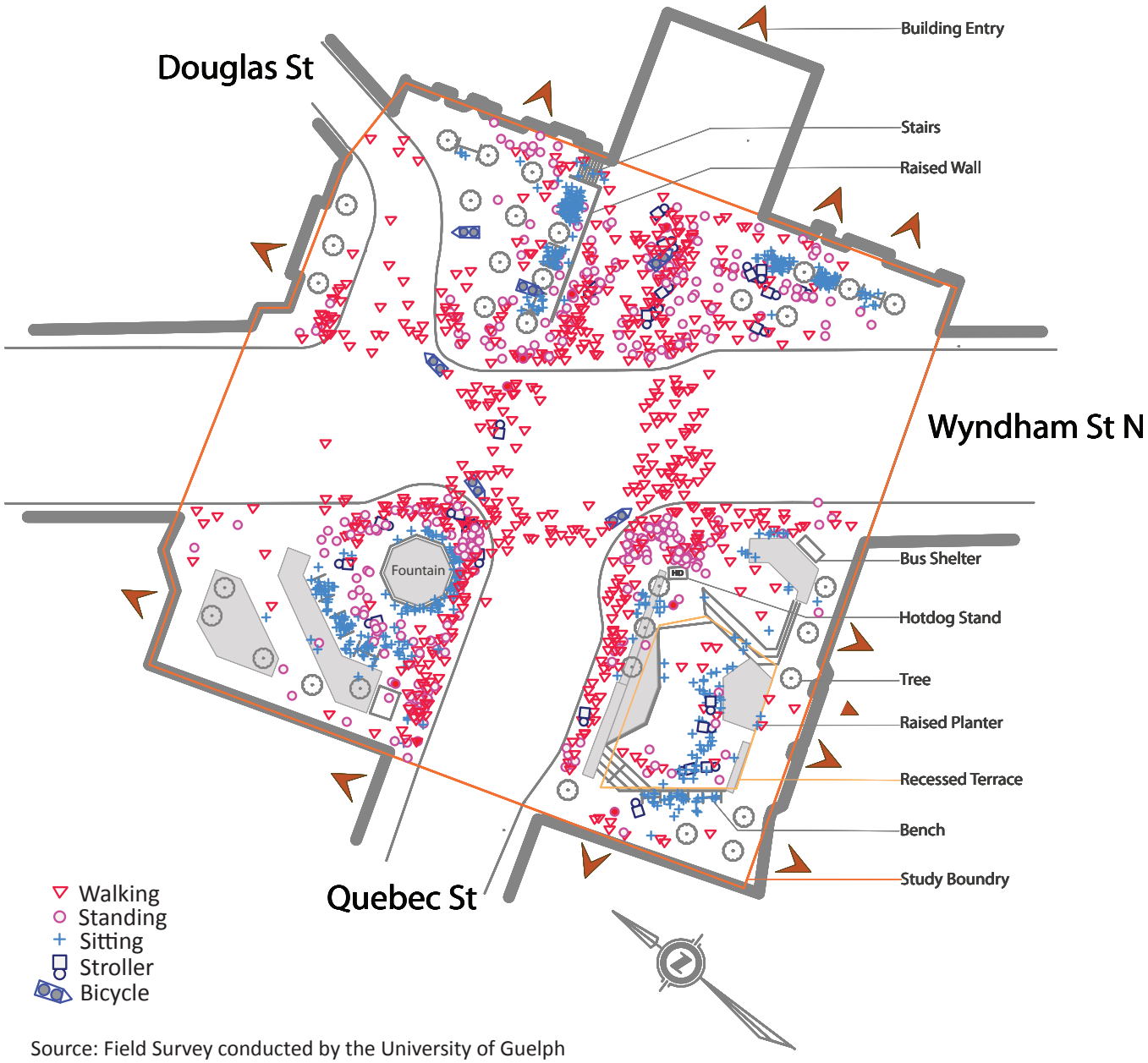
1:00pm - 47 Persons



5:00pm - 64 Persons.

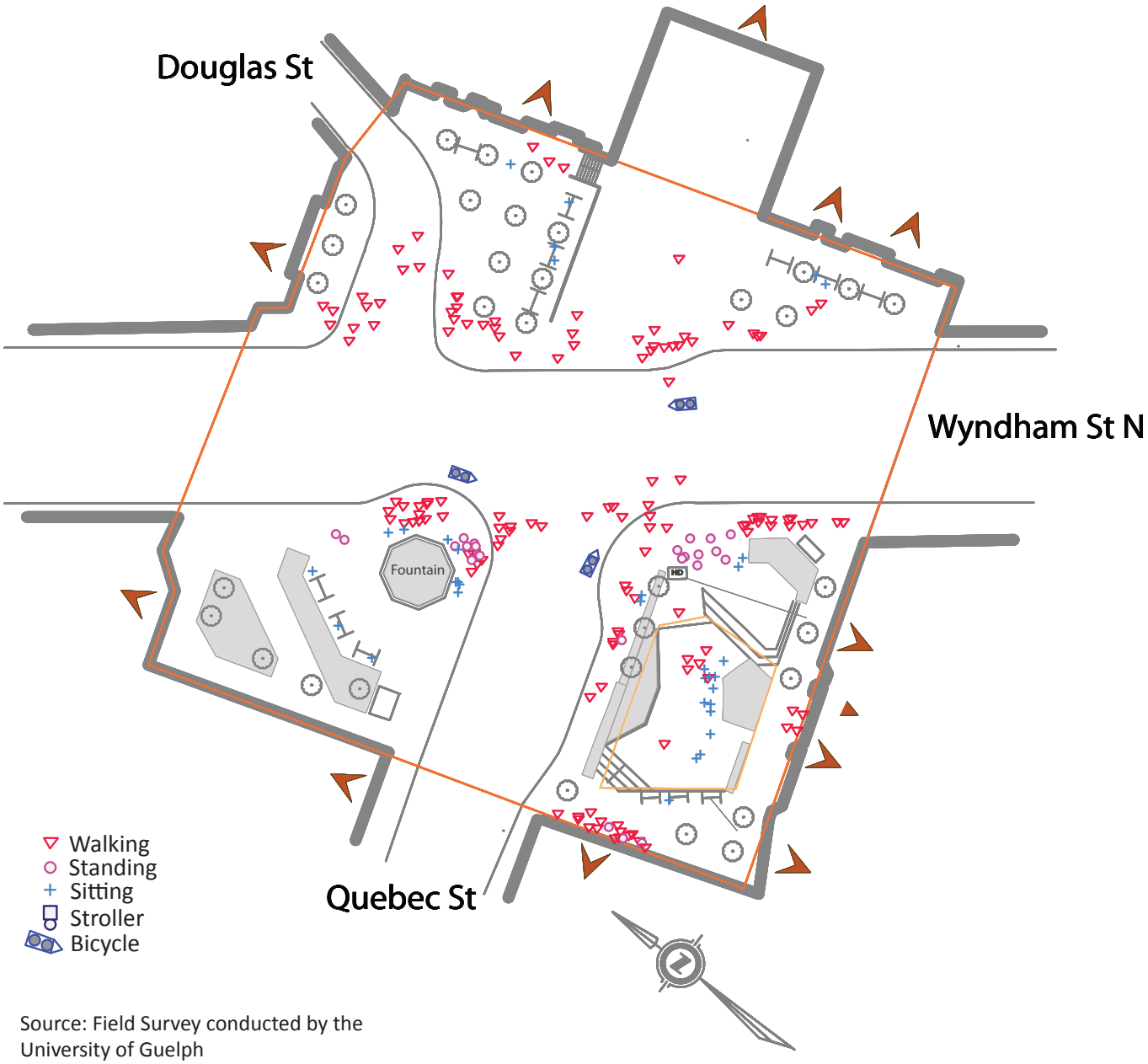
Source: Field Survey conducted by the University of Guelph
Date: June, 2012, Thursday

Daytime Activity Diagram (Late Spring / Early Summer)



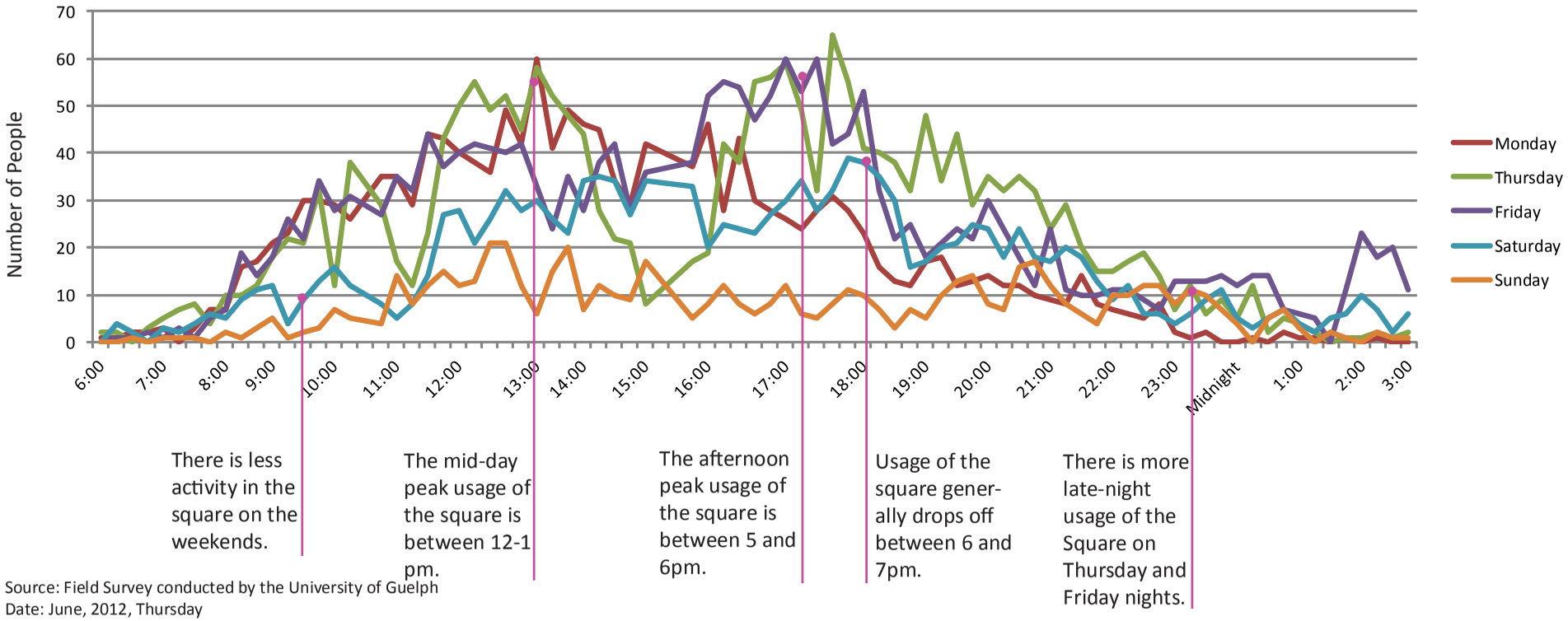
Source: Field Survey conducted by the University of Guelph
Day time: 8AM–8PM Night time: 8pm--3am
Date: June, 2012, Thursday

Nighttime Activity Diagram (Late Spring / Early Summer)



Source: Field Survey conducted by the University of Guelph
Night time: 8pm--3am
Date: June, 2012, Thursday

When is the Square being Used? (Late spring/early Summer)



Source: Field Survey conducted by the University of Guelph
Date: June, 2012, Thursday

Strategic Assessment

Considering the future of strategic downtown public realm sites

The Downtown Strategic Assessment Report, developed by LiveWorkLearnPlay, identifies St. George's Square as a barrier to connectivity and outlines a strategy and series of tactics and next steps which should be initiated to enhance the vitality of this crucial urban space. The following is a breif summary of its key recommendations.

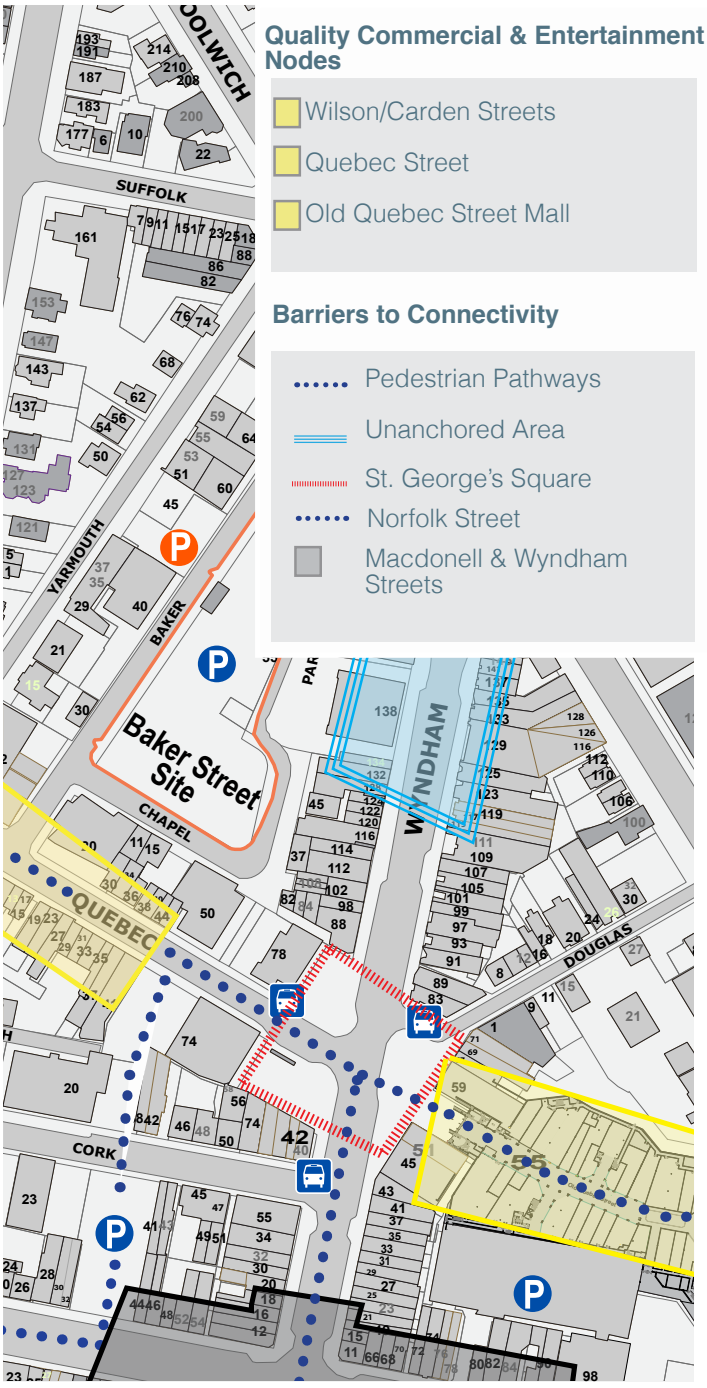
Connectivity

Ease of movement and connectivity Downtown is essential for both business and visitors. It creates a desirable and safe environment, which prolongs shopping trips, attracts the broader target market and increases sales and commercial operators.

St. George's Square should be an essential anchor and connector for the Downtown. However, non-interactive commercial frontages, primarily banks, are the predominant use surrounding the Square. Grade changes, flower boxes, and other design features also discourage congregation in the Square. A lack of linkages between the Square and Wyndham Street prohibits it from being a central gathering spot for the public.

Strategy

Pedestrian movement between anchor uses and commercial clusters can be promoted using a variety of techniques. The physical conditions present within the public realm can be improved to create an enhanced pedestrian experience. Reprogramming commercial spaces with more active uses will create pedestrian draws throughout the Downtown, and improved wayfinding will help remind pedestrians of proximate services and amenities.



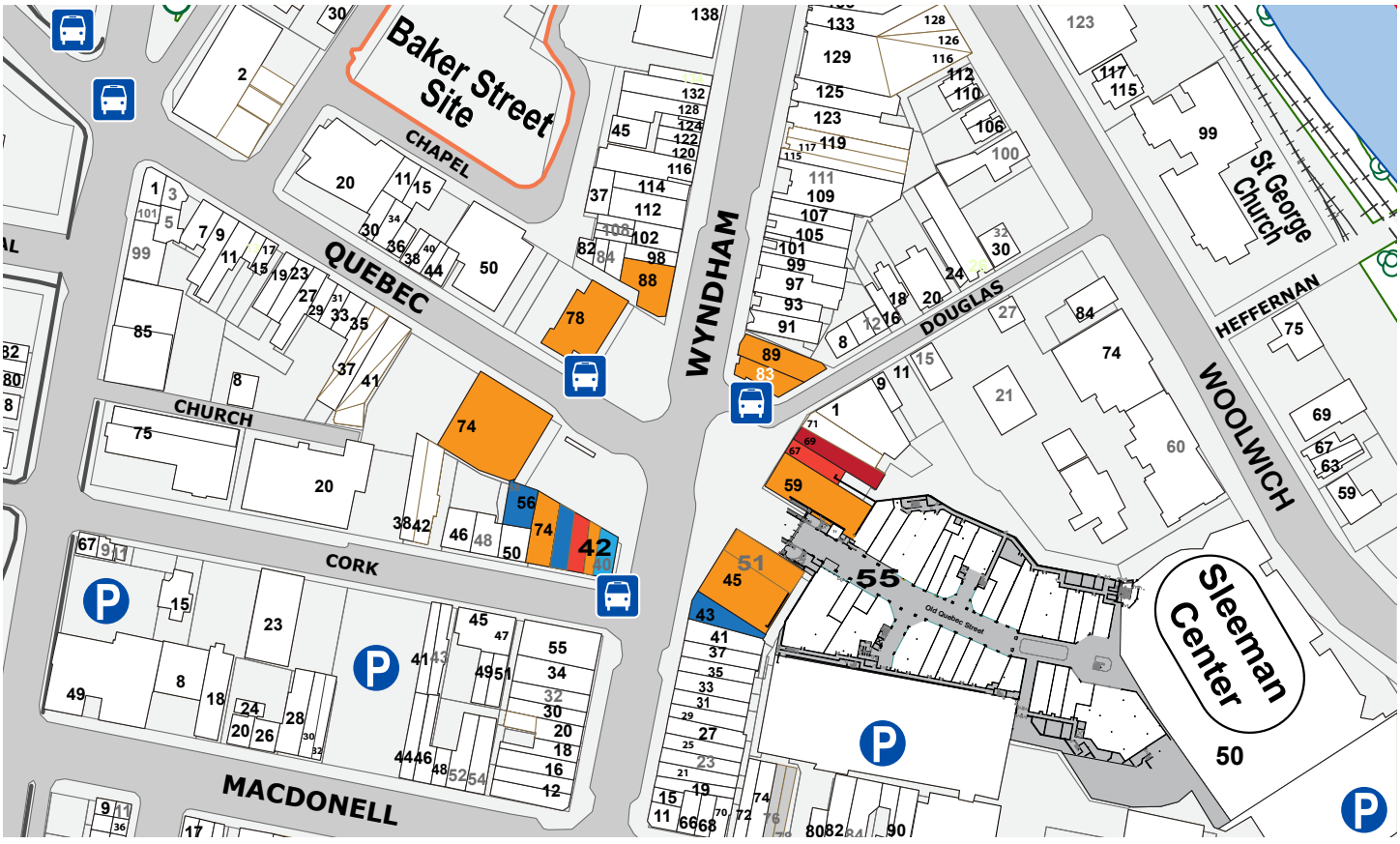
Map illustrating Quality Nodes and Barriers to Connectivity, Courtesy of the Downtown Strategic Assessment Report.

Tactics and Next Steps

Tactical urbanism interventions can be employed in St. George's Square to promote improved pedestrian circulation. Tactical urbanism approaches use informal, incremental approaches to improving urban performance. (see Appendix D of the Downtown Strategic Assessment for examples).

Permanent public realm improvements should also be initiated in St. George's Square to promote pedestrian flow. The most convenient pedestrian paths between many locations pass through the square, which will be an important connector to the Baker Street development. As such, enhancing this critical public space should be prioritized.

Reprogramming of critical street frontages along the edges of St. George's Square, should be promoted through the Downtown Guelph Business Association, as well as the City of Guelph.



Map illustrating properties fronting St. George's Square, Courtesy of the Downtown Strategic Assessment Report.

Opportunities

On the cusp of major change as the Downtown Secondary Plan begins to be realized, St. George's Square is ready for change

The Heart of the City

Remaining true to John Galt's vision, an opportunity exists to transform St. George's Square into a major cultural node and destination, which will anchor downtown Guelph by providing opportunities for business activation space, the self-activation of the space through informal daily use, and for use during major events (concerts, festivals, etc.).

Imageability & Placemaking

In a departure from its traditional role as a transit hub, an opportunity exists to promote the revitalization of St. George's Square and the surrounding downtown by transitioning the space to comfortably accommodate all modes of transportation. The square should continue to allow access for vehicles but also promote increased pedestrian activity. Vehicular lanes could be reduced in number and narrowed in size, and could be subject to various traffic calming measures. Such measures could include the introduction of on-street parking lanes to provide a buffer between vehicles and pedestrians; the use of street trees, bollards, light poles, benches and other street furnishings to delineate between roadway and boulevard space while encouraging pedestrian movement and safety; and a uniform roadway and boulevard surface incorporating a special paving treatment comprised of patterned unit pavers and trench drains to promote universal access and barrier-free design.

Flexibility

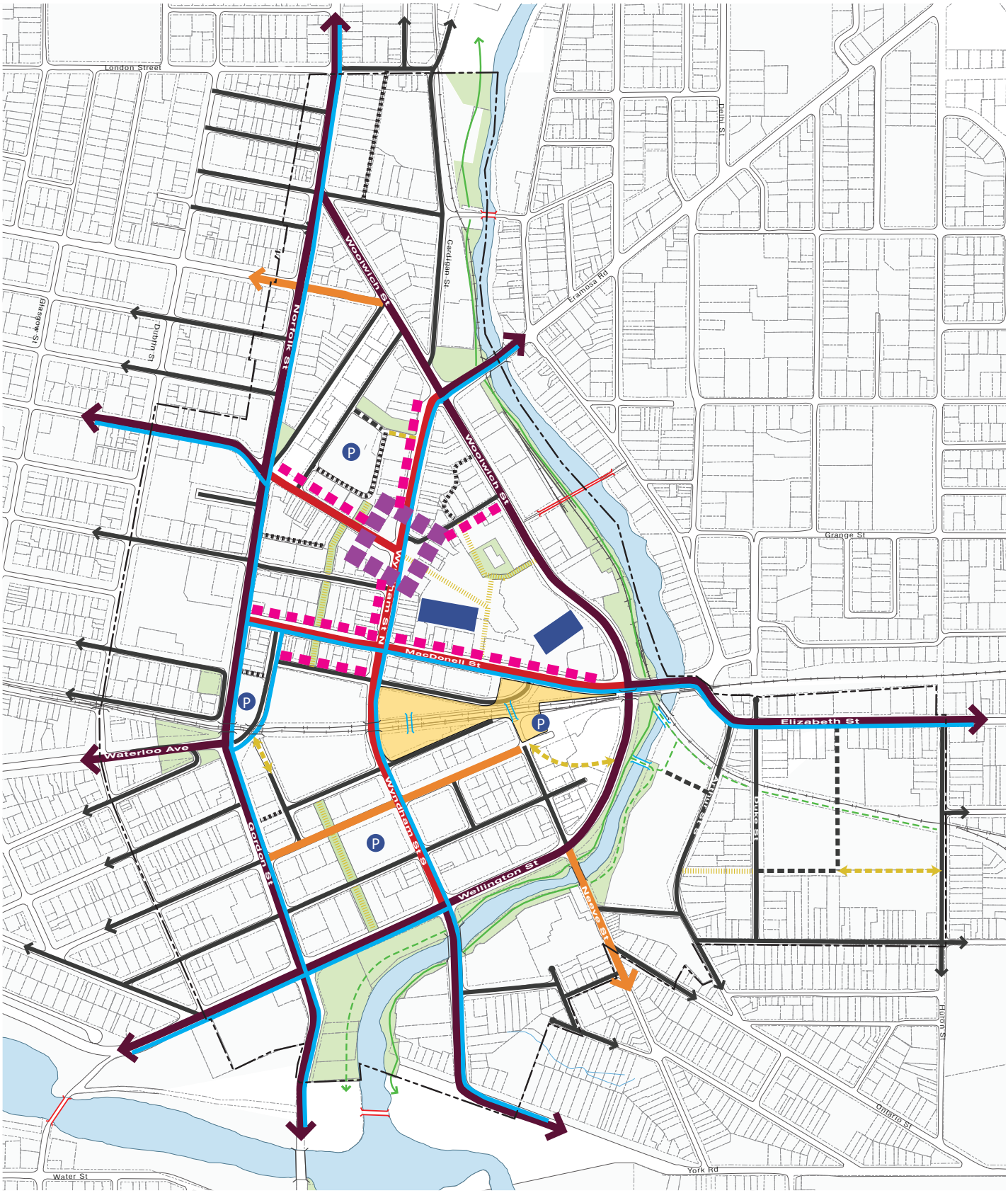
To create a vibrant and animated destination on a year-round and daily basis, in addition to creating a desirable space for major events, flexibility should be incorporated into the redesign of St. George's Square. The design should be simple and versatile, allowing for a range of activities to occur in the Square. The Square could include a canopy feature (seasonal or permanent) to frame the Square, provide shade and to house a public washroom, storage space and a kiosk.

Edge Activation

In order to animate St. George's Square, the edges of the Square should be activated with street-related uses. Existing physical barriers and grade changes should be removed to free-up valuable pedestrian space, to promote spillover uses, and to improve connections to the centre of the Square. In doing so, street trees, bollards, light poles, benches, other street furnishings, and a uniform surface treatment could be combined with removable seating, public art, historic interpretive opportunities, elements for children's play, and other landscaping features to promote pedestrian use and achieve a sense of vibrancy and animation.

Connectivity & Wayfinding

Downtown's proposed network of flexible streets will converge at St. George's Square an therein lies an opportunity to extend this innovative design treatment into the Square and provide seamless connectivity throughout the centre. Additionally, the Square's central location in the centre makes it a natural point from which to orient visitors in Downtown.


London Street
Norfolk St
Woolwich St
Cardigan St
Eramosa Rd
Grange St
MacDonell St
Elizabeth St
Waterloo Ave
Gordon St
Wellington St
Water St
York Rd
Ontario St
Huron St
Primary Street (arterial)
Downtown Main Street
Secondary Street
Local Street
Existing pedestrian bridge
Future pedestrian bridge/tunnel
Existing trail
Future trail
Key pedestrian connection
Laneway
Potential Local Street or Active Transportation Link
Potential Local Street
Proposed and existing bike facilities
Major Transit Station
Existing parking structure
Future parking structure
Boundary of the Secondary Plan Area
Existing railway or road bridge
Flexible Streets
St. George's Square
0
100
300
500
METERS

Case Studies

Learning from success

Market Square, Pittsburgh, Pennsylvania

- Market Square in downtown Pittsburgh was redeveloped in 2010 to great fanfare.
- Previously bisected by two roads, the square was completely transformed into a flexible, multi-purpose space that hosts frequent markets and events.
- A generous boulevard provides businesses that front the square room to use.
- The road was reoriented to frame the central plaza and raised curbs were removed to promote access to the centre of the square.
- Trees provide shade for flexible seating throughout the space.
- Includes fixed mounting points for a tensile stage structure.

Market Square, Pittsburgh, Pennsylvania

Place d'Armes, Montreal, Quebec

- The renewal of Place d'Armes in Old Town Montreal transformed this historic square into a space that speaks to the identity of the City and respects contemporary uses.
- A palette of high quality materials and furnishings - granite paving, cobbles, wood seating, lighting - are respectful of the heritage context but speak a contemporary language in their use.
- The square is designed all at one level to facilitate easy access in and out of the central space.
- No physical separator between road and plaza is used - material and texture difference only delineate this change.

Place d'Armes, Montreal, Quebec

Market Square, Kingston, Ontario

- Market Square in Kingston is a flexible space immediately behind City Hall in a historic downtown retail district.
- Host to a public market, running since 1801.
- High-quality granite paving provides a blank palette to host markets, events and performances.
- Area transforms into a skating rink during winter months for seasonal interest.
- Roads frame the plaza on three sides but are separated by a raised curb.
- Interpretive elements provide a window into the area's history.

Market Square, Kingston, Ontario

Old Town Square, Prague, Czech Republic

- One of two main public squares in historic Prague, created in the 12th century as a marketplace.
- Public art and adjacent architecture serve as focal points, lending the square its modern day identity.
- Flush surface allows for maximum flexibility and permeability.
- Roads on two sides of plaza frame the square.
- Busy edges with cafe patios and shop.
- Uniform paving treatment in centre of plaza does not define or limit use.

Old Town Square, Prague, Czech Republic

4.2 Conceptual Design

Guiding Principles

Six principles to guide the redesign of St. George's Square

The following six core principles provide the foundation for the conceptual redesign of St. George's Square. The principles incorporate general objectives and specific targets of the Concept Plan, articulating what is important and providing guidance to discussions that will shape the future of the area. These principles are:

1 Support Local Business and Daily Activities

2 Unify the Square

3 Less is More

4 Make it Beautiful

5 Make it Comfortable

6 Improve Connections to other Downtown Anchors

Objectives

Expanding on the guiding principles, objectives clarify the role of St. George's Square within downtown

In addition to satisfying the intent of each guiding principles, the redesign of St. George's Square should:

- Create an environment in which daily activation occurs in the Square;
- Activate the corners by re-establishing connections between building edges and adjacent streets, particularly at the edges and corners of the Square;
- Simplify the space, allowing for greater flexibility in programming and day-to-day use;
- Establish uniform grading throughout the square, allowing streets to contribute to the pedestrian realm during festivals, celebrations, and other activities that require temporary road closures;
- Establish new public amenities for a growing downtown;
- Provide convenient parking for shopping and visiting;
- Improve the image of the Square and discourage undesirable uses;
- Reduce the barrier effect of the road;
- Enhance connections to adjacent streets and other important downtown destinations;
- Create places where healthy businesses can flourish;
- Celebrate the rich history of the Square;
- Slow traffic moving through the Square to create a safe and comfortable environment for pedestrians;
- Provide a range of seating options throughout the Square;
- Be universally accessible;
- Incorporate sustainable approaches such as Low Impact Development;
- Plant new street trees to establish a continuous tree canopy along the perimeter of the Square, in order to provide shade, promote pedestrian comfort, and incorporate green elements;
- Encourage families to visit downtown;
- Promote St. George's Square as a hub for Public Art exhibits in the City;
- Create a place that feels like a true public square.

St. George's Square Concept Plan

St. George's Square is an important public open space in downtown Guelph that is ready for renewal

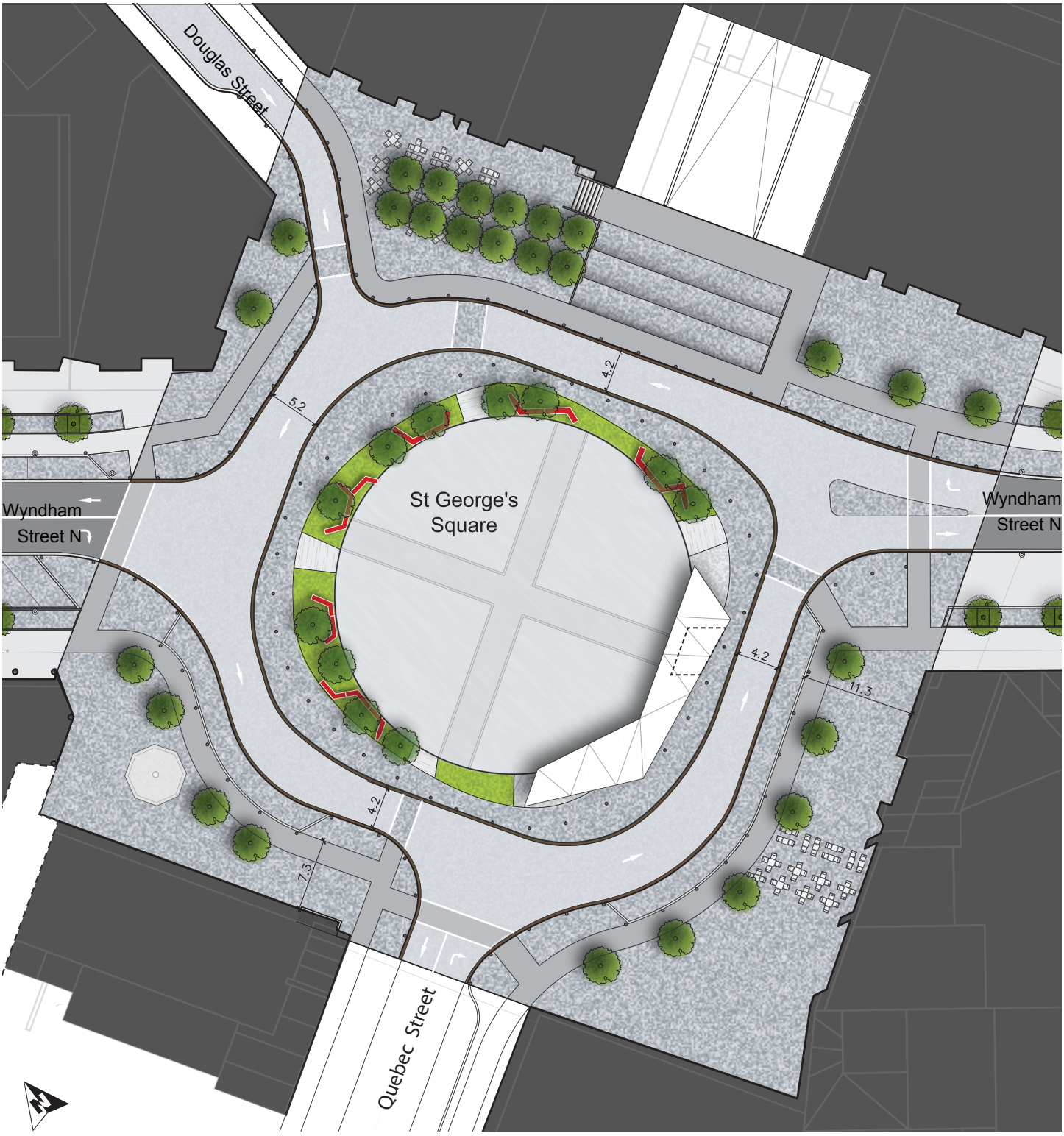
With intensification throughout downtown on the horizon, St. George's Square has the potential to become a unique setting for civic and cultural events as well as for daily life in downtown.

Developed in close consultation with City Staff, stakeholders, and responding to the Project for Public Spaces' recommendations, the preferred concept proposes a return to the space's intended form - a Square. John Galt created a perfect 80m by 80m void in downtown Guelph for public gathering, but this function has been lost over time. Galt's vision for St. George's Square will rise again with a redesign that seeks to restore it as a prominent public open space. By routing the road around the Square - rather than straight through it - a comfortable, protected central plaza is created for the benefit of the community.

Today, predominantly banks and community services line the Square and are typically recessed and hidden from the centre of activity (the intersection of Wyndham and Quebec). These land uses, by their very nature, are unable or are unlikely to attract significant activity to the public realm, especially given the size of the quadrants in which they lie. Unifying space in the centre of the Square allows for maximum flexibility of use during events and has the added benefit of pushing activity towards the edges of the space, helping to breath new life into underutilized corners. By rightsizing the space in front of businesses that line the Square, underutilized space is consolidated into self-activated space in the centre of the Square. Additionally, the establishment of uniform grading throughout the Square, by eliminating raised curbs and retaining walls, is a key outcome of the design that will maximize flexibility and give clarity of purpose to the space.

To create the central plaza, the road running through the Square transitions from a two-way T-junction to a one-way, continuously flowing ring road. This, along with its curbless design, will slow traffic and allow for pedestrians to comfortably flow in and out of the central plaza. The ring road configuration allows for events to occur in the central plaza without necessitating the closure of streets, minimizing impacts to businesses. When the Square is closed for larger events, the curbless design functionally extends the central plaza, allowing the entire space to be utilized. Additionally, on-street parking stalls in three segments of the road provide parking opportunities in the Square to support business function.

The central plaza is defined by a multi-material band that rings the space, acting as a threshold into the plaza. The band incorporates trees, lawn and sculptural benches to provide shaded seating. The paving pattern of the central plaza - a subtle cross pattern - is a nod to the church that originally occupied the Square as well as to Saint George's cross. A canopy structure vertically defines and contains the southern quadrant of the central plaza. The canopy will become the signature design element of St. George's Square and contribute to its identity. The canopy could incorporate a small structure to house concierge functions (e.g. a washroom, a storage/maintenance space, a kiosk, and power/water hookups).


Douglas Street
St George's Square
Wyndham Street N
Wyndham Street N
Quebec Street
5.2
4.2
4.2
4.2
11.3
7.3

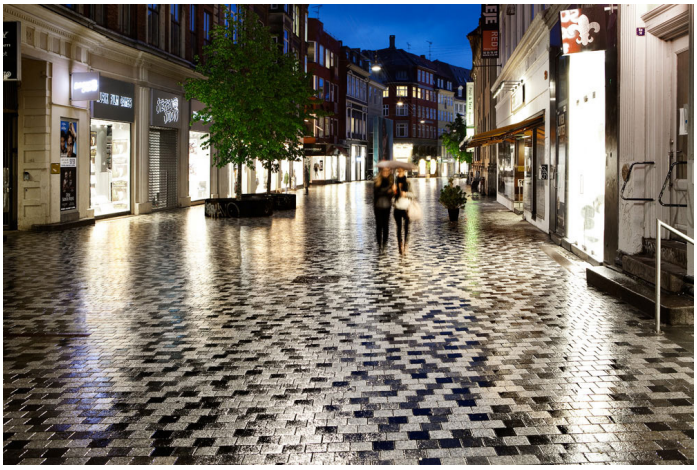
Staff should continue to work with partners to identify opportunities and address potential needs to animate the Square, including: a concierge function that recognizes the Square's role as a wayfinding hub; an 'Eyes-on-the-Square' program to ensure it is a welcoming and well maintained public space; and the development of resources to help curate daily activation in the Square.

Outside the central plaza, the ring road occupies as little room as possible while accommodating transit vehicles and large trucks. Traffic entering and exiting the ring road will be controlled by yield signs, and 2-3 signalized pedestrian crossings provide accessible routes into the central plaza. Signalized crossings should give transit vehicles priority and also actively manage signal timing between the signals to optimize traffic flow around the ring road. Additionally, a pedestrian clearway circumnavigating the Square provides an accessible route to adjacent streets.

The direction of Douglas Street should be reversed so that it flows *in* to the Square as this will provide better opportunity to access the centre of the City. This change has the added benefit of simplifying turning movements on the ring road and allowing for more space to be created in front of an existing restaurant to accommodate an outdoor dining terrace.

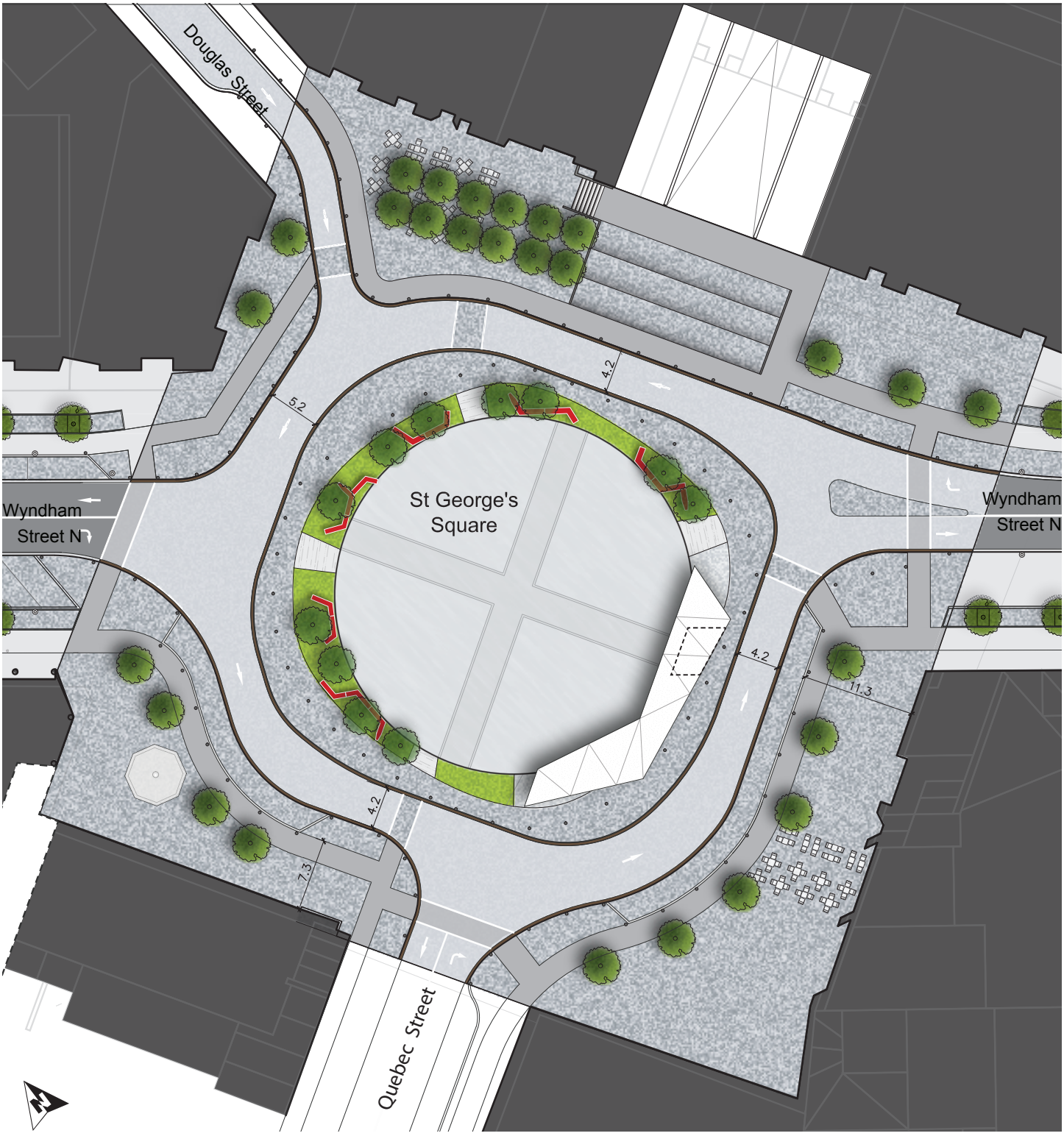
This concept plan is intended to illustrate how the principles, objectives and guidelines could take shape in a design for the Square. A detailed design exercise for the Square is the next step and will continue to refine this concept based on the principles, objectives, guidelines and on-going consultation (see the Implementation section for more details).

The following pages illustrate the concept in greater detail, provide precedent images, and a set of design guidelines to guide detailed design.



A 'pixelated' paving pattern, like the one used on streets in downtown, will add visual interest to the Square

Curbless streets allow for maximum flexibility and permeability of the street corridor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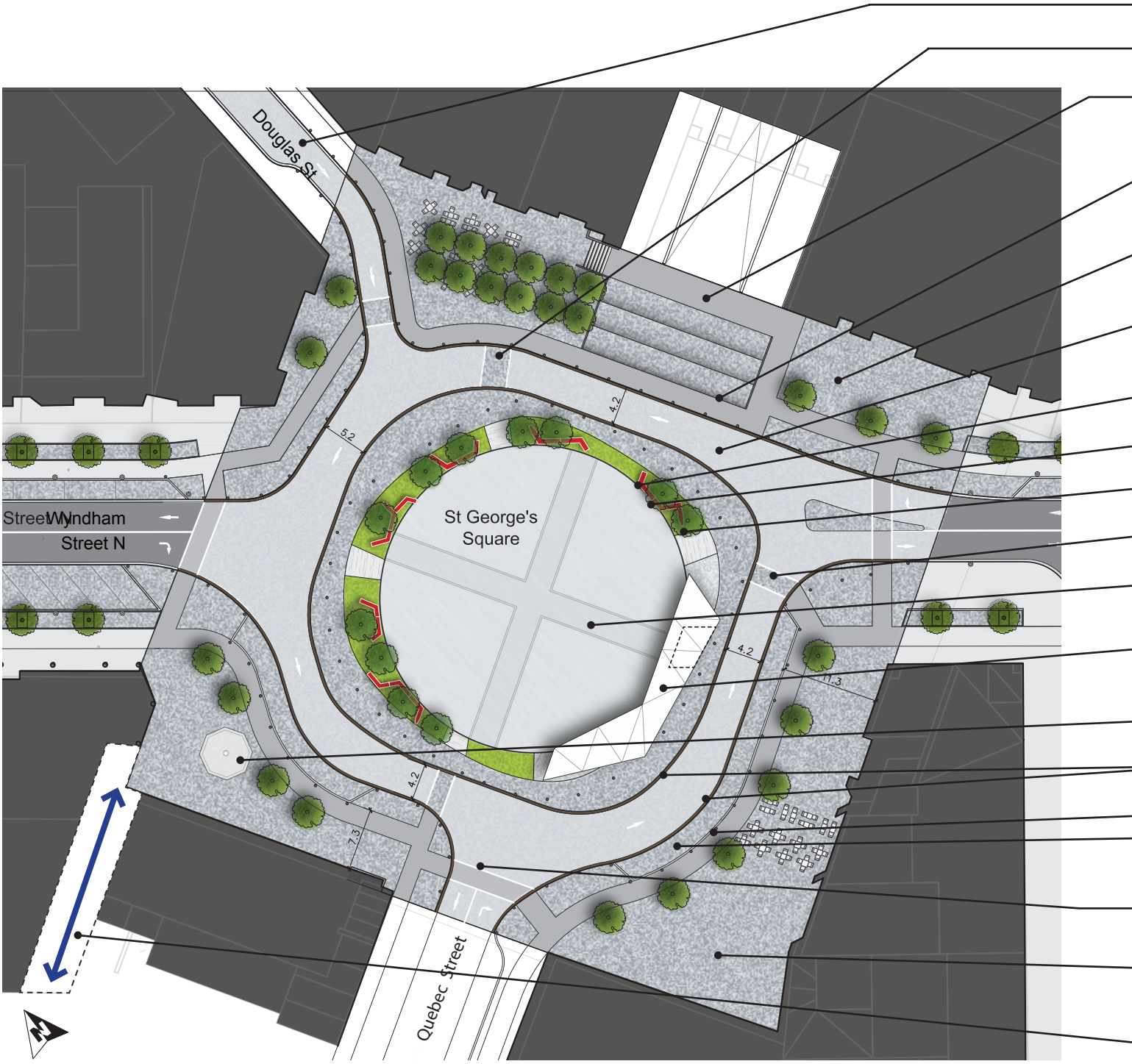


Flexible plazas can host a variety of events

Seating opportunities will give people a reason to use the square when it is not hosting an event

Reverse direction of Douglas Street

Signalized pedestrian crosswalk

Modified entrance to Old Quebec Street

Accessible route around outside of Square (pedestrian clearway)

Unit paving - 'pixelated' pattern to match streetscape unit paving

Unit paving on road - uniform colour as middle gray from 'pixelated' pattern

Trees to create shade and frame central plaza

Shaded seating under trees

Grass ring to frame central plaza

Signalized pedestrian crosswalk

Central plaza - multi-purpose space to host civic & cultural events

Canopy structure with integrated washroom, storage area and kiosk

Family fountain

Trench drains on either side of roadway

Bollards to delineate street edge

On-street parking

Signalized pedestrian crosswalk

Wide boulevard in front of active retail properties

Enhanced connection to Baker Street development site

A canopy provides shade and frames a plaza space

Trench drains delineate between road and boulevard space

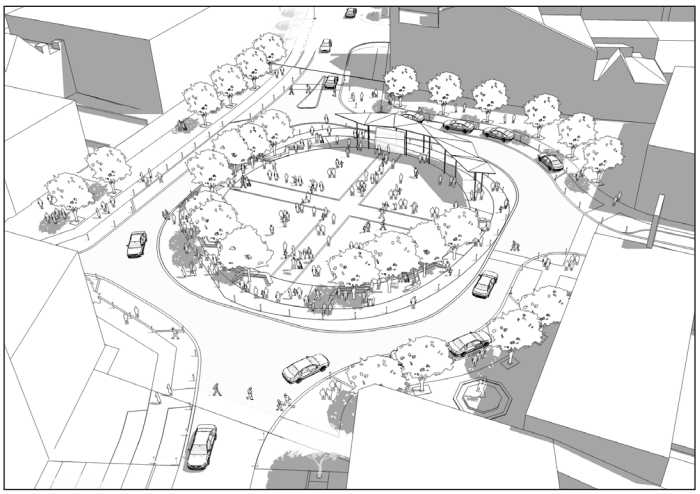
Lawn areas with shaded seating will create comfortable places to sit and enjoy downtown

A 'pixelated' paving pattern, using three neutral grey colours, will add visual interest and texture to the square

Using the Plaza

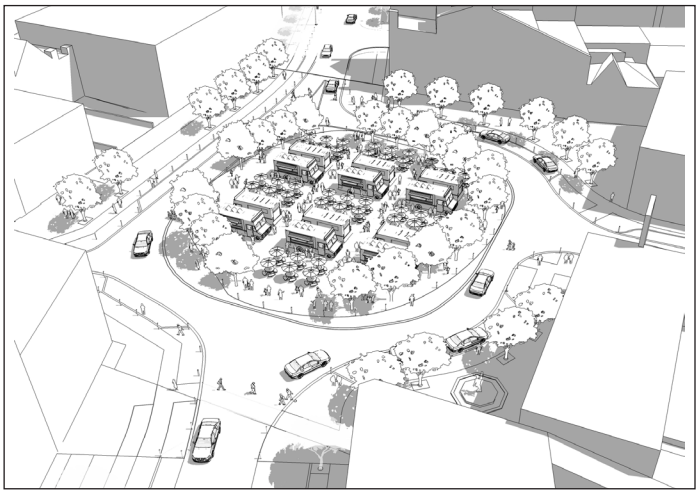
Flexibility by design

A central plaza in St. George's Square creates potential for a variety of uses, without having to close down the ring road.

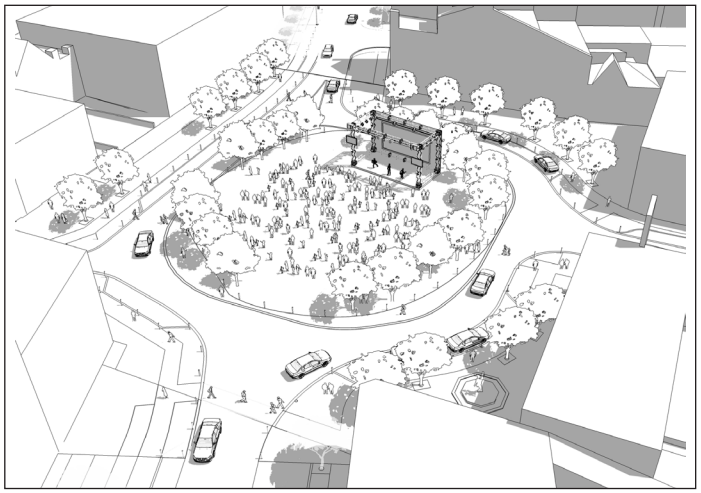


Open plaza

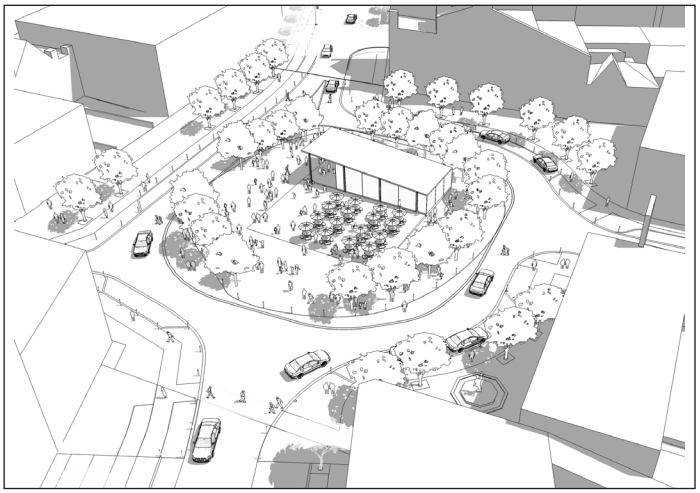
Market stalls



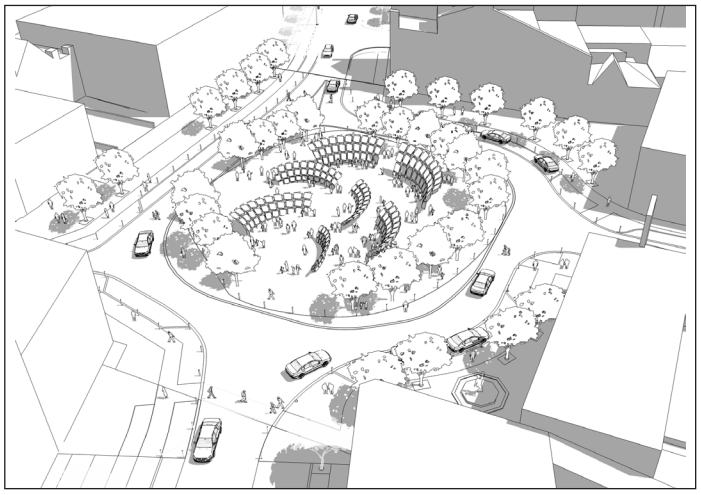
Food truck festival



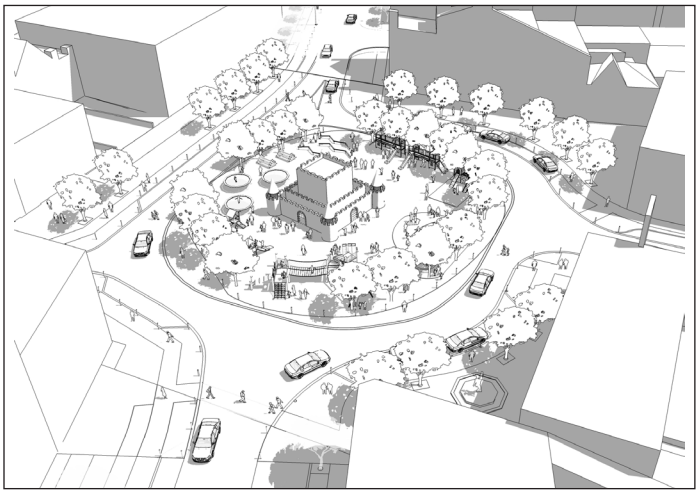
Concert



Food services pavilion

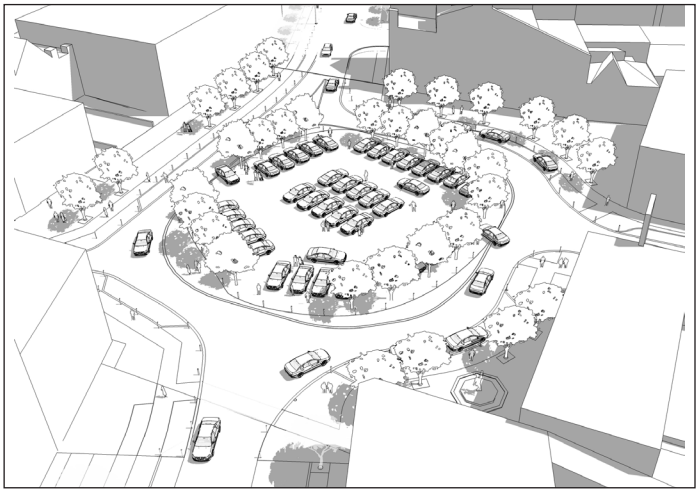


Interactive public art exhibits



Children's festival

Holiday display



Temporary parking

Public Art

Animating the Square

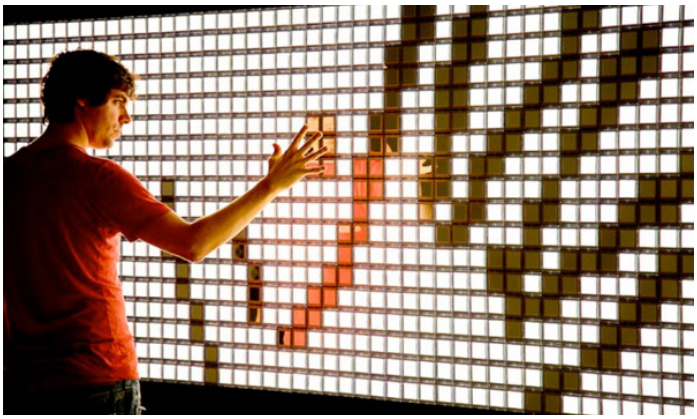
Incorporating temporary interactive public art into the Square is critically important to ensuring it has a purpose beyond hosting events. A well curated public art component will draw families and tourists and will animate the Square. Pieces installed in the Square should be thought provoking but approachable, especially by children. Pieces should be installed in the centre of the Square, primarily, but can also be installed in edge areas.

Interactive public art encourages participation.

Reflections draw users literally inside this piece.

Children are drawn to items that entice exploration.

Physically involving users engages the mind and body.



Digital media is a powerful medium with which to explore the nature of interaction.

Design Guidelines

A checklist to guide detailed design

As this initial concept for St. George's Square advances through detailed design, the following guidelines should serve as a checklist to measure the success of the evolving design concept. St. George's Square should:

1. Provide the right amount of space in front of businesses to allow for them to activate it comfortably;
2. Provide a flexible central plaza space that encourages self-activation on a day-to-day basis but also accommodates large and small community and cultural events;
3. Ensure maximum flexibility to seamlessly integrate with adjacent flexible streets;
4. Encourage pedestrian activity at the edges of the Square;
5. Incorporate high-quality materials and finishes;
6. Choose a palette of materials that unify the Square (e.g. unit pavers);
7. Integrate seating areas to provide places for rest;
8. Use trees to provide shade and to define space;
9. Integrate elements for children's play;
10. Incorporate both fixed and movable seating;
11. Incorporate a seasonal or permanent canopy structure to provide shade and seating opportunities;
12. Incorporate concierge functions (e.g. public washroom, storage/maintenance space, a kiosk and power/water hookups) either within the Square or in a storefront on the Square. Find the appropriate tenant for this space.
13. Provide a framework for interactive public art to occur in the Square;
14. Provide historical interpretation opportunities throughout the Square;
15. Ensure universal accessibility with a continuous pedestrian clearway that circumnavigates the Square as well as 2-3 signalized pedestrian crossings which provide access to the central plaza. Signalized crossings should give transit priority as well as actively manage timing to optimize traffic flow;
16. Incorporate measures to allow for easy closure during large events;
17. Allow for events to occur in the centre of the Square without affecting the road;
18. Incorporate wayfinding measures in the Square to orient visitors in downtown;
19. Maintain vehicular access through the Square;
20. Reverse the travel direction of Douglas Street;
21. Comfortably accommodate transit vehicles and the occasional large transport truck;
22. Provide on-street parking;
23. Incorporate lighting to illuminate, animate, and unify the Square at night;
24. Capture stormwater to passively irrigate trees; and
25. Utilize trench drains, bollards and light poles to delineate between roadway and boulevard space.

Impacts of Change

Pedestrian Impacts

St. George's Square is segmented into two primary areas for the use of pedestrians: the Central Square and Boulevards. The Central Square is primarily where events will occur and is safely protected from the road. Boulevard areas - fronting shops and services - provide a comfortable experience for pedestrians, protecting them from the roadway through the use of bollards.

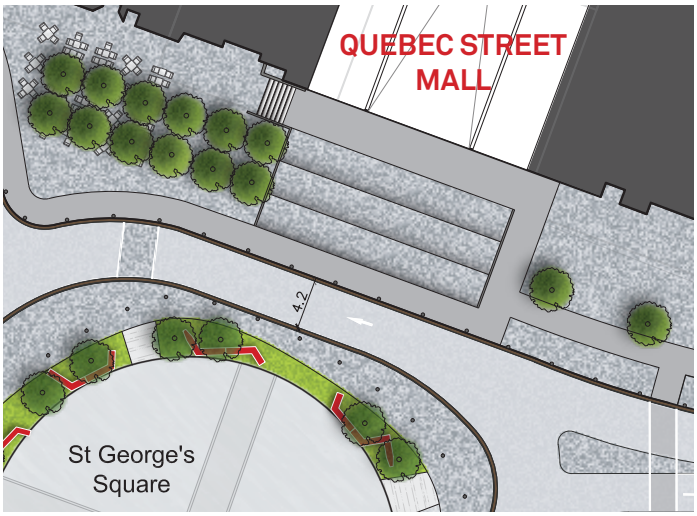
The curbless, flush design is also an important component of increasing the walkability of the Square as it allows for permeability between all areas. During large events, the Square will function as one large plaza, free from the encumbrance of a system of raised curbs. During day-to-day use, pedestrians will be able to cross the roadway and enter the Central Area easily. Finally, pedestrians will benefit from the proposed changes to roads that move through the Square as vehicles will slow dramatically, thus reducing the risk of serious collision.

Curbless streets slow vehicles and allow pedestrians to seamlessly cross the road

Transit Impacts

Several buses currently pass through St. George's Square, both leaving and retuning to the Central Station. This is planned to continue. The demand for transit in the Square is driven by the Old Quebec Street Mall, which has a concentration of health service offices. To provide convenient access to the Mall, a transit should be located as close as possible to the Mall entrance.

The new ring road through the Square has been designed to accommodate the turning movements of transit vehicles. Lane widths are generous at 4.2m and bollards are inset on the inside to provide additional turning room. Trip times through the Square may be increased marginally - as the operational speed will decrease - but the speed reduction will likely be offset as there will no longer be a traffic signal, thus allowing for continuous flow throughout the Square.



A transit stop should be located as close as possible to Old Quebec Street Mall

Traffic Impacts

Wyndham Street North, Quebec Street and Douglas Street all converge at St. George's Square, making the space an important but complex junction in the downtown. The existing road configuration reasonably resolves the confluence from the perspective of the vehicle but occupies prime space in the Square. The proposed redesign of the Square seeks to better balance space allocations for vehicles versus boulevard and aims to allow vehicles to flow continuously, and in one direction only. Vehicles will need to move slowly through the Square as there will be more pedestrians using the space as well as new on-street parking bays. Both of these factors will passively calm traffic through the Square. The new configuration, however, will likely result in similar travel times as the increased distance and slower speeds will be offset by the removal of the traffic signal. Corner radii have been designed to accommodate transit vehicles and bollards have been offset from the inside of each corner to allow for large trucks (WB-20) to pass through the Square (see appendix).

The existing signalized intersection in the Square will be removed in favour of a continuously flowing, one-way road

Operational Impacts

St. George's Square will require a higher level of maintenance as it will incorporate many new features, amenities, materials and furnishings. The operational impacts, however, will not be entirely new to City staff as they will be similar to what has been recently experienced in Market Square. During the detailed design of St. George's Square, Operations & Maintenance Staff should serve on the Steering Committee to ensure they are able to provide input into the process as well as understand forthcoming changes and associated operation. Accordingly, the City should begin to plan for increased operations funding to operate and maintain the space.

Specifically, winter operations in the square will require special attention (similar to the flexible streets model that has been proposed for key downtown streets). Accumulated snow should be removed promptly to ensure that all areas of the Square remain universally accessible. This will require specialized equipment in addition to great care to ensure that site furnishings are not damaged.

St. George's Square will require a higher level of maintenance effort, similar to Market Square

4.3 Implementation

Implementation Overview

The renewal of St. George's Square is a complex task that will require considerable forethought and planning

With planned reconstruction of Wyndham Street North in the near-term, which will reduce the number of lanes from four to two as well as transition it to a flexible street, St. George's Square should ideally be renewed concurrently or immediately following street reconstruction. This will ensure continuity in the public realm and of the roadway operations. It is equally important to renew the Square to respond to projected intensification in downtown (as outlined in the Downtown Secondary Plan) as the Square will gain significance beyond its immediate connections. It has also become apparent through extensive stakeholder consultation during this study that there is interest from the arts community for a flexible, programmable outdoor space in the downtown.

Change in St. George's Square will require considerable forethought and a strategic approach to planning. The first step is to set priorities for the short and medium-to-long terms. The second and equally important step is to continue the conversation about a construction phasing approach, in the context of a larger downtown reconstruction effort, to minimize disruption to businesses throughout the core.

Fortunately, City Staff have recent experience with a similar project - the renewal of Market Square. The first step in beginning the process of planning for renewal of St. George's Square should be to organize a round-table discussion for those involved in the Market Square reconstruction project. The discussion should focus on the project process from detailed design through to substantial completion and the resulting summary should highlight successes and shortcomings of the Market Square project. Applying lessons learned to the planning and implementation of St. George's Square will ensure that the same mistakes aren't made twice.

Planning for Change

In the short-term, there are several important tasks that should be undertaken by the City:

- Begin Capital Planning to allocate sufficient funding, informed by the preliminary costing included in this report (this task is interrelated to the construction phasing approach - opposite page);
- Explore options for cost sharing or alternative funding/procurement methods;
- Consult with utility providers to explore if infrastructure running through the Square can be renewed concurrently with reconstruction. Early consultation with utility providers is important as these organizations typically require long lead times for planning and budgeting purposes; and
- Continue consultation with Downtown Guelph Business Association (DGBA) and businesses that front the Square to ensure that they remain involved as the project evolves.

In the medium-to-long-term, and in preparation for implementation concurrent or immediately following Wyndham Street N reconstruction, City officials should:

- Retain a qualified consultant to lead the detailed design and implementation process;
- Ensure that a Transportation Engineer is retained as a part of the detailed design team to optimize pedestrian, accessibility, traffic, goods movement and transit priority considerations;

- Develop a construction phasing approach (see next section) and consult with stakeholders and the public to build consensus behind a preferred approach;
- In anticipation of the eventual redevelopment of the Baker Street site into a civic node, the connection between St. George's Square and the Baker Street site become increasingly important. The City should seek to acquire the necessary agreement that will allow for the enhancement and enlargement of this connection;
- Plan for an increased level of maintenance/ operations;
- Develop a program to fund and implement a rotating series of interactive public art installations in the Square; and
- Amend internal processes to simplify and streamline the approval and permitting process to host events in the Square.

Construction Phasing

As the reconstruction of Wyndham Street North and St. George's Square will cause considerable disruption to businesses in the area, efforts must be made to minimize adverse impacts. The development of a phasing plan to organize construction sequencing will be necessary to guide efforts. The following options could be considered as a starting point for the implementation planning phase:

1. *One Phase Approach* - Reconstruct all of Wyndham St. N and St. George's Square in one action;
2. *Two Phase Approach* - Reconstruct all of Wyndham St. N first, then reconstruct St. George's Square (or vice versa); and
3. *Three Phase Approach* - Moving south to north, reconstruct Wyndham St. from Macdonell to Square; then St. George's Square, then Wyndham St. from Square to Woolwich

In all of the options noted above, pedestrian access to businesses must be retained at all times. The renewal of St. George's Square will remake this important space into one that is intricately tied to the identity of the City. Careful and methodical planning by a dedicated team will be required to ensure this vision is realized.

Costing

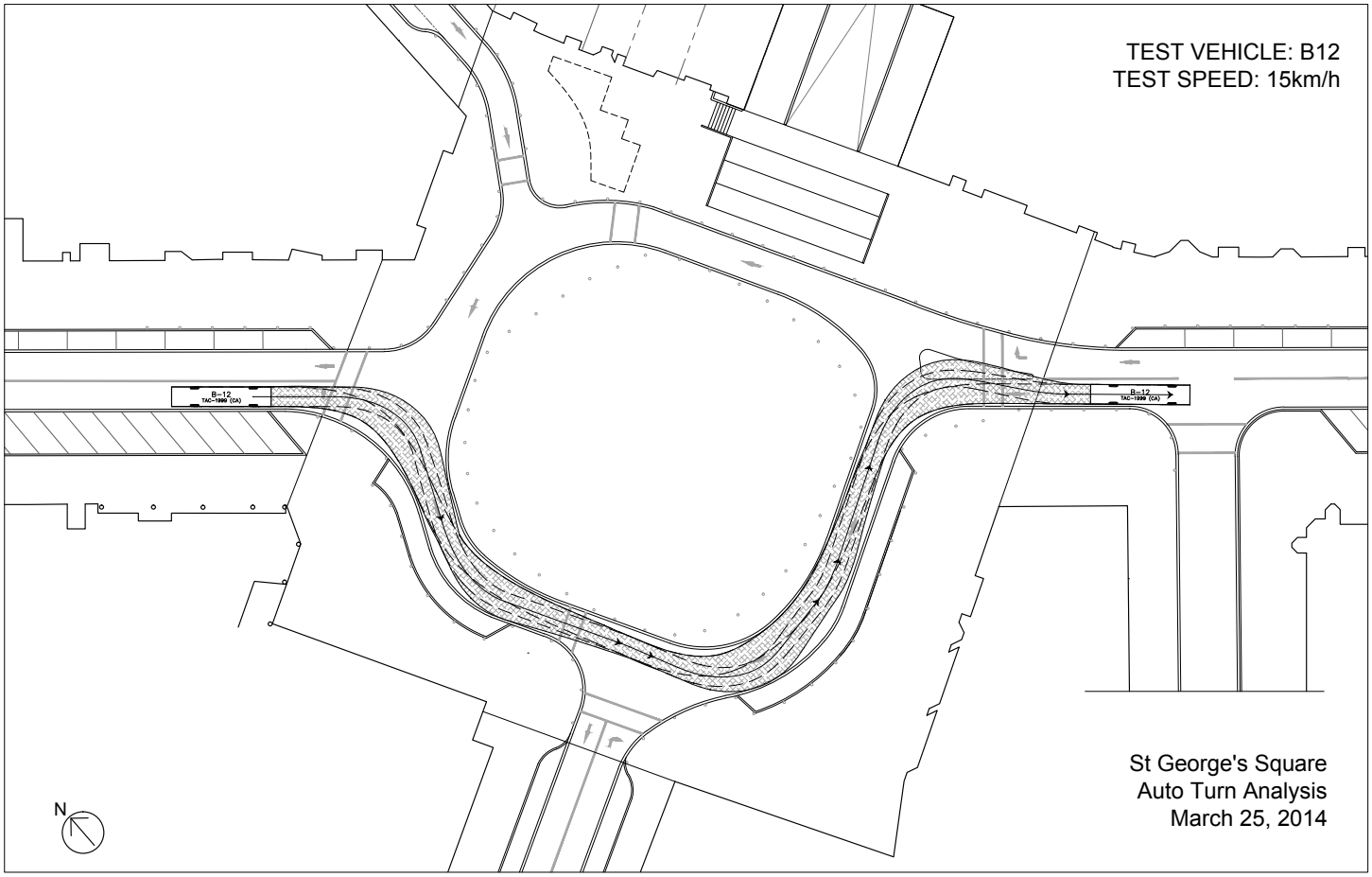
The redevelopment of St. George's Square is a once in a generation opportunity to breathe new life into a key downtown public space. To seize this opportunity, sufficient budget must be allocated to realize the recommended concept in its highest form.

Order of Magnitude Costing

Scenario	Approximate Cost
Recommended configuration of St. George's Square	$6,512,000
Recommended configuration with optional kiosk and integrated canopy	$7,760,000

A detailed Order of Magnitude cost estimate has been submitted to City staff for consideration and planning purposes. The accompanying Staff Report also discusses costing options in greater detail.

4.4 Appendix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St George's Square
Auto Turn Analysis
March 25, 2014
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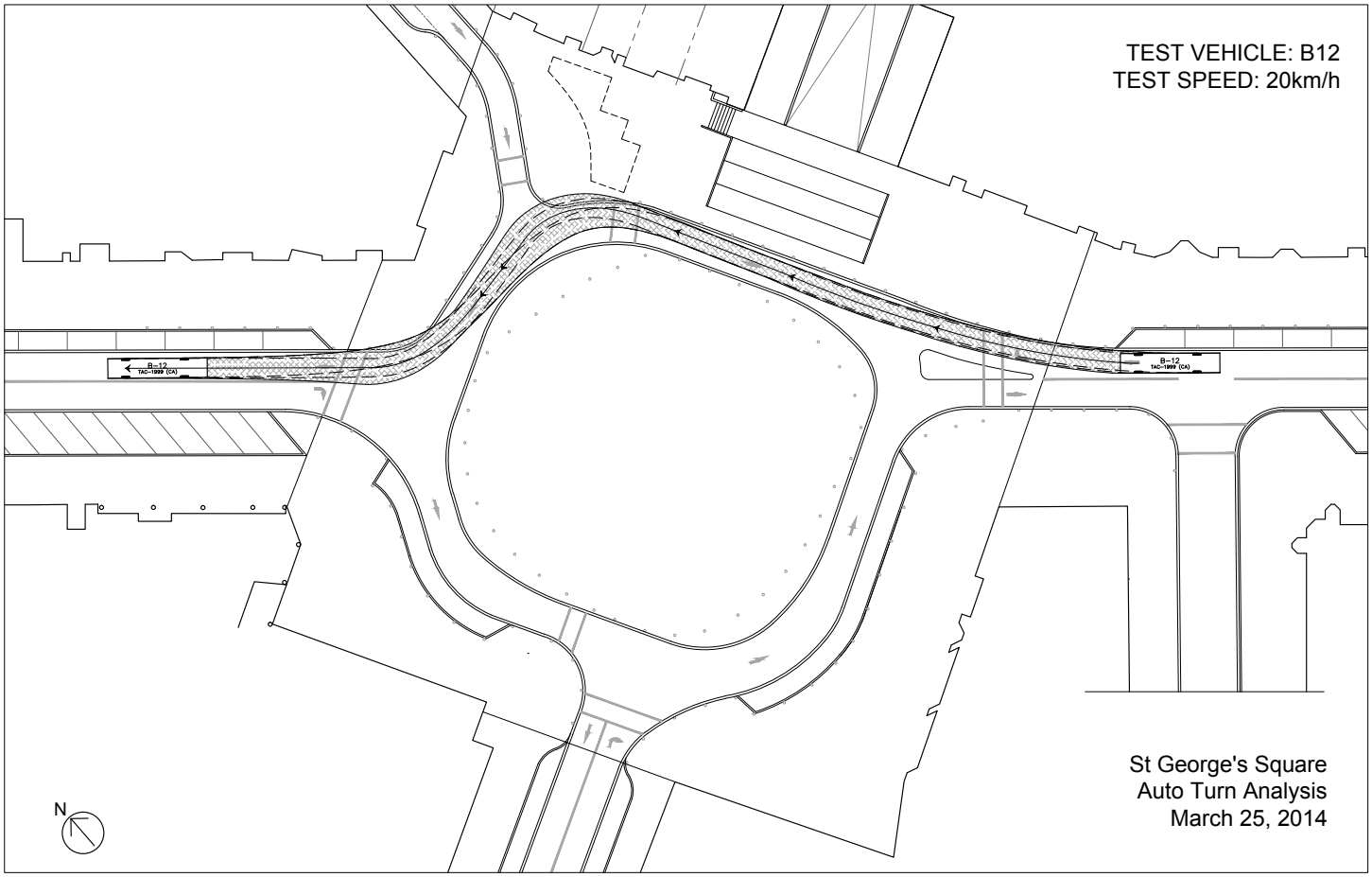
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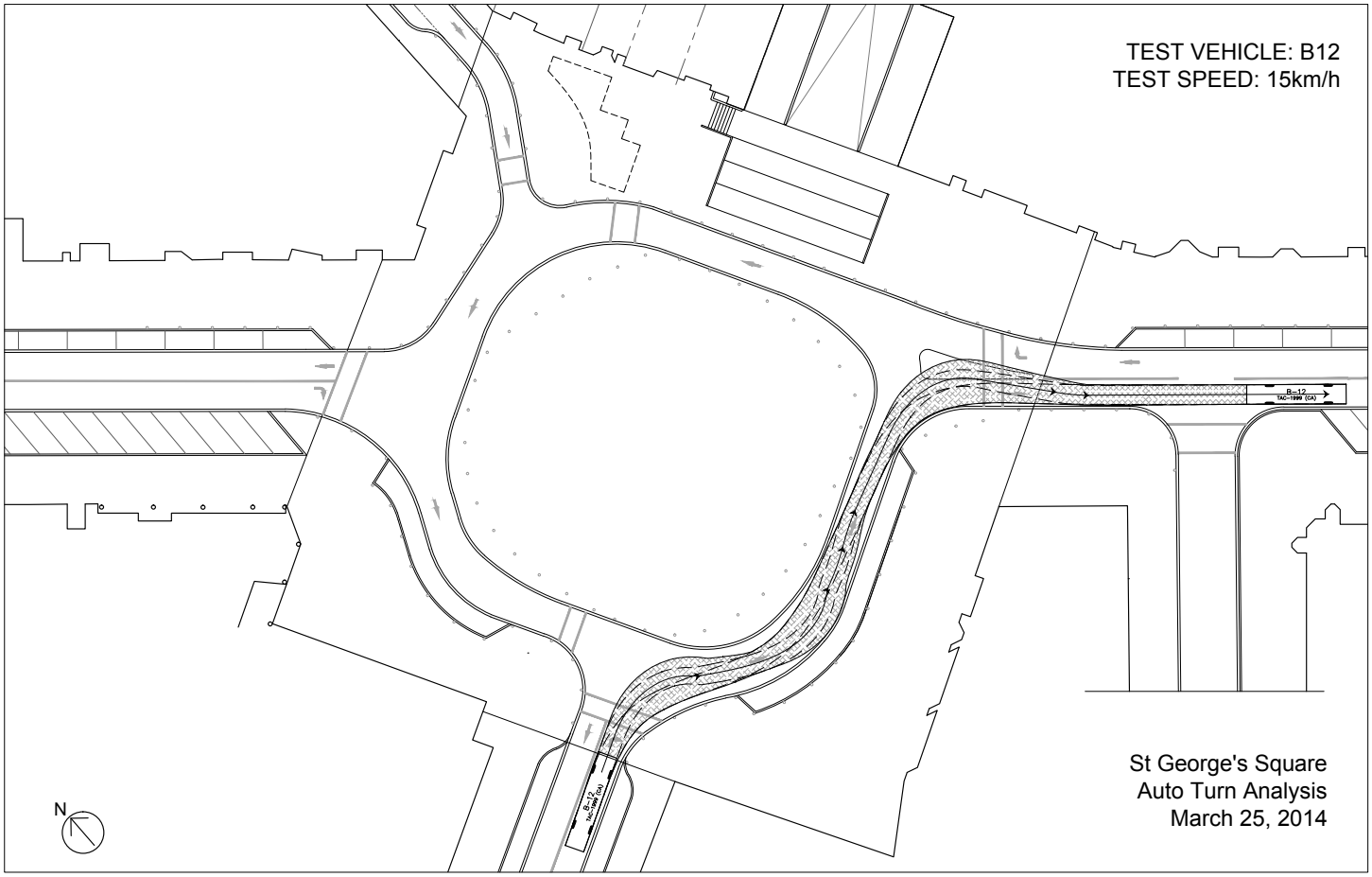
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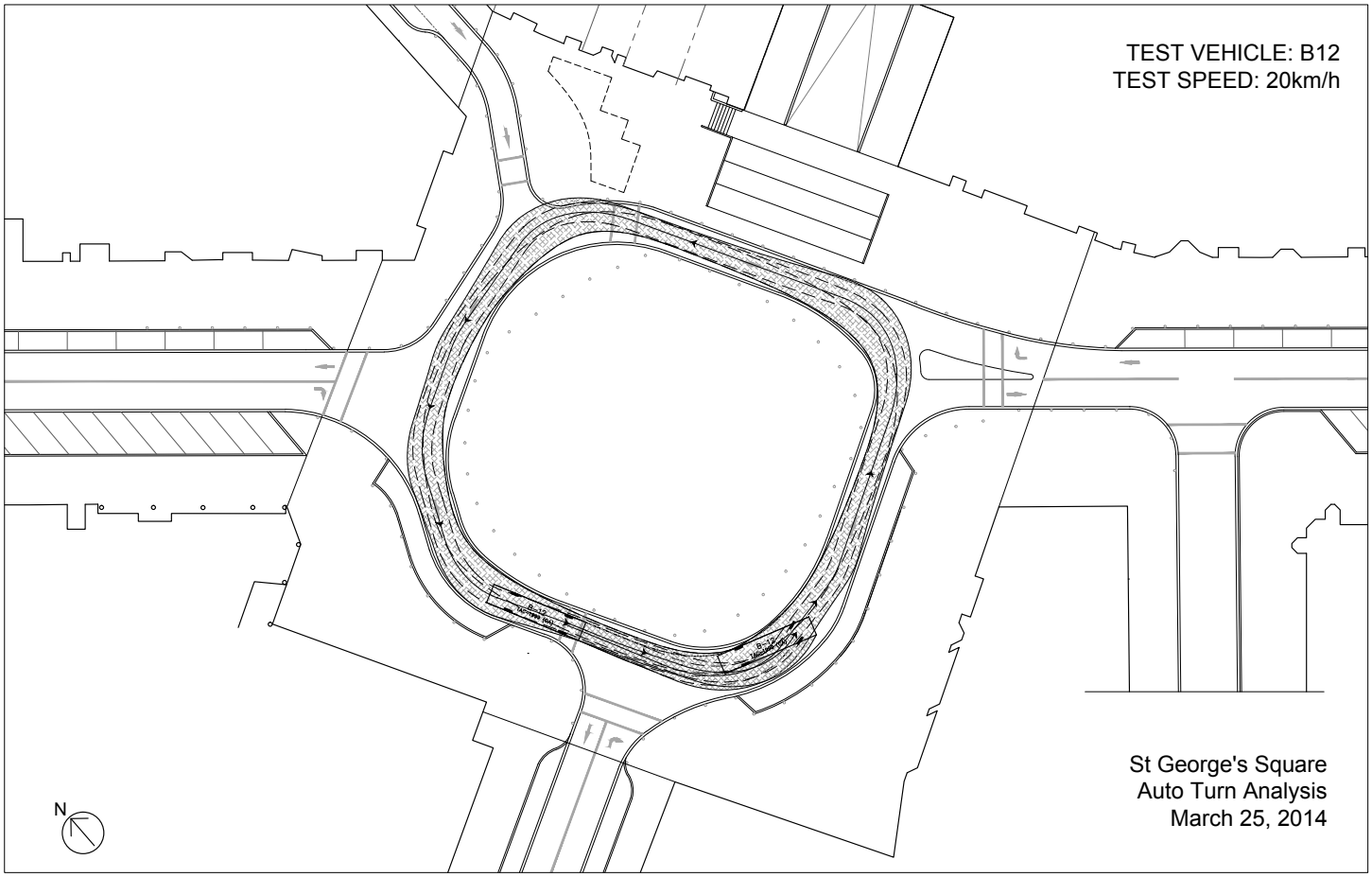
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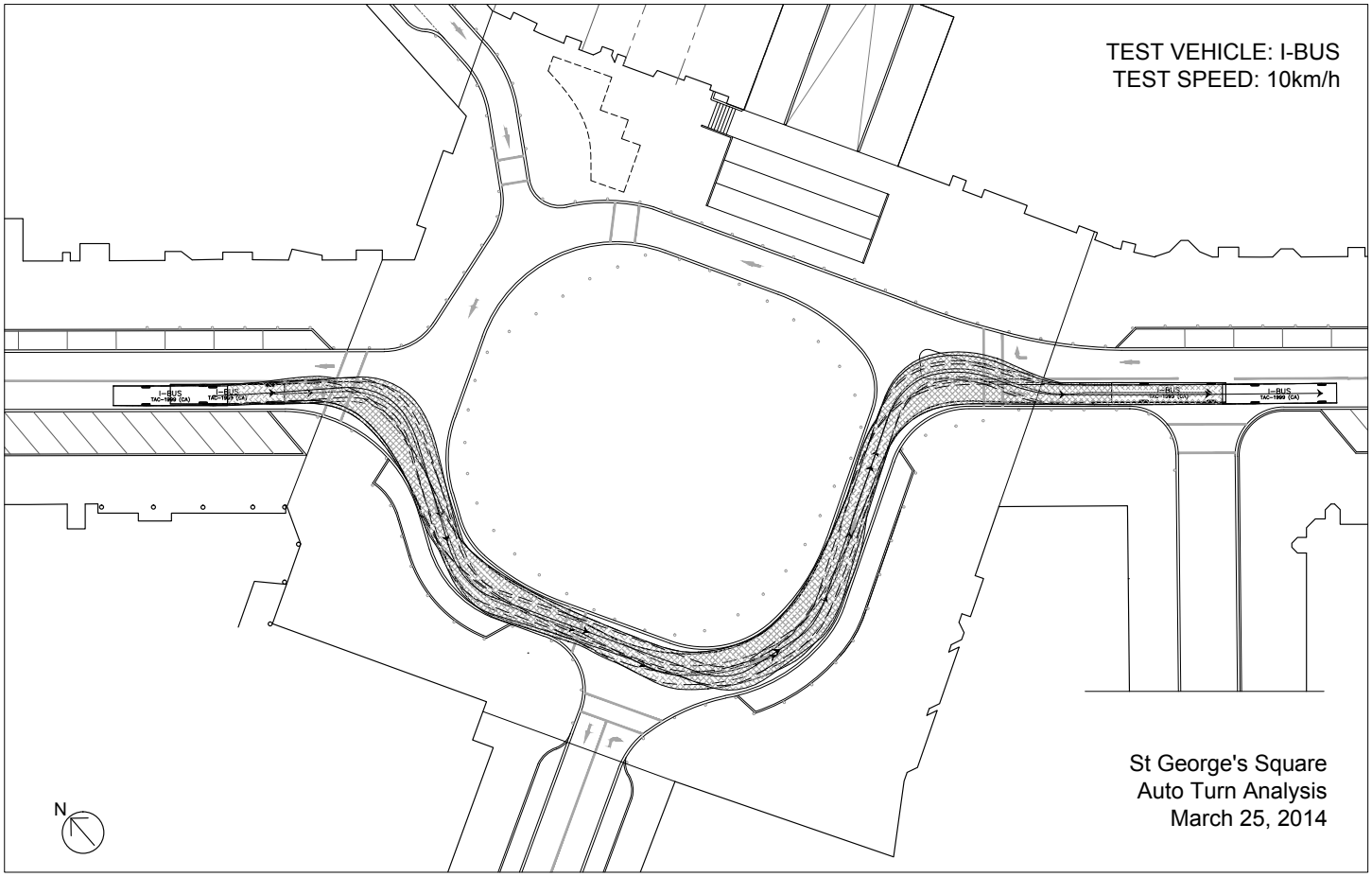
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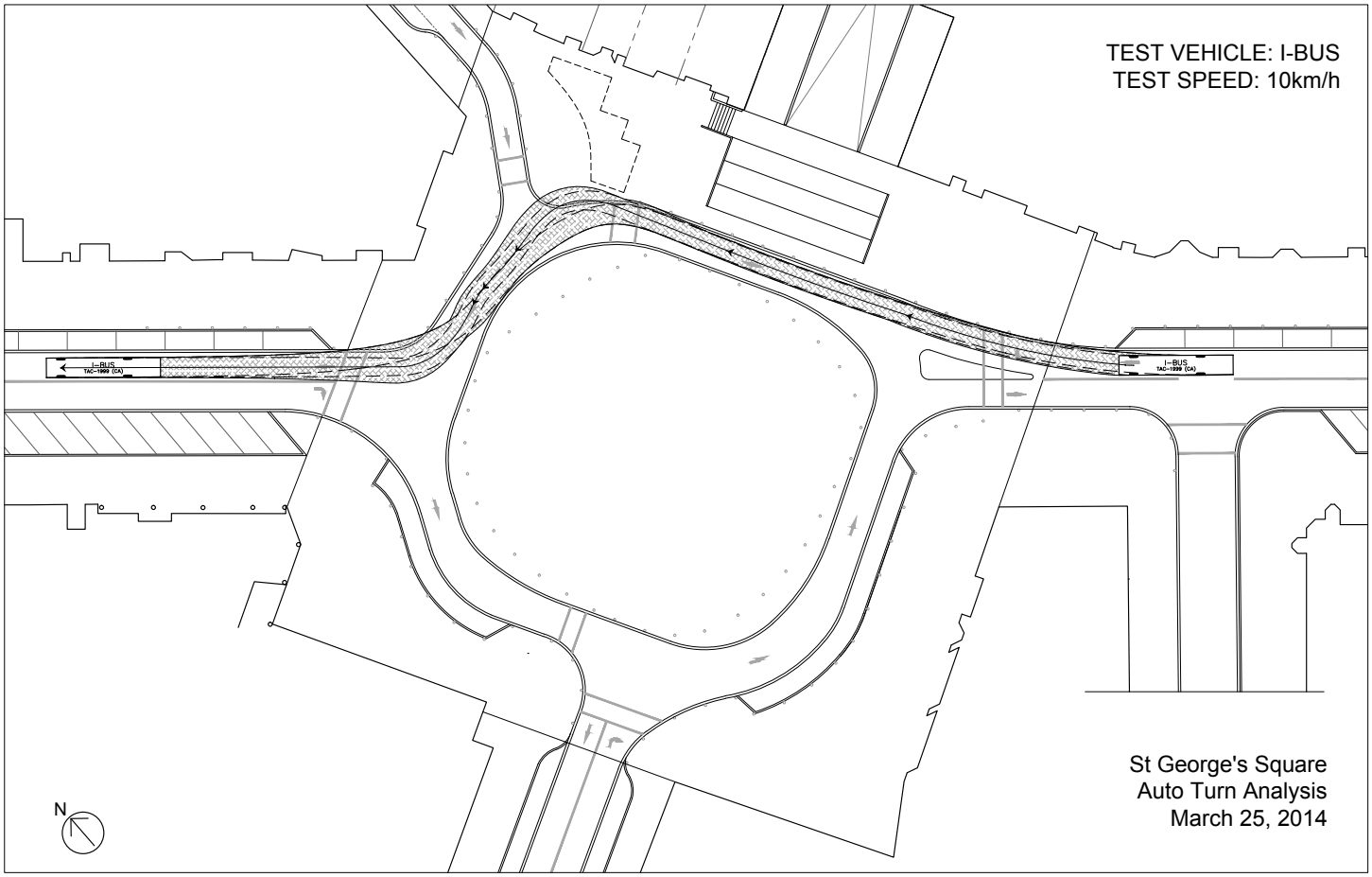
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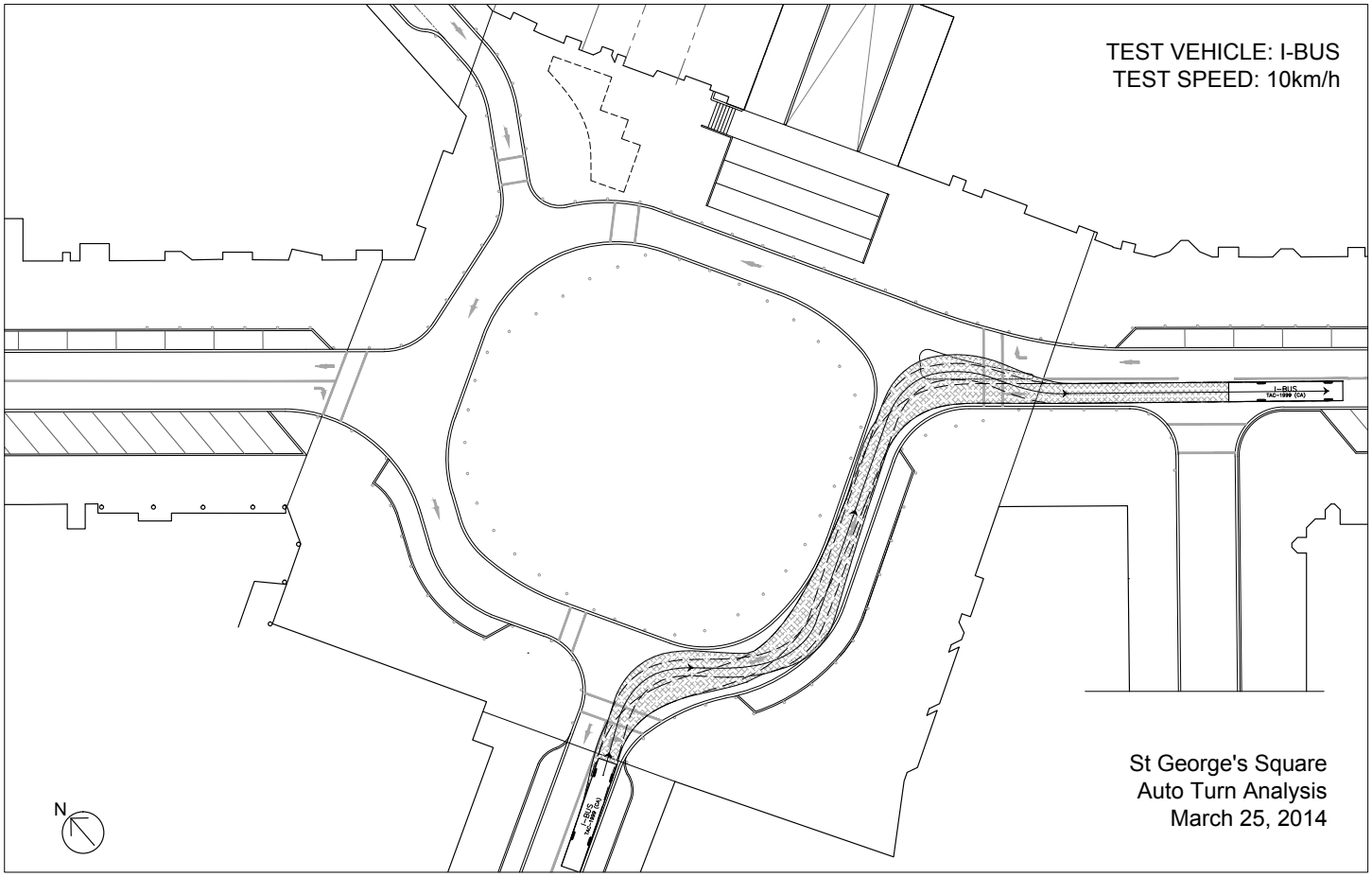
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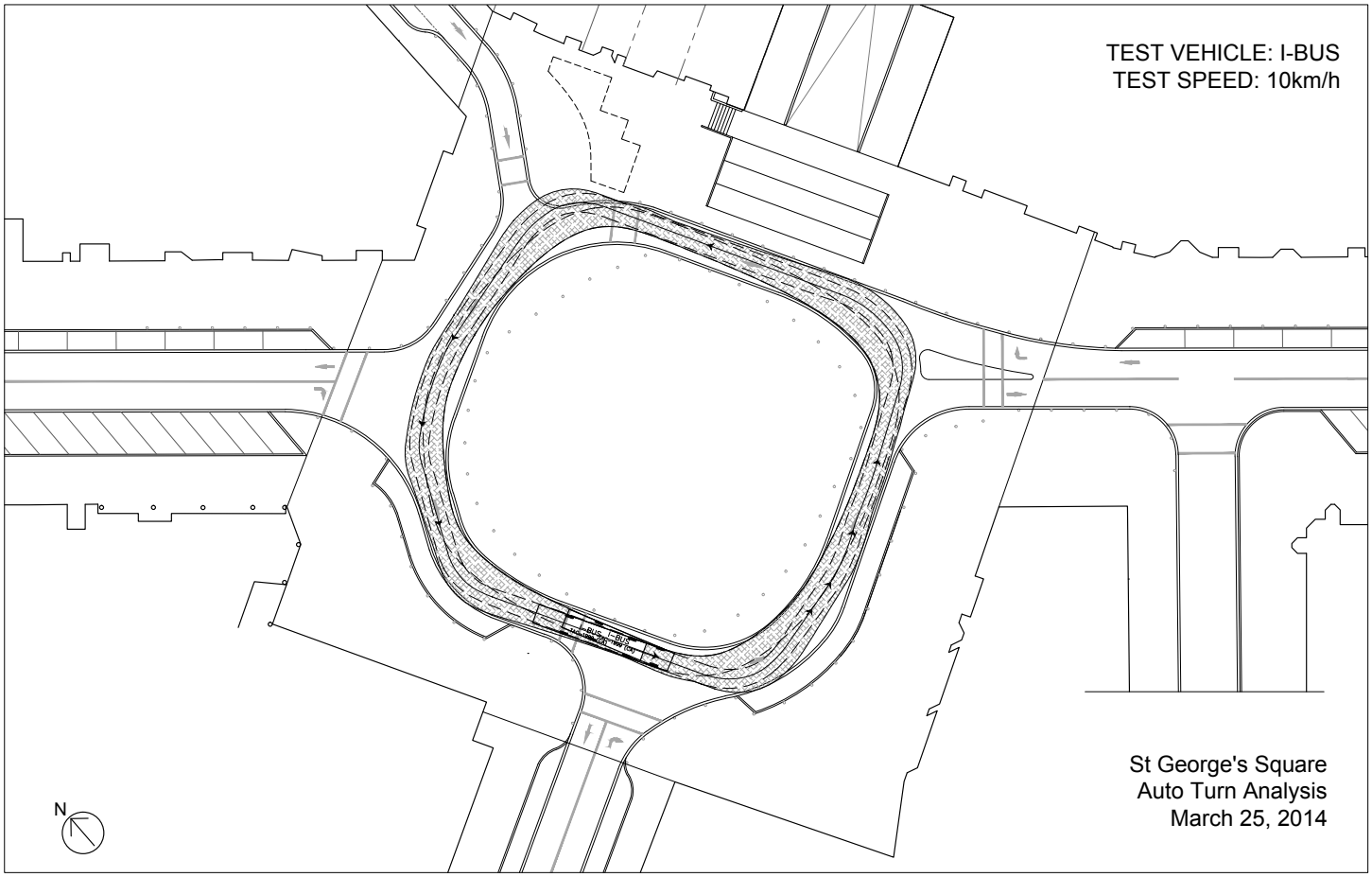
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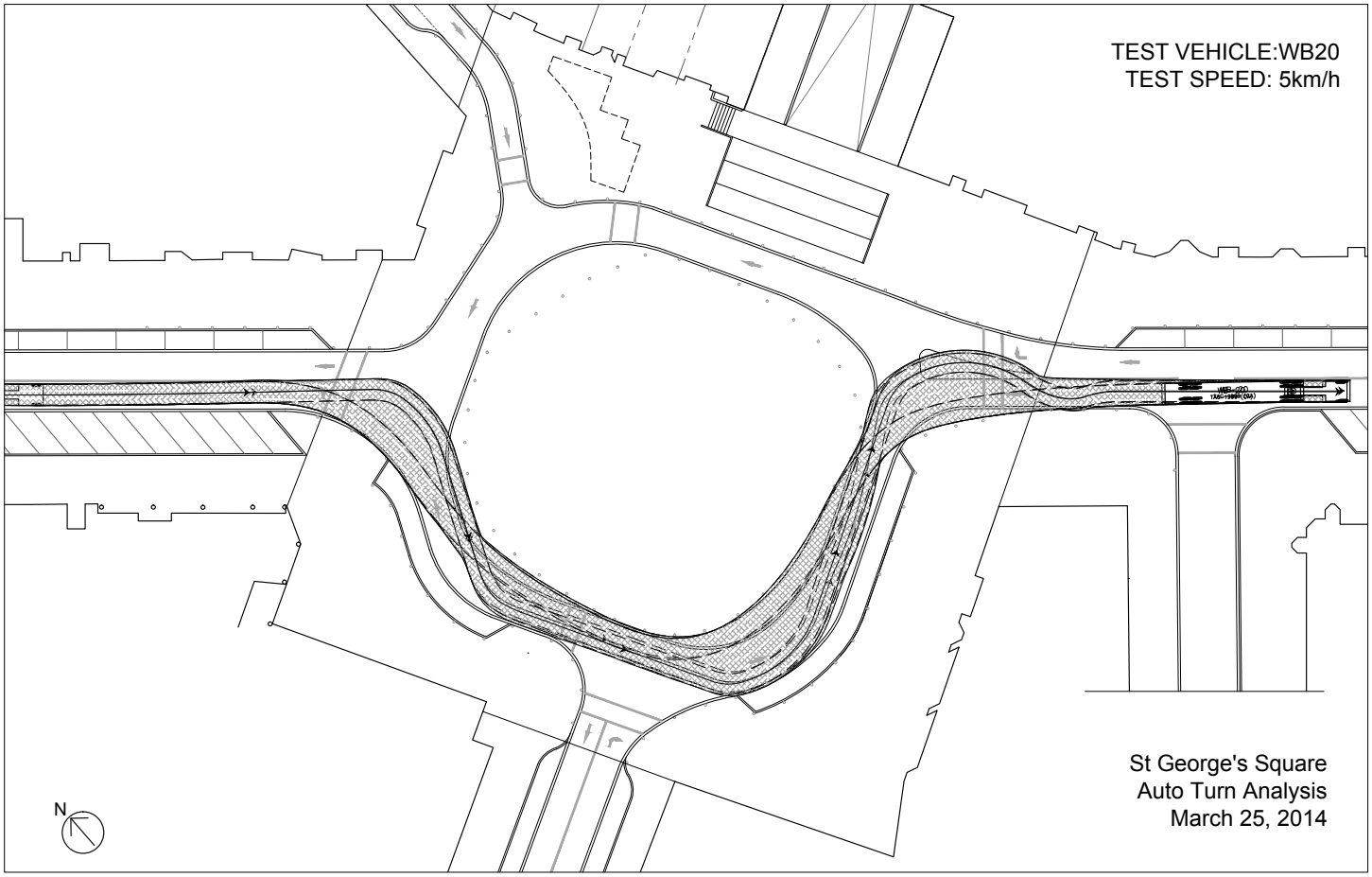
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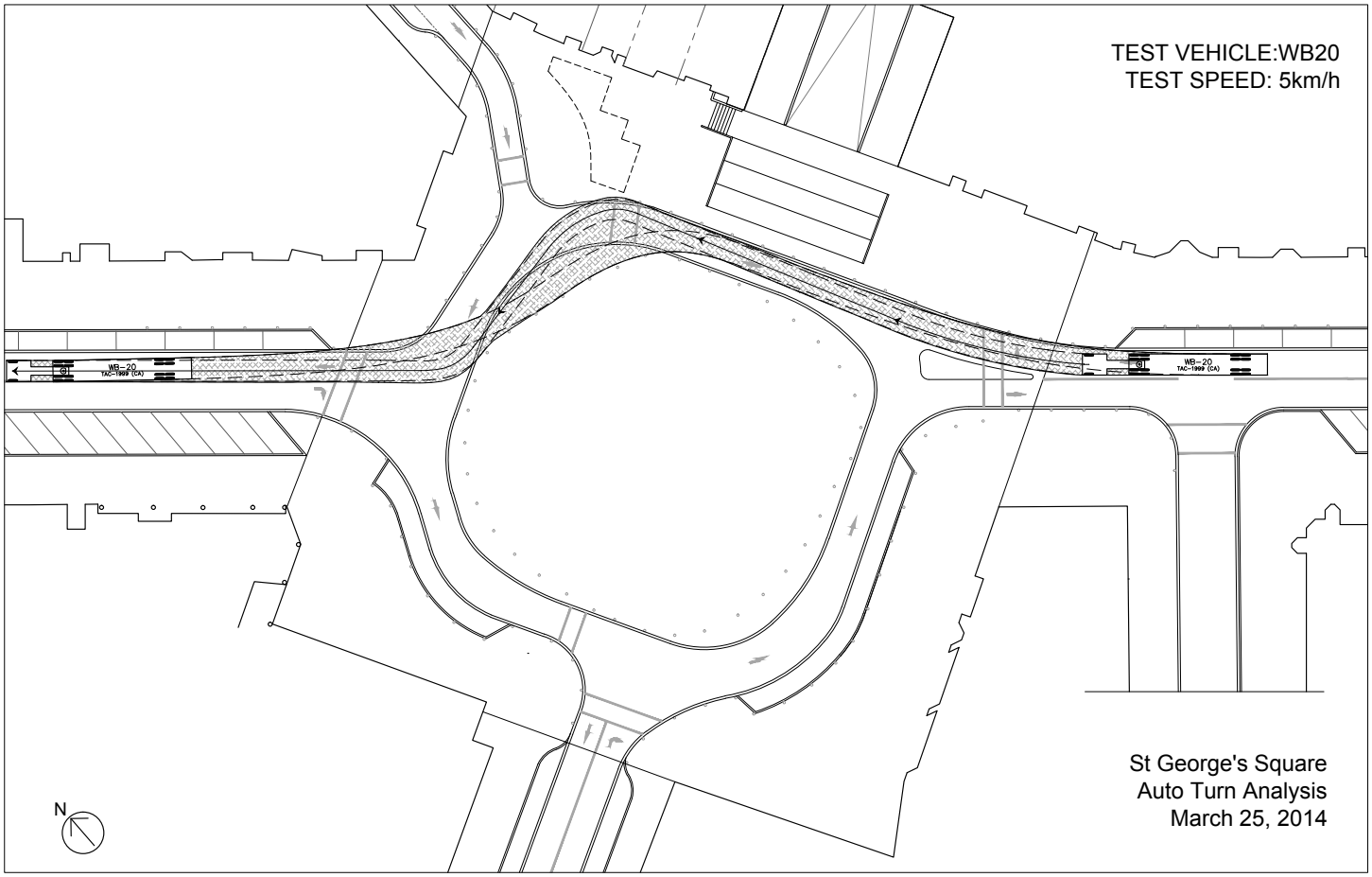
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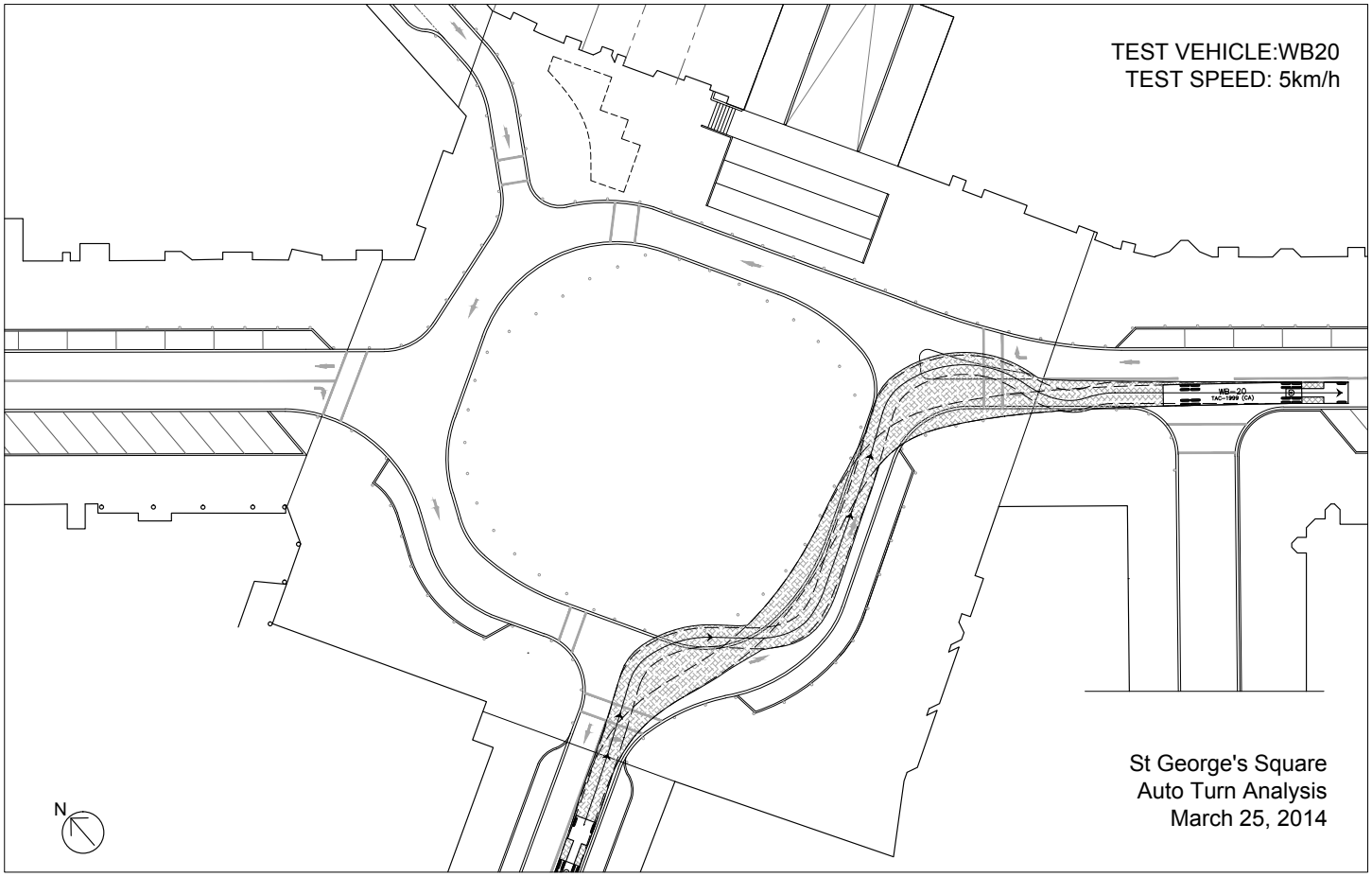
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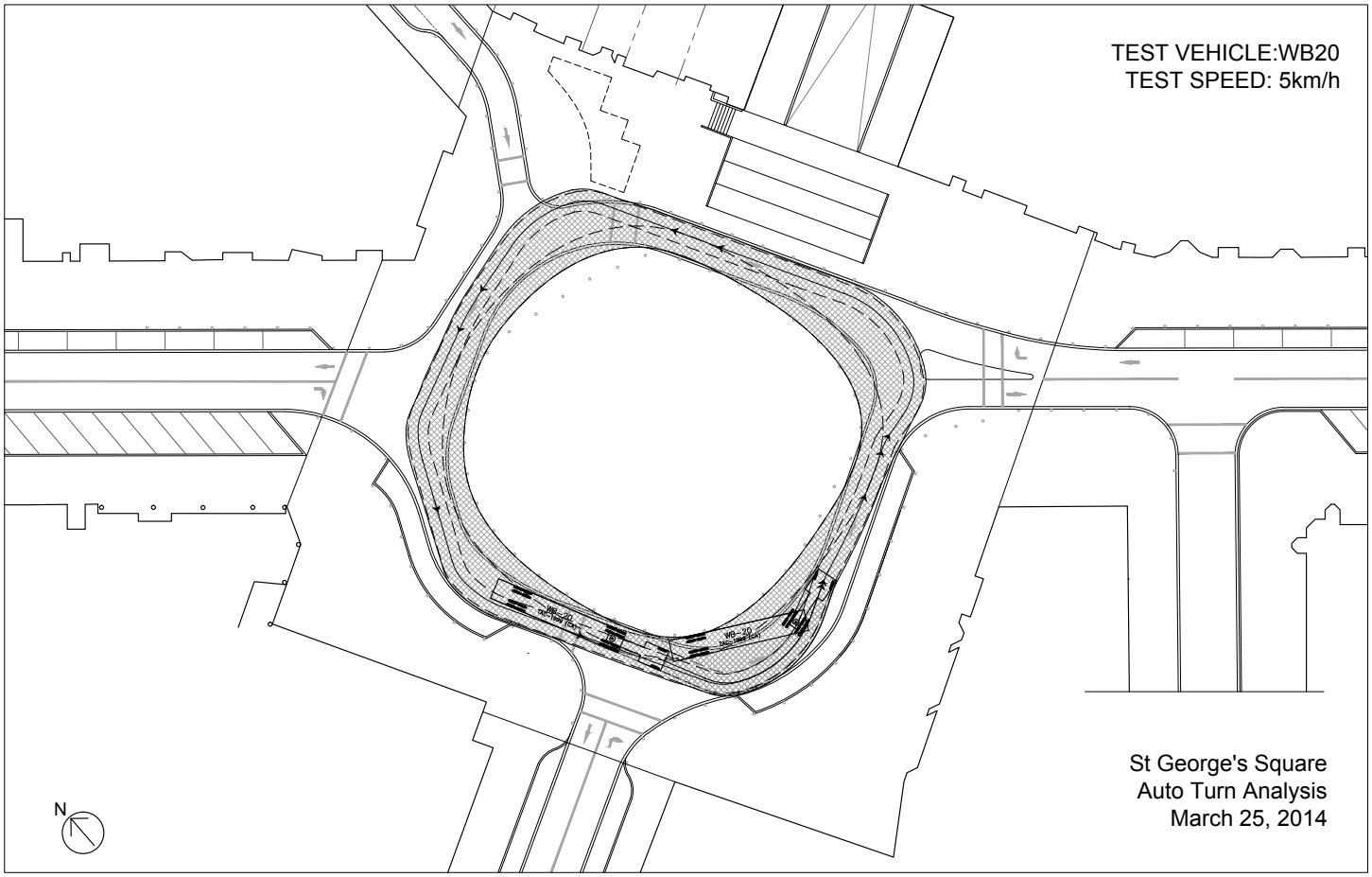
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