




# CORRIDOR OF PUBLIC SPACES

A FRAMEWORK FOR PUBLIC  
SPACE DESIGN ALONG THE  
OAKRIDGE TOWN CENTRE  
OF THE CAMBIE CORRIDOR



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ALONG THE OAKRIDGE TOWN CENTRE  
OF THE CAMBIE CORRIDOR**

by  
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We accept this project as conforming  
to the required standard

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May 2012  
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## Preface

Throughout the history of urbanization, public spaces have played a critical role in the progress and development of cities. In many societies of the 21st century, urban dwellers of all types, regardless of age, gender, race, sexuality, culture or socioeconomic status enjoy accessing and using public spaces for a variety of activities.

In the City of Vancouver, British Columbia, the Cambie Corridor is expected to undergo significant changes throughout the next several decades as it is transformed into one of the city’s major transit corridors through the Cambie Corridor Planning Program. It will exemplify the City of Vancouver’s goals of becoming a leader in sustainable urban development, eco-density, and the creation of green, walkable cities.

As spaces for new homes, jobs and recreational opportunities form, the need for high-quality public spaces for residents, workers and visitors will become paramount to the successful development of the Cambie Corridor. This project aims to utilize the principles of urban design to create a framework of strategies for public space design along a portion of the Cambie Corridor designated as the “Oakridge Town Centre,” focusing particularly on public plaza design and development.



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# 1.0 INTRODUCTION

Due to the implementation of the Canada Line light-rail transit (LRT) system, the City of Vancouver initiated the Cambie Corridor Planning Program in 2009. The objective of the three-phased program is to establish a long-term strategy for Transit-Oriented Development (TOD) along an area designated as the Cambie Corridor (see Figure 1).

The Cambie Corridor, along which the Canada Line traverses via an underground guideway (with the exception of an elevated guideway at Marine Landing), includes four existing stations (Marine Drive, Langara-49th Avenue, Oakridge-41st Avenue, and King Edward) along Cambie Street between the Fraser River and 16th Avenue. The area between the Langara-49th Avenue and Oakridge-41st Avenue Stations, designated as the “Oakridge Town Centre” (see Figure 1), is expected to develop as the Corridor’s central urban core, consisting of mid-to-high density mixed land uses and a strong urban public realm (COV(a), 2011).

On May 9, 2011, the Cambie Corridor Plan was approved by Vancouver City Council, signaling the completion of Phase 2 of the Cambie Corridor Planning Program. If fully implemented, the initiatives proposed in the document will result in significant changes to the built form and land use patterns throughout an expansive urban area in the City of Vancouver. A crucial component of the Plan is the Urban Systems and Public Realm Strategy, which proposes a set of guidelines for the long-term development of a network of urban public spaces and a range of other public realm improvements throughout the Cambie Corridor.

## 1.1 Central Objectives

The central objective of this project will be to utilize the Urban Systems and Public Realm Strategy of the Cambie Corridor Plan as a basis to formulate a more detailed urban design analysis of future public space development along the Oakridge Town Centre of the Cambie Corridor. In particular, the project will focus on five specific locations within the study area which may potentially be developed into key pedestrian public plazas. These locations were selected based on areas designated in the Cambie Corridor Plan as potential locations for public plaza development (COV(a), 2011). Two of these five proposed plaza locations will be explored as case studies in a greater level of detail to obtain a deeper understanding of potential public space design strategies and opportunities along the Oakridge Town Centre, as well as the entire Cambie Corridor study area.

The intent is to formulate a framework of guidelines and implications for the City of Vancouver as it becomes further involved in future public space design (particularly public plaza design) along

the Oakridge Town Centre. It may be useful in prompting and informing further discussion on the topic in the context of the Metro Vancouver Region, as well as TOD and public space development on a more general scale. The project is not intended to serve as a blueprint of future public space development which will occur along the Corridor, as this process will inevitably involve a larger variety of factors that the scope of this project is unable to cover.



**Figure 1:** City of Vancouver & the Cambie Corridor

Scale = 1:150,000

Source: City of Vancouver,  
Google Maps

### Legend

- Canada Line LRT Guideway
- Canada Line LRT Station
- Cambie Corridor (approximate boundary as defined by the City of Vancouver)
- Oakridge Town Centre



1.2 Rationale for Focus

The Oakridge Town Centre, or the portion of the Cambie Corridor located between 49th Avenue and 39th Avenue (see Figure 2), will serve as the focus area of this project. Two Canada Line Stations (Langara-49th Avenue and Oakridge-41st Avenue) are located in this area. This portion of the Corridor was selected for the following reasons:

- The area is projected to become the urban centre of the Cambie Corridor which will provide a diverse mix of housing, recreation and commercial activity with mid to high-density land uses and built forms
- Numerous amenities and services currently exist in the area, which may be enhanced through future public space development
- The Oakridge Centre mall occupies a substantial area of land, and is expected to undergo redevelopment in the near future to increase its compatibility with the TOD strategies of the Cambie Corridor Planning Program. This will have significant implications for public realm development in its proximity
- According to the Cambie Corridor Plan, the area has high potential for development in various public realm components such as streetscapes, laneways, greenspaces and plazas
- As the population of residents, workers and visitors expands along the Corridor, the demand for amenities and infrastructure for public transit and non-motorized forms of transport, such as walking and cycling, are also expected to grow. As the central urban core of the Corridor, this area will play a key role in accommodating and adapting to this growth

*Although the “Oakridge Town Centre” is officially defined by the City of Vancouver (under the Cambie Corridor Plan) as the area of the Corridor between 39th Ave. and 48th Ave., the block bordering 49th Ave. and Cambie Street, where the Langara-49th Ave. Station is located, will be included in the study area and defined as part of the Oakridge Town Centre for the purposes of this project*

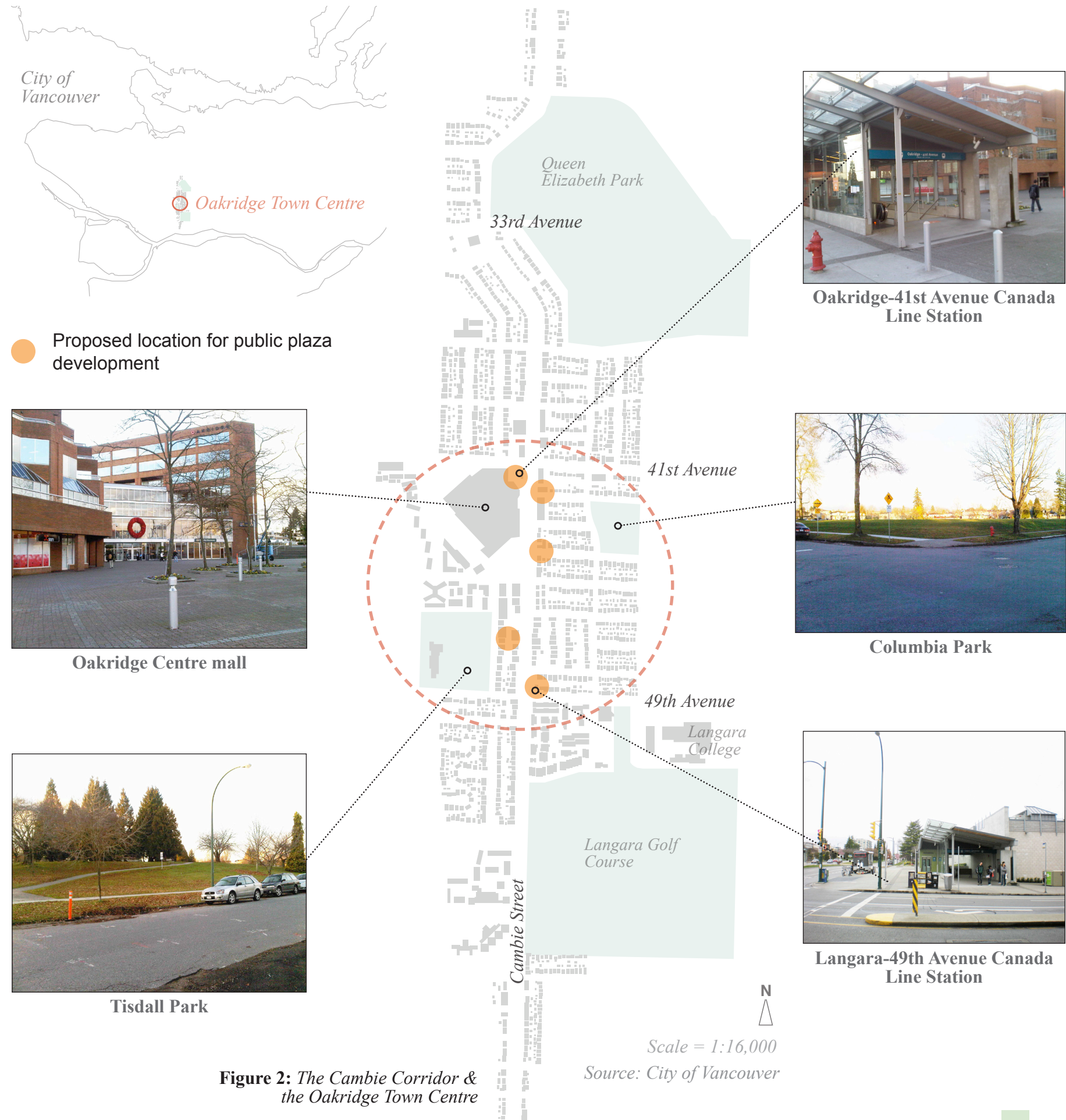
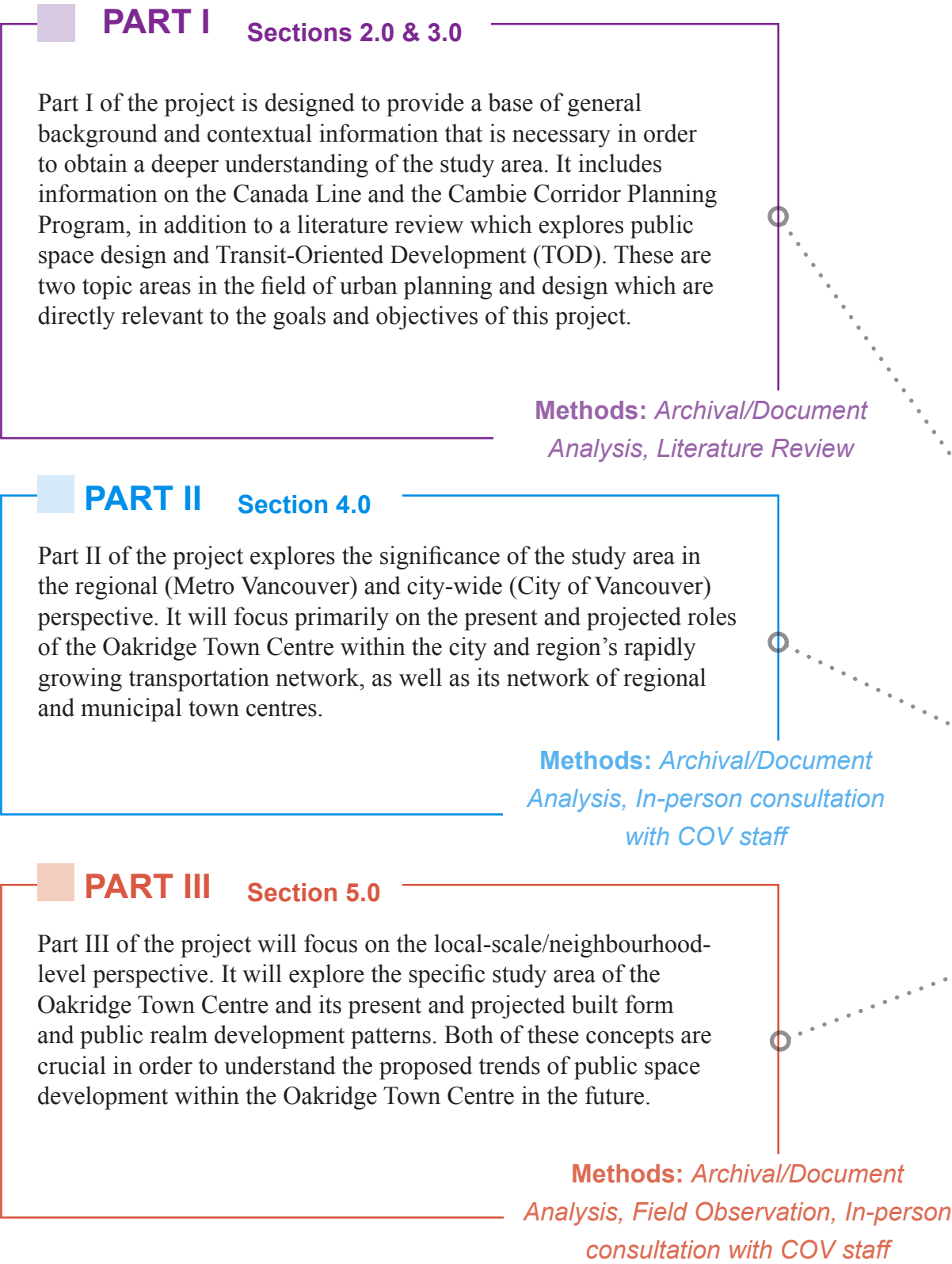


Figure 2: The Cambie Corridor & the Oakridge Town Centre

1.3 Structure and Methodology

The project will be structured into the following four parts, beginning with an investigation of the study area from a large-scale, macro-level perspective towards a local-scale perspective, and finally to a site-specific context:



The following central methods were utilized throughout the project:

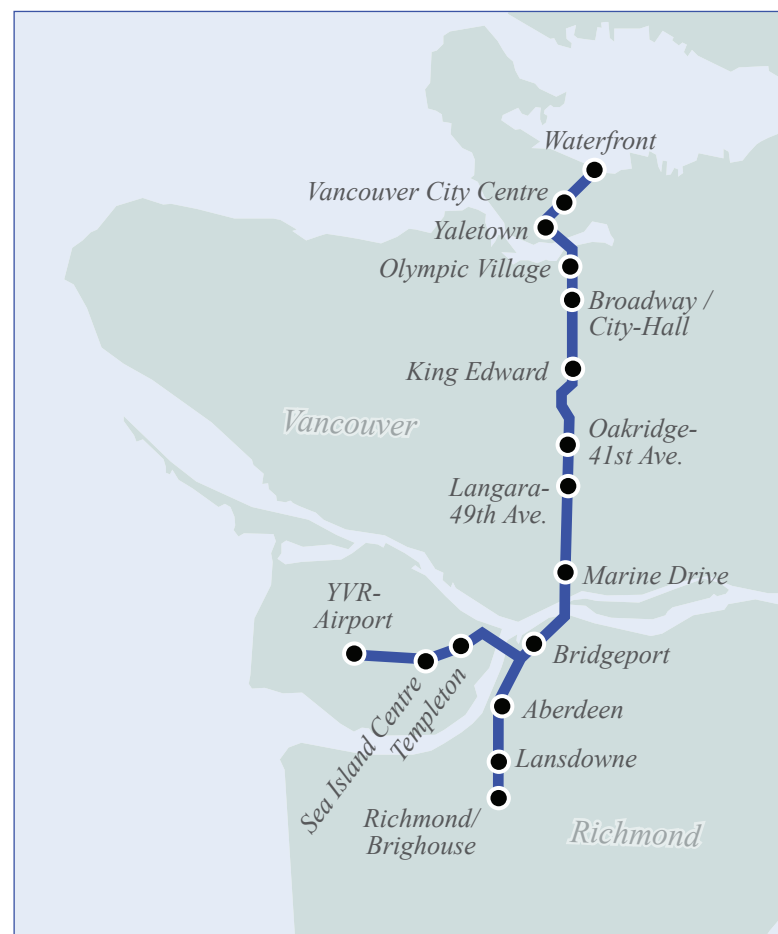
- **Literature Review:** The use of academic and professional sources to obtain background information on relevant topics including public space design and transit-oriented development (TOD).
- **Archival/Document Analysis:** The use of policy documents from various governmental and media sources (eg. City of Vancouver) to obtain relevant data regarding the Cambie Corridor Planning Program and other planning initiatives undertaken in the City of Vancouver and Metro Vancouver.
- **Field Observation:** Field observation methods and techniques were utilized to obtain data regarding present and projected public space and public realm design strategies within the study area.
- **In-person Consultation with COV staff:** Regular scheduled meetings were held with staff from the City of Vancouver Planning Department (who possessed expertise on the Cambie Corridor Planning Program and/or urban design in Vancouver) to discuss the progress, details and objectives of the project.



## 2.0 CONTEXT & BACKGROUND

### 2.1 The Canada Line

The Canada Line is a light rail transit (LRT) system which links downtown Vancouver to the Vancouver International Airport (YVR) and the neighbouring suburb of Richmond (see Figure 3). The project was implemented under a public-private partnership model which involved local, provincial and federal levels of government and consists of a 19km automated guideway with 16 stations, 9 of which are located in Vancouver (Partnerships BC, 2011; COR, 2005). Since its opening on August 17, 2009, the Canada Line has played a crucial role in expanding public transit connections throughout the Metro Vancouver region, particularly through its connections with the Skytrain (LRT), West Coast Express (commuter rail) and Seabus (ferry) systems at Waterfront Terminal Station, as well as various east-west bus routes throughout the region. In Vancouver, the Canada Line runs mostly through an underground guideway along Cambie Street until it reaches the downtown peninsula. Within a year of operation, daily ridership counts of the Canada Line in 2010 exceeded 100,000, three years ahead of projected timelines (Richmond News, 2010). By June 2011, the system averaged 136,259 riders per weekday (Translink, 2011).



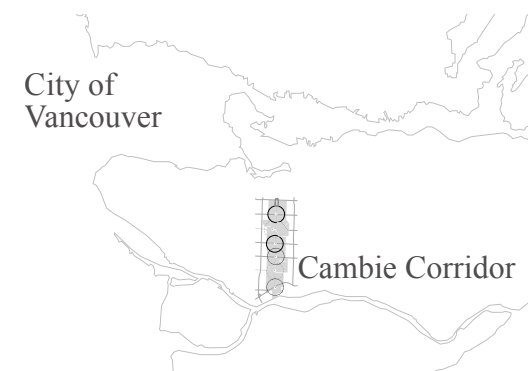
**Canada Line train and station platform** Source: SweetOne. Retrieved from <http://www.flickr.com/photos/sweetone/5957337584/in/pool-1034419@N25/>

Scale = 1:150,000  
Source: City of Vancouver

**Figure 3: The Canada Line Route**

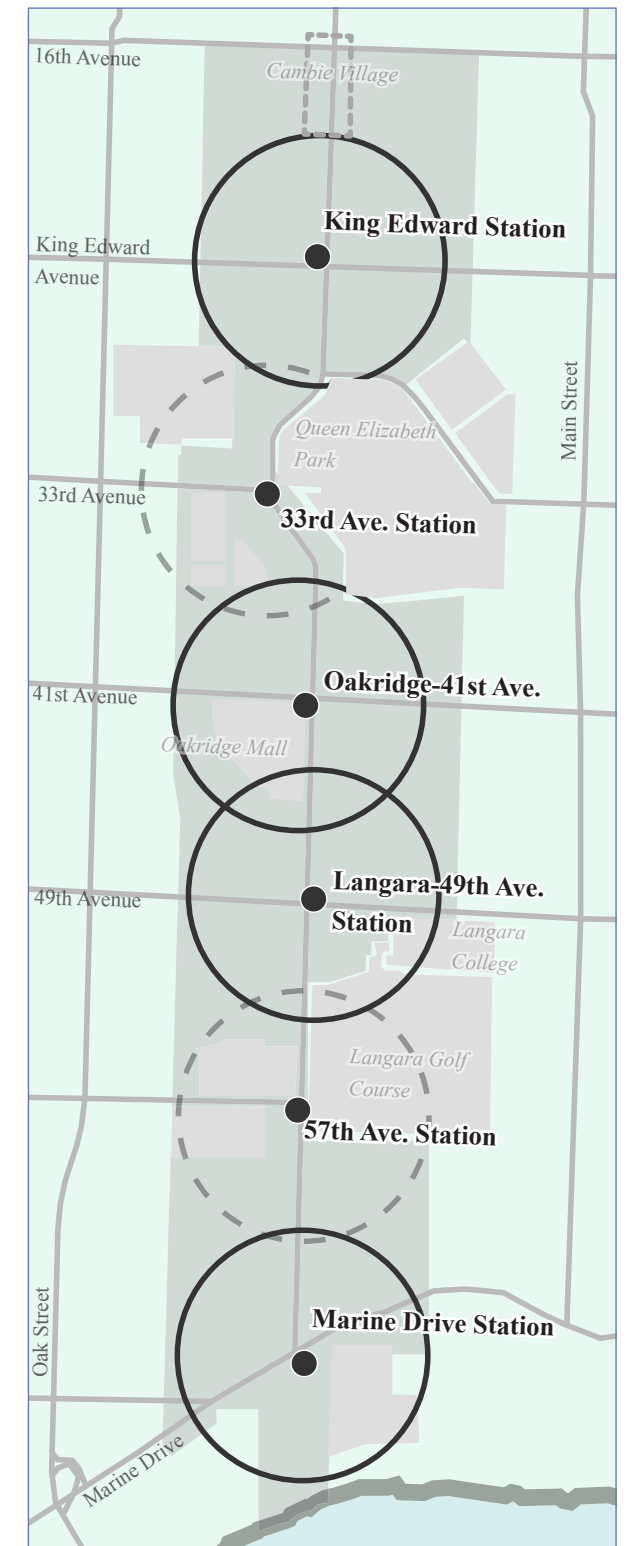
### 2.2 The Cambie Corridor Planning Program

In order to maximize the Canada Line's service and infrastructure investments, the City of Vancouver initiated the Cambie Corridor Planning Program, which is an on-going Transit-Oriented Development (TOD) project covering the area designated as the Cambie Corridor. This area includes all station areas along Cambie Street between the Fraser River and 16th Avenue and covers four existing stations (Marine Drive, Langara-49th Ave, Oakridge-41st Ave, and King Edward) as well as two proposed stations (at 57th Ave, 33rd Ave) (see Figure 4). The central objective of the program is to "focus on opportunities to integrate development with transit along and around the Canada Line to support the City's goals



#### Legend

- Cambie Corridor Boundary
- Canada Line Station
- 400m station area perimeter (existing)
- 400m station area perimeter (proposed)



**Figure 4: The Cambie Corridor** Source: City of Vancouver  
Scale = 1:16,000



of environmental sustainability, livability and affordability” (COV, 2011(b)). Within the Cambie Corridor Planning Program, the portion of the Corridor between 48th and 39th Avenue has been identified as the “Oakridge Town Centre” (COV, 2011(a)).

The Cambie Corridor Planning Program began in 2009 and was separated into three distinct phases, each consisting of extensive processes of public participation and engagement events. The objective of Phase 1, which was completed in January 2010, was to develop an interim rezoning policy and a set of planning principles pertaining to the study area (COV, 2011(a)). The seven planning principles were as follows:

1. Provide land use that optimizes the investment in transit
2. Provide a complete community
3. Create a walkable and cycleable corridor of neighbourhoods seamlessly linked to public transit
4. Focus intensity and community activity at stations and other areas with strategic opportunities for sustainability, renewable energy and public amenity
5. Provide a range of housing choices and affordability
6. Balance city-wide and regional goals with the community and its context
7. Ensure job space and diversity

Phase 2 of the Cambie Corridor Planning Program aimed to develop a range of land use, design and built form policies for areas along the Cambie Corridor designated as “core areas,” which are mostly areas immediately surrounding a Canada Line station along Cambie Street. Under Phase 2, a variety of Corridor-wide strategies, including public realm and housing diversity strategies, were also developed to address the entire study area (COV, 2011(a)).

Phase 3 of the Cambie Corridor Plan aims to implement the strategies identified in Phase 2 and to focus on developing a “transit-influenced development policy” which will address core areas along the Cambie Corridor, in addition to more expansive areas along the study site. Phase 3 is currently ongoing, and the timing and expected completion date is yet to be determined (COV, 2011(b)).

The Cambie Corridor Planning Program is being implemented in conjunction with other initiatives by the City of Vancouver, including the Eco-Density Charter and the Greenest City 2020 initiative. The Eco-Density initiative aims to utilize density, design and land use regulation to increase housing choice, affordability and diversity while promoting reduced carbon emissions from residential land uses (COV, 2008). The Greenest City 2020 initiative aims to transform Vancouver into the “Greenest City in the World” by the year 2020 through achieving a set of 10 goals with specific targets. These include targets for making the majority of trips (over 50%) on foot, bicycle and public transit, and for reducing the per capita ecological footprint by 33% (COV, 2009). As the city’s next key developing transit corridor, the Cambie Corridor may likely play a crucial role in advancing and contributing to the goals of these initiatives.



Oakridge Centre mall viewed from Cambie Street & 44th Avenue (facing NW)

2.3 The Cambie Corridor Plan

The Cambie Corridor Plan is a document which contains the culmination of work completed in Phase 2 of the Cambie Corridor Planning Program. It was approved by City Council on May 9, 2011 and contains strategies developed by the City of Vancouver to address core areas along the Corridor and to provide guidelines for future development, land use and planning. Section 6.0 of the Cambie Corridor Plan, titled “Urban Systems and Public Realm Strategy,” consists of a comprehensive Corridor-wide strategy for the future development of the public realm along the Corridor which focuses specifically on six components:

- |            |                   |                 |
|------------|-------------------|-----------------|
| • Movement | • Connections     | • Public Plazas |
| • Habitat  | • Streets & Lanes | • Green Space   |

The strategy proposes a series of “fine-grained ... small-scale interventions” involving a combination of these six components to “create a memorable and identifiable public realm experience throughout the Corridor” (COV, 2011(a):78-79). According to the strategy, the provision of new public spaces such as urban plazas, sidewalks plazas and mini-parks along the Corridor will play a crucial role in “promoting public life and community health,” providing “opportunities for socializing and special events” and creating “areas of respite, identification and opportunity for social interaction” (COV, 2011(a):96).

The Cambie Corridor Plan, particularly Section 6.0 – Urban Systems and Public Realm Strategy, will be utilized as the basis of this project for developing a more detailed design plan for the public realm of the Oakridge Town Centre area, with a particular focus on five potential locations proposed in the Plan for the development of public plazas.

## 3.0 LITERATURE REVIEW

Within the field of urban planning and design, the current project focuses on the intersection between the two following central concepts: public space design and transit-oriented development (TOD). The following literature review will first describe each of these concepts separately, followed by an exploration of the ways in which they are related, particularly with regards to the Cambie Corridor Plan and the Urban Systems and Public Realm Strategy.

### 3.1 Public Space Design - Definitions, History, Benefits/Challenges & Principles

#### Definitions

A public space may be simply defined as an area in an urban or rural setting which may have a variety of uses and which all members of the public (regardless of age, gender, culture, race, class, sexuality, etc.) may have free and uninhibited access to. In the urban context, these may include components of the built environment such as streets, sidewalks, greenways, parks, plazas, town squares, beaches, waterfront areas and gardens. Numerous scholars have attempted to create a comprehensive typology and classification of urban public spaces. For example, Carr et. al. (1992:79) identify a total of the eleven following types of public space:

- Public parks
- Squares and plazas
- Memorials
- Markets
- Streets
- Playgrounds
- Community open spaces
- Greenways and parkways
- Atrium/indoor marketplaces
- Found spaces/everyday spaces
- Waterfronts

#### History

In the context of early western urbanization, public spaces played a key role during the ancient Greek and Roman Empires. During this era, various types of urban public spaces such as the agora and the forum became the centre of public life upon which social,

political, commercial and cultural activities occurred (USI, 2012). Due to the ascending power of Christianity during the Medieval Era, public spaces became heavily centered upon the Church and were mostly located adjacent to religious institutions (Carmona et. al., 2008). During the Renaissance, public spaces retained many of the uses of their predecessors, but increasingly became symbols of the values and cultural expressions which dominated the era, such as scale, grandeur, power, symmetry and aesthetics (USI, 2012). Finally, the age of colonization and the Industrial Revolution resulted in the diffusion of historical European public space ideals and principles to towns and cities in North America (Carmona et. al., 2008). Gehl and Gemzoe (2001:10) note that although public spaces have varied in form and function among different societies and eras, they have always been utilized for three central purposes:

- A **Meeting Place** where information is exchanged and events and exhibitions are held
- A **Marketplace** where goods and services are exchanged
- A **Thoroughfare** for individuals and groups to travel through

In 20th century North America, numerous scholars have noted that the ideals of modernism, in congruence with increased mobility and communications technology, suburbanization and automobile-dependency, have led to an urban form which is hostile to the historical roles of public spaces (Gehl and Gemzoe 2001; Jacobs, 1961; Carmona et. al., 2008). During the latter half of the century, however, a renewed interest in urban public spaces has emerged, due to a variety of factors such as the Smart Growth movement and the progression of post-modern planning ideologies and practices, as well as events such as the 1973 Oil Crisis, which led to an increased interest in public transit and alternative modes of non-motorized transportation (Gehl and Gemzoe 2001; Carmona et. al., 2008).



Andy Livingstone Park,  
Vancouver, BC, Canada



Market Square, Bruges,  
Belgium



Public plaza in Florence, Italy



Pedestrian street in Havana,  
Cuba



## Benefits & Challenges of Public Space Implementation

In the past several decades, public spaces have become increasingly recognized as crucial urban amenities for various social, cultural, public health, economic and environmental benefits (Carmona et. al., 2008). Particularly in the realm of public health, the relationship between walkability and public spaces have been a central focus in many sources of literature. A 2005 study by Michael Southworth, for example, identified six central measurable characteristics of public spaces (connectivity, linkages with other modes, fine grained land use patterns, safety, quality of path, path context) which determine the quality of the pedestrian environment. According to Southworth (2005:246), the efficient and balanced implementation of these qualities in the urban realm is the “key to encouraging people to choose walking over driving” and to “promote mental and physical health” through pedestrian transportation. In another study, Ewing et. al. (2006) identify the following measurable design characteristics which they view as crucial to promoting active living and walkability: imageability, visual enclosure, human scale, transparency and complexity. These qualities were identified through the development of a visual field survey instrument.

Studies focusing on human behaviour in public spaces have also charted the positive effects of public spaces on pedestrian transport and activity levels, such as Jan Gehl’s studies of the Stroget, a central historical street in Copenhagen which was closed in 1962 to vehicular traffic and transformed into a pedestrian space. Gehl (1989:12) noted that within a year of the transformation of the Stroget, pedestrian traffic grew by 35% in the area. Further studies by Gehl (1989:13) discovered that as the total area of public spaces tripled in Copenhagen between 1968 and 1986, the number of pedestrians sitting, standing or staying in those spaces also tripled, and pedestrians were also staying in public spaces for more extensive periods of time. Other activities in public spaces which have been observed and documented in these public spaces have included jogging, dog-walking, roller-blading, skateboarding, biking and organized sports activities such as basketball games (Gehl et. al., 2006). These studies confirm that if implemented correctly, public spaces have the potential to change pedestrian travel patterns and

encourage walkability.

Despite their benefits, public space development continues to face a wide variety of challenges, ranging from poor design and conflict with vehicular traffic space and other uses (eg. building delivery and loading space), to issues of criminal activity, anti-social behaviour, safety and privatization (Williams and Green 2001:7-11). In many cases, the success of public spaces will depend on an appropriate and context-specific balance between design, ownership, maintenance and strategic planning in order to ensure that they may be effectively utilized by the public (Williams and Green 2001).

## Principles of Public Space Design

An extensive portion of research on public space focuses on appropriate design principles and guidelines which would encourage the public to utilize them. These include both tangible and intangible characteristics such as safety and security, comfort, rest and replenishment, sociability, sensory stimulation and physical activity. Each of these aspects, which are described in more detail below, serve a significant role in drawing people into public spaces and ensuring their success.

**Safety & Security:** Issues of safety and its effects on the success of public spaces have been central to research on public space design. One of the strongest proponents of safety on sidewalks, streets and other types of public spaces was Jane Jacobs (1961:35), who popularized the concept of “Eyes upon the street,” arguing that in order for people to perceive the sidewalk as a safe space, activity on the sidewalk and in adjacent buildings must be oriented towards and maintain active visibility of the street. These concepts have been reinforced by Gehl (2010) who noted that ground-oriented activity in buildings and a clear demarcation of public and private space are important aspects of encouraging a sense of safety and use on the streets.

The provision of lighting has been a central topic in many studies focusing on safety and public space design. While lighting has been recognized as a crucial part of activating and maintaining safety in

public spaces during the nighttime, the need to strategically utilize them to achieve other specific objectives has been identified. For example, Zelinka and Brennan (2001:127) warn that although certain types of lighting near ATM machines allow its users to be observed, they may create a “fish bowl effect” (where light is concentrated in a small space around a dark area), which makes it difficult for the user to observe his or her surroundings. Aside from safety, lighting may also play a variety of other roles, such as orientation, wayfinding and aesthetics.

Although feelings of safety from crime are important in attracting people to use public spaces, other areas of research have focused on safety and enclosure from other elements such as vehicular traffic. For example, Gehl’s (2010) research has focused on pedestrian and cyclist safety from areas of high vehicular traffic. Much of his research has emphasized that the key to encouraging pedestrian and cycling activity is to create urban spaces in which a carefully-designed balance between different modes of transport exists, such as in the case of woonerfs, shared spaces and other types of pedestrian-priority zones (Gehl, 2010).

**Comfort & Legibility:** Research on public space design has also focused on manipulating the built environment to ensure maximum comfort for individuals and groups of various backgrounds. In his work The Social Life of Small Urban Spaces, William H. Whyte (1980) outlined numerous principles to ensure maximum comfort in outdoor public spaces, based on time-lapse photography and field observations studies conducted in urban plazas in New York City. Whyte (1980) noted that natural elements played a key role in determining the comfort of a public space, and that the design of urban plazas should consider factors such as the minimization of strong winds and drafts, an appropriate balance between spaces with solar exposure and shade, and the careful placement of plants and vegetation.

Climactic factors in public space design have been further explored by other researchers, such as Carr et. al (1992:231), who noted that many studies point to the need to consider the balance between solar exposure and shade and their effects on the comfort of public

spaces, depending on climactic context of an urban setting. More recently, in her study of the connection between physical activity and community design, Forsyth (2004:22) emphasized the need to provide appropriate components in the pedestrian infrastructure system such as awnings, street trees and bus shelters in order to maximize comfort from outdoor weather conditions. In studies of public spaces in Copenhagen, Gehl et. al. (2006: 38-44) highlight various design features which contribute to making public spaces attractive in various weather conditions and during the night, such as artificial heating, paving material and lighting.

The work of Kevin Lynch (1960) has played a key role in developing concepts of public space design such as imageability, which Lynch defined as the “quality in a physical object which gives it a high probability of evoking a strong image in any observer.” In his 1960 work *The Image of the City*, Lynch argued that city-dwellers navigated urban public spaces based on their recognition and the imageability of the following five key components in the built environment: paths, edges, districts, nodes and landmarks. Throughout the late 20th century, Lynch’s work has had a significant impact on various fields of planning and design, such as public space design principles and strategies.

**Rest and Replenishment:** The provision of structures and means for rest and replenishment such as seating, both formal and informal, has been a recurring topic in public space design literature. Whyte (1980) noted that seating in urban plazas needed to be practical and accessible, emphasizing that moveable seating was especially crucial in expanding seating choices and configurations. Lennard and Lennard (2008) noted that as opposed to formal seating, informal seating such as steps, walls, ledges and structures such as statues and fountains have traditionally played a crucial role in European public space design. Other researchers who have focused on seating in public spaces include Gehl (2010) who has developed a seating quality scale based on studies in Stockholm, Sweden. The scale measured various qualities of good public seating, including a pleasant microclimate, placement preferably at the edge of a space with the back covered, a good view, and low noise levels. Aside from seating, Whyte’s (1980) studies emphasized the presence of food in public spaces as a crucial aspect of replenishment and activity in

public spaces, stating that “if you want to seed a place with activity, put out food.”

**Sociability:** Socialization and social interaction have been cited in many public space design literature sources as one of the key reasons why people use and stay in public spaces. Aside from fulfilling a basic human need, socialization also contributes greatly to the cognitive and social development and the mental and emotional health of humans (Carmona et. al., 2008). Oldenburg (1989:169) famously coined the term “Third Places” to describe the role of public spaces as places which “exist on neutral ground” in which “conversation is the primary activity ... for the display and appreciation of human personality and individuality.” Numerous strategies for improving the sociability of public spaces have been identified in the literature. For example, Whyte (1980) noted that “what attracts people most, it would appear, is other people.” In other words, individuals and groups in public space tended to congregate, rather than isolate themselves as they engaged in activity. Whyte (1980) also coined the term “triangulation” to define the phenomenon in which an object (eg. Water feature, sculpture) or event (eg. live concert, street entertainment) acts as an impetus for social interaction between strangers. Lennard and Lennard (2008) also note the effect of “focal points” or “anchors” as well as the position and configuration of seating spaces in inducing social interaction.

**Sensory Stimulus & Activity:** Public space design literature has emphasized that the extent to which people are willing to stay and engage in activity in a public space depends largely on the amount of stimuli and activity options present in the environment. Using a combination of mapping and picture sequence methods, Bosselmann (1992) strongly illustrated this concept, noting that one’s perception of time in two walking trips of identical distances in two different urban settings may vary, depending on the strategic and “rhythmic” placement of recurring urban elements along the street. Focusing on the provision of activity options in the urban setting, Forsyth (2004:20) notes the importance of providing mixed-uses in close proximity in order to encourage increased activity, stating that “people often move between different kinds of activities and if they are close together they may be inclined to walk.” Gehl’s research also focuses on the diversity of uses and pedestrian activity,

emphasizing that the edges of the city, “particularly the lower floors of buildings,” plays a crucial role in activating pedestrian spaces through varied and interactive stimuli which makes public spaces interesting and desirable to stay in (Gehl, 2010:77-79).

Another crucial aspect regarding sensory stimuli in public space design has focused on providing a level of sensory interest and detail that is appropriate for pedestrian and cyclist use rather than vehicle use (Frank et. al, 2003:160). The premise of this research is that since pedestrians travel at much slower speeds than motorists, pedestrian-oriented environments should contain higher levels of sensory information and stimuli (eg. signs, people, retail activity, detailed architectural features), as opposed to automobile-oriented environments which lack sensory detail (Frank et. al, 2003:163). This concept has also been explored by Gehl (2010:44) who distinguishes between 5km/h pedestrian-oriented architecture in which “spaces are small, buildings are close together and the combination of detail, faces and activities contributes to the rich and intense sensory experience” as opposed to 50, 60, 80 and 100km/h car-oriented architecture which would provide an “impoverished sensory experience” for a pedestrian.

## Summary

In summary, the successful design of public spaces is dependent upon a balance between a large variety of factors, ranging from the tangible aspects of the built environment (eg. seating, lighting, weather protection) to the intangible and more subjective aspects (eg. comfort, safety, orientation). Figure 5 provides a summary of the principles and considerations of public space design discussed in this section of the literature review.

Figure 5: Principles of Public Space Design

Safety & Security	<ul style="list-style-type: none"><li>• “Eyes upon the Street”</li><li>• Safety from criminal activity</li><li>• Safety from vehicular traffic and other conflicting modes of transport</li></ul>
Comfort & Legibility	<ul style="list-style-type: none"><li>• Natural elements (eg. vegetation)</li><li>• Solar exposure and shade</li><li>• Exposure vs. protection from Weather / Climactic Factors</li><li>• “Imageability”</li></ul>
Rest & Replenishment	<ul style="list-style-type: none"><li>• Seating (formal vs. informal)</li><li>• Moveable seating</li><li>• Seating quality</li><li>• Food</li></ul>
Sociability	<ul style="list-style-type: none"><li>• Social Interaction</li><li>• “Third Places”</li><li>• “Triangulation” and “Focal Points”</li></ul>
Sensory Stimuli & Activity	<ul style="list-style-type: none"><li>• Urban “rhythm” &amp; activity</li><li>• Walkability</li><li>• Edge activation</li><li>• Sensory experience &amp; scale (low vs. high detail)</li></ul>

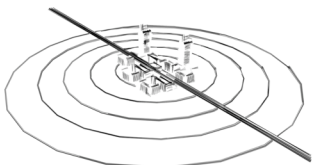
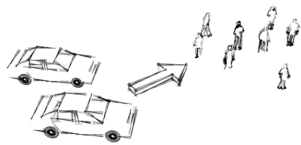
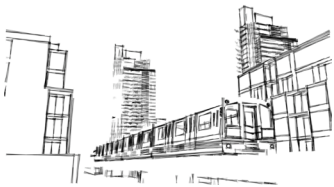
3.2 Transit-Oriented Development (TOD)

Although definitions of TOD vary according to context, many identify similar features and characteristics that distinguish it as a unique form of urban development and land use planning. For example, consider the four following definitions of TOD:

- “a mixed-use community within an average 2000-foot walking distance of a transit stop and core commercial area. TODs mix residential, retail, office, open space, and public uses in a walkable environment, making it convenient for residents and employees to travel by transit, bicycle, foot, or car” (Calthorpe, 1993:56).
- “... TOD should include the following features:
  - Convenient and pleasant pedestrian connections
  - High-quality public spaces
  - Transit-supportive densities with the densest forms near the transit station
  - A mix of land-uses, including attractions for transit rides, like convenient retail
  - Unobtrusive parking – requirements should reflect the potential for reduced auto use” (CMHC, 2009)
- “A compact, mixed-use community, centered around a transit station that, by design, invites residents, workers, and shoppers to drive their cars less and ride mass transit more. The transit village extends roughly a quarter mile from a transit station, a distance that can be covered in about 5 minutes by foot. The centerpiece of the transit village is the transit station itself and the civic and public spaces that surround it” (Bernick & Cervero 1997:5).
- “a walkable, mixed-use form of area development typically focused within a 600m radius of a transit station ... Higher density development is concentrated near the station to make transit convenient for more people and encourage ridership ... Successful TOD provides a mix of land uses and densities that create a convenient, interesting and vibrant community for local residents and visitors alike” (City of Calgary, 2011).

Several key themes of TOD may be drawn from these definitions:

- A land use form which induces public transit use through compact/dense mixed-use development centered around a transit station
- Development which focuses on close proximity to the transit station (measured by distance or time) so that it may be accessed by foot or other alternative means of transport (eg. cycling)
- Development which aims to reduce automobile-dependency as a means of transport while encouraging public transit and non-motorized transport as viable alternatives
- The development of a high-quality public realm which is designed to promote connectivity, walkability, a mix of land uses, and accessibility to a variety of open public spaces and to transit stations





In many parts of the world, the concept of TOD has gained much attention in the field of urban policy and development throughout the past several decades. In many cases it has been viewed as a solution to the negative consequences induced by current dominant land use patterns, such as automobile-dependency and traffic congestion, suburban sprawl, increased GHG emissions, a lack of amenities and services in residential areas, and shortages in affordable housing and transportation options (Jacobson & Forsyth 2008; Gilbert & Ginn 2001; Cervero et. al, 2002). TOD advocates have also emphasized a range of other advantages, such as land use efficiency through compact development, improved linkages between jobs and housing and enhancing neighbourhood activity, identity and walkability (City of Calgary, 2004). At the same time, many TOD initiatives continue to encounter numerous challenges to implementation and progress. These include fiscal and financial barriers such as high public investment costs, political barriers, and opposition and NIMBY-ism from community groups who fear that TOD will result in congestion and new high-density housing forms that are incompatible with the existing neighbourhood character (TCRP, 2004; Gilbert & Ginn 2001; Goodwill & Hendricks 2002).

3.3 The Role of Public Spaces in TOD

Numerous academic and policy sources have emphasized the importance of integrating effective public space design into TOD initiatives in order to create urban environments which are walkable, attractive, unique and human-scaled. Such environments are necessary in order to diminish automobile-dependency, induce community gathering and sociability, and to encourage the utilization of public transit options in addition to other modes of non-motorized transport. For example, Bernick and Cervero (1997:5) note that “the centerpiece of the transit village is the transit station itself and the civic and public spaces that surround it ... The surrounding public space serves the important function of being a community gathering spot, a site for special events, and a place for celebrations – a modern-day version of the Greek agora.” Bernick and Cervero (1997:91) also emphasize that “since all transit trips involve some degree of walking, it follows that transit-friendly environments must also be pedestrian-friendly.”

A 2002 report by Cervero et. al. for the Transit Cooperative Research Program which focused on TOD in the United States also explored the link between TOD and public space design. The report noted that TOD principles have tended to adopt numerous principles of traditional European community design and planning principles which treated transit stations not as a separate functional entity but as a “centerpiece for community building” and as a part of a community hub which includes a “major public amenity, like a civic square, that functions in part as a community gathering point” and “helps to soften people’s perceptions of density.” Such an environment also encourages the development of an urban environment which promotes “attractive landscaping” and “public amenities” (Cervero et. al., 2002:77). The report notes that this approach to TOD, which views high-quality urban design and the implementation of pedestrian-oriented public spaces as a critical and necessary component, is becoming increasingly accepted “if for no other reason than that they make the necessary densities to support costly rail transit services acceptable in the minds of many residents” (Cervero et. al., 2002:84).

Jacobson and Forsyth (2008:51) similarly emphasize the importance of using appropriate urban design principles during the implementation of TOD in order to “coordinate transportation types, mix land uses, and create an appealing public space, all in a limited area.” Urban design was noted as a crucial aspect of TOD since “scholarly attention ... has been largely focused on the public policy aspects of TOD development” while “greater understanding of the successes and failures of TODs in terms of their urban design practices is needed” (Jacobson and Forsyth 2008:51). Through an analysis of seven case studies of TOD projects across the United States, Jacobson and Forsyth (2008) particularly noted that the implementation of public spaces in the context of TOD should meet a series of criteria, including the following:

- An appropriate activity programming structure (eg. markets, concerts, festivals) to ensure and increase the use, safety, and sense of place in public spaces
- High levels of maintenance in order to ensure the attractiveness of spaces
- A human-scaled design, including pedestrian-

- oriented architectural features in the urban environment
- The ability to encourage a wide range of user groups to stay and engage in various activities through the use of design elements such as public art, street furniture and “flexible spaces” which may be utilized for a variety of purposes
- Utilization of appropriate safety features such as lighting, access control, visibility and connectivity
- Successfully creating a sense of place through variation of uses and elements in the urban environment

(Jacobson and Forsyth 2008:76-79)

The 2011 Transit-Oriented Development Handbook by the City of Winnipeg contains a comprehensive exploration of the role of public spaces in TOD, stating that “to support TOD’s typically higher densities, a variety of parks and public open spaces (approximately 10-15% of land in a TOD project) should be integrated into walkable station areas to provide a balance between what is ‘built’ and what is ‘green’” (City of Winnipeg 2011:51). The document follows with a list of public space prototypes which include specific considerations for implementation in the context of TOD for the following types of open spaces:

- |                              |                                |
|------------------------------|--------------------------------|
| • Transit/Town Plaza         | • Natural Open Space/Preserves |
| • Pocket Park                | • Greenway                     |
| • Neighbourhood Park         | • Community Park               |
| • Private/Public Open Space  | • Regional Park                |
| • Landscape Buffer           | • Sports Park                  |
| • Green Streets              |                                |
| • Stormwater Garden Facility |                                |

According to the document, transit/town plazas (the type of public space which this project will mainly focus on) in the context of TOD should function as civic spaces and landmarks which may serve as transit station entries and gathering places, include features such as active building edges and other public amenities, and are usually enclosed by streets and located at major intersections (City of Winnipeg, 2011:53).

The following key points may be drawn from the existing literature on the relationship between TOD and public space design:

- High-quality public spaces are a crucial component of TOD, and are necessary in order to bridge the transition between the pedestrian-oriented and transit-oriented urban environment, or between walking/cycling trips and transit trips
- Public spaces play a role in the successful implementation of and balance between density, land use mix and open spaces that are characteristic of a wide variety of TOD project types
- A wide range of public spaces may be implemented in the context of TOD, depending on the size, type and character of the project
- Public spaces should not be viewed as a separate urban entity, but as an integral component of the wider TOD built form and public realm network, and of the entire neighbourhood, place and community
- Research and literature on public space implementation and urban design will continue to inform a variety of TOD projects in the future

As a process which focuses on long-term, corridor-wide TOD strategies, the Cambie Corridor Planning Program has identified public spaces and a high-quality public realm as a key component to its success and development. Throughout this project, a clear understanding of the links and integration between public spaces and TOD will remain crucial in order to obtain a deeper understanding of the long-term goals outlined in the Urban Systems and Public Realm Strategy of the Cambie Corridor Plan.

## 4.0 THE ROLE OF THE OAKRIDGE TOWN CENTRE: CITY-WIDE & REGIONAL PERSPECTIVE

The following section of the project aims to investigate the following question: *“What role does the Oakridge Town Centre play within the context of urban development in the City of Vancouver and the Metro Vancouver Region?”* An exploration of the present and projected roles that the study area will play in future local and regional urban development processes is crucial in order to understand the importance of efficient urban design strategies and public realm development which this project aims to advance and promote. The section will focus specifically on the Oakridge Town Centre in the context of the two following aspects of city-wide and regional urban development:

- Transportation Networks:** Due to its location at the centre of the Canada Line and its projected role as a major transit precinct within a wider TOD Program, the development of the Oakridge Town Centre is expected to play a key role in the growth of the local and regional transportation system. Through effective public realm strategies, the Oakridge Town Centre will also play a significant role in promoting more sustainable forms of urban transportation, and in the efficient integration of the transportation network with its surrounding urban context.
- Urban Centres:** Recent initiatives by Metro Vancouver have placed an emphasis on establishing a network of local and regional urban centres as a means of forming place-based communities and nodes of mixed-use urban activity (Metro Vancouver, 2011). Within this plan, the Oakridge Town Centre has been identified as a potential location for a major urban centre. While future public realm and public space development within the Oakridge Town Centre will have numerous neighbourhood-level impacts, it will also play a role in the development of these city-wide and regional goals for establishing a network of urban centres.

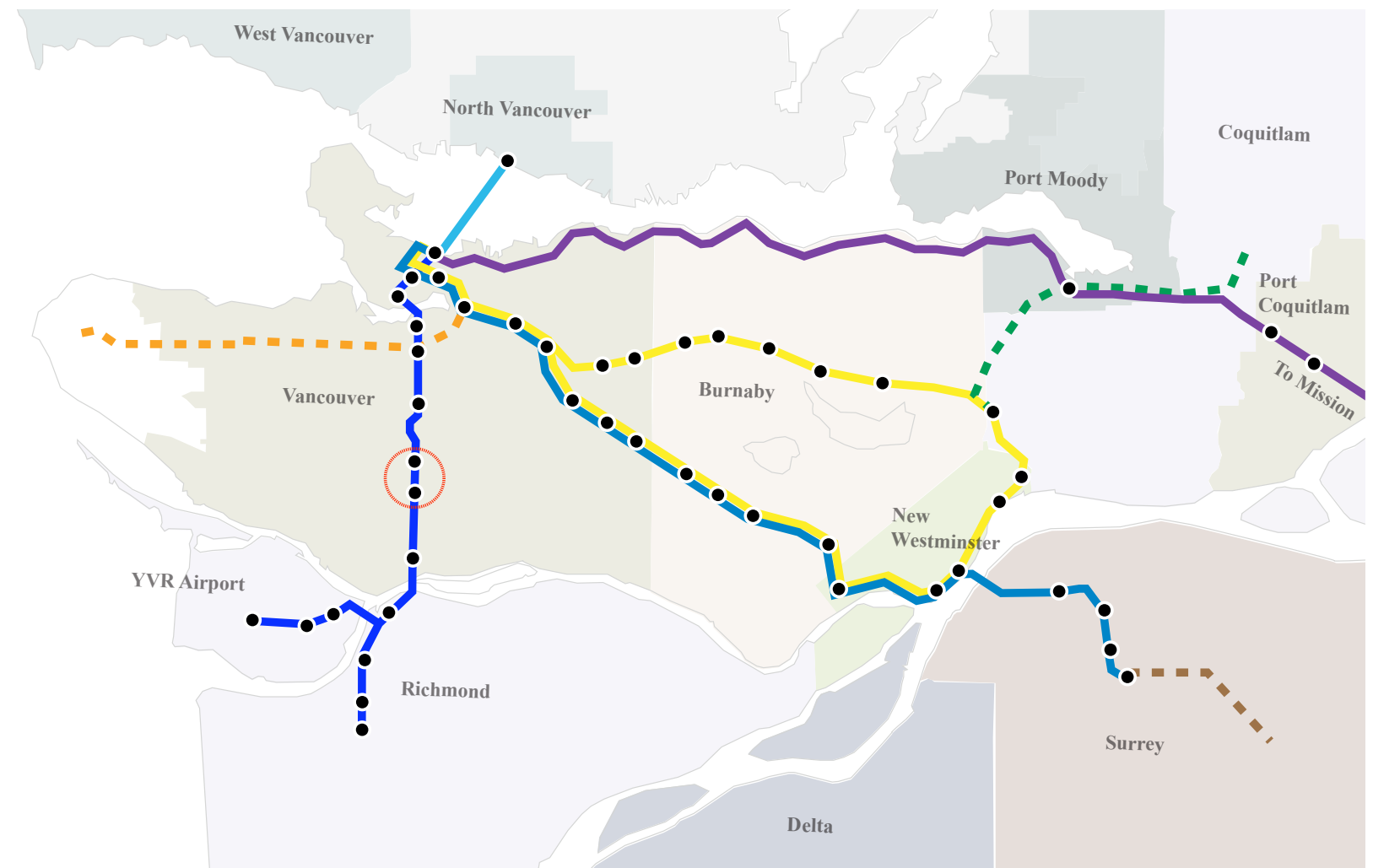


Figure 6: The Oakridge Town Centre within the Metro Vancouver Public Transit Network

Source: Translink  
Scale = 1:180,000

### Legend

- Transit Station
- Oakridge Town Centre

### Existing Transit Networks

- Canada Line (Skytrain LRT)
- Expo Line (Skytrain LRT)
- Millenium Line (Skytrain LRT)
- West Coast Express (Commuter Rail)
- Seabus (Ferry)

### Projected Transit Networks

- Evergreen Line (Skytrain LRT)
- Surrey Line (Skytrain LRT)
- Broadway Rapid Transit Line

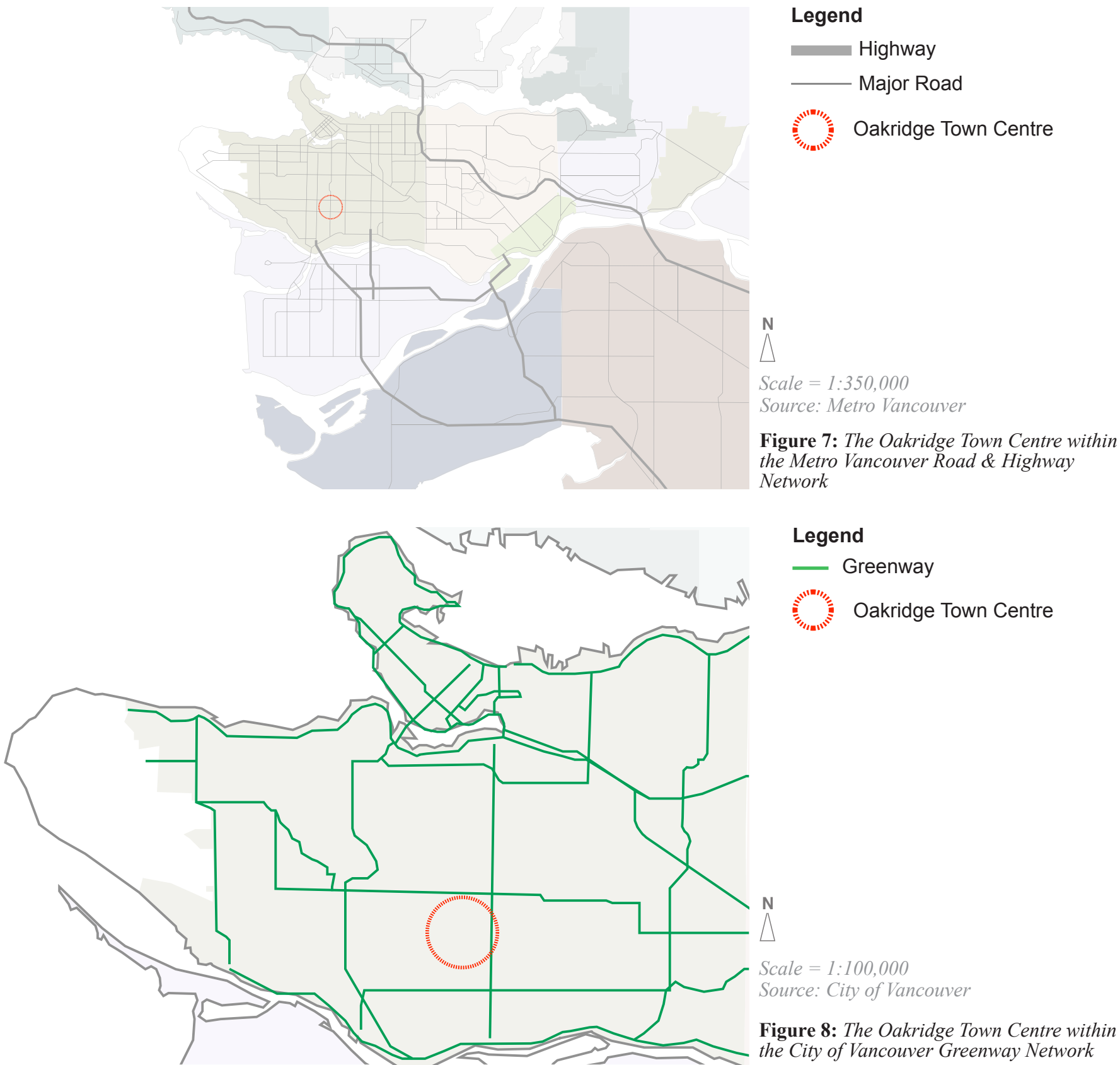


4.1 Local & Regional Transportation Networks

Within the City of Vancouver and the Metro Vancouver region, several initiatives are underway to ensure that local and regional transportation networks continue to develop and grow in a sustainable and context-specific manner as the city and region continues to experience population growth and demographic shifts. These include the following:

- **Metro Vancouver 2040 Regional Growth Strategy (RGS):** The 2040 RGS contains a set of goals and strategies for the projected sustainable development of the Metro Vancouver Region up to 2040. One of the five key goals of the RGS is to “support sustainable transportation choices,” which includes the promotion of TOD, active transportation, public transit, and reduced GHG emissions through transportation (Metro Vancouver, 2011).
- **Translink Transport 2040:** Transport 2040 is a long-term initiative which includes a set of strategies and goals for future transportation development patterns in the region, including a goal to “make most trips by transit, walking and cycling” (Translink, 2012).
- **City of Vancouver Initiatives:** Aside from the Cambie Corridor Planning Program, the City of Vancouver has become engaged in a wide variety of initiatives in an effort to plan for the sustainable development of the city’s transportation networks and infrastructure. These include the Greenways Program and the Greenest City 2020 Action Plan.

All of the initiatives mentioned above strive for the following common goal: To ensure that the transportation network in the City of Vancouver and the Metro Vancouver region develops in a sustainable manner in order to reflect the city and region’s growth and demographic change.



Figures 6-8 depict the Oakridge Town Centre in the context of its connection and integration with various modes of transportation in the City of Vancouver and the Metro Vancouver region. As a projected transit node consisting of high-density and mixed-use activity, the Oakridge Town Centre has the potential to play a key role and to set a milestone example for the sustainable development of the local and regional transportation network through the Cambie Corridor Planning Program. For example, through the development of a strong public realm with high-quality public spaces proximal to transit, it will emphasize and promote the progression towards pedestrian-oriented and less automobile-dependent modes of transportation and movement throughout the city and region.

#### 4.2 Local & Regional Urban Centres

Aside from its contribution to enhancing the development of transportation systems and networks in the City of Vancouver and the Metro Vancouver region, the public realm and public space development of the Oakridge Town Centre will also play a key role in defining it as a component within a network of regional and local urban centres.

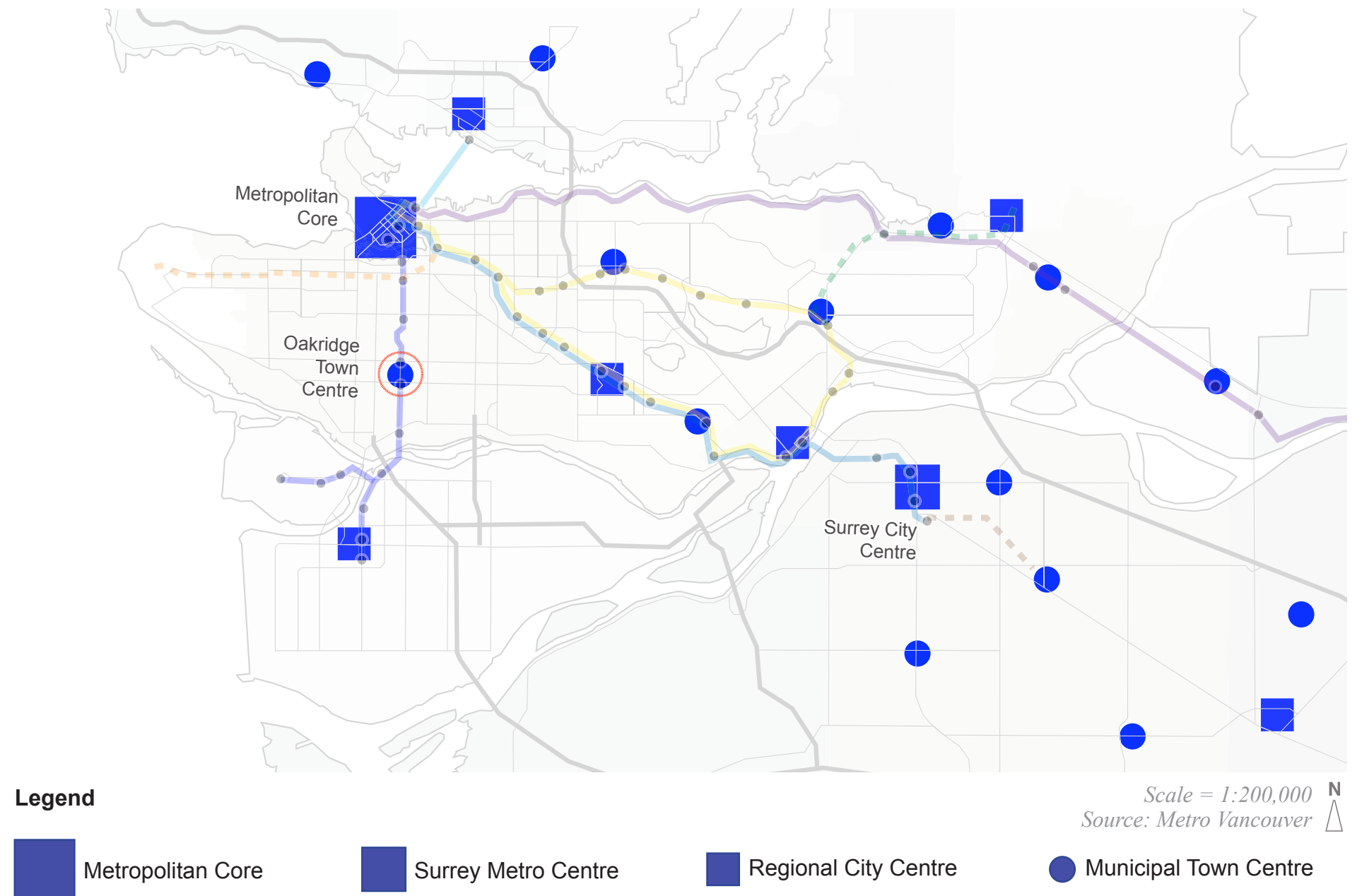
Figure 9 displays the network of regional and municipal urban centres as defined by the 2040 RGS. According to the Metro Vancouver Livable Region Strategic Plan, these centres are designed to create a “foundation of complete communities” by creating urban centres that “serve a number of neighbourhoods” and are characterized by medium to high-density development, a concentration of business and community facilities, and transit and pedestrian-oriented land uses (Metro Vancouver, 2011). The central objective of this network of “Livable Centres” include the following:

- Reduce travel time and increase travel options
- Lowering infrastructure costs
- Provide a diverse range of services and amenities
- Use less land for more development
- Reduce emissions

(Metro Vancouver, 2011)

As depicted in Figure 9, one of the municipal centres identified by Metro Vancouver is the Oakridge Town Centre. It is also the only municipal centre that has been identified within the City of Vancouver. This indicates that initiatives undertaken by Metro Vancouver, such as the 2040 RGS, have begun to identify the importance of the Oakridge Town Centre in advancing city-wide and regional urban development goals and strategies. More specifically, the area has been viewed as a crucial component to a network of

urban centres that is projected to promote sustainable urban growth in the future. As development continues within the Oakridge Town Centre, the implementation of public plazas and other public realm components will play a significant role in transforming the area into a successful and well-planned municipal urban centre which serves the development needs and goals of the city and region.



**Figure 9:** The Oakridge Town Centre within the Metro Vancouver Network of Regional and Municipal Centres



## 5.0 THE OAKRIDGE TOWN CENTRE: A LOCAL-SCALE PERSPECTIVE

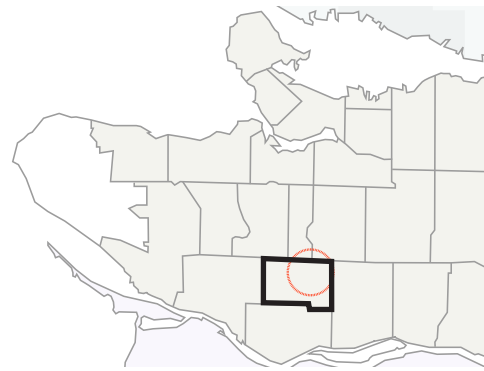
The following section will explore the Oakridge Town Centre at the neighbourhood-level scale (see Figure 10) and focus on the present and projected public realm development patterns of the study area in greater detail. After a brief overview, it will consist of the following two sub-sections:

- **Existing Conditions:** This sub-section will explore the Oakridge Town Centre in its current state, particularly the strengths and weaknesses of its existing urban form and public realm.
- **Projected Conditions:** This sub-section will explore the projected built form and public space development patterns of the Oakridge Town Centre according to the Cambie Corridor Plan.

### 5.1 Overview

The Oakridge Town Centre is situated within three neighbourhoods in the City of Vancouver: South Cambie, Riley Park and Oakridge. Figures 11(a-c) display general demographic information about each of these neighbourhoods, based on data from the 2006 Canadian Census and the City of Vancouver. While urban development in the South Cambie and Riley Park neighbourhoods occurred steadily between the late 19th century to early 20th century, the Oakridge neighbourhood remained primarily in its natural state until development under the Canadian Pacific Railway began in the early 1950s (COV, 2005). As TOD continues in the Oakridge Town Centre, it will likely impact these three neighbourhoods most directly.





**Figure 11(a): Oakridge Neighbourhood Statistics**

### Oakridge

**Population:** 12,725 (7.9% growth since 2001)

**Language (Mother Tongue):**

- English: 31.6%
- French: 0.3%
- Chinese: 50.5%
- Korean: 2.3%
- Taiwanese: 2.0%
- Tagalog: 1.0%

**Households:**

- Number of private households: 4,640
- One-person households: 25.2%
- Average household size: 2.7
- Median household income: \$54,784
- Population in low-income household: 29.7%

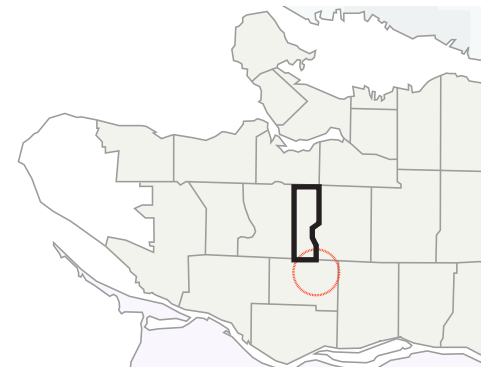
**Type of Dwelling:**

- Single-detached house: 47.1%
- Semi-detached house: 1.6%
- Detached duplex: 5.6%
- Row House: 3.7%
- Apartment (under 5 stories): 23.7%
- Apartment (5 or more stories): 17.8%

**Age of Dwelling:**

- Built before 1946: 7.3%
- Built 1946-1960: 21.7%
- Built 1961-1970: 17.9%
- Built 1971-1980: 14.1%
- Built 1981-1990: 14.7%
- Built 1991-2000: 19.1%
- Built 2001-2006: 5.0%

Source: Statistics Canada, City of Vancouver



**Figure 11(b): South Cambie Neighbourhood Statistics**

### South Cambie

**Population:** 7070 (1.1% growth since 2001)

**Language (Mother Tongue):**

- English: 61.6%
- French: 1.8%
- Chinese: 20.0%
- Korean: 1.8%
- Japanese: 1.5%
- Spanish: 1.3%
- German: 1.3%

**Households:**

- Number of private households: 2,850
- One-person households: 29.6%
- Average household size: 2.4
- Median household income: \$61,524
- Population in low-income household: 17.9%

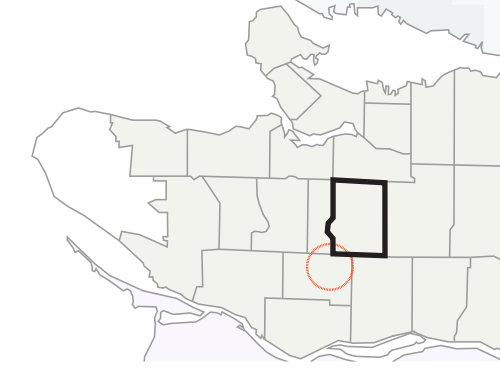
**Type of Dwelling:**

- Single-detached house: 36.3%
- Semi-detached house: 2.5%
- Detached duplex: 21.6%
- Row House: 1.6%
- Apartment (under 5 stories): 37.7%
- Apartment (5 or more stories): 0.4%

**Age of Dwelling:**

- Built before 1946: 30.8%
- Built 1946-1960: 20.0%
- Built 1961-1970: 9.4%
- Built 1971-1980: 4.5%
- Built 1981-1990: 13.0%
- Built 1991-2000: 18.4%
- Built 2001-2006: 3.7%

Source: Statistics Canada, City of Vancouver



**Figure 11(c): Riley Park Neighbourhood Statistics**

### Riley Park

**Population:** 21,815 (-0.8% growth since 2001)

**Language (Mother Tongue):**

- English: 54.6%
- French: 1.3%
- Chinese: 20.6%
- Tagalog: 4.6%
- Punjabi: 1.4%
- Vietnamese: 1.4%

**Households:**

- Number of private households: 8,360
- One-person households: 26.6%
- Average household size: 2.6
- Median household income: \$56,973
- Population in low-income household: 20.6%

**Type of Dwelling:**

- Single-detached house: 33.4%
- Semi-detached house: 2.2%
- Detached duplex: 30.3%
- Row House: 1.9%
- Apartment (under 5 stories): 30.1%
- Apartment (5 or more stories): 1.8%

**Age of Dwelling:**

- Built before 1946: 37.7%
- Built 1946-1960: 18.4%
- Built 1961-1970: 8.0%
- Built 1971-1980: 8.7%
- Built 1981-1990: 11.7%
- Built 1991-2000: 12.4%
- Built 2001-2006: 3.2%

Source: Statistics Canada, City of Vancouver

5.2 Existing Conditions in the Oakridge Town Centre



Strengths

The Oakridge Town Centre possesses numerous strengths in its current urban form and environment that may be enhanced through further development and growth. As the Urban Systems and Public Realm Strategy and the other components of the Cambie Corridor Plan are implemented, many of these strengths should be taken into account.

**Mixed Land Uses:** The Oakridge Town Centre contains a variety of land uses and zoning types, ranging from commercial and residential uses to comprehensive development district zones (see Figure 12). Rezoning is currently underway in several locations to permit development that is consistent with the Cambie Corridor Plan.

**Oakridge Centre:** The Oakridge Centre mall originally opened in 1959 as Vancouver’s first major shopping centre and was renovated in 1989. It remains one of Vancouver’s major indoor shopping centres, with approximately 150 shops and a branch of the Vancouver Public Library. Within the local context, the mall plays a significant role in defining the neighbourhood and forming a large centre of retail activity and employment. Under the City of Vancouver’s 2007 Oakridge Centre Policy Statement, the mall is expected to undergo major redevelopment within the next several years to better integrate it with the TOD goals of the Cambie Corridor Planning Program (COV, 2007).

**Proximity to Transit Routes:** The Oakridge Town Centre is well served by public transit, including two Canada Line stations and several east-west bus routes (eg. 041, 049) and north-south routes (015).

**Existing Public Spaces:** Within the Oakridge Town Centre, several public plazas and spaces exist, including the plaza at the North-east entrance to Oakridge Centre, and a plaza located mid-block between 41st and 42nd Avenue. One of the main objectives of the Urban Systems and Public Realm Strategy is to complete this network of public spaces as projected mid to high-density development is implemented.

**Proximity to Greenspaces:** Columbia Park and Tisdall Park are two major parks which currently exist in close proximity to Cambie Street within the Oakridge Town Centre. Through further development, opportunities may exist to enhance access and activity in these greenspaces. Other major greenspaces exist within close proximity of the Oakridge Town Centre, including Queen Elizabeth Park and the Van Dusen Botanical Gardens.

**Views and View Corridors:** The Oakridge Town Centre is located at a relatively high elevation point in the City of Vancouver, resulting in an expansive set of views and view corridors which may be preserved and enhanced through further urban development.

**Proximity to Amenities:** Numerous major amenities currently exist within the Oakridge Town Centre, including several places of worship, banks, and retail shops that serve the surrounding neighbourhood and community.

**History and Heritage:** Since the Oakridge Town Centre did not undergo major urban development until the mid 20th century, the majority of the built form is not designated as a heritage site. This may be viewed as a strength, since it allows further urban development and growth with fewer restrictions and considerations for heritage preservation.

Figure x: Zoning Map of the Oakridge Town Centre

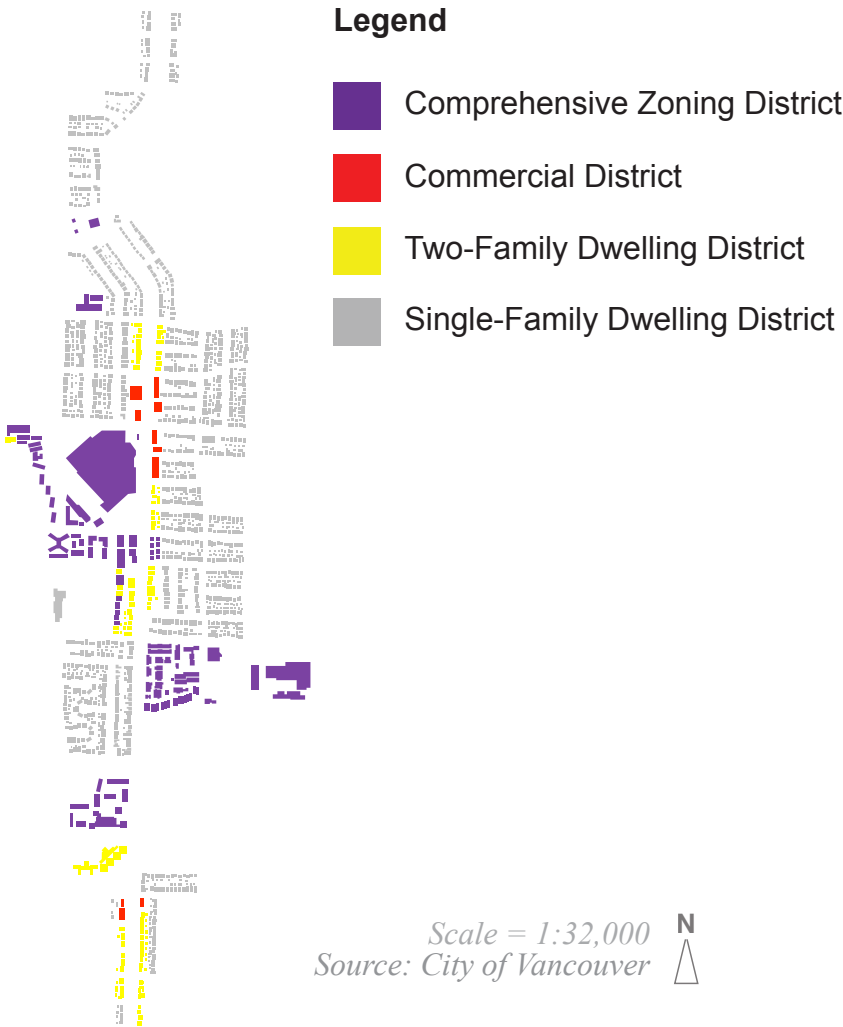


Figure 12: Current Zoning in the Oakridge Town Centre



Public art installation at Langara-49th Ave. Station



Oakridge Centre mall (with Canada Line station in the foreground)



Food cart on Cambie Street & 49th Ave.



Oakridge Centre mall along Cambie Street





## Weaknesses

As the Oakridge Town Centre undergoes further urban growth under the Cambie Corridor Plan, it will likely address numerous weaknesses in the urban form which currently prohibit the area from developing a strong public realm and from becoming a unique and defined urban centre within the city and region.

**Car-Oriented environment:** The Oakridge Town Centre remains a relatively car-oriented environment, with wide roads and busy intersections, particularly at Cambie-41st and Cambie-49th. The Oakridge Centre mall maintains a large amount of surface parking, although much of it may be removed and replaced by an underground parkade as redevelopment progresses (COV, 2007).

**Massing of the Built Form:** Currently, the massing of the Oakridge Centre mall is relatively large and imposing. Through projected redevelopment, the mall's massing and structure is expected to be reconfigured in order to improve pedestrian connections and strengthen the public realm (COV, 2007).

**Lack of Wayfinding & Orientation Cues:** Due to its current built form and car-oriented environment, the Oakridge Town Centre currently lacks a complete sense of legibility and orientation for pedestrians and cyclists. Further development of the public realm will play a significant role in enhancing this aspect of the built environment.

**Existing Public Spaces:** Although several public plazas and spaces exist within the Oakridge Town Centre, many are under-utilized, under-developed, and lack numerous components which would enhance their success and utility.

**Low-Density Land Uses:** Within the Oakridge Town Centre, a large area of land is zoned as RS-1, or single-family detached housing. Many of the business areas within the study area also reside in low-density buildings. As Phase 2 of the Cambie Corridor Planning Program is implemented, the Oakridge Town Centre is expected to undergo changes in the built form which will result in many of the low-density land uses to be transformed into mid to high-density forms.

**Vacant/under-utilized spaces:** Several lots and spaces along the Oakridge Town Centre are currently under-utilized or vacant, including various surface parking lots and a former gas station site on the northeast corner of Cambie and 41st Avenue. Through further development, many of these areas will likely be redeveloped.

**Building/Street Edge Relationship:** Certain areas along the Oakridge Town Centre suffer from a poor relationship between the building edge and the sidewalk and street, which affects the overall quality of the public realm. An example of this relationship exists along the eastern edge of Oakridge Centre and the western edge of Cambie Street, particularly between 42nd to 44th Avenue.



Oakridge Centre mall and the western edge of Cambie Street



Cambie Street near 42nd Ave.



Cambie Street & 49th Ave.



Vacant lot behind Langara-49th Ave. Station



5.3 Projected Conditions in the Oakridge Town Centre

The Built Form

The Cambie Corridor Plan describes the Oakridge Town Centre as an area which will become “the most significant concentration of urban uses and density” along the Cambie Corridor, and an area which will be “strengthened and enhanced as a walkable mixed-use urban centre with a diverse mix of job space and housing types and tenures” (COV, 2011(a):42). Along Cambie Street, a variety of mixed-use built forms are projected in the plan, ranging mostly from 6-12 stories, and up to 24 stories within the redevelopment of Oakridge Centre (see Figures 13(a-c)). The Cambie Corridor Plan also explores a wide variety of options for integrating the built form with a pedestrian-oriented public realm, including the use of set-backs, streetscape and laneway activation, and street-level retail (COV, 2011(a)).

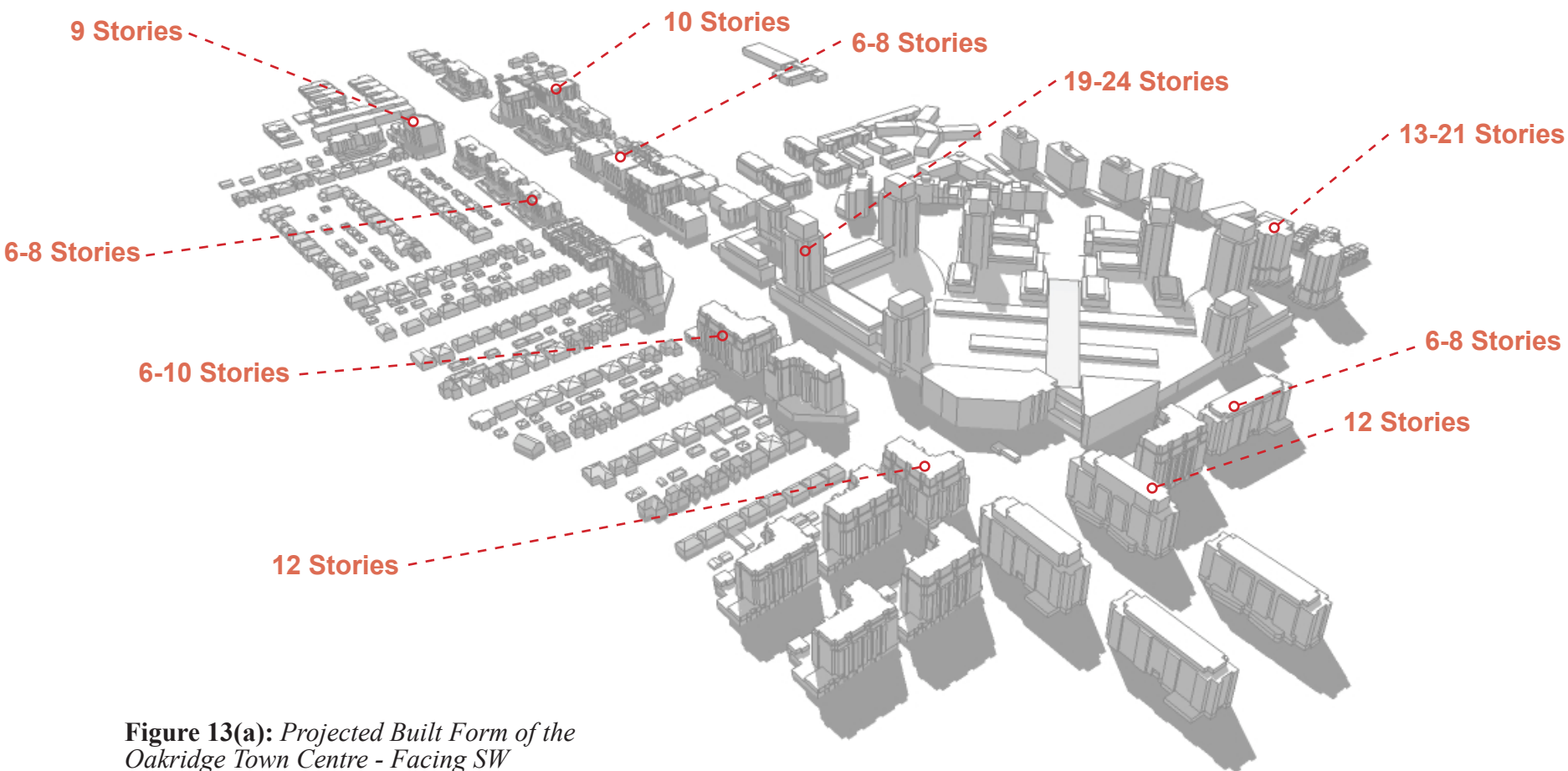


Figure 13(a): Projected Built Form of the Oakridge Town Centre - Facing SW

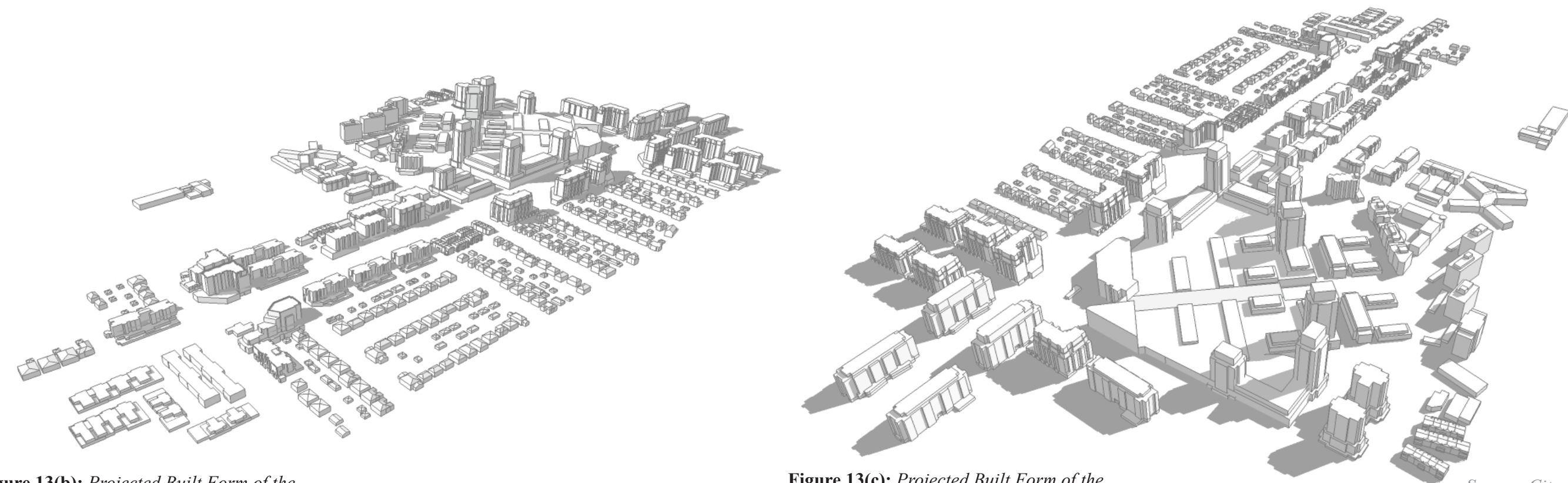
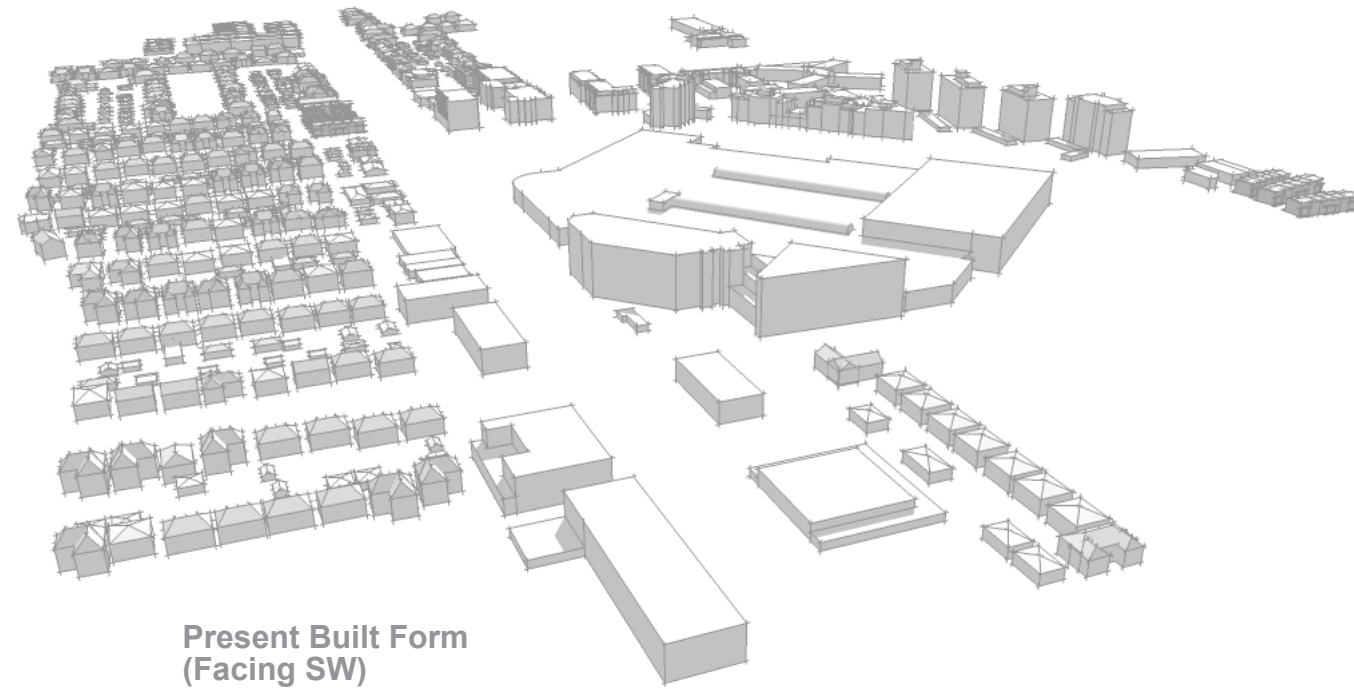


Figure 13(b): Projected Built Form of the Oakridge Town Centre - Facing NW

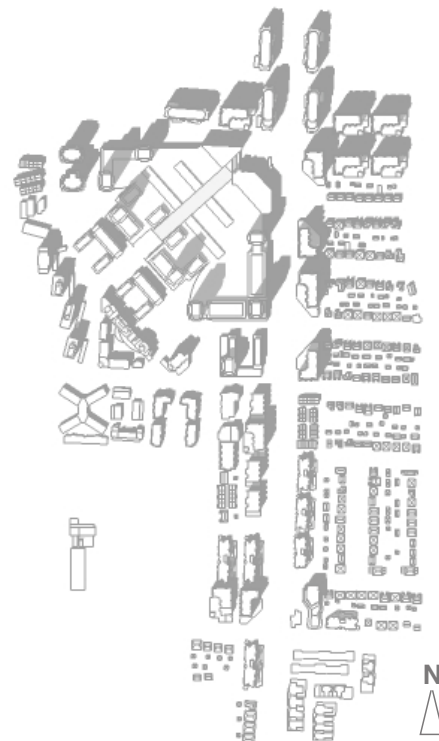
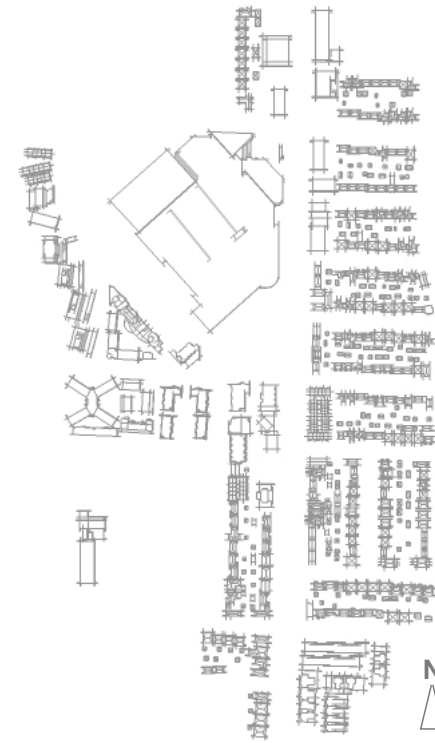
Figure 13(c): Projected Built Form of the Oakridge Town Centre - Facing SE

Source: City of Vancouver  
Various components downloaded from Elements DB

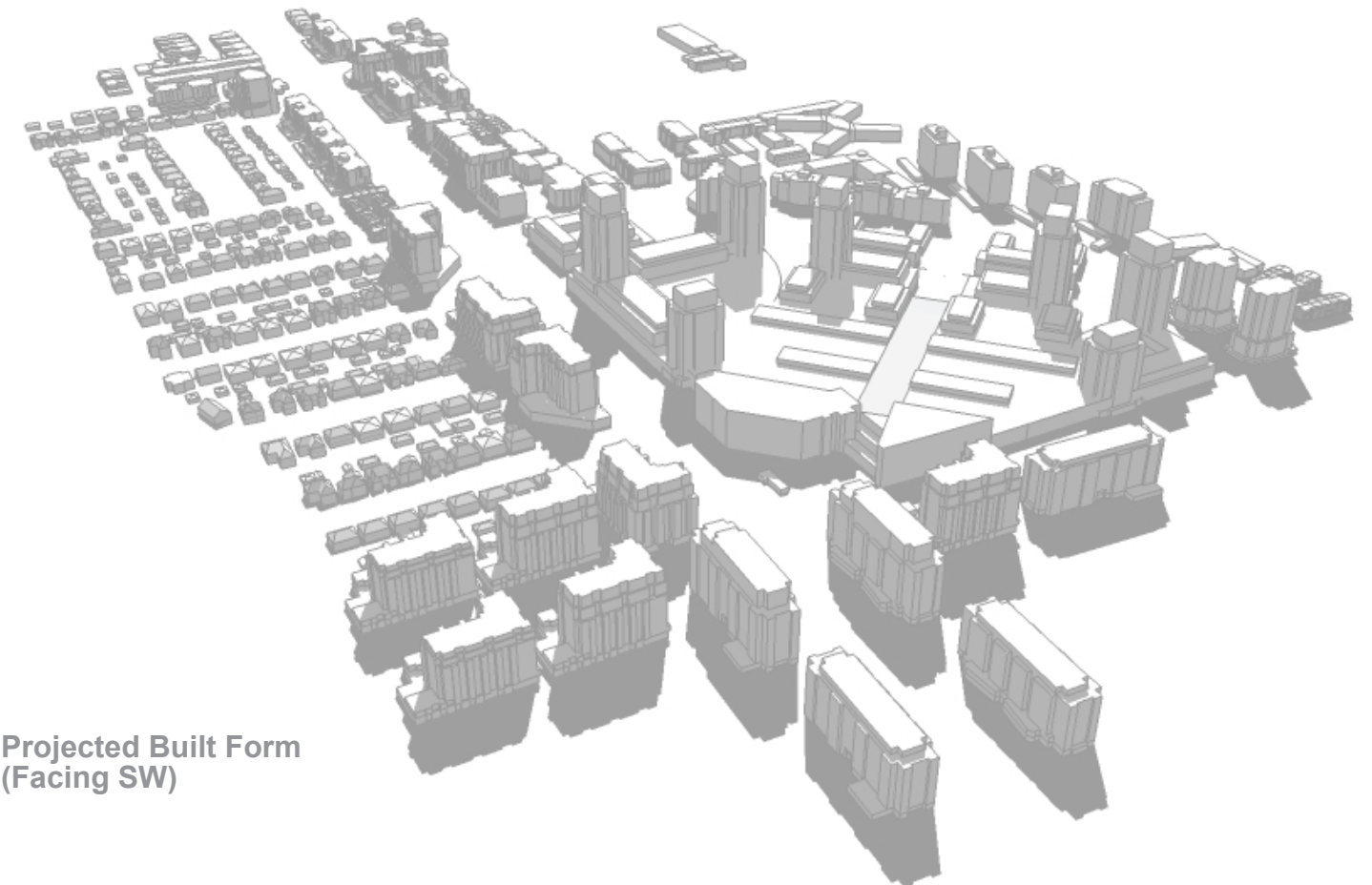




**Present Built Form  
(Facing SW)**



**Projected Built Form  
(Facing SW)**



## The Public Realm

The Urban Systems and Public Realm Strategy of the Cambie Corridor Plan lists a variety of objectives, including the following:

- To help create a unique identity for the Cambie Corridor
- To knit together a new high quality public realm within the structure of the existing neighbourhoods
- To create environments that are memorable, comfortable, and foster a sense of community
- To create places that allow for multiple types of activities and community functions, from daily activities and shopping to social gatherings and social events (COV, 2011(a):78)

The Oakridge Town Centre will depend upon a strong public realm and a complete network of pedestrian-oriented public spaces in order to adapt to and become integrated with changes in the built form. The following is a list of the various components of projected public realm and public space development which are likely to occur as the Urban Systems and Public Realm Strategy is implemented. Each of these components play a crucial role in integrating the built environment in the study area with transit, cycling and pedestrian infrastructure and amenities.



## Urban Plazas

As density increases in the Oakridge Town Centre due to changes in the built form, the demand for large, open public spaces such as plazas will also increase. According to the Urban Systems and Public Realm Strategy, five potential locations exist within the Oakridge Town Centre for the implementation of public plazas (see Figure 14(a)). These plazas will play a significant role in forming and completing the network of public spaces and strengthening the public realm along the entire Cambie Corridor (COV, 2011(a)). Section 6.0 / Part IV of this project will focus on potential design guidelines and principles for these five plaza locations.

### Key Issues & Considerations

- Access, Enclosure, Connectivity & Networking
- Use & Activity
- Place, Identity & Public Art
- Safety & Comfort
- Views & Solar Orientation

**Figure 14(a):** Projected Public Realm along the Oakridge Town Centre - Urban Plazas

## Laneway Network

As the land uses in the Oakridge Town Centre become increasingly mixed, the uses of many new public spaces may follow a similar trend. The Urban Systems and Public Realm Strategy proposes the implementation of a new network of mixed-use rear laneways within the focus area which would be activated by public realm components such as street-level retail (COV, 2011(a)) (see Figure 14(b)). These redeveloped laneways may potentially play an important role in creating, activating and integrating active pedestrian linkages throughout the urban core, particularly between the five proposed urban plazas. It will also play a crucial role in introducing a relatively new type of public space into the City of Vancouver and along the Cambie Corridor.

### Key Issues

- Access, Safety & Connectivity
- Use & Activity
- Place & Public Art
- Safety & Comfort
- Private/Public Space Demarcation
- Laneway/building edge



**Figure 14(b):** Projected Public Realm along the Oakridge Town Centre - Laneway Network

## Parks

Columbia Park and Tisdall Park fall within the focus area of this project. Further development may potentially present opportunities to upgrade and enhance these parks in order to integrate them into the Cambie Corridor's projected public realm, land uses and built form (see Figure 14(c)). Access to these greenspaces from Cambie Street through public realm improvements will play a particularly important role in enhancing their potential for use and activity.

### Key Issues

- Access & Connectivity
- Use & Activity



**Figure 14(c):** Projected Public Realm along the Oakridge Town Centre - Parks

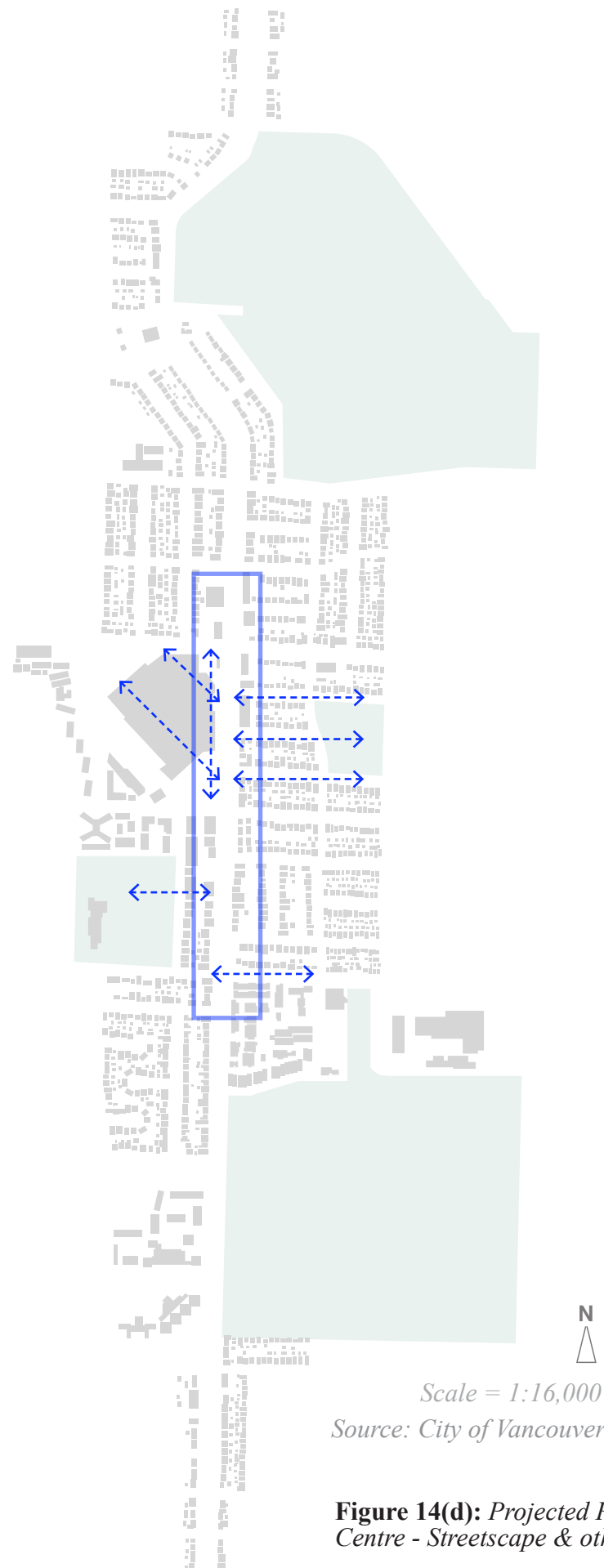


## Streetscape & Other Pedestrian Connections

As further TOD is implemented within the Oakridge Town Centre, the transformation of the public realm, land uses and the built form (particularly the redevelopment of Oakridge Centre and its vicinity) offers numerous opportunities to explore the implementation of additional pedestrian linkages and paths within the study area. Streetscape improvements along Cambie Street itself may also play a crucial role in strengthening the public realm in the area (see Figure 14(d)).

### Key Issues

- Access & Connectivity
- Use & Activity



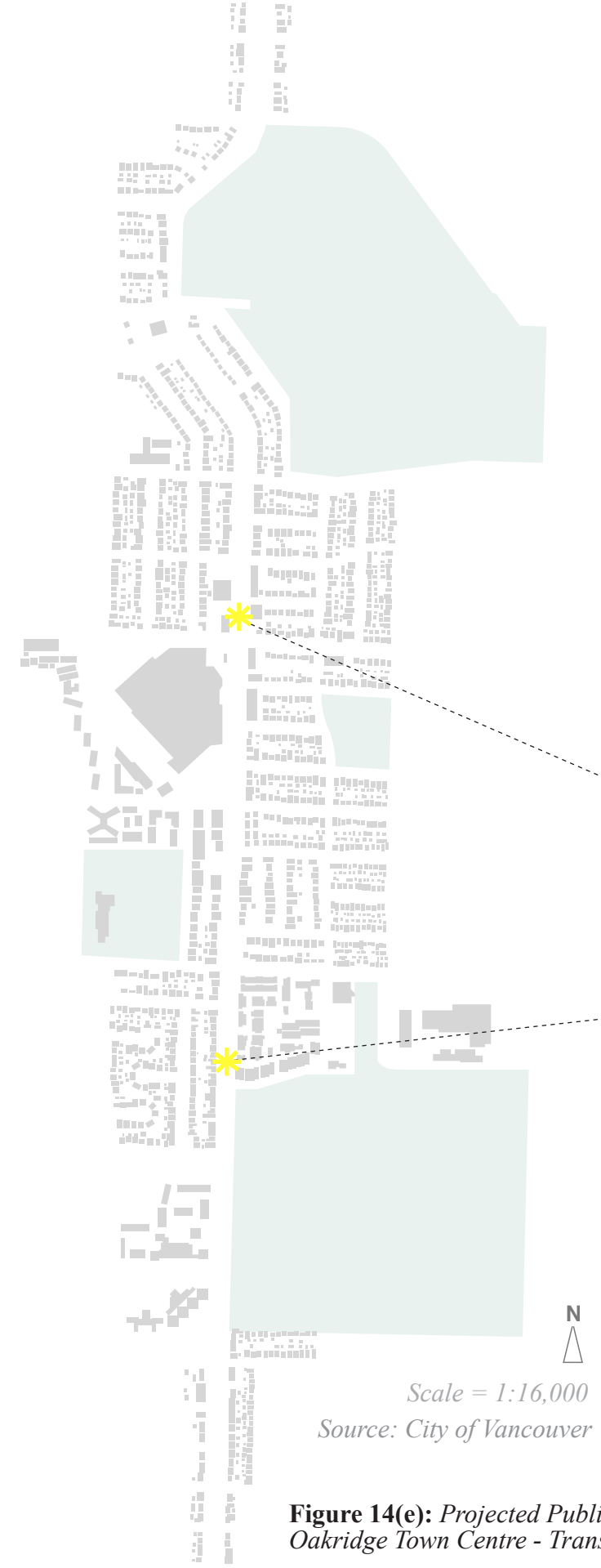
**Figure 14(d):** Projected Public Realm along the Oakridge Town Centre - Streetscape & other Pedestrian Connections

## Transition Zones

The Cambie Corridor Plan provides a clear demarcation between the different projected neighbourhood types along the Cambie Corridor. As further public realm development occurs within the Oakridge Town Centre, it may potentially need to consider the importance of transition zones, or areas in which the public realm may need to provide an indication of where the urban character of the Oakridge Town Centre transitions into other distinct neighbourhoods along the Cambie Corridor (see Figure 14(e)).

**North Transition Zone** towards the proposed 33rd Avenue Station and a less urban, more park-like, residential-focused neighbourhood adjacent to Queen Elizabeth Park

**South Transition Zone** towards the proposed 57th Avenue Station and a mid-rise mixed-use neighbourhood, leading eventually to Marine Landing



**Figure 14(e):** Projected Public Realm along the Oakridge Town Centre - Transition Zones

SUMMARY

As depicted in Figure 14(f), the formation of a complete public realm along the Oakridge Town Centre will depend upon the successful implementation of an integrated network of distinct and unique types of public spaces. Many of these enhancements are projected under the Cambie Corridor Plan as part of its strategy to create a strong urban transit precinct along the centre of the Cambie Corridor. While several components currently exist but have not reached their full potential as pedestrian-oriented places, others will be developed as TOD progresses in the neighbourhood.

The five potential locations for public plaza development within the Oakridge Town Centre are a component of and are situated within the highly intricate network of potential public space and public realm enhancements in Figure 14(f). The proceeding part of this project will focus on potential design strategies and guidelines for these five public spaces.

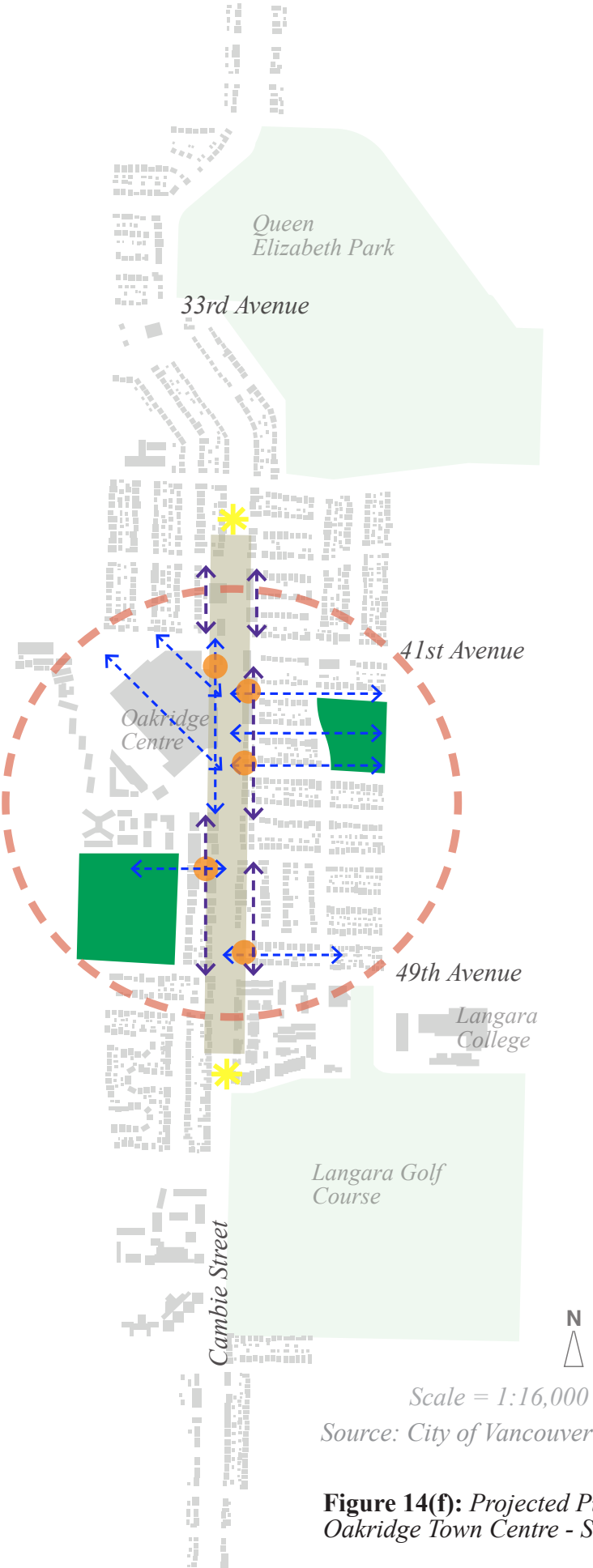
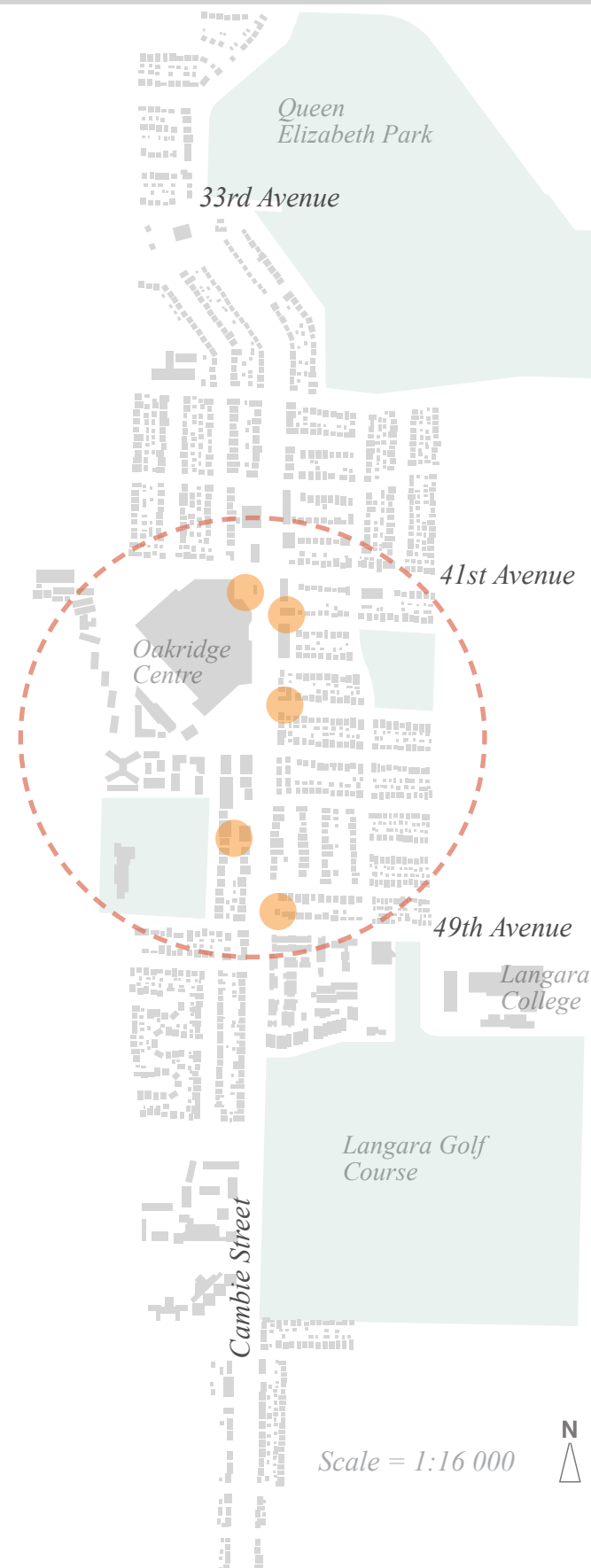


Figure 14(f): Projected Public Realm along the Oakridge Town Centre - Summary



## 6.0 DESIGN STRATEGIES FOR PUBLIC PLAZAS - A BRIEF OVERVIEW

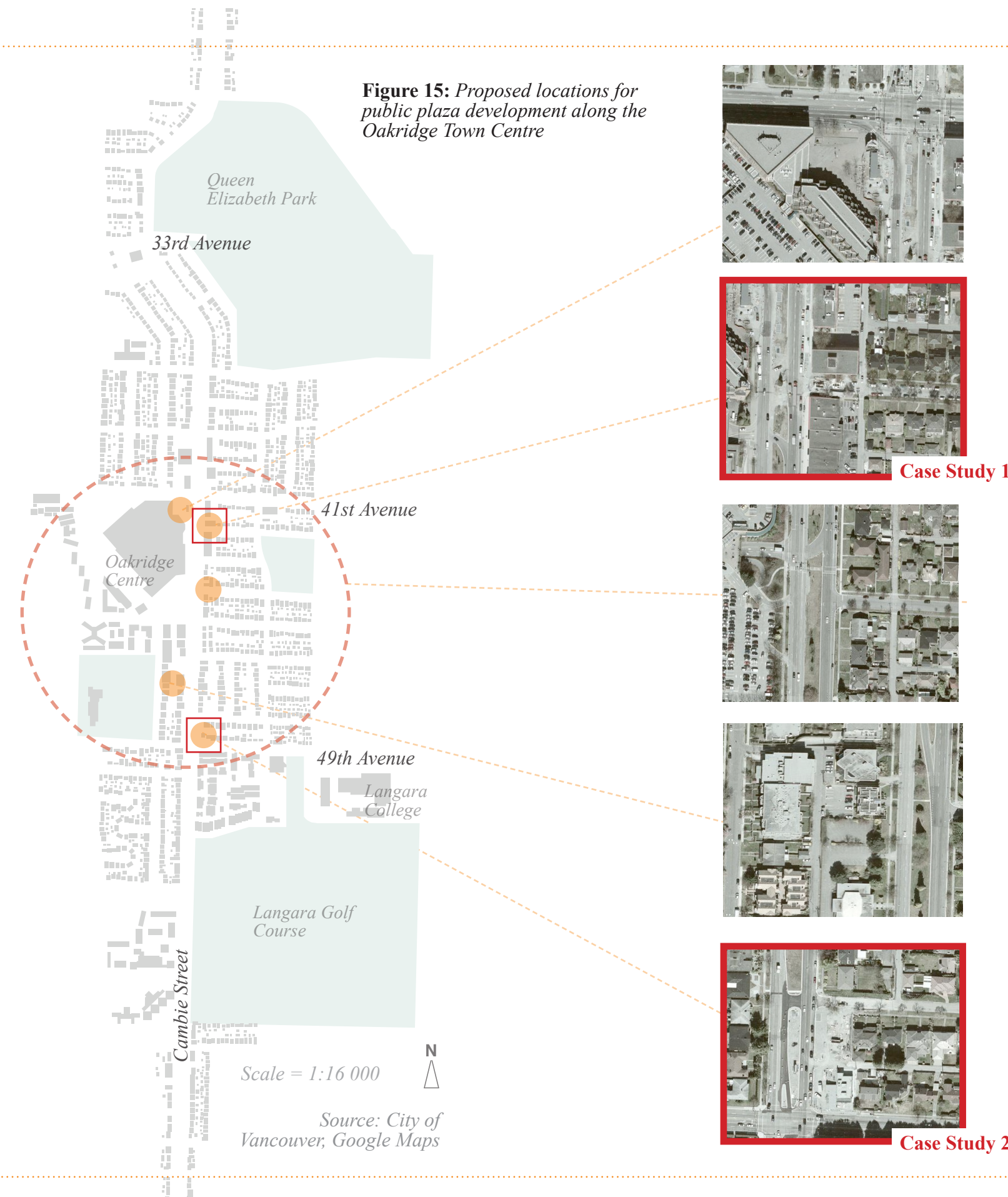


Part IV (Sections 6.0 - 8.0) is the main component of this project and will focus on developing a framework for public space design in the Oakridge Town Centre. It will focus specifically on **public plaza development**, drawing from information obtained in Parts I-III in order to formulate guidelines that would achieve the following:

- Take into account the existing literature and research on principles and strategies for the successful implementation of public spaces, especially in the context of TOD
- Contribute to transforming the study area into a crucial transit precinct that is linked with city-wide and regional transportation systems, as well as the network of mixed-use, high-amenity urban centres which are characterized by high-quality public spaces
- Satisfies the goals and objectives of the Cambie Corridor Planning Program (particularly the Urban Systems and Public Realm Strategy) as well as other sustainability initiatives undertaken by the City of Vancouver
- Respect, develop and enhance the existing character, strengths and weaknesses of the neighbourhoods in which the Oakridge Town Centre is situated, as they adapt to projected development in its built form and public realm due to the Cambie Corridor Planning Program

In order to achieve this objective, Section 6.0 will provide a brief overview and site inventory for each of the five proposed public plaza locations in the study area (as designated in the Cambie Corridor Plan) (see Figure 15). This will be followed by Section 7.0, in which two of these plaza locations (see Figure 15) will be selected as case studies to be analyzed in further detail. Section 8.0 will discuss the implications of Sections 6.0 and 7.0, and formulate a framework for future public space design along the Cambie Corridor.





**Urban Plaza - SW Corner of Cambie/41st Avenue:** A plaza which integrates the Oakridge-41st Ave. Canada Line Station and the entrance of Oakridge Centre currently exists in this location, but lacks many crucial amenities and components. With the projected redevelopment of Oakridge Centre, opportunities exist for the redevelopment of the space into a larger plaza that contains higher-quality amenities and is more tightly-integrated with its retail and station edges.

**Urban Plaza - NE/SE Corner of Cambie/42nd Avenue:** A small plaza currently exists midblock between 41st and 42nd Ave. which is under-utilized and lacking many crucial amenities. Through further development, in the area the plaza may be expanded to include the NE and SE corner of 42nd Ave. This plaza location would play a crucial role in enhancing the neighbourhood's local identity and activity, as well as connecting it with nearby amenities such as Columbia Park, Oakridge Centre and the proposed mixed-use laneway network.

**Urban Plaza - NE/SE Corner of Cambie/44th Avenue:** This particular location for public plaza development is currently occupied primarily by single-family housing. The Urban Systems and Public Realm Strategy has identified the area for the development of a large urban plaza with an "interactive landscape," "retail activity at the edge" and "expanded space on 44th Ave. for special events" (COV, 2011).

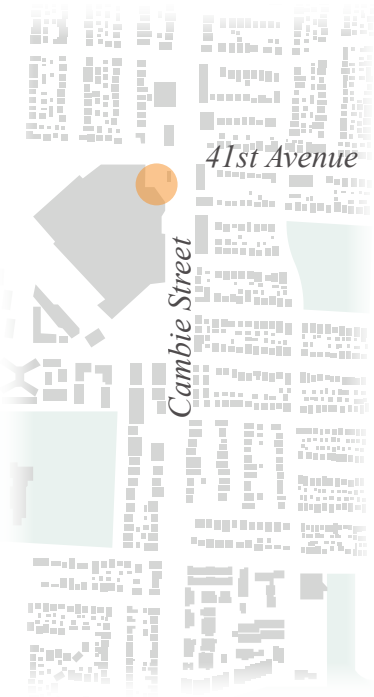
**Street Space - Midblock (45th/49th Avenue) West of Cambie:** The Urban Systems and Public Realm Strategy proposes the development of a small urban plaza in this location which would be integrated with its surrounding mixed-used development (COV, 2011). The plaza may form a crucial connection between Cambie Street and Tisdall Park.

**Urban Plaza - NE Corner of Cambie/49th Avenue:** This location, where the Langara-49th Ave. Station is situated, currently consists of a small plaza space which lacks a strong relationship with the station entrance and its surrounding urban context. Further development may provide opportunities to expand and integrate the plaza with new development, and to enhance its role in shaping the neighbourhood's identity.



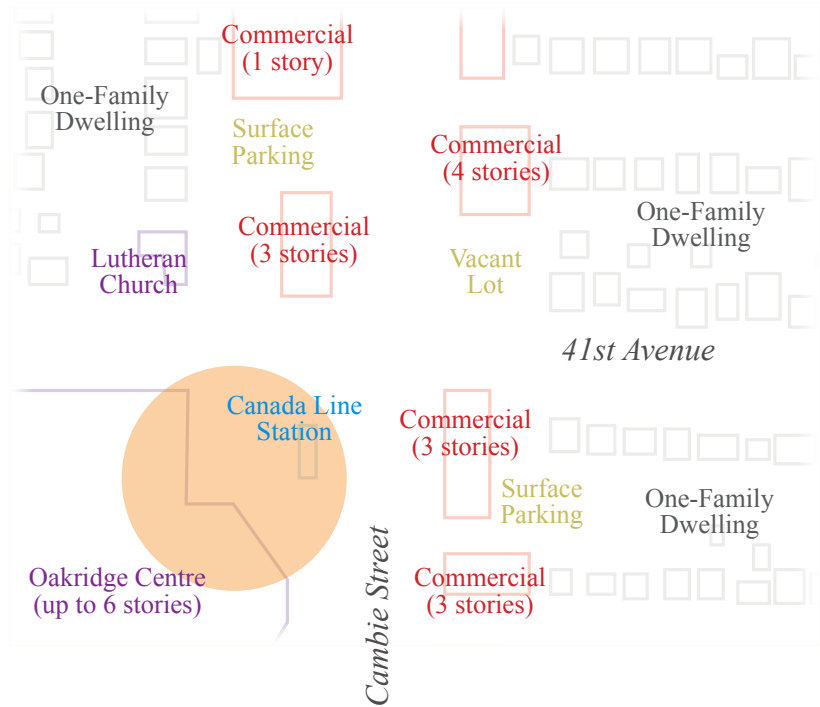
6.1 SW Corner of Cambie/41st Avenue

Existing Conditions



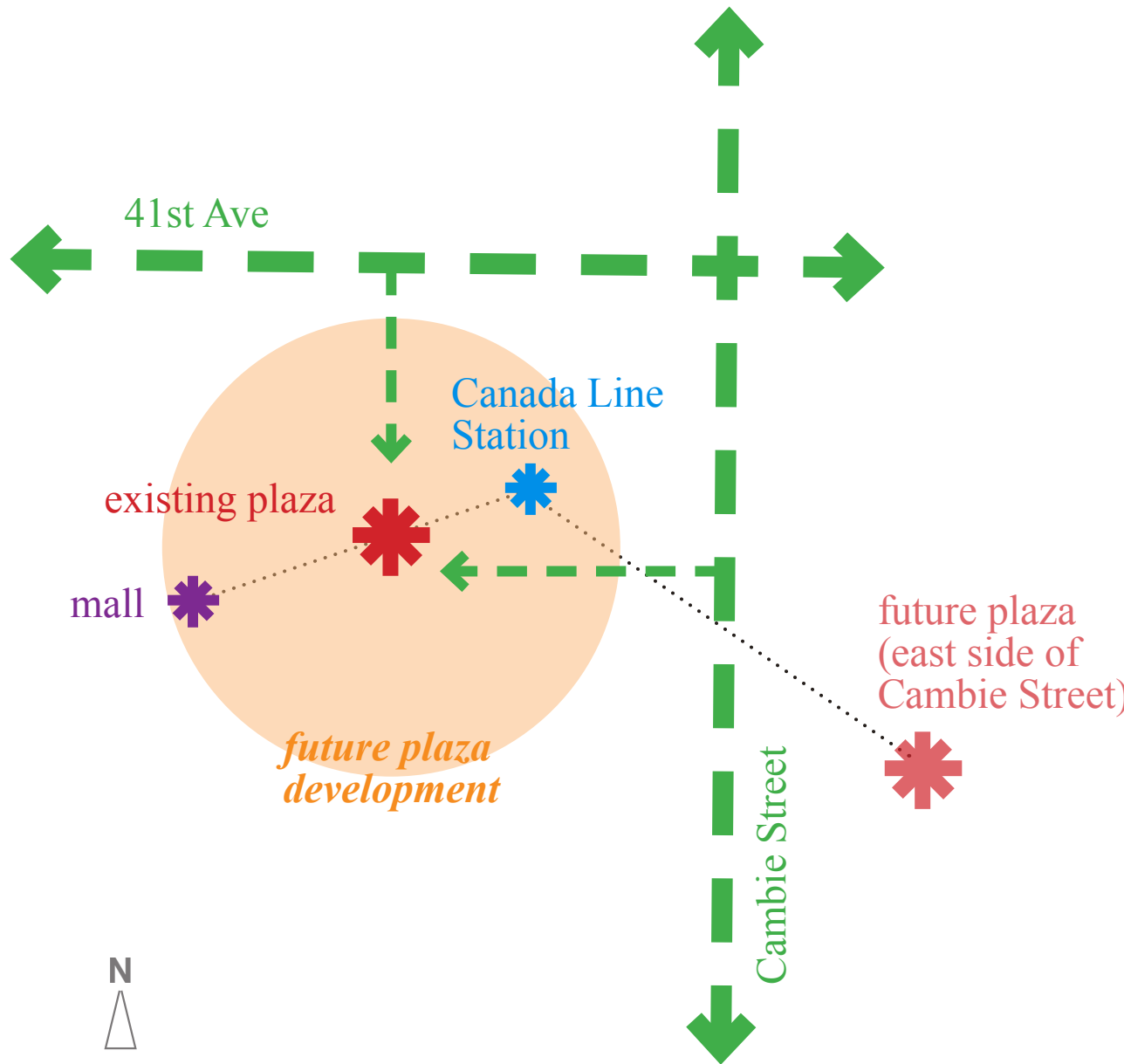
Land Use

The existing plaza is bounded by Oakridge Centre on its west and south edges and serves as a main entrance to the mall. The Oakridge-41st Ave. Canada Line Station is located on the eastern edge of the plaza. Stacked residential space reaching a height of 6 stories exists above the mall along the south edge of the plaza. Future plaza development in this area should reflect and enhance the area's existing role as a central public space which connects a variety of land uses, public realm components and transit points.

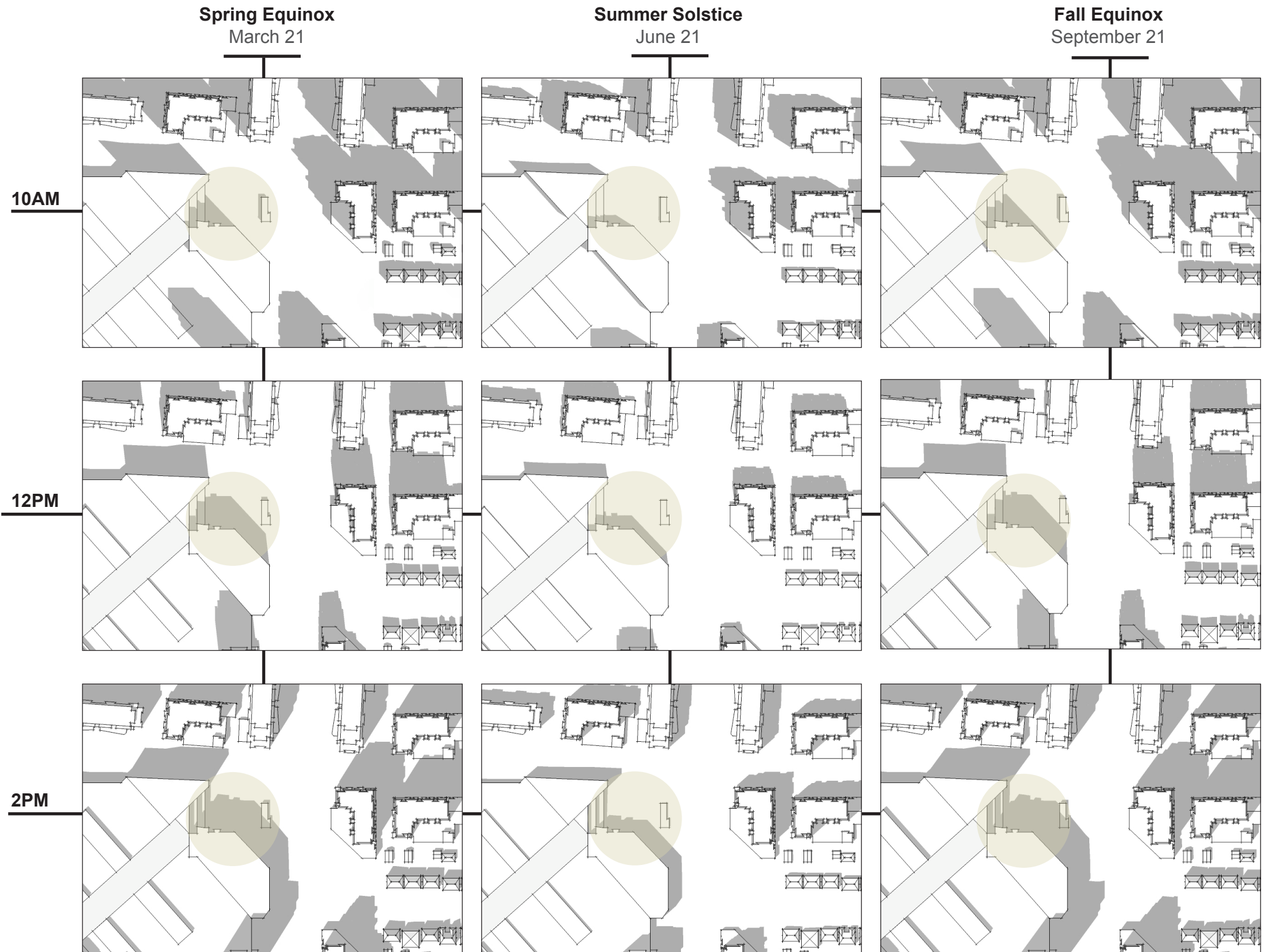
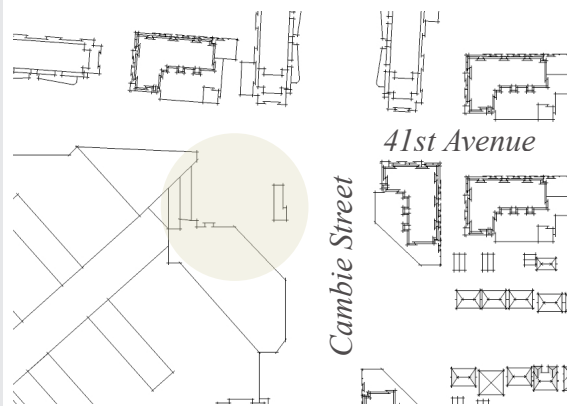


Flow, Linkages & Connectivity

The existing plaza faces and may be accessed from 41st Ave and Cambie Street, which are two major vehicular thoroughfares. Access to and from the Oakridge Centre mall exists on the western edge. Access to the Canada Line Station exists on the north-east corner of the plaza. Future plaza development in this area should focus on connecting the mall (which is projected to undergo major redevelopment) with the Canada Line Station, in addition to public spaces along the eastern edge of Cambie Street. Consideration should also be given to the plaza-street interface along 41st Ave and Cambie Street.



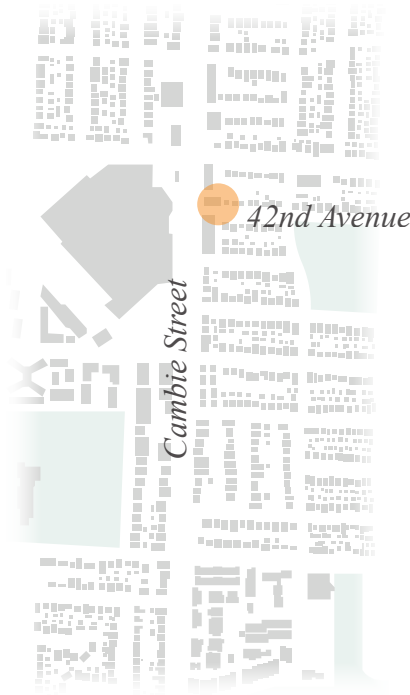
Shadow Analysis for Proposed  
Plaza Space - SW Corner of  
Cambie/41st Avenue





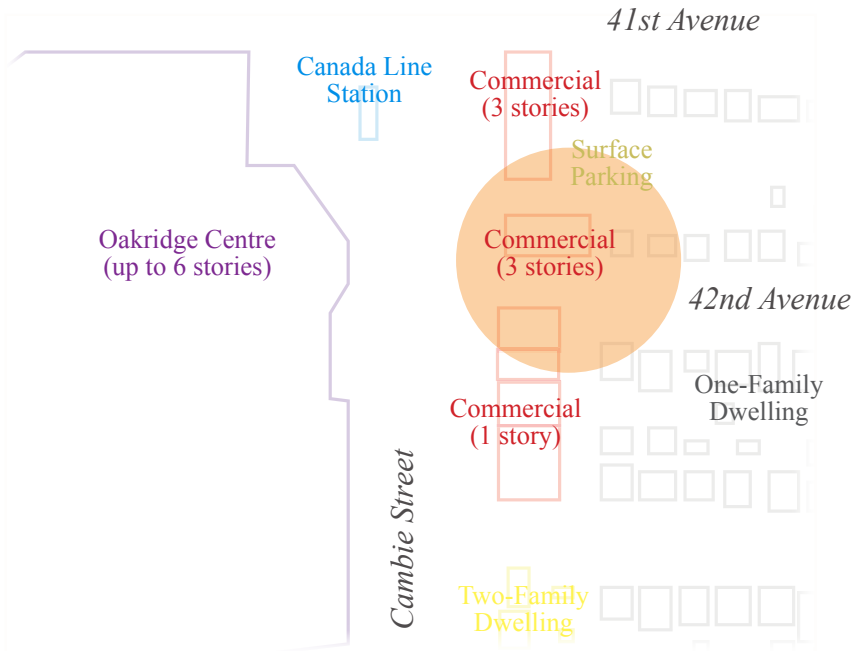
6.2 NE/SE Corner of Cambie/42nd Avenue

Existing Conditions



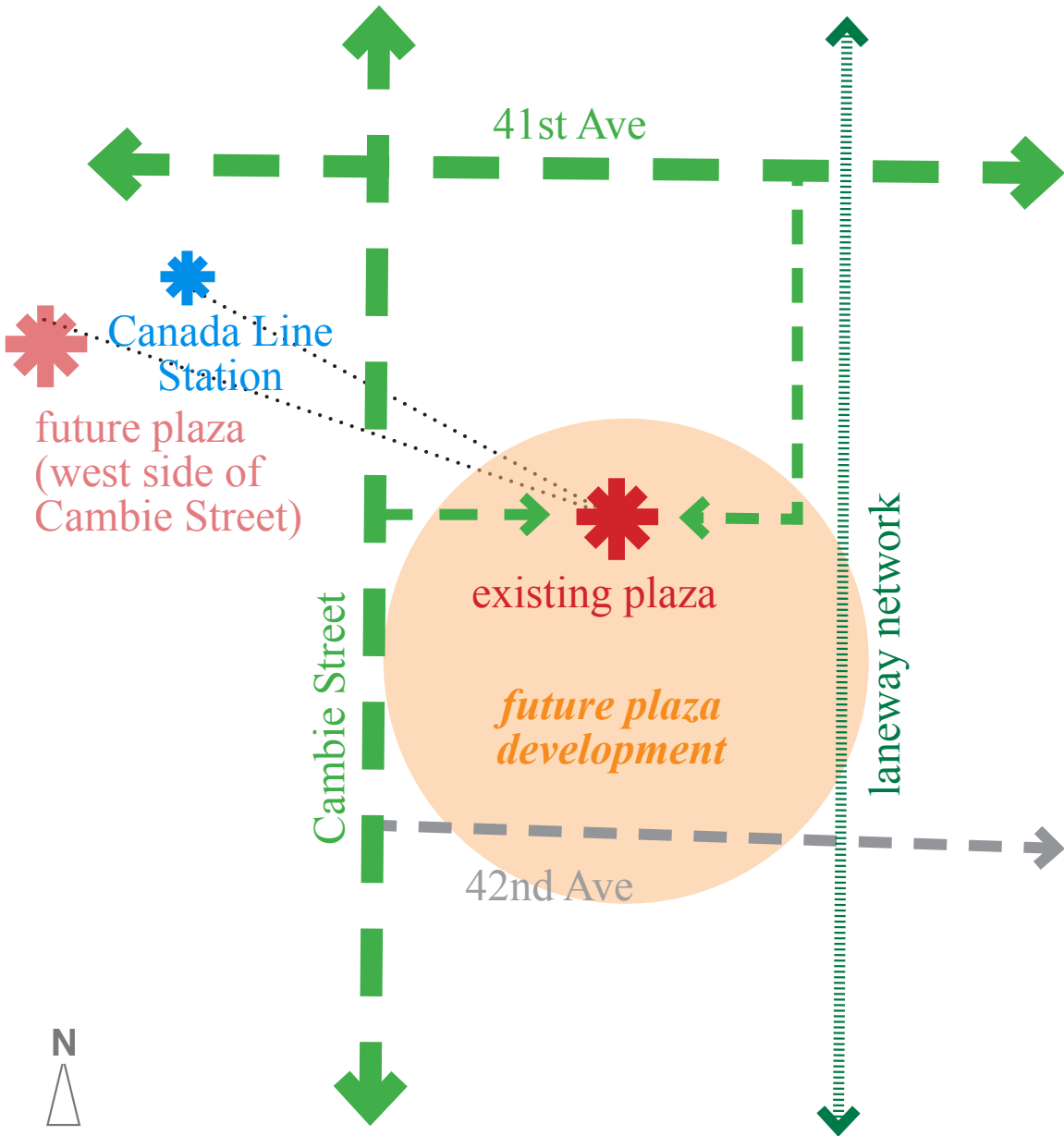
Land Use

The immediate area is characterized by a relatively mid to high-density built form (with heights ranging from 1-6 stories) and a mix of land uses, including office space, retail and restaurant establishments, banks, a pharmacy and a tutoring centre. Single-family housing exists directly east of the proposed plaza space, separated by a parking lot and rear laneway access. Future plaza development should enhance the existing dense, mixed-use character of the area.

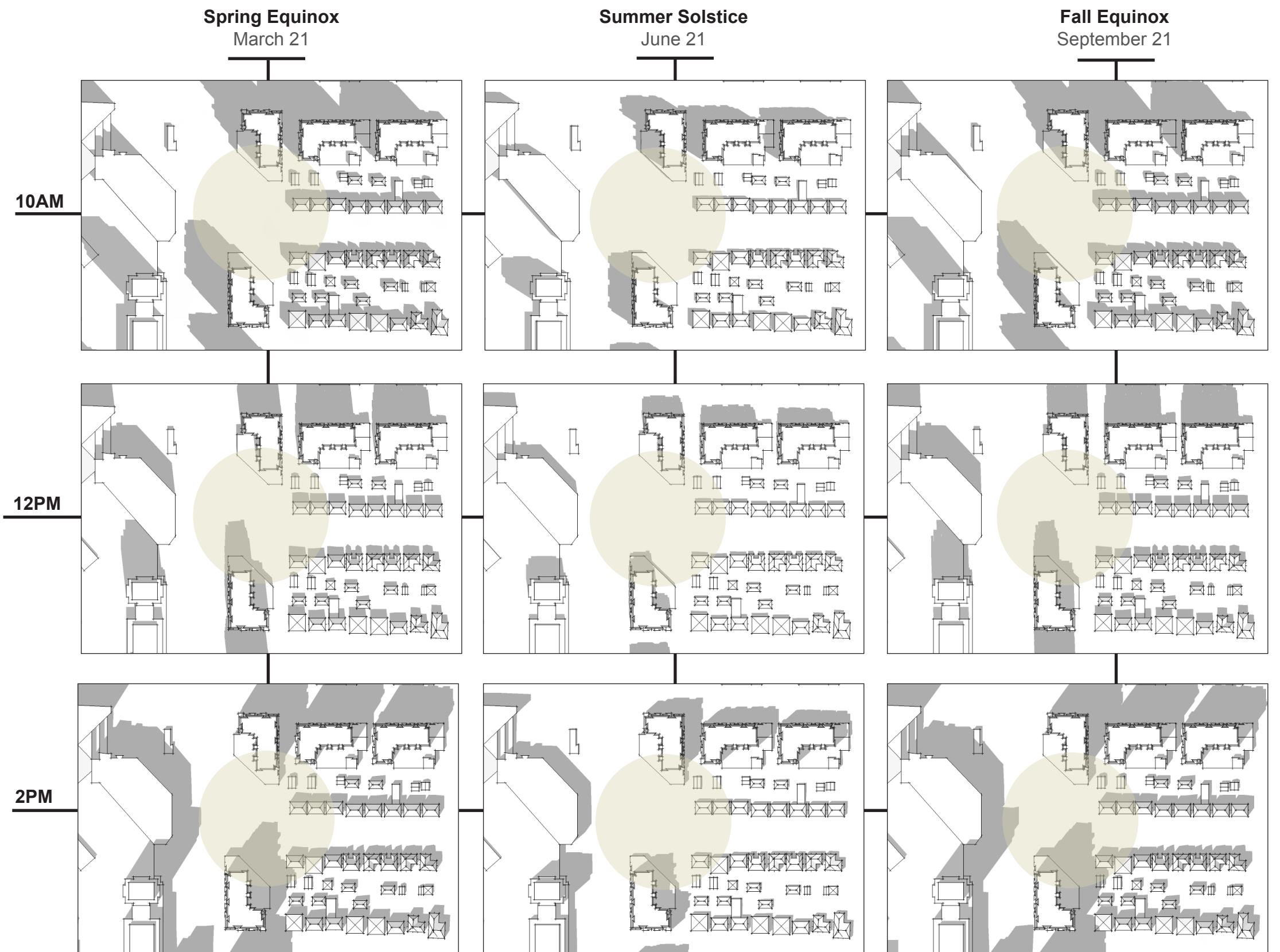
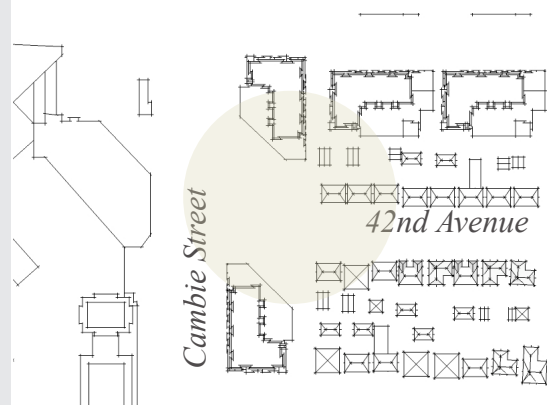


Flow, Linkages & Connectivity

Although well-served by transit and bicycle connections, Cambie Street and 41st Ave. remain major vehicle thoroughfares, while 42nd Ave. serves as a narrower residential vehicular street. Access to the existing plaza exists on its east and west edges. Future plaza expansion and development should focus on improving the relationships between public spaces on the west and east edges of Cambie Street, connections to the Canada Line Station and the new mixed-use laneway network, and to connections along 42nd Ave. to Columbia Park. Consideration should also be given to the plaza-street interface along Cambie Street.



Shadow Analysis for Proposed  
Plaza Space - NE/SE Corner of  
Cambie/42nd Avenue



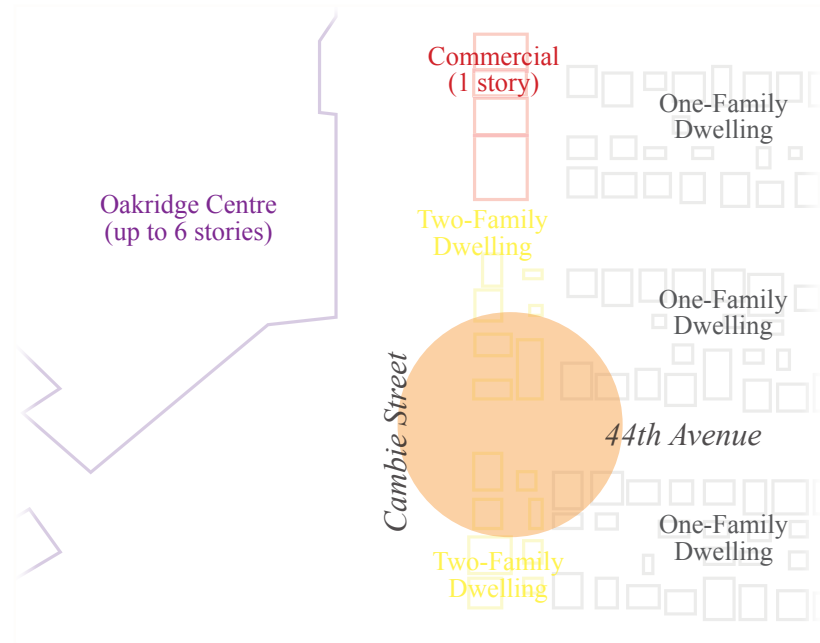
6.3 NE/SE Corner of Cambie/44th Avenue

Existing Conditions



Land Use

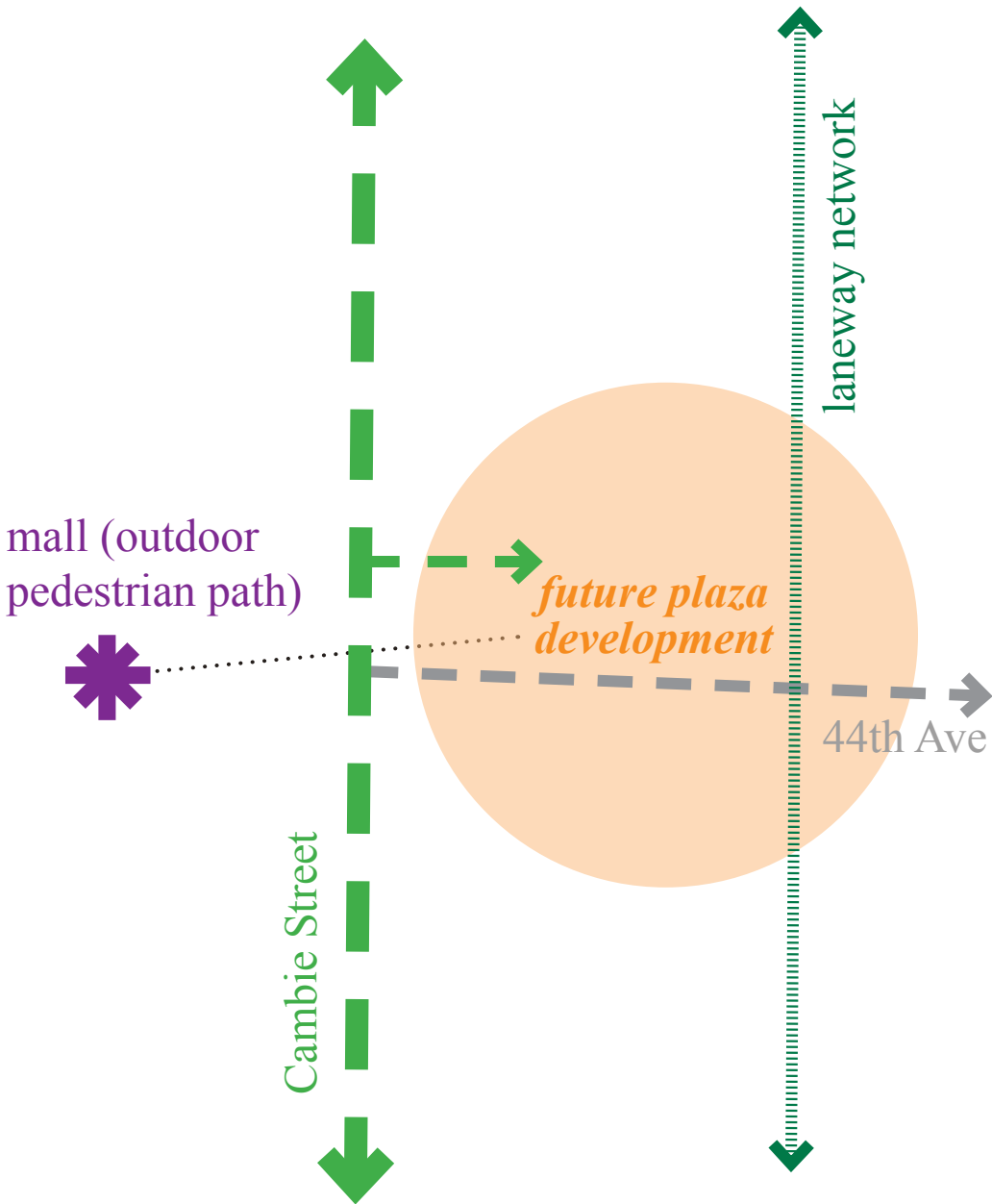
The immediate area is currently characterized by a low-density, single-family residential built form. The south surface parking lot of Oakridge Centre exists across Cambie Street from the area. Future plaza development should consider the area's existing residential character, while integrating other land uses such as retail, services and other amenities.



Flow, Linkages & Connectivity

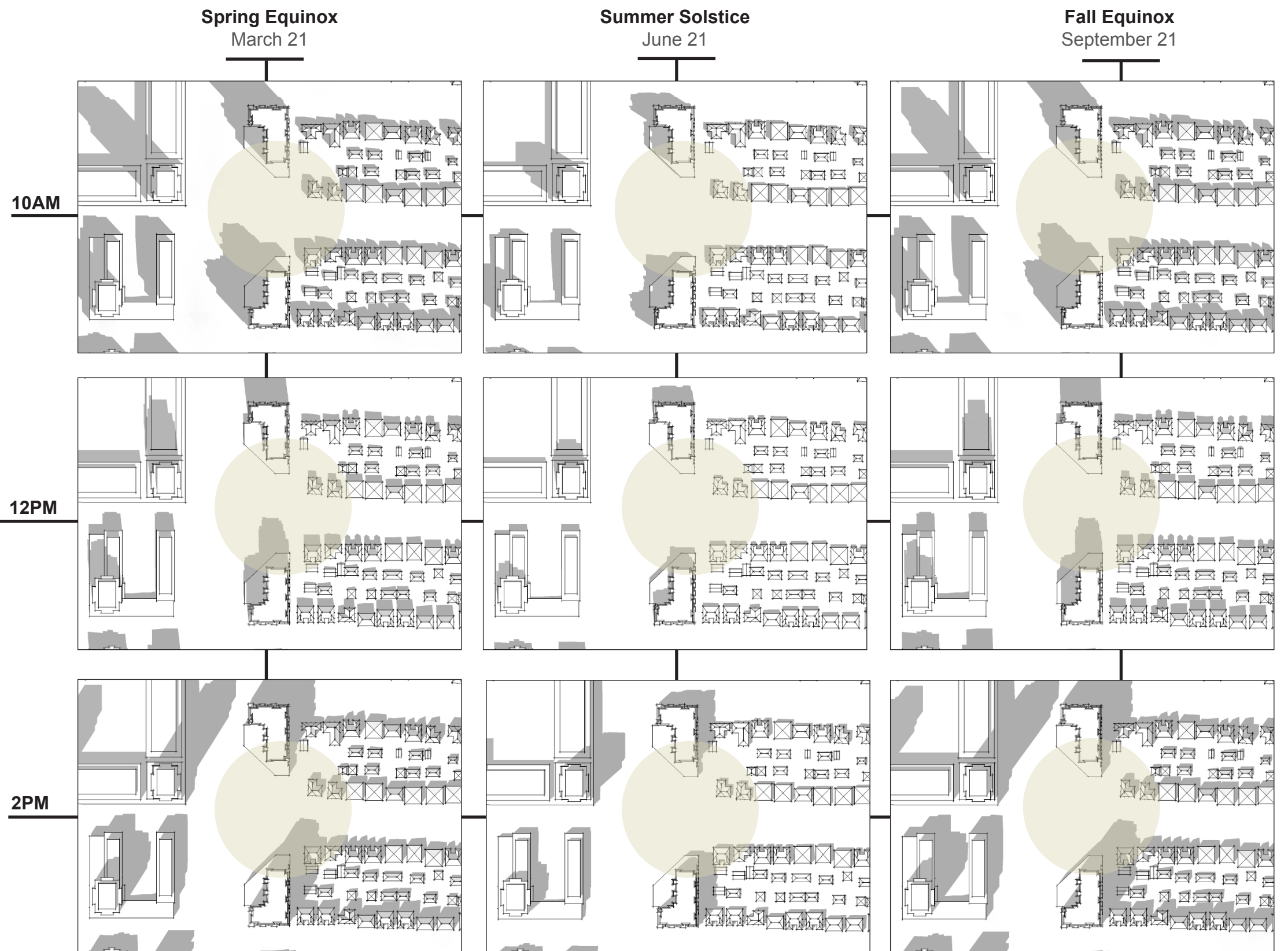
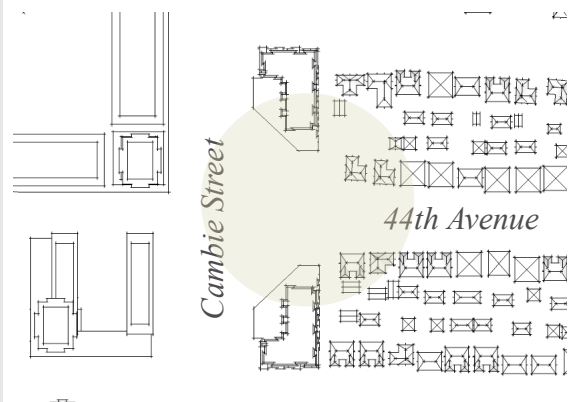
The area exists along Cambie Street and 44th Avenue (which serves as a residential street). Although public plaza space currently does not exist in this area, future development should focus on the following:

- Connecting the eastern edge of Cambie Street with the projected development of an outdoor pedestrian mall (which is part of the redevelopment of Oakridge Centre), the proposed mixed-use laneway network, and to Columbia Park
- Connecting the network of public spaces along the eastern edge of Cambie Street





Shadow Analysis for Proposed  
Plaza Space - NE/SE Corner of  
Cambie/44th Avenue



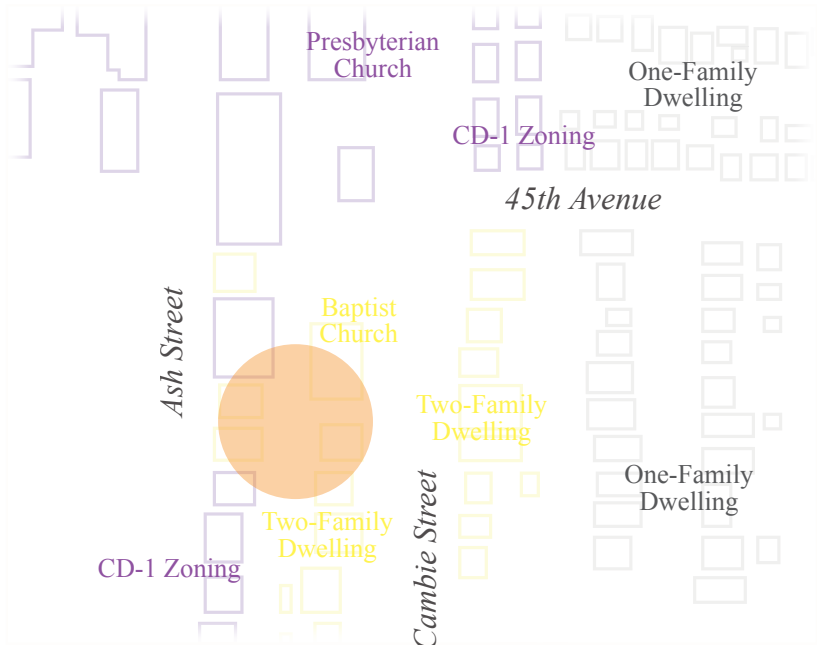
6.4 Midblock (45th/49th Avenue) West of Cambie

Existing Conditions



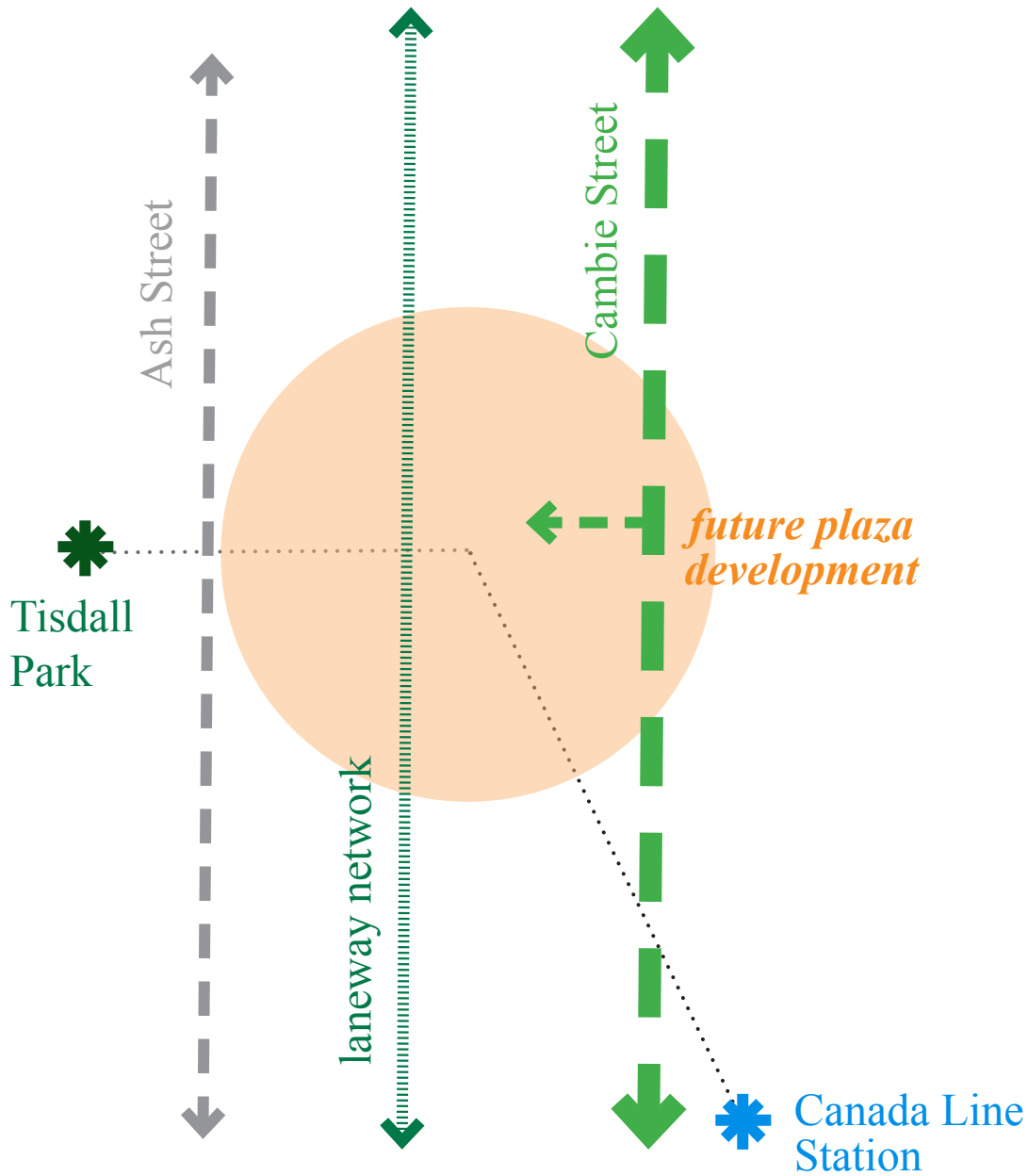
Land Use

The area is currently characterized by a mix of single, two and multiple-family housing, as well as CD-1-zoned areas consisting of a variety of land uses such as places of worship, and services. Building heights in the area range from 1-7. Future plaza development in this area should focus on maintaining the area’s low to mid-density residential character while other land uses become integrated into the neighbourhood.

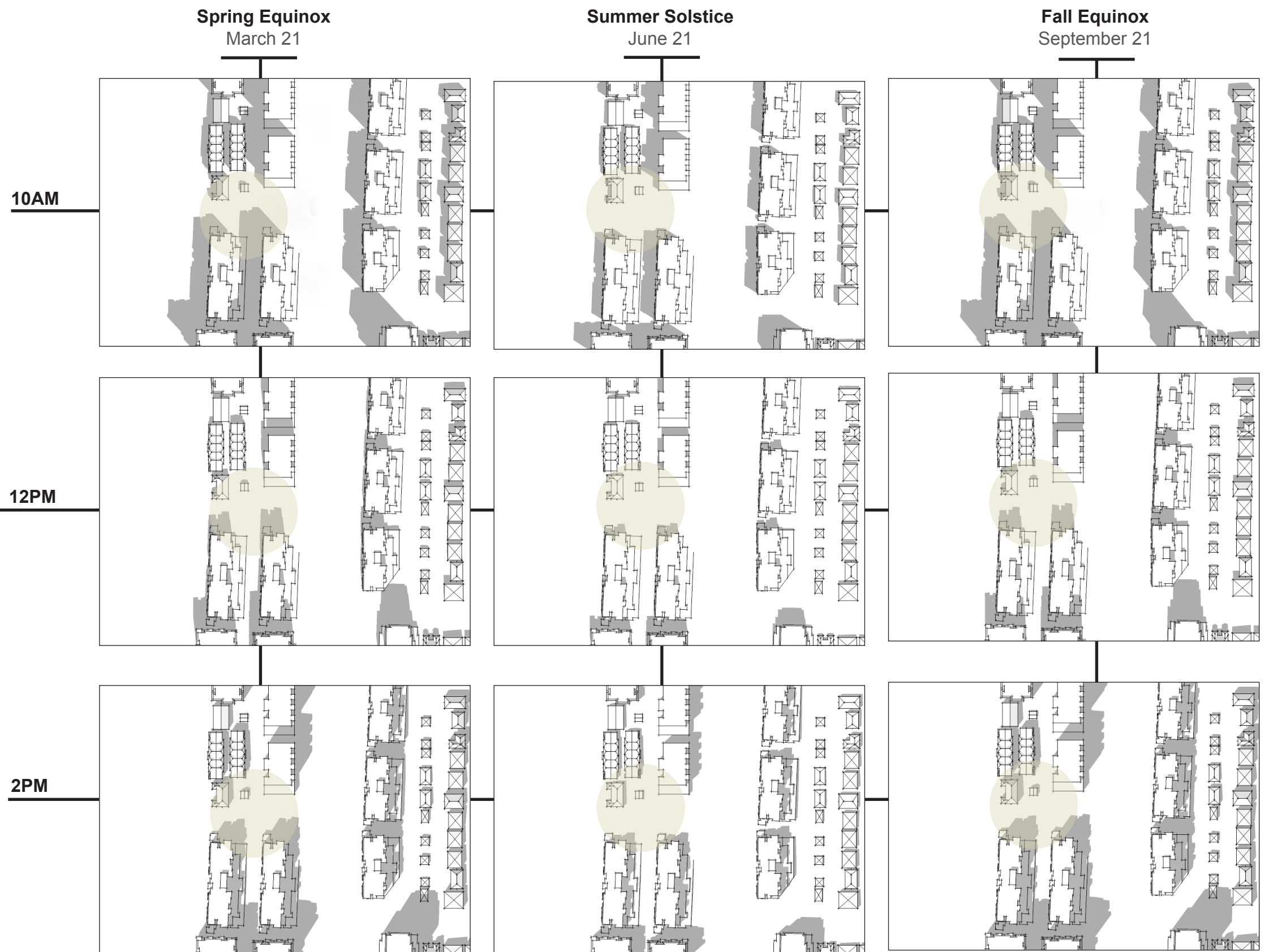


Flow, Linkages & Connectivity

The area currently lacks existing major plazas or open public spaces. If implemented, the proposed location for a new plaza may form a new major connection mid-block of 45th and 49th Ave. between Cambie Street and Ash Street, leading to Tisdall Park. Future plaza development should also focus on connections with the Langara-49th Ave. Canada Line Station, Oakridge Centre to the north, and to the proposed mixed-use laneway network on the western edge of Cambie Street.



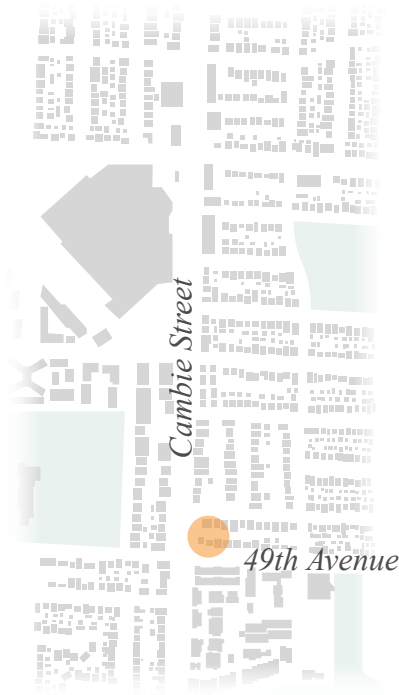
Shadow Analysis for Proposed  
Plaza Space - Midblock (45th/49th  
Avenue) West of Cambie





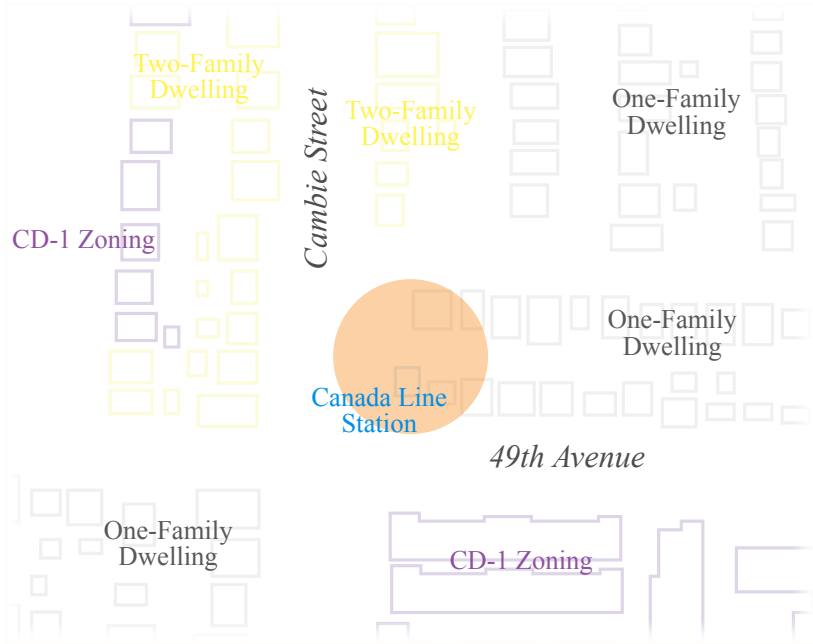
6.5 NE Corner of Cambie/49th Avenue

Existing Conditions



Land Use

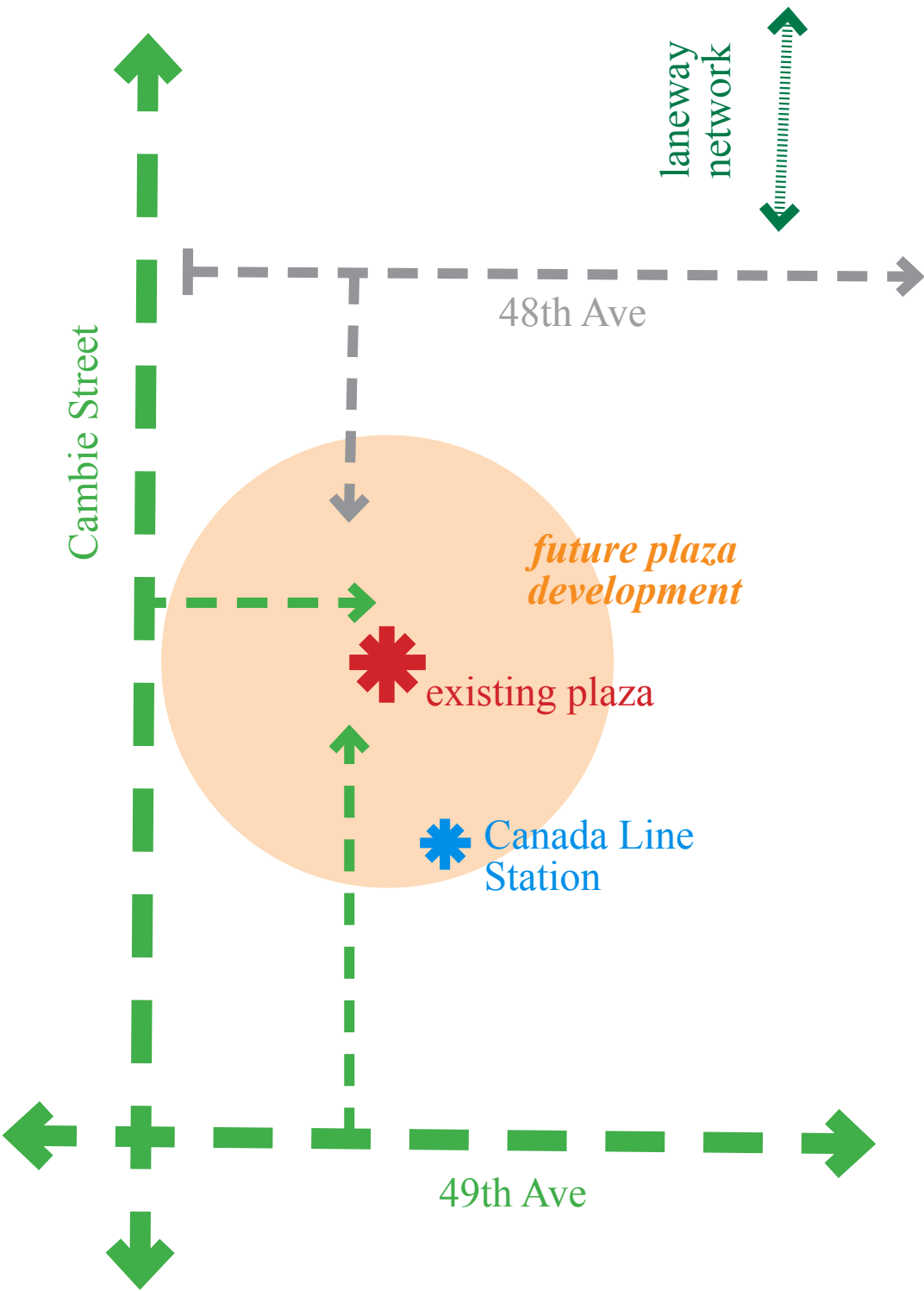
The area is currently characterized primarily by a low to mid-density residential built form. Future plaza development should focus on retaining the area’s residential character, while integrating other land uses, particularly retail and other amenities. Consideration should also be given to ways in which public space development may reflect the area’s role as a transitional zone along the Cambie Corridor (between the Oakridge Town Centre and Langara Neighbourhoods).



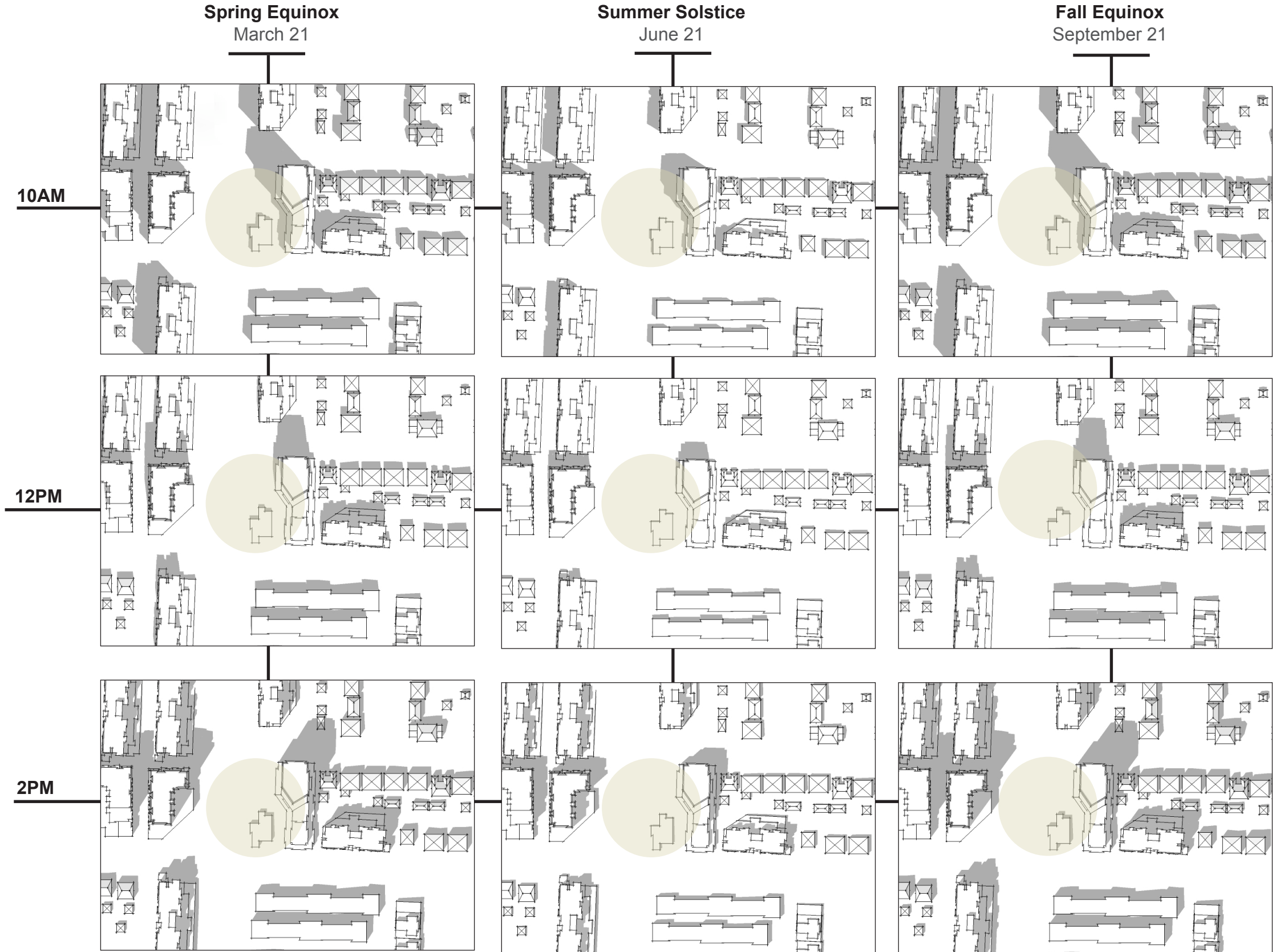
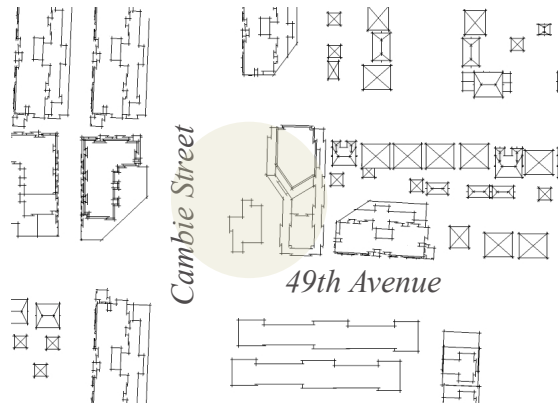
Flow, Linkages & Connectivity

The existing plaza and sidewalk area (within which the Langara-49th Ave. Canada Line Station is located) is bordered by 49th Ave., Cambie Street and 48th Ave. Access to the Canada Line station is located along the southern edge. Future plaza development should focus on the following:

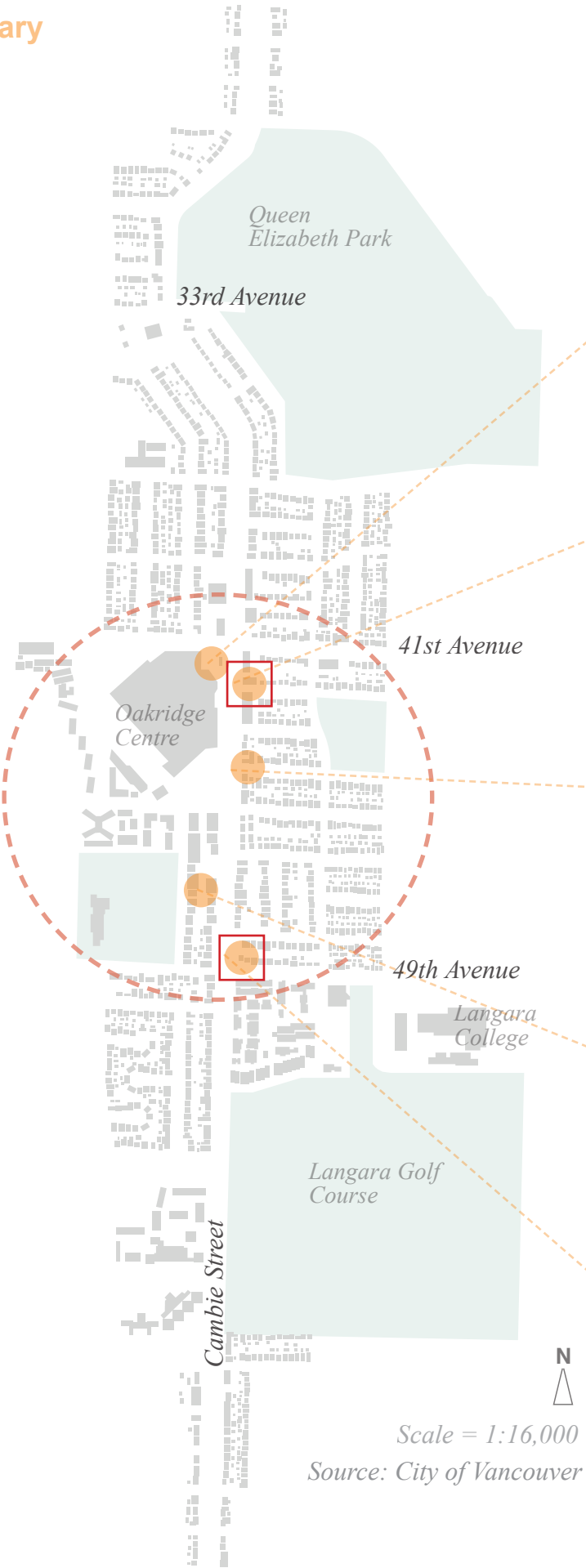
- Connecting the public realm along Cambie Street with nearby amenities (eg. Langara College)
- Connecting the network of public spaces along the eastern edge of Cambie Street, particularly through the mixed-use laneway network
- Addressing the plaza-street interface, particularly along Cambie Street and 49th Ave.



Shadow Analysis for Proposed  
Plaza Space - NE Corner of  
Cambie/49th



6.6 Summary



Existing Conditions



Future Development: Key Considerations

- Connections to Oakridge Centre
- Integrating the Canada Line station into pedestrian public space
- Linkages with the public realm on the eastern edge of Cambie Street
- Plaza/Street edge treatment
- Place-making
- Enhancing a high-density urban identity and character

- Connections to Columbia Park and the proposed mixed-use laneway
- Linkages with the public realm on the western edge of Cambie Street
- Retail edge and activity
- Flexible roles, uses and programming
- Plaza/Street edge treatment
- Place-making
- Enhancing a high-density urban identity and character

- Connections to Columbia Park and the proposed mixed-use laneway
- Linkages with the proposed outdoor pedestrian mall (part of Oakridge Centre Redevelopment scheme)
- Retail edge and activity
- Flexible roles, uses and programming
- Plaza/Street edge treatment
- Place-making
- Integrating residential character with other projected land uses

- Connections to the proposed mixed-use laneway and Oakridge Centre
- Linkages to Tisdall Park
- Place-making
- Enhancing the mid-density residential character of the area

- Integrating the Canada Line station into pedestrian public space
- Linkages to the proposed mixed-use laneway network
- Retail edge and activity
- Plaza/Street edge treatment
- Place-making
- Integrating residential character with other projected land uses
- Transitioning between Oakridge and Langara neighbourhoods



## 7.0 DESIGN STRATEGIES FOR PUBLIC PLAZAS - DETAILED CASE STUDIES



Public Art at Langara-49th Avenue Station (Source: Stephen Rees. Retrieved from [http://www.flickr.com/photos/stephen\\_rees/4680290508/](http://www.flickr.com/photos/stephen_rees/4680290508/))

Section 7.0 will explore two of the five proposed plaza locations presented in Section 6.0 as detailed case studies to further analyze potential plaza design strategies along the Oakridge Town Centre (see Figure 16). The following will be conducted for each case study:

- A vision statement describing the proposed plaza space
- A range of site inventory diagrams displaying the existing conditions of the site
- A precedent study
- A range of concept diagrams depicting aspects of the proposed new plaza space, based on data and information collected throughout the previous sections of the project
- A plaza size/scale comparison study
- A series of site plans, sections and views depicting the appearance, use and layout of the proposed design

Each case study, in addition to information obtained in Section 6.0, will offer valuable information and data which will inform the development of a framework for public space design along the Cambie Corridor in Section 8.0. The following provides a brief introduction to each of the selected case studies:

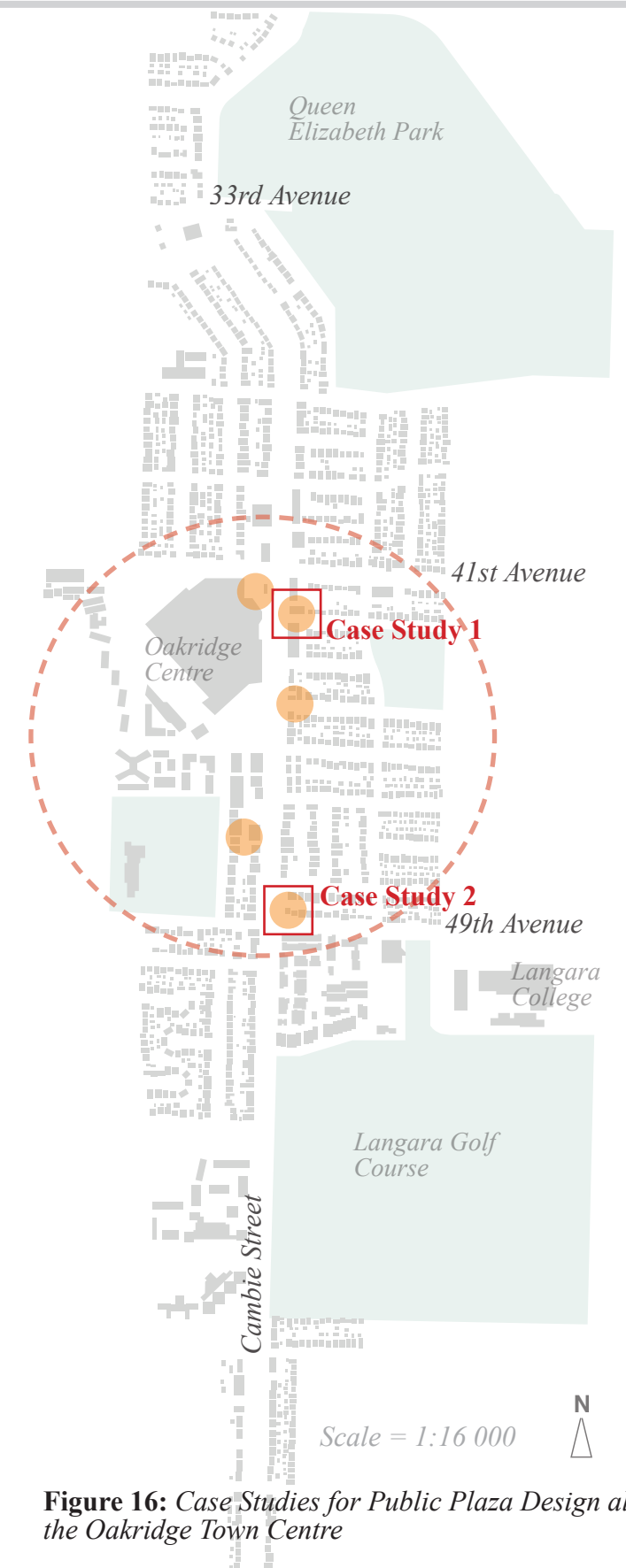
### Case Study 1 - “Oakridge Plaza East”: NE/SE Corner of Cambie & 42nd Avenue

This location was selected as a case study due to its proximity to the central intersection of Cambie/41st Avenue. If a new public space is

implemented in this location, it may potentially play a critical role in connecting the various components of the wider public realm of the Oakridge Town Centre, particularly between the eastern edge of Cambie Street (where the space is located) and the western edge (where Oakridge Centre and the Canada Line Station are located). The space will also play a key role in connecting Cambie Street and 42nd Avenue with a range of nearby amenities. Although a small plaza currently exists in the area, it may have the potential through further development to be reshaped and redefined as a central public plaza with a wide variety of uses and place-making elements.

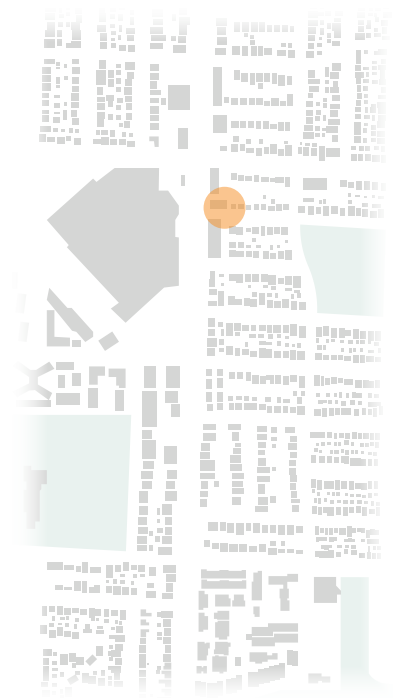
### Case Study 2 - “Langara Station Square”: NE Corner of Cambie & 49th Avenue

This site was chosen as a case study due to its location at the southern edge of the Oakridge Town Centre at the major intersection of Cambie Street and 49th Avenue. Unlike the previous case study in which a transit station is situated across the street from the proposed plaza location, this case study provides an opportunity to explore ways to integrate a transit station directly within a public plaza in the context of the Cambie Corridor. Although a small plaza space currently exists in this area, the expansion and redefinition of a new public plaza would result in numerous major implications and changes for the nearby public realm, amenities, land uses and built form. It would also result in major shifts to the use and identity of the public space.



**Figure 16:** Case Studies for Public Plaza Design along the Oakridge Town Centre

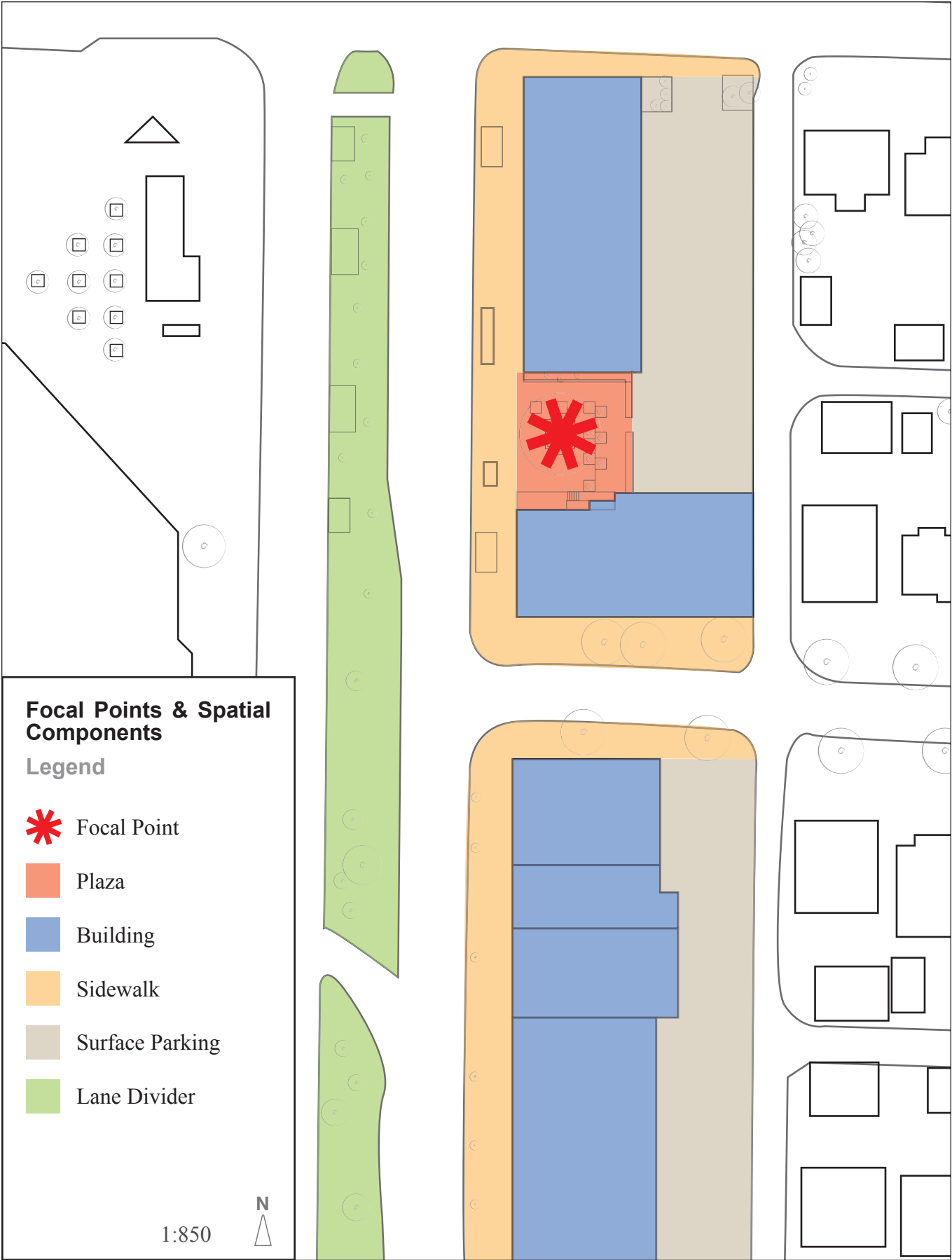
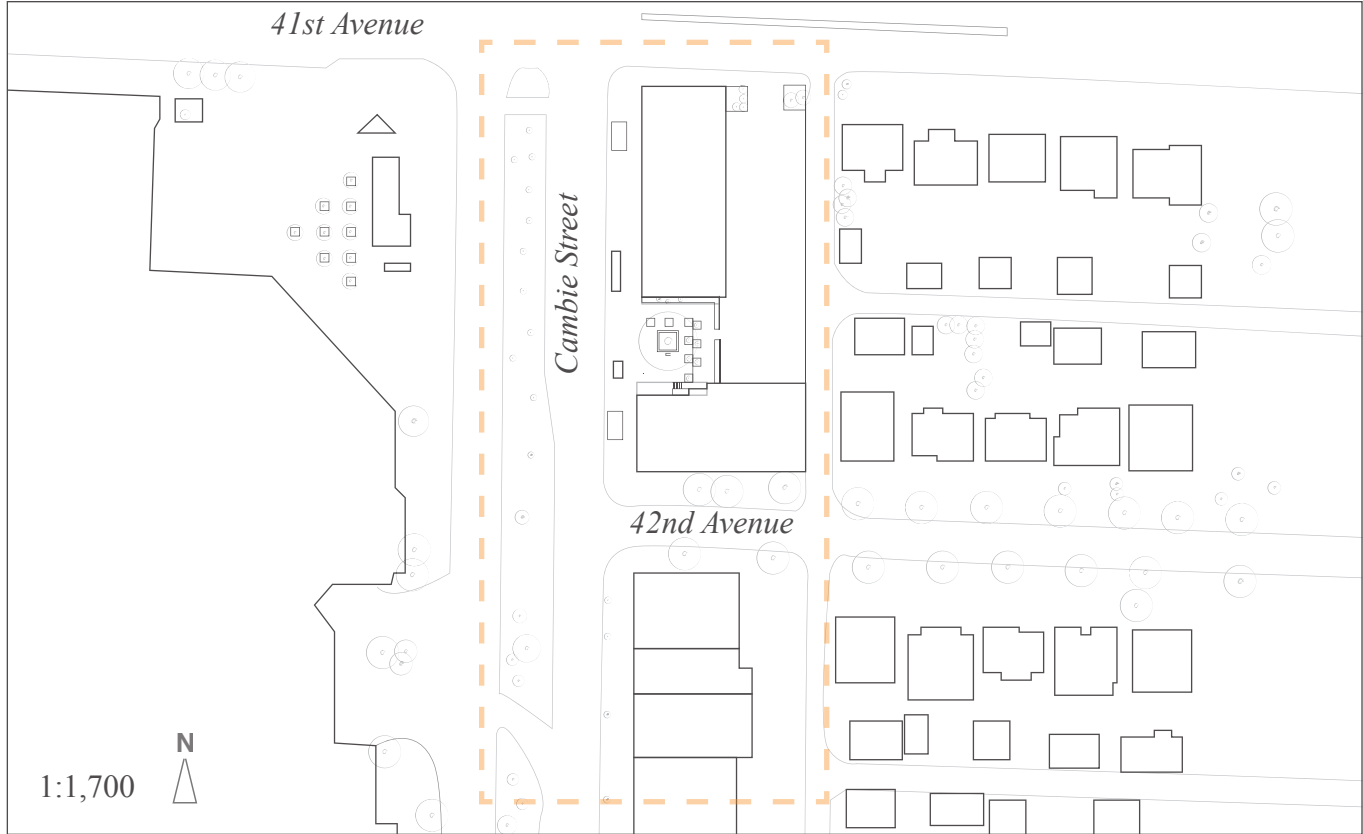
7.1 Case Study 1 - “Oakridge Plaza East”: NE/SE Corner of Cambie/42nd Avenue

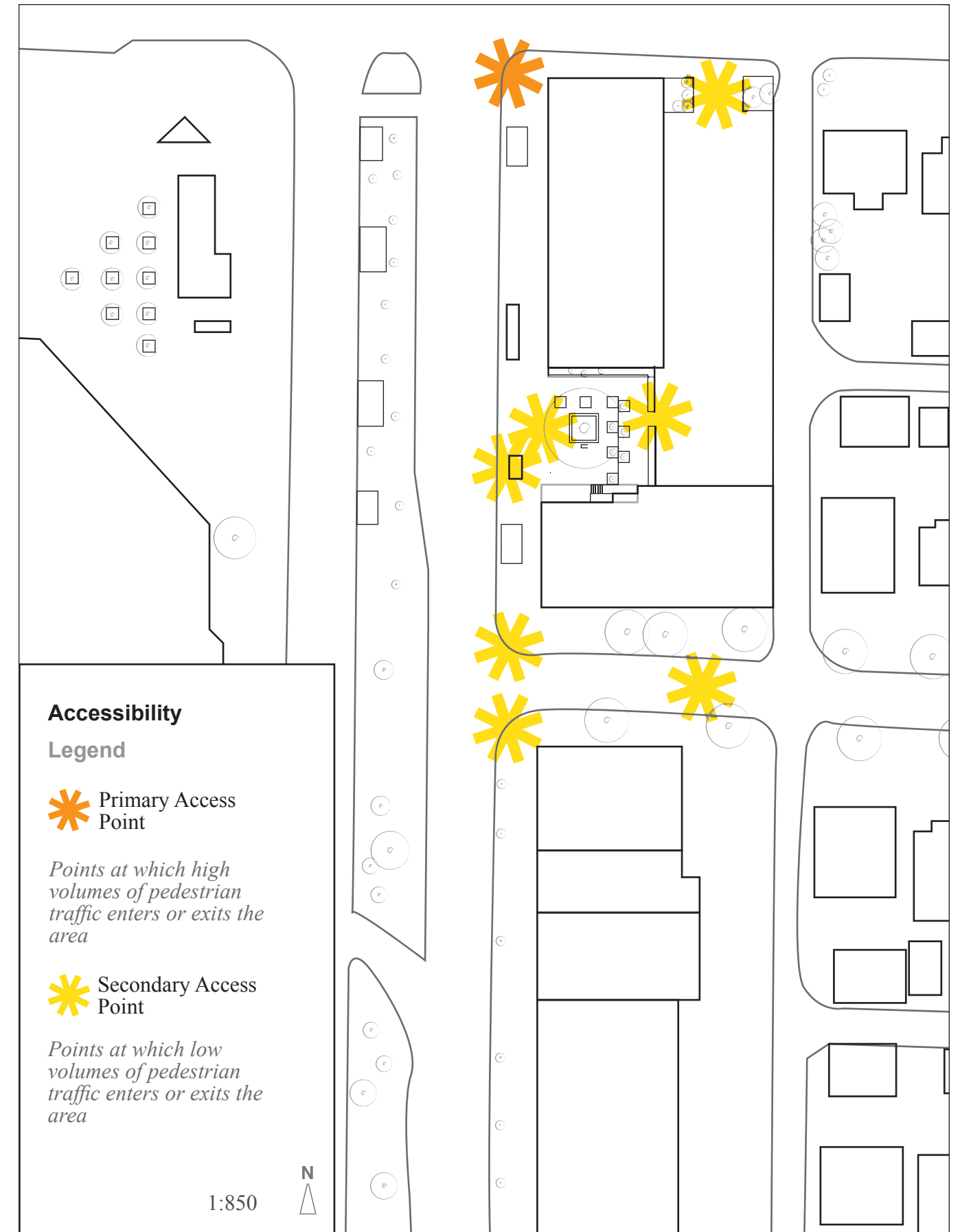
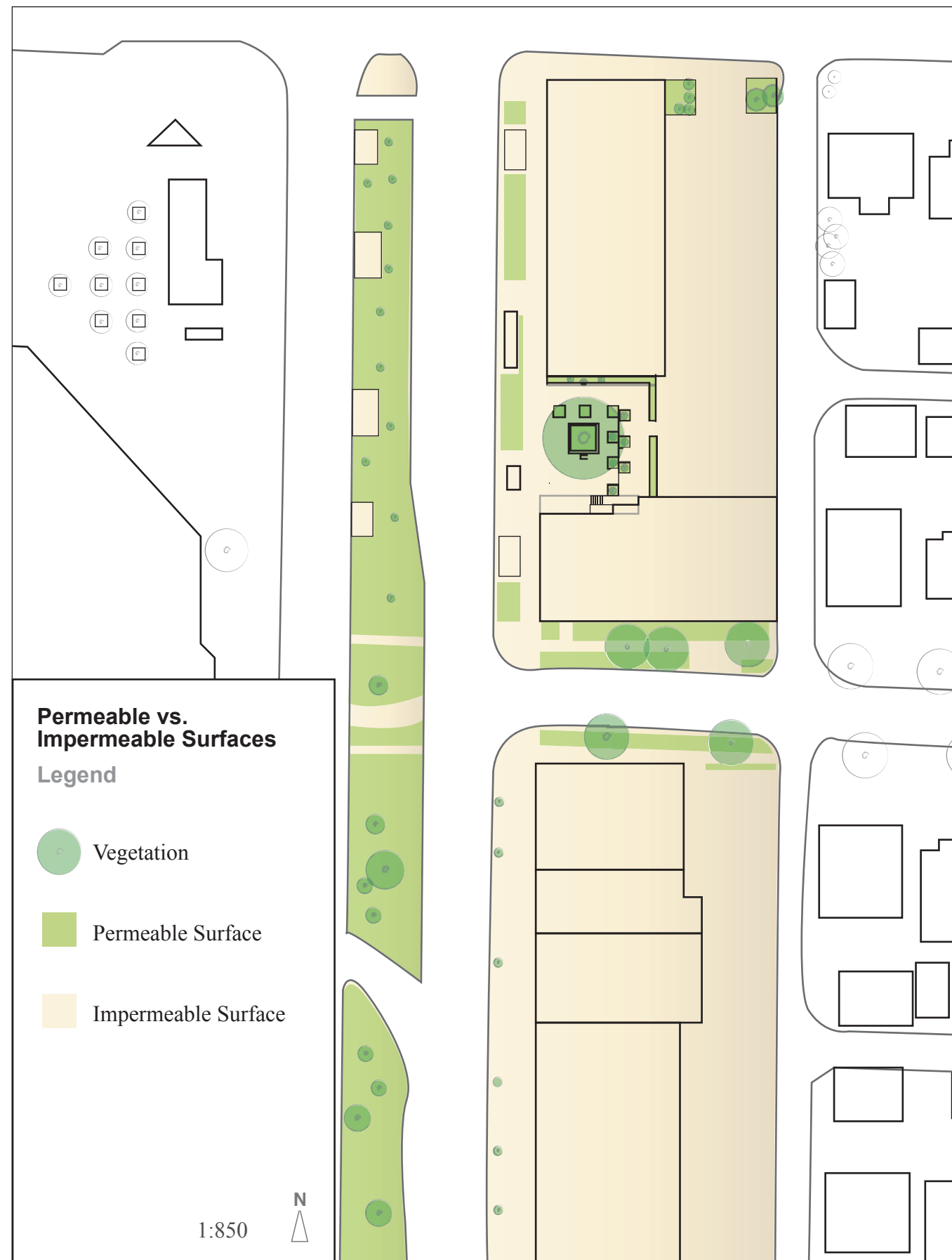


VISION

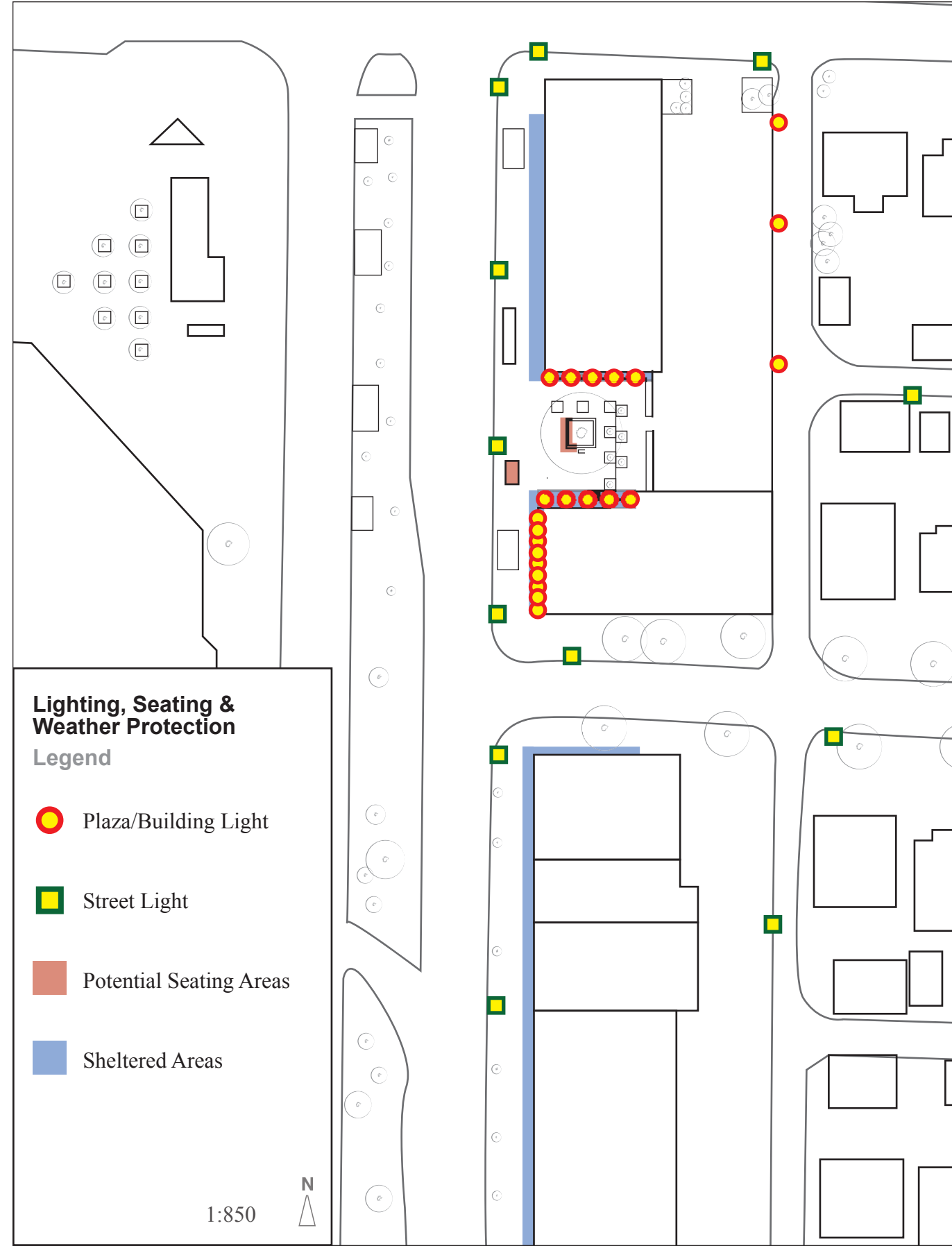
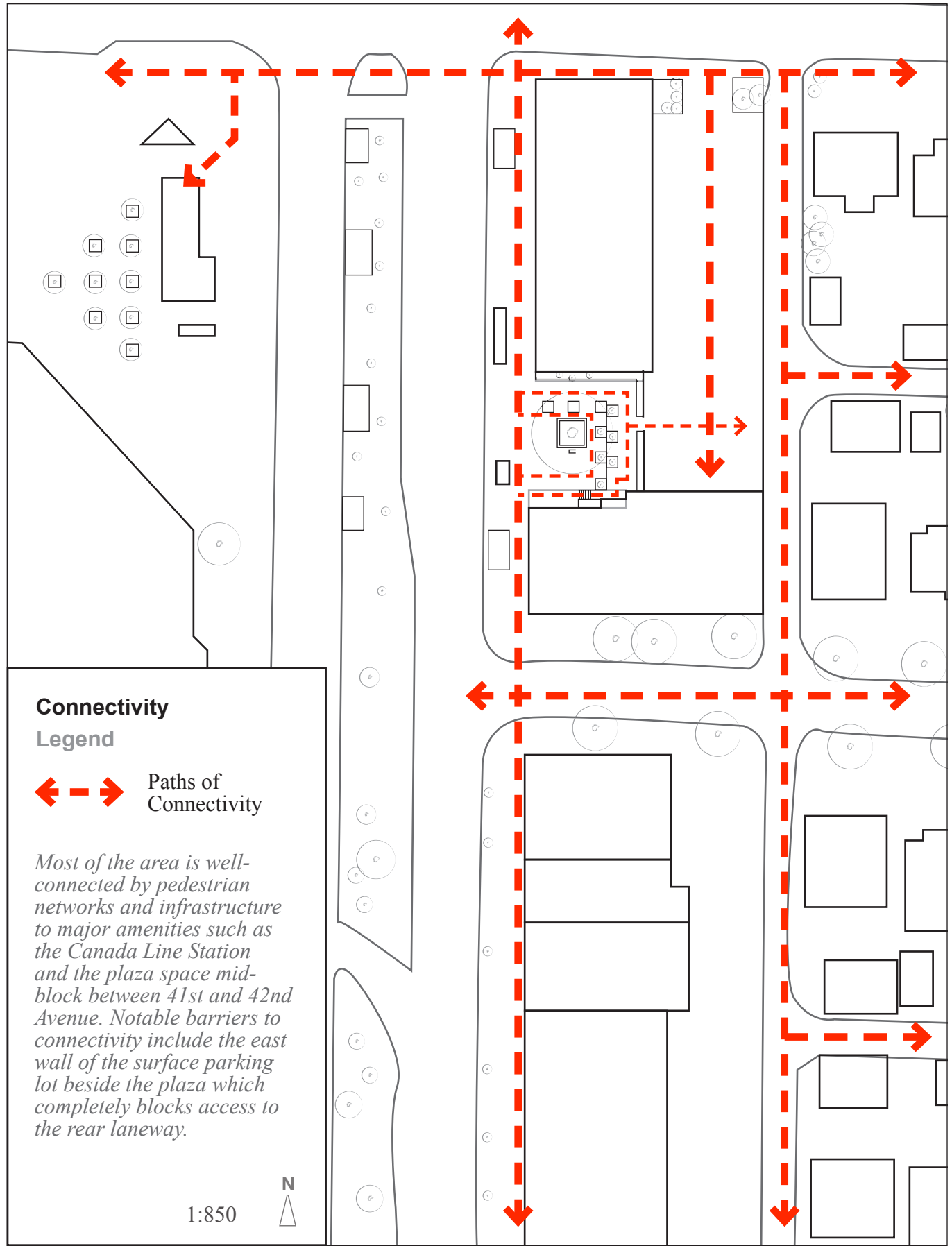
To develop a mid-sized plaza which emphasizes a strong connection between the eastern and western edges of Cambie Street, while reinforcing the importance of the Cambie St. & 41st Ave. intersection. The plaza will serve as a highly unique and flexible space which may be transformed to adapt to a variety of uses ranging from casual recreation and retail to large-scale community gathering and performance.

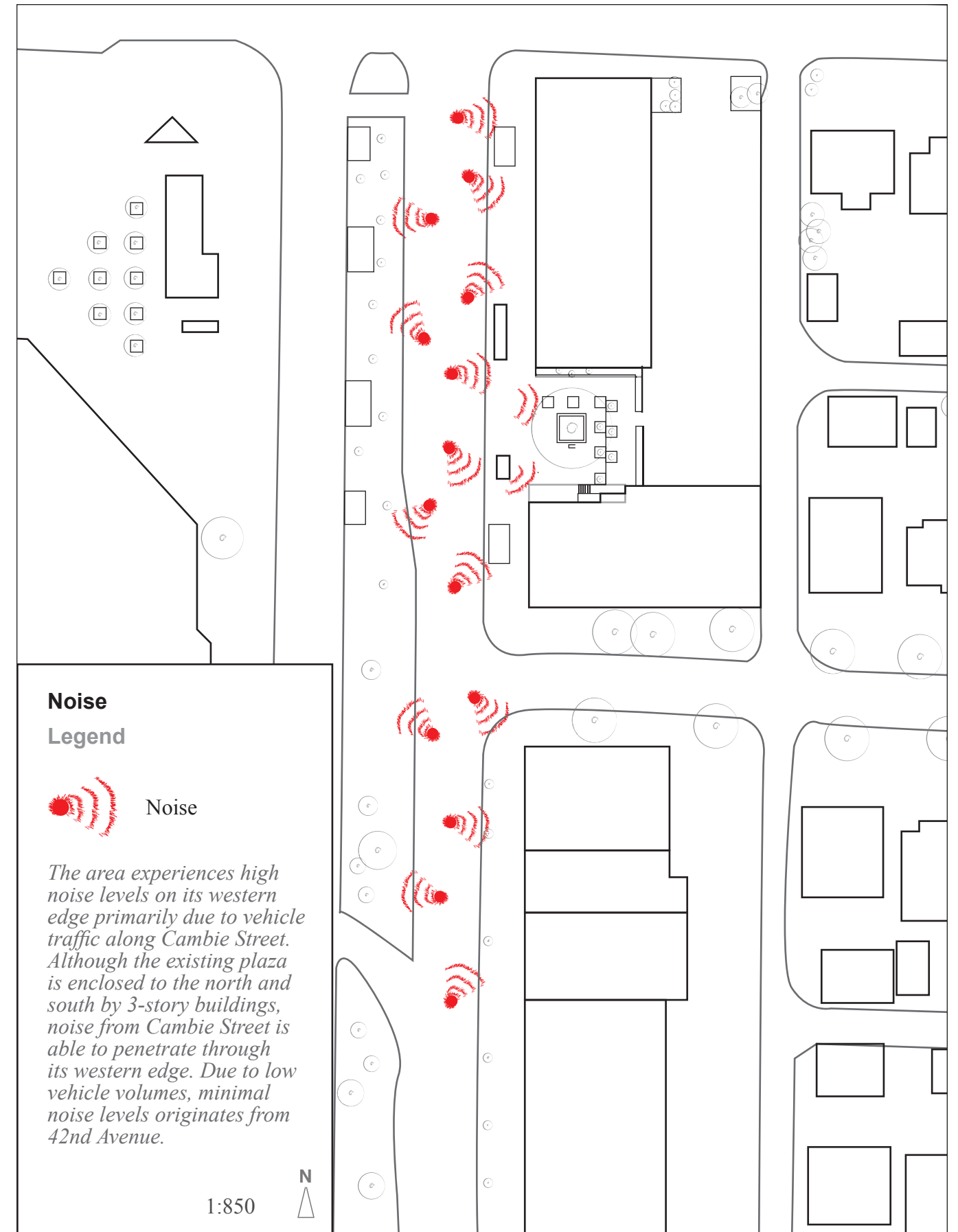
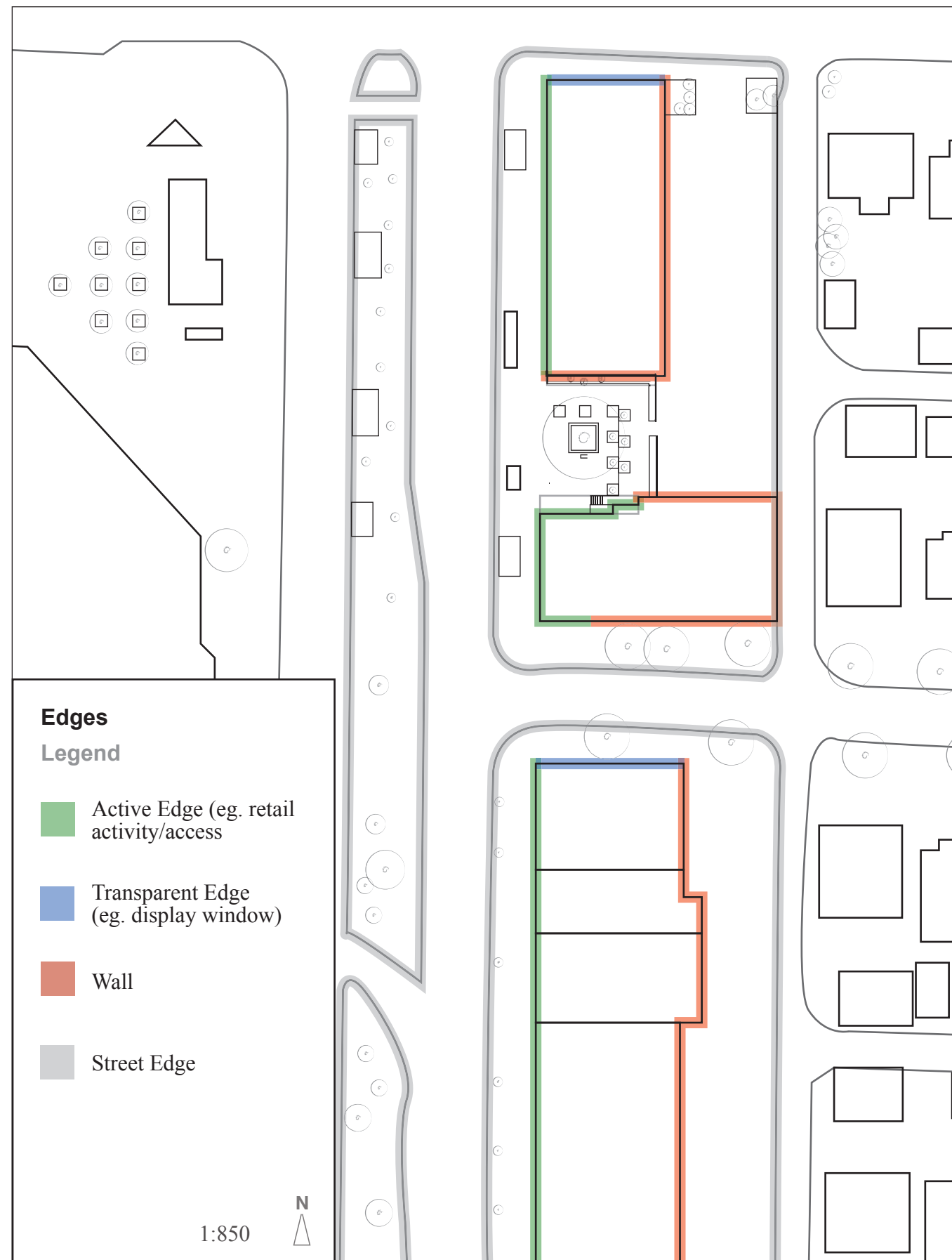
Site Inventory & Analysis:

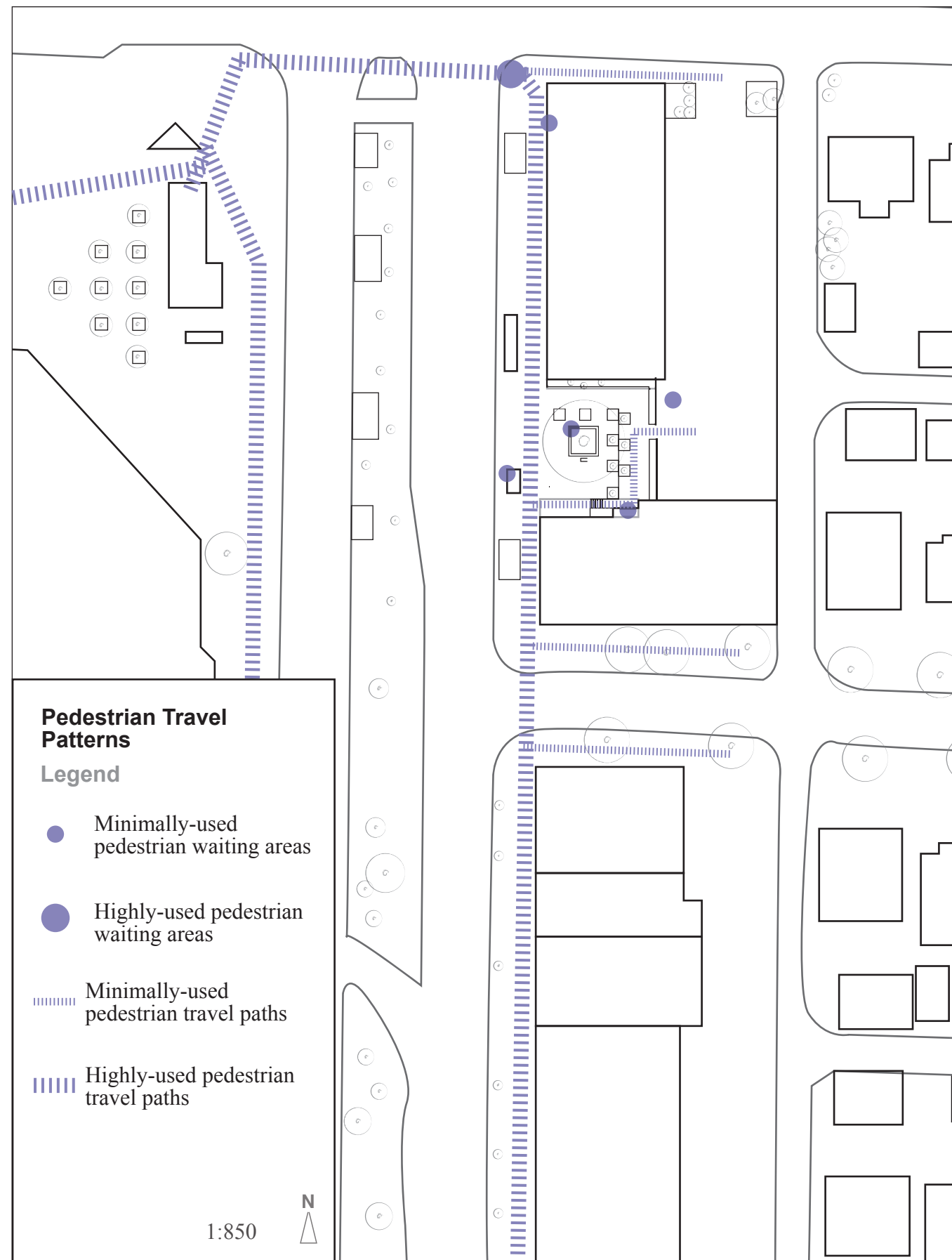














## Summary of Key Points Drawn from Site Inventory & Analysis:

The site currently consists of limited useable pedestrian spaces partly due to its design and its current low-density built form and land uses. This is exacerbated by the dominance of an inactive edge on the rear of the buildings along the east side of Cambie Street.

The public spaces that do exist offer very little impetus for pedestrians to stay and engage in activity. For example, there are no activity spaces which offer opportunities for informal community gathering or programmed events. There is also a lack of seating and weather protection, weak lighting features, and a lack of a strong, highly visible focal point.

The site lacks a sense of connectivity (visual, physical and otherwise) with the existing plaza space on the western side of Cambie Street, which is exacerbated by the wide street divider which separates north/south traffic along Cambie Street.



Source: VanMaps  
Scale = 1:3,000

The site currently offers little protection from noise that is generated from vehicular traffic along Cambie Street, which diminishes the pedestrian-oriented experience.

Due to its current orientation and surrounding land uses and building materials, current public spaces on the site lack a sense of place, identity and wayfinding patterns which would serve to enrich the pedestrian experience.



## Precedent Study - Westlake Park, Seattle, Washington, USA

### Form & Location:

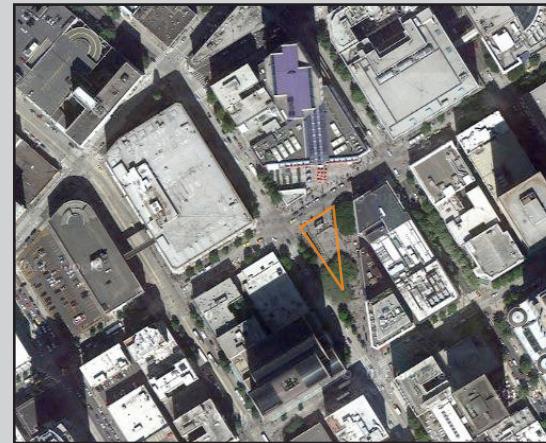
Triangular-shaped plaza located at the intersection of Pine Street and 4th Avenue (extending down 4th Avenue to Pike Street) in Seattle, WA.

### Size:

0.1 acres / 0.04 hectares / 400 square meters

### Date Opened:

1988



Source: Google Maps



Source: Joe Mabel. Retrieved from [http://commons.wikimedia.org/wiki/File:Selling\\_roasted\\_chestnuts\\_and\\_corn\\_at\\_Seattle%27s\\_Westlake\\_Park.jpg](http://commons.wikimedia.org/wiki/File:Selling_roasted_chestnuts_and_corn_at_Seattle%27s_Westlake_Park.jpg)



Source: Joe Mabel. Retrieved from [http://commons.wikimedia.org/wiki/File:Seattle\\_Westlake\\_01.jpg](http://commons.wikimedia.org/wiki/File:Seattle_Westlake_01.jpg)



Source: Joe Mabel. Retrieved from [http://commons.wikimedia.org/wiki/File:18\\_Mar\\_2007\\_Seattle\\_Demo\\_13.jpg](http://commons.wikimedia.org/wiki/File:18_Mar_2007_Seattle_Demo_13.jpg)

Westlake Park (see Figure 17) is a suitable precedent study for an exploration of a proposed plaza space on the NE/SE corner of 42nd Ave. and Cambie Street because it is a plaza space located within a major transit hub in downtown Seattle, consisting of several light rail transit and bus connections. It functions mainly as a space that provides opportunity for activity, rest, and recreation amidst a busy transit node in a high-density environment.

Westlake Park also mirrors the form, orientation and function as the proposed plaza on the NE/SE corner of 42nd Ave. and Cambie Street in that it is linked to an adjacent plaza across Pine Street which connects directly to Westlake Centre and several major transit stations (much like the proposed plaza will be linked to the adjacent existing plaza across Cambie Street which provides direct connections to Oakridge Centre and the Oakridge-41st Ave. Canada Line Station). The park is linked to its adjacent plaza through a consistent paving treatment which extends across Pine Street (as a place-making and traffic-calming measure) as well as consistent architectural features and elements.

As a well-programmed public plaza which consists of a retail edge, a strong focal point and a well-established street-plaza edge relationship, Westlake Park offers numerous valuable lessons and ideas for the development, attractiveness and utility of the proposed plaza in the current case study.



Source: Google Maps  
Scale = 1:3000



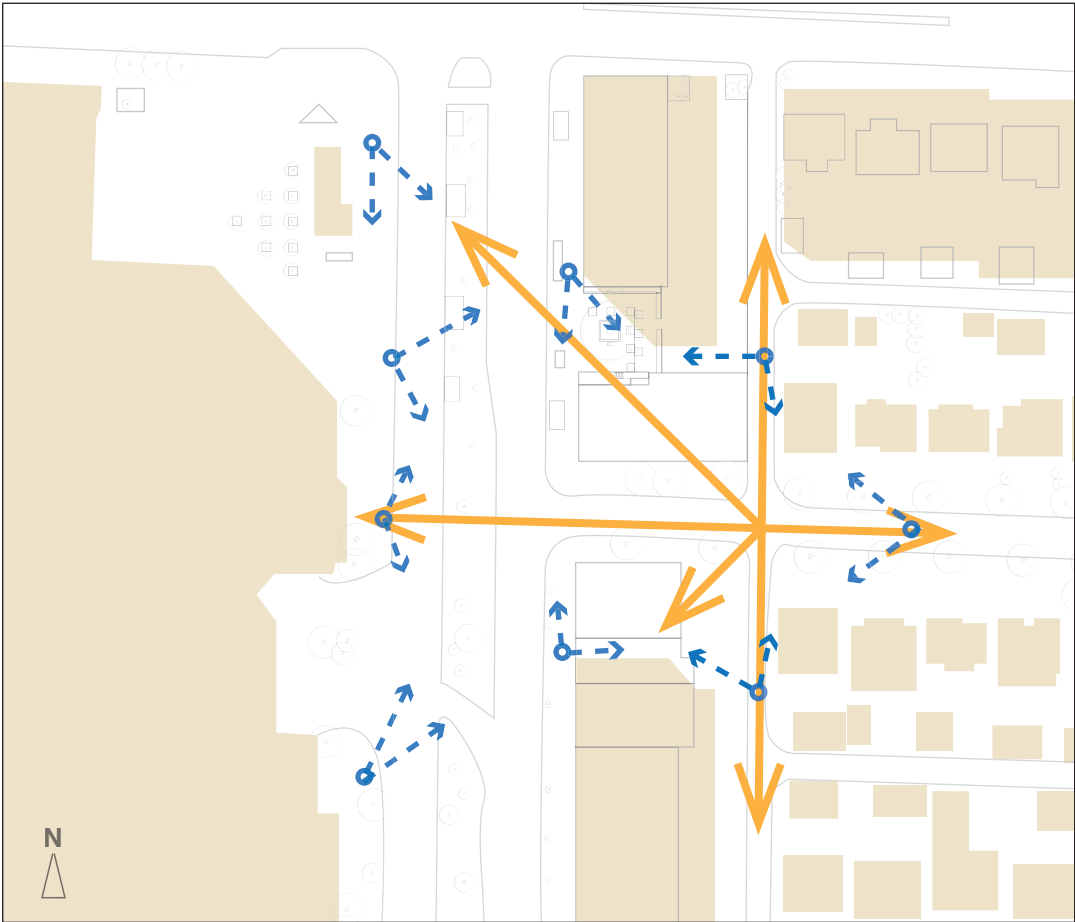
Figure 17: Westlake Park, Seattle, WA

# GOAL 1

Form, Connectivity & Identity

Determine the form of the plaza based on axial relationships with the western edge of Cambie Street.

Ensure clear and deliberate view lines of the plaza from various points of origin.

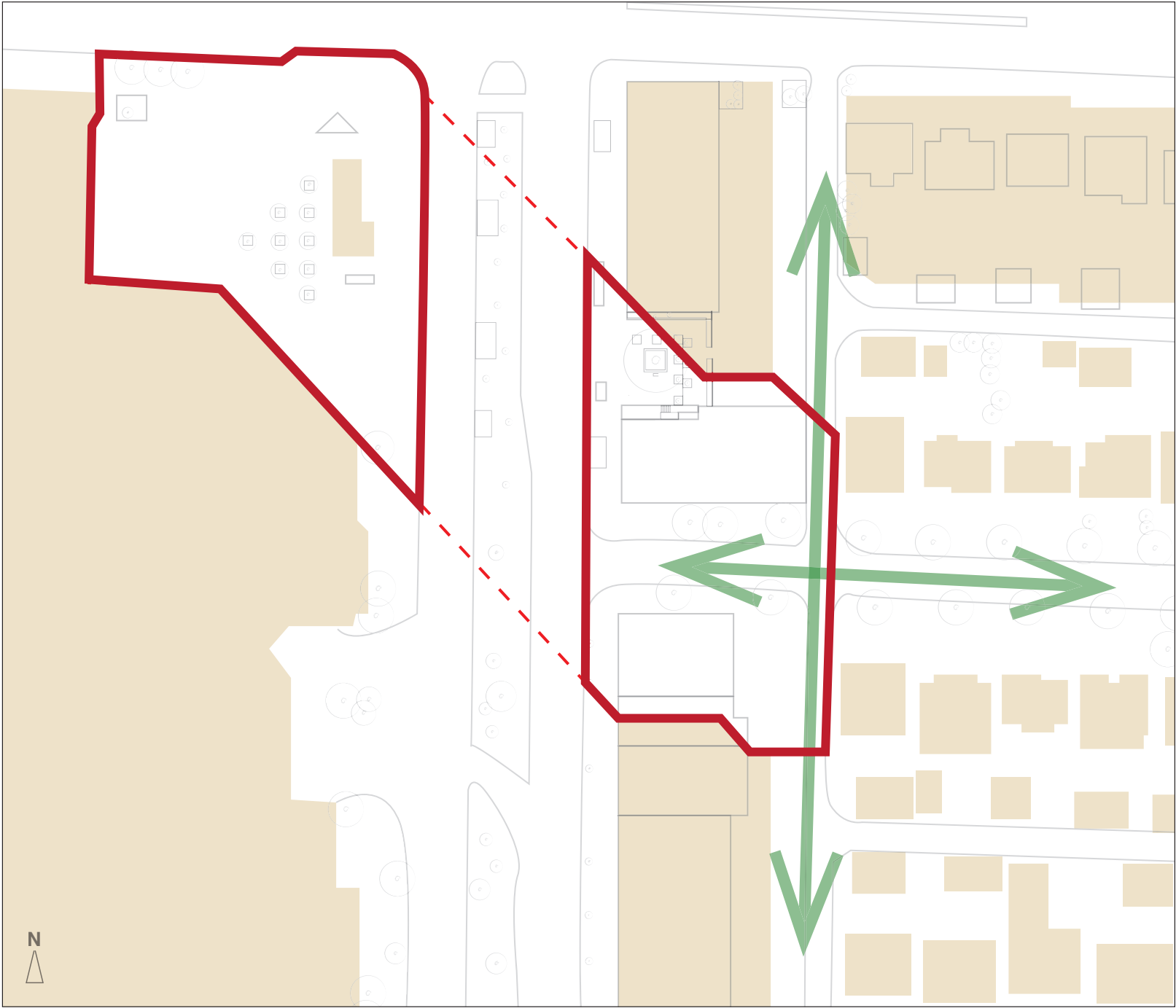


Legend

Axial Relationships

Views

Building Edges



Legend

Plaza Boundaries

Visual Connectivity

Building Outline

Other Amenities

Use the building edges of new buildings/developments to shape the form of the plaza.

Establish a sense of diagonal visual connectivity between the plaza spaces on the west & east of Cambie Street.

Connect the plaza to other public realm amenities including the proposed mixed-use laneway and the improved streetscape along 42nd Ave.

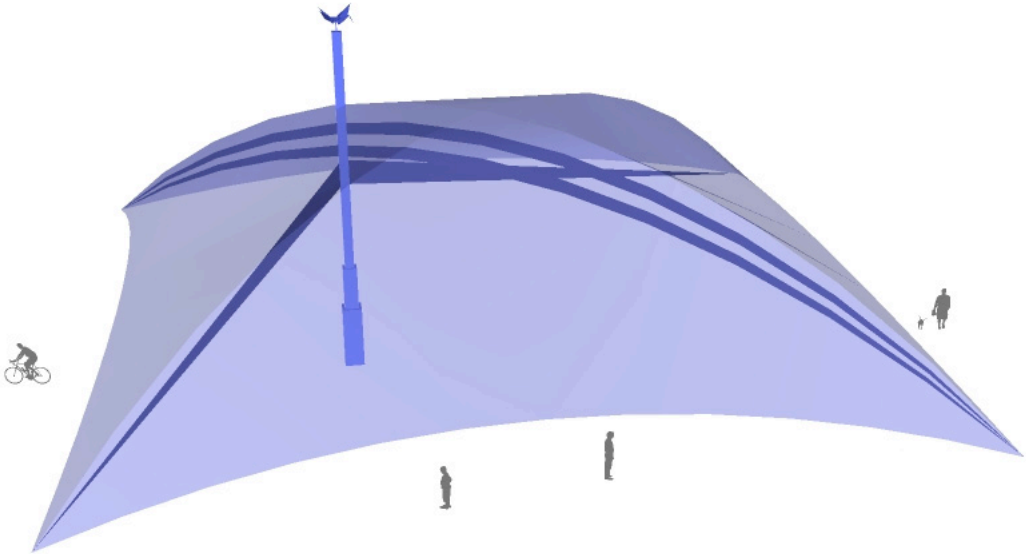


Utilize a vegetation pattern which reinforces the connection between the two plaza spaces.

Utilize a consistent paving pattern spanning across the two plazas and the street divider to reinforce the visual connection between the east and west of Cambie Street.

Create a series of visually-connected secondary focal points to emphasize the continuity between the east and west plaza spaces.

Establish a central, visually-dominating primary focal point at the edge of the eastern plaza which also serves as a community event and gathering location, an aesthetic structural expression and an area of lighting, seating and wind/weather protection. Depending on weather and season, certain temporary features may be installed and/or removed to allow for maximum solar exposure or rain shelter.



Proposed primary focal point for Oakridge Plaza East.  
*Original canopy downloaded from Google SketchUp 3-D Warehouse (Source: Daniel Tal)*



Legend

Vegetation

Paving Treatment

Building Outline

Secondary Focal Point


Primary Focal Point


**Establish a set of clear circulation paths centred around the dominant focal point.**


**Reinforce the identity of the plaza through a strong retail edge concentrated on the north and south sides.**


**Identify central activity areas where informal and formal events and activities may be concentrated.**


Legend

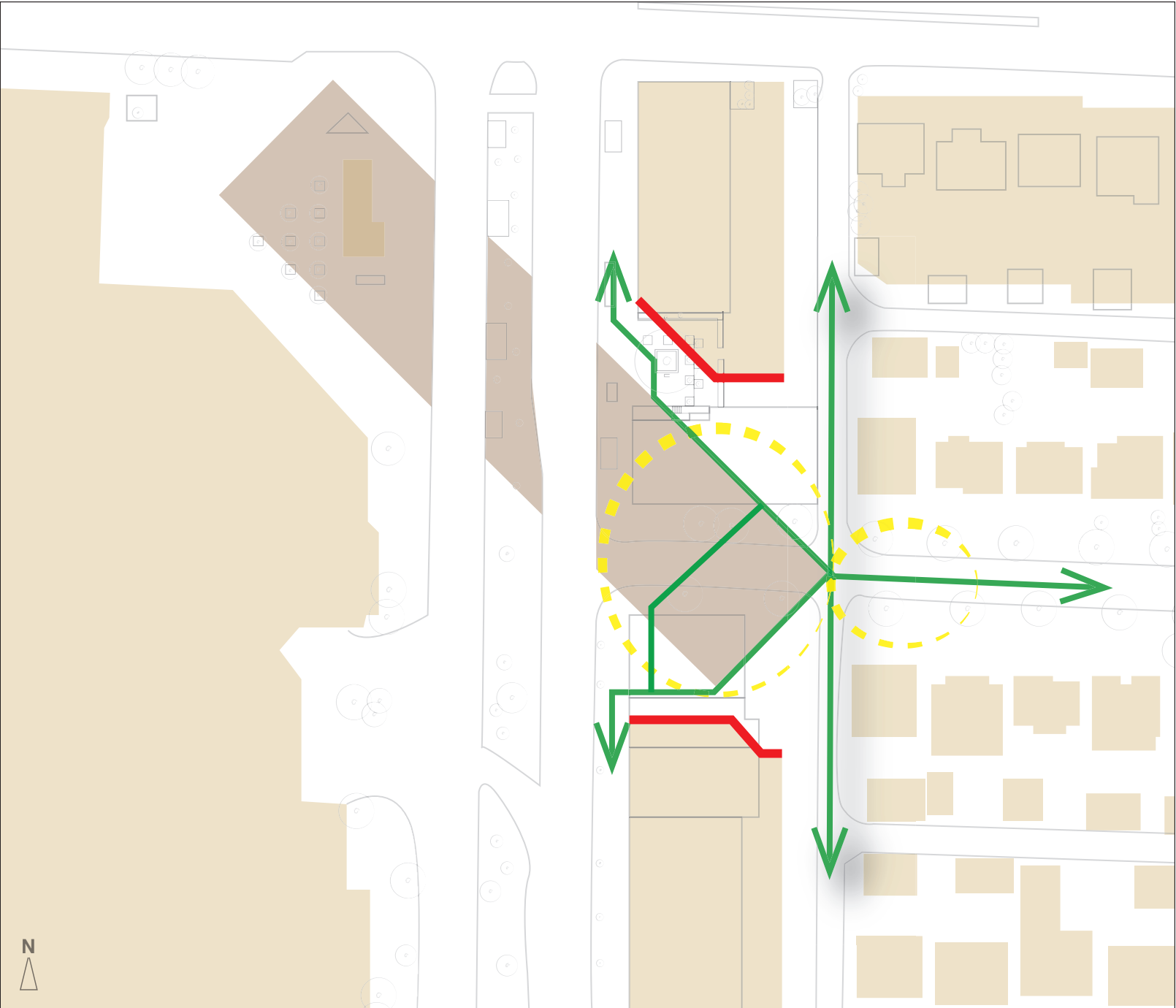
 Connectivity

 Active Retail Edges

 Central Activity Areas

 Paving Treatment

 Building Outline

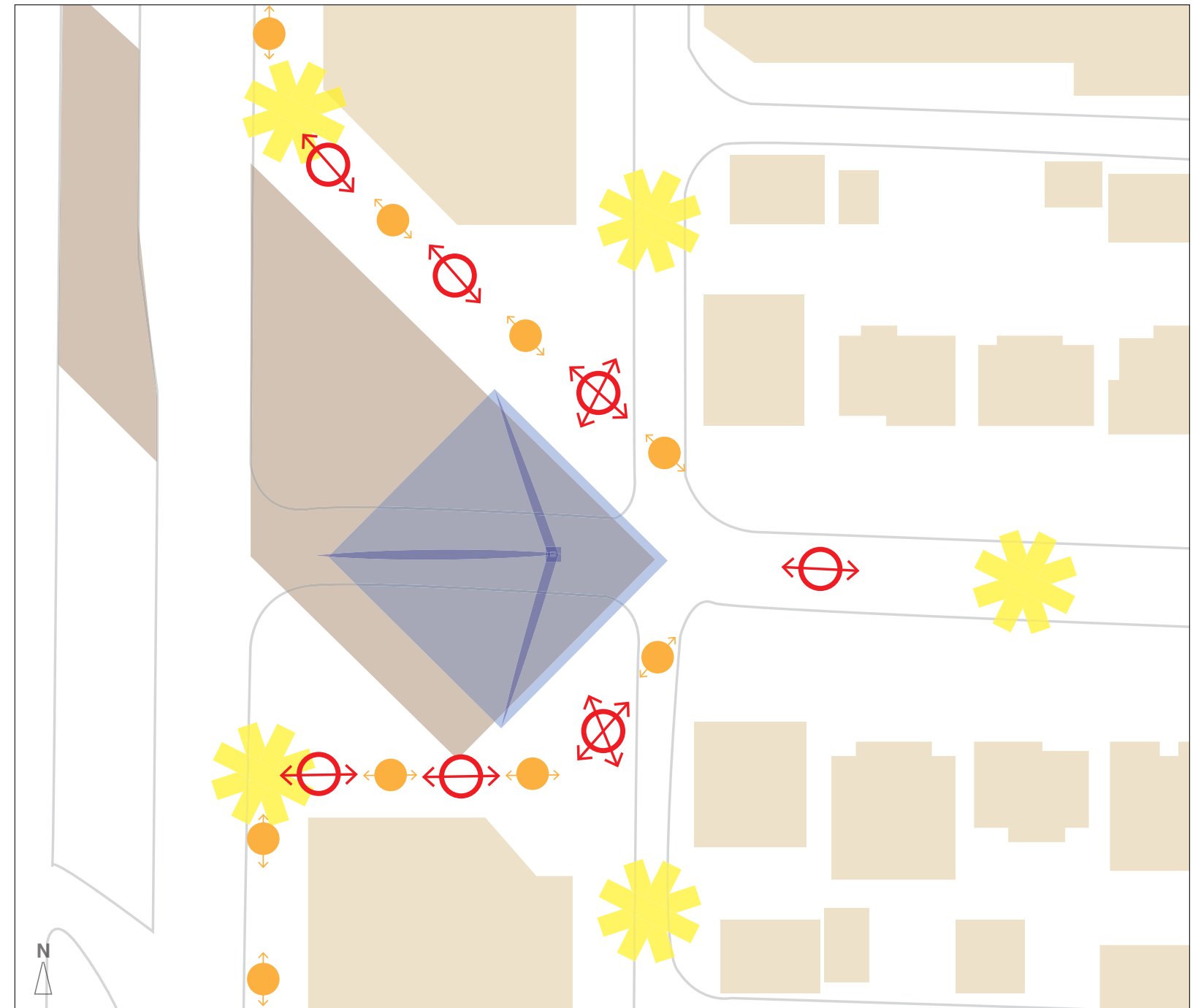
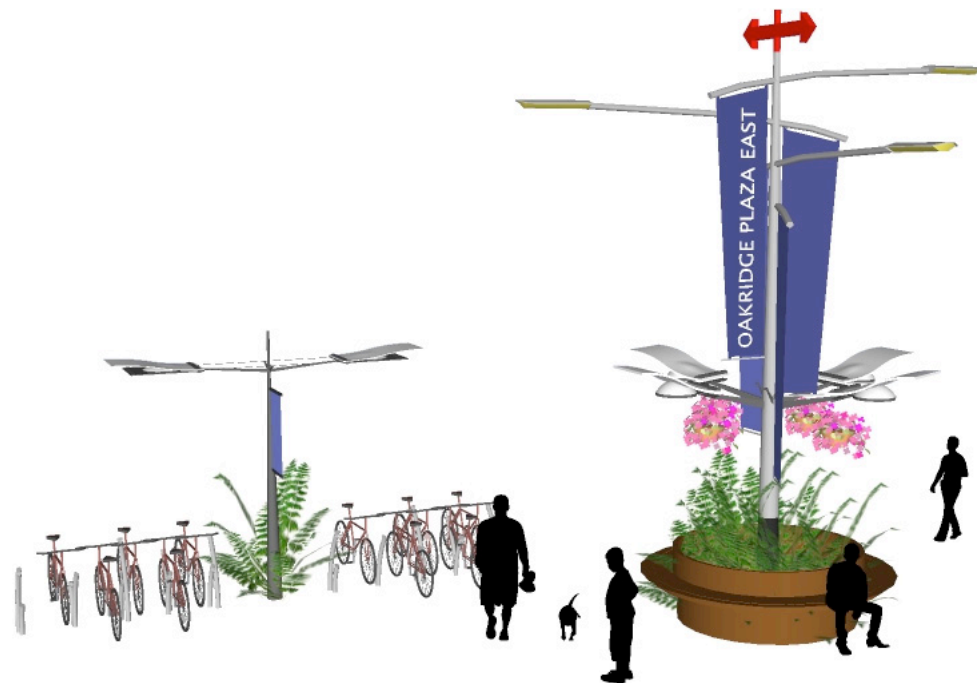


## GOAL 2

### Access, Wayfinding & Enclosure

Ensure that access to the plaza from various points from the street edge and the rear laneway network is established.

Establish a series of primary and secondary wayfinding components which serve as a place-making feature and to draw users into the plaza space. These components may be designed to be repeated throughout the plaza network in the Oakridge Town Centre. Aside from wayfinding, they may also serve other purposes such as lighting, seating, artificial heating, aesthetics and bicycle parking.



#### Legend



Primary Wayfinding Component



Secondary Wayfinding Component



Access Points



Primary Focal Point



Paving Treatment



Building Outline



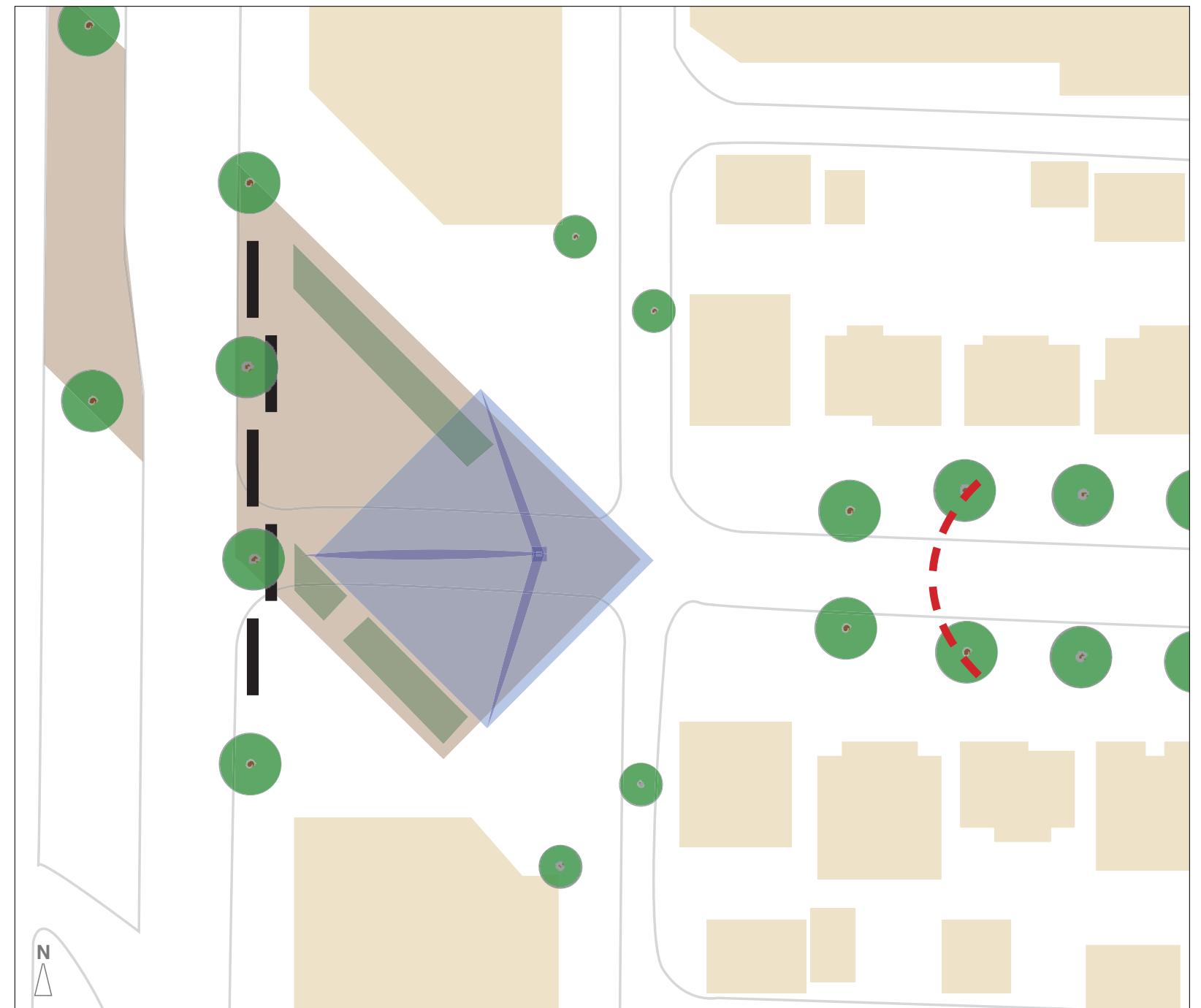
Create a sense of enclosure and wind protection around the north, south and east edges of the plaza through the use of vegetation and building edges.

Implement a set of bollards and a cul-de-sac between the boundary of the plaza and 42nd Avenue in order to emphasize a sense of enclosure from the street and to accommodate local vehicular traffic.

Install a unique enclosing feature such as a series of public art half-walls on the western side of the plaza which faces Cambie Street, which allow for community artistic expression while enhancing the pedestrian experience and maintaining visibility of the western edge of Cambie Street.



**“Forsyth Fish” public art wall in Jacksonville, Florida.** *Source: JAX Public Art - Jacksonville Public Art Coalition. Retrieved from <http://inhabitat.com/colorful-wall-art-creatures-made-from-old-vinyl-records/>*



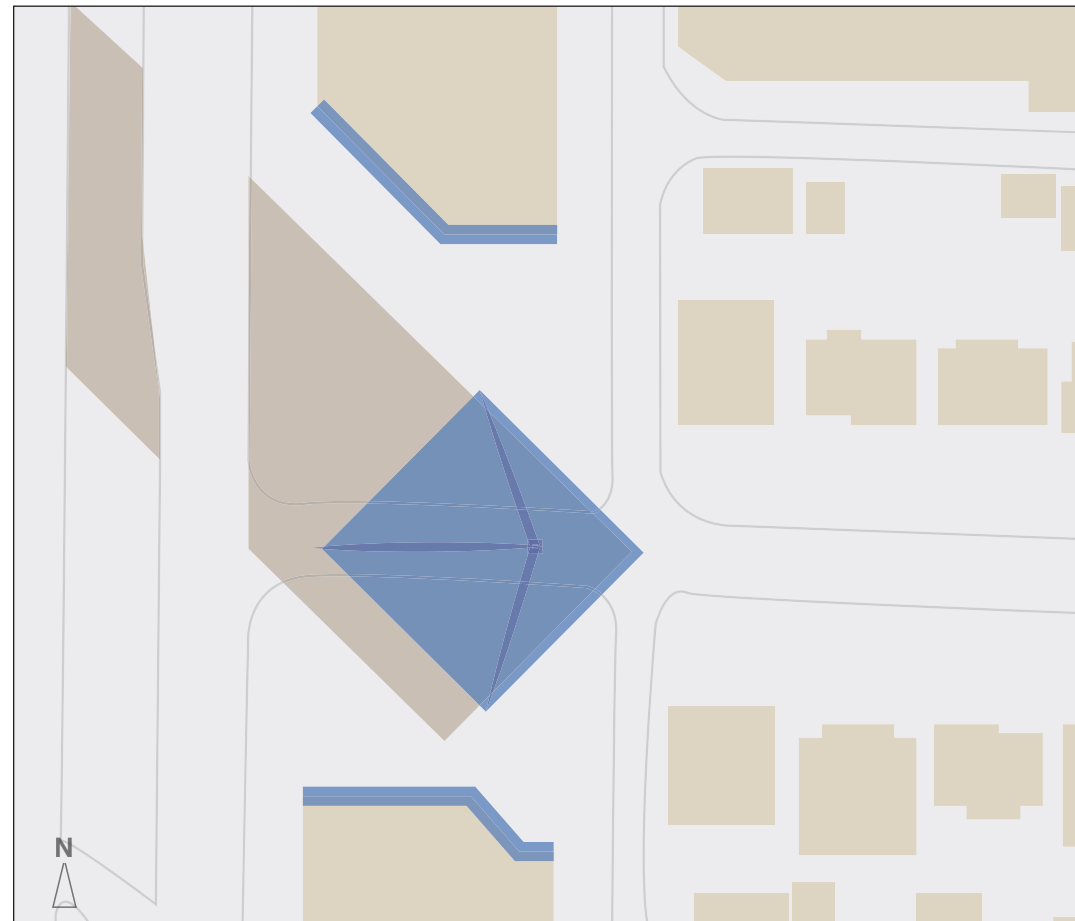
#### Legend

-  Vegetation
-  Paving Treatment
-  Building Outline
-  Primary Focal Point
-  Cul-de-Sac
-  Public Art Half-Wall

## GOAL 3

### Lighting & Weather Protection

Expand areas of weather protection throughout the plaza. Several components, such as the dominant focal point, may feature a temporary/removable weather protection piece to adapt to seasonal changes and to prepare for large community gathering events.



#### Legend

 Weather-Protected Areas

Implement a lighting scheme that serves not only as a safety feature, but also as a wayfinding, aesthetic and place-making feature. The lighting scheme should be geared towards plaza users and avoid the effects of glare which would disrupt nearby residents.



#### Legend

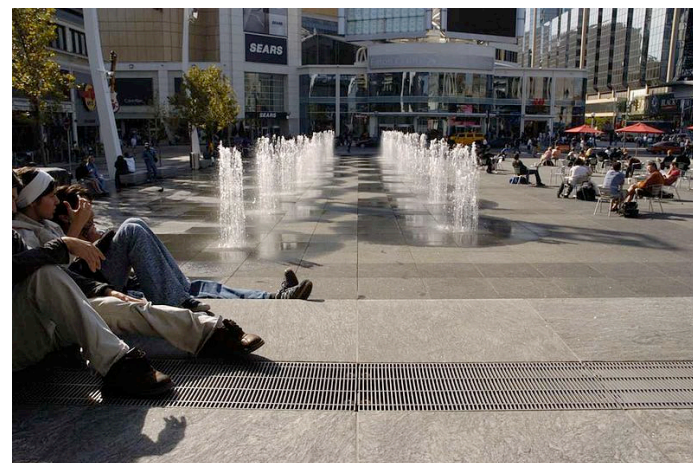
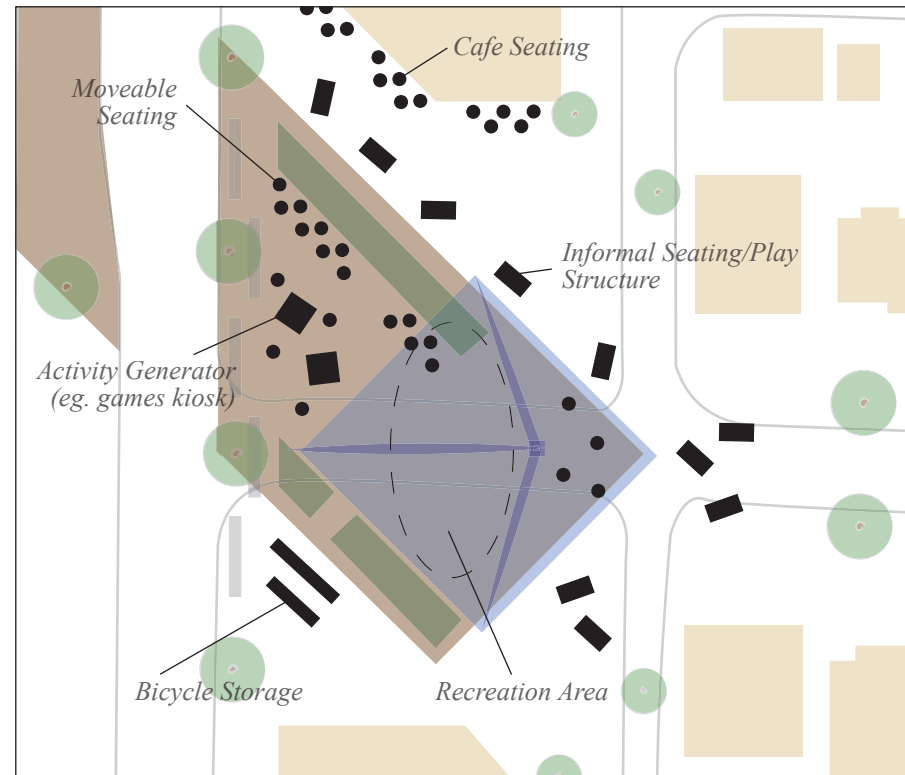
 Lighting



# GOAL 4

## Programming & Activity

### Scenario 1: Informal Activity Space



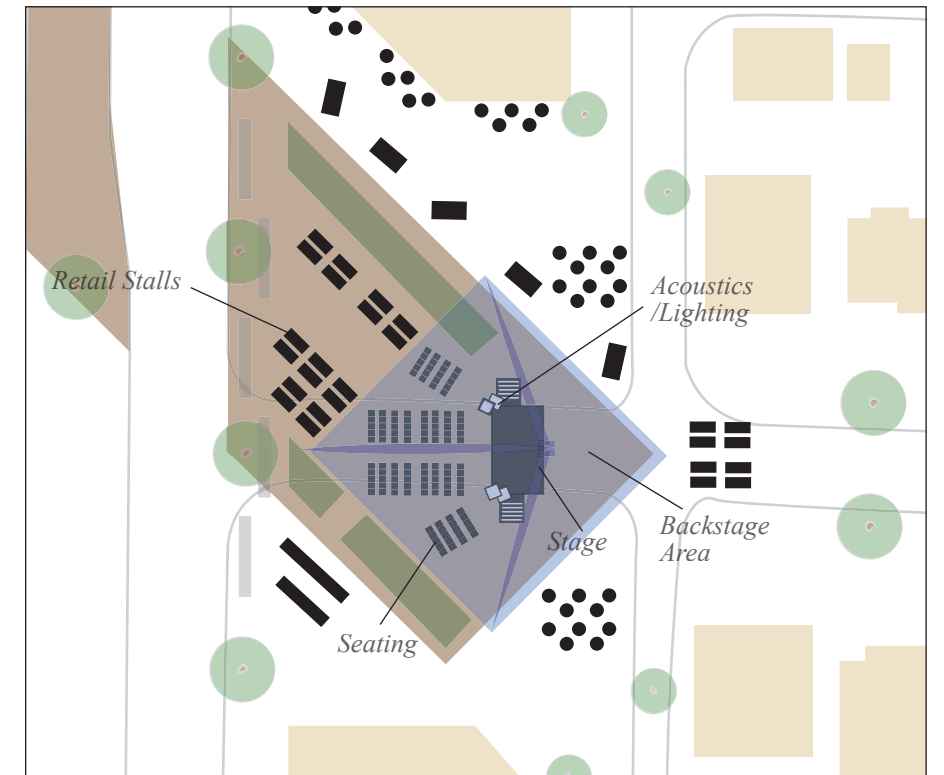
**Dundas Square, Toronto, ON.** Source: Steve Mann. Retrieved from [http://en.wikipedia.org/wiki/File:Urbeach2004oct07\\_135u.jpg](http://en.wikipedia.org/wiki/File:Urbeach2004oct07_135u.jpg)

### Scenario 2: Outdoor Market



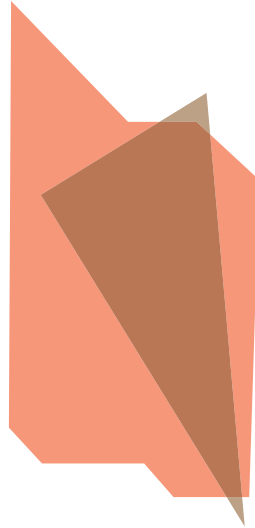
**Farmers' Market in Jackson, Mississippi.** Source: NatalieMaynor. Retrieved from <http://www.flickr.com/photos/nataliemaynor/2539111053/>

### Scenario 3: Performance Venue

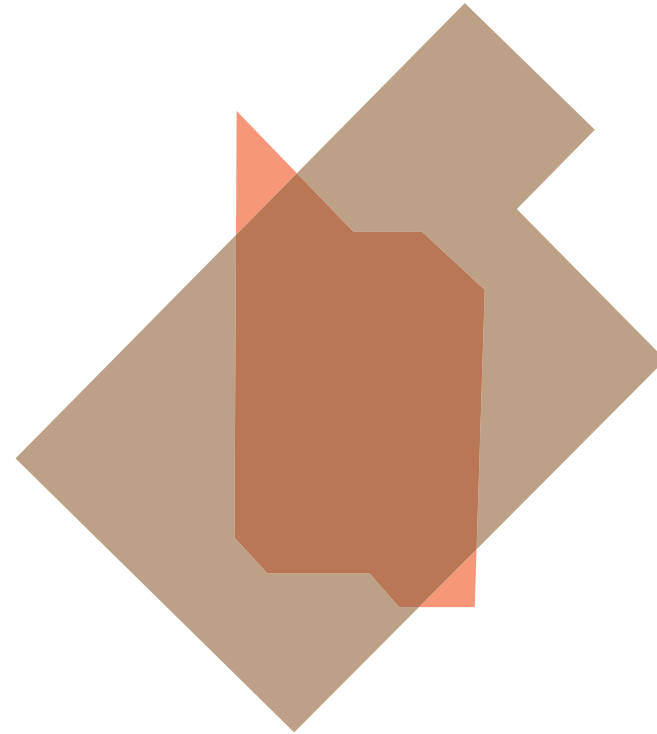
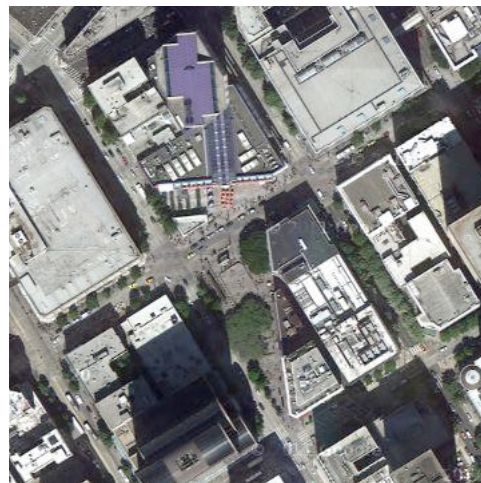


**Outdoor performance stage.** Source: Cedrick Ledesma. Retrieved from <http://www.flickr.com/photos/ced/5886784577/>

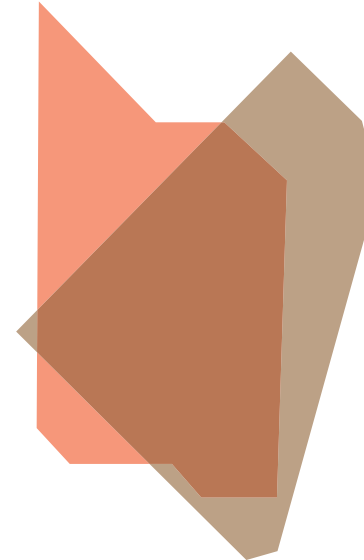
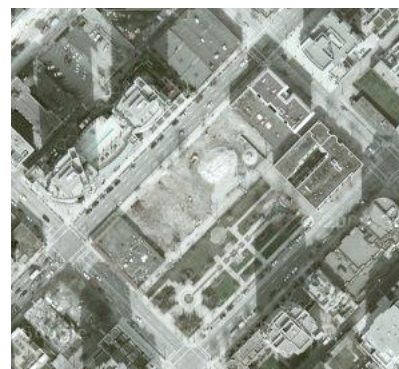




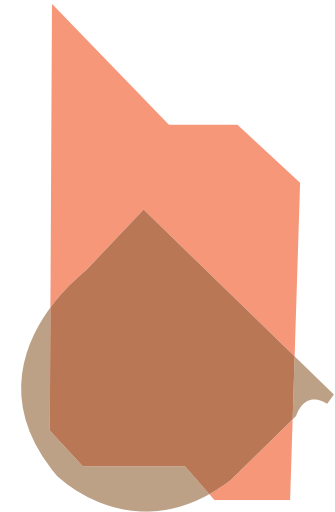
**Westlake Park**  
*(including surrounding  
sidewalk & plaza space)*  
**Seattle, WA**



**Emery Barnes Park,**  
**Vancouver, BC**



**Victory Square,**  
**Vancouver, BC**



**Roundhouse Turntable Plaza,**  
**Vancouver, BC**



Scale 1:1500

*Source: Google Maps*

# SITE PLAN: OAKRIDGE PLAZA EAST



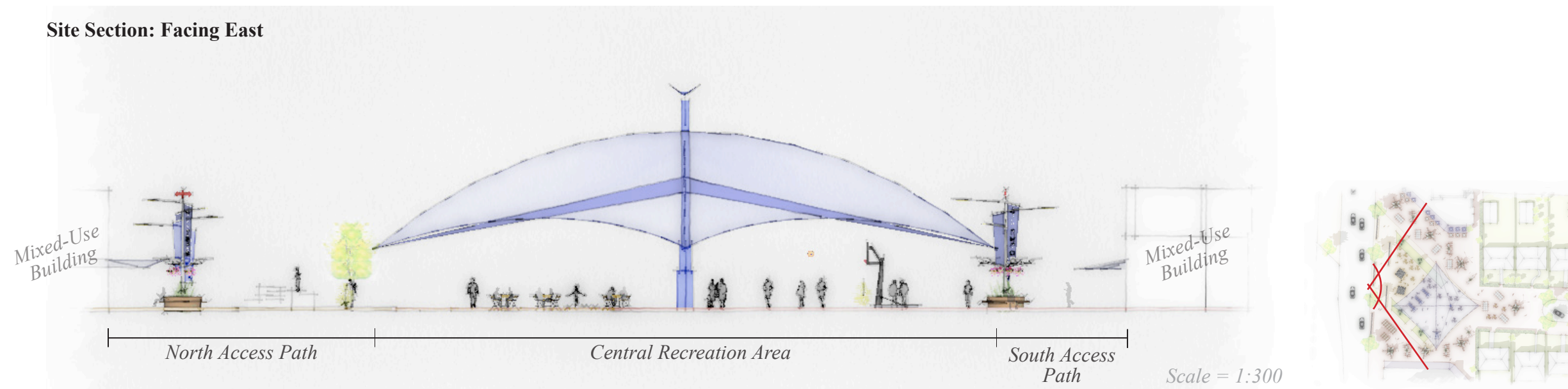
*Various components downloaded from Google SketchUp 3-D Warehouse & Elements DB*

**Scale = 1:450**

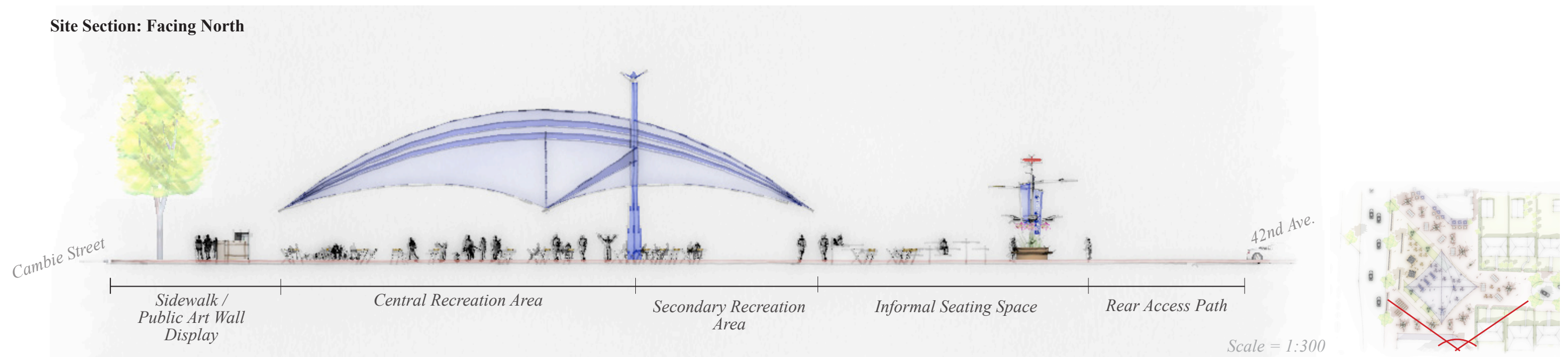




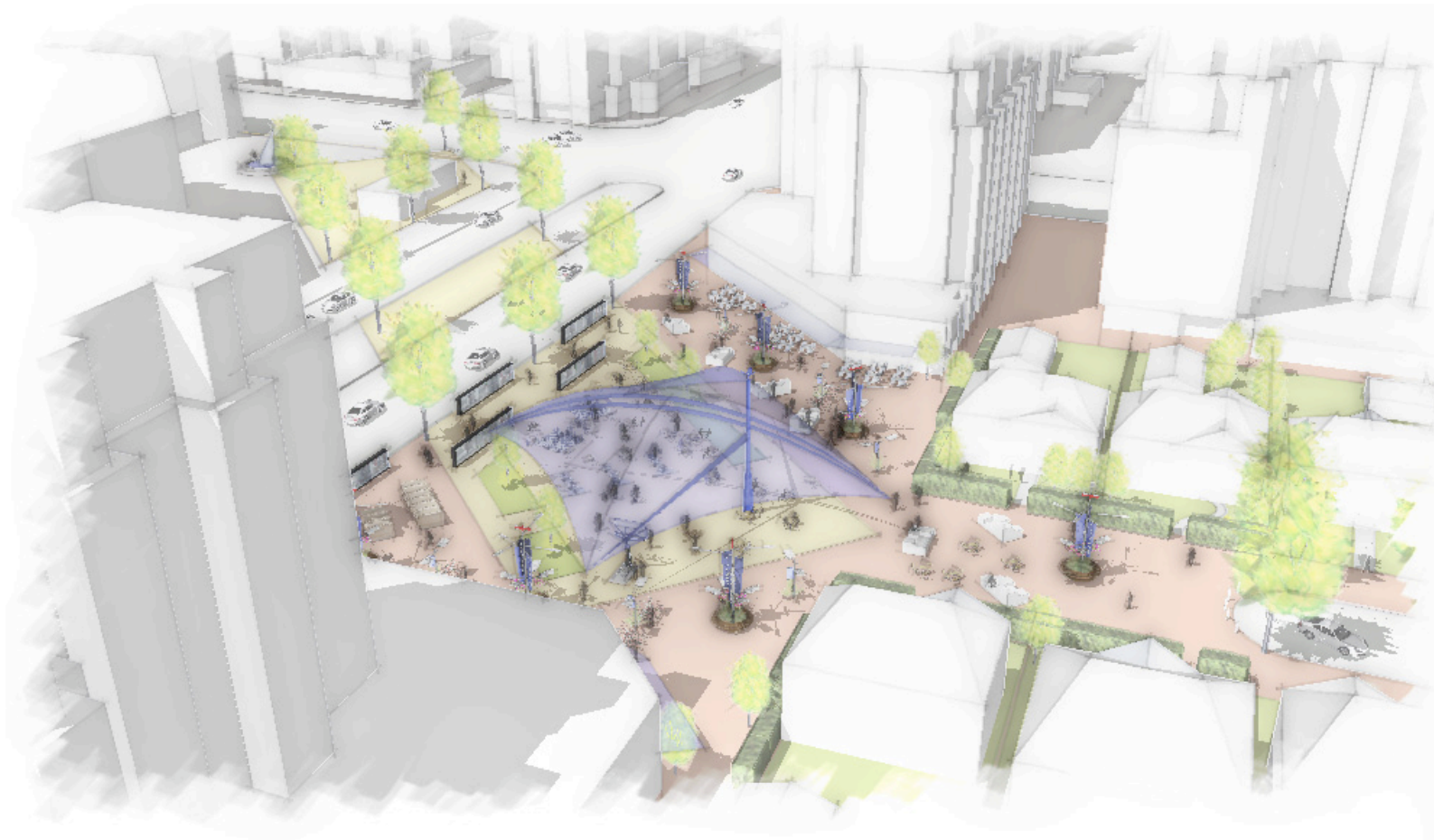
Site Section: Facing East



Site Section: Facing North

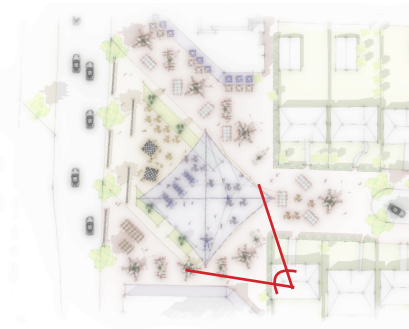




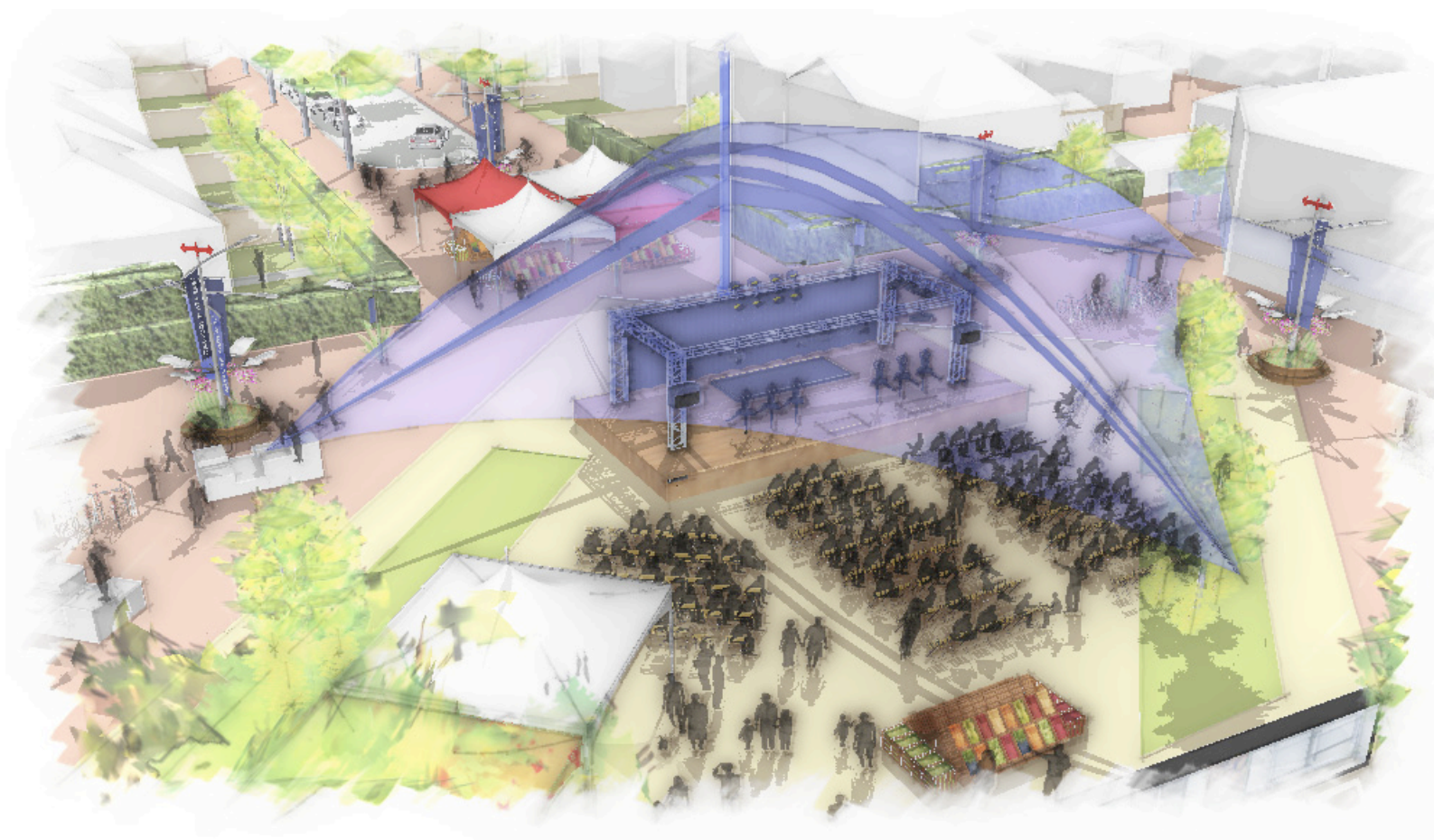


### Key Features

- Visual connectivity with western edge of Cambie Street and Oakridge-41st Avenue Station through the use of a vegetation scheme and consistent paving pattern
- Layout of primary wayfinding components
- Public art wall defining the sidewalk space along Cambie Street edge
- Integration between high-density/mixed-use and single-family residential land uses
- Connection to projected laneway network



**Bird's Eye View: facing NW**



### Key Features

- Flexibility of uses (eg. as a performance venue, community gathering space and outdoor marketplace)
- The role of the central canopy as a primary focal point, a covered seating and performance area and a place-making component



**Bird's Eye View: facing SE**





### Key Features

- Connection to improved streetscape along 42nd Avenue leading to Columbia Park
- The role of the public art walls as both an enclosing feature and a place-making component
- A sense of enclosure resulting from new mixed-use built form
- Use of a vegetation pattern to define and enclose the plaza space
- Active retail edge
- Access from north, south and eastern tips of plaza space, as well as from the laneway network

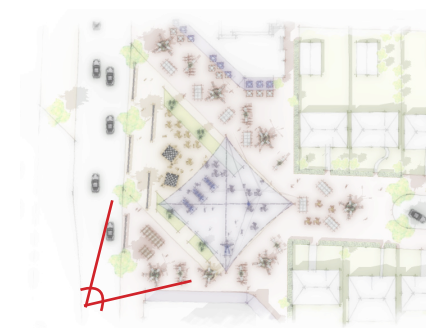


**Bird's Eye View: facing SE**



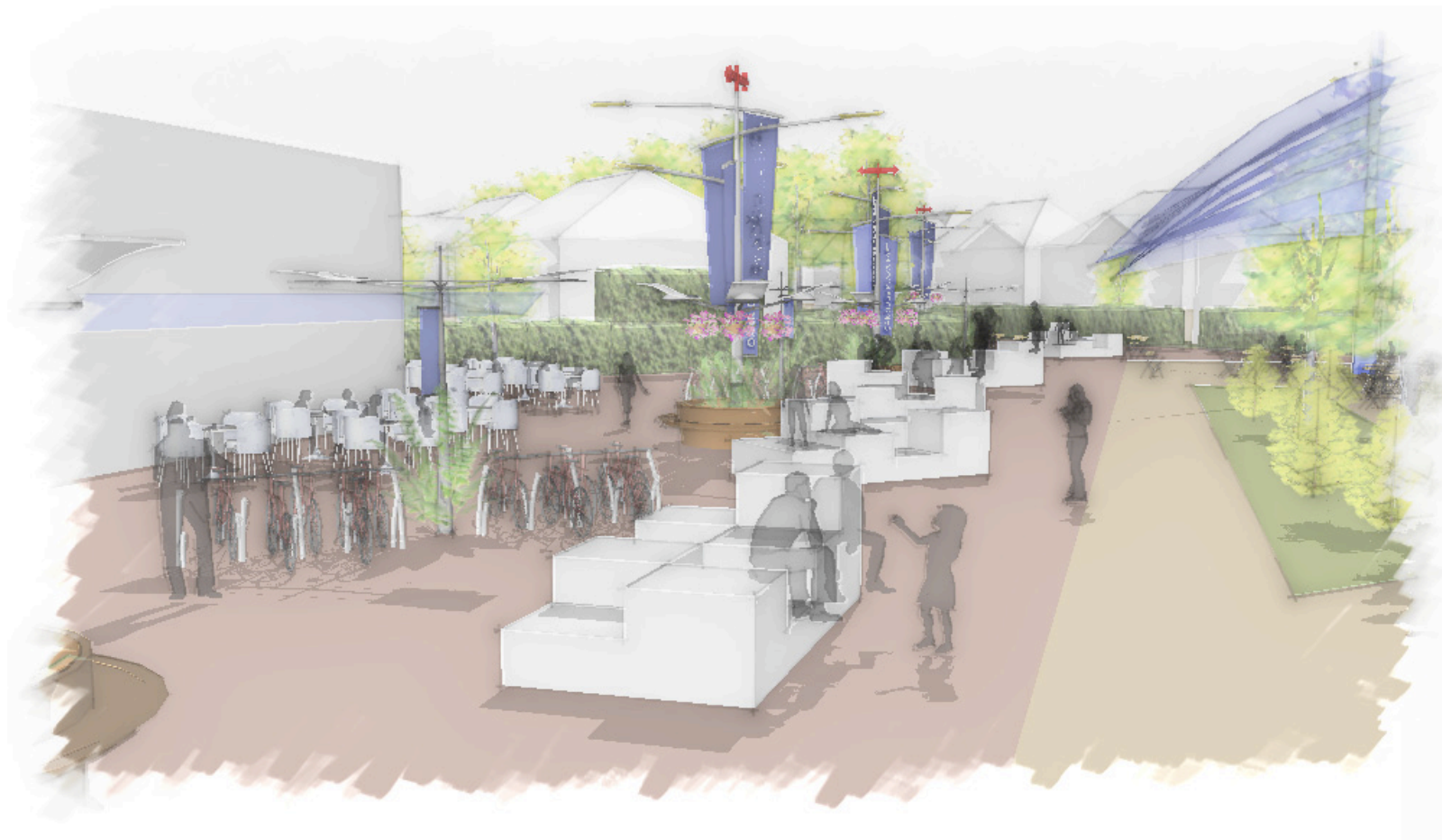
### Key Features

- Layout of primary wayfinding components
- Active retail edge



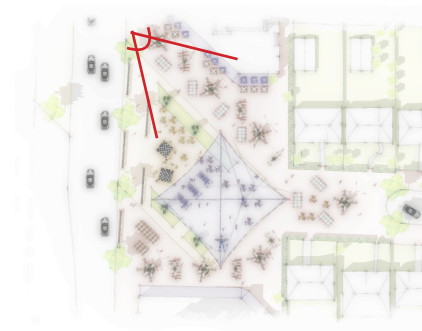
**Bird's Eye View: facing NE**



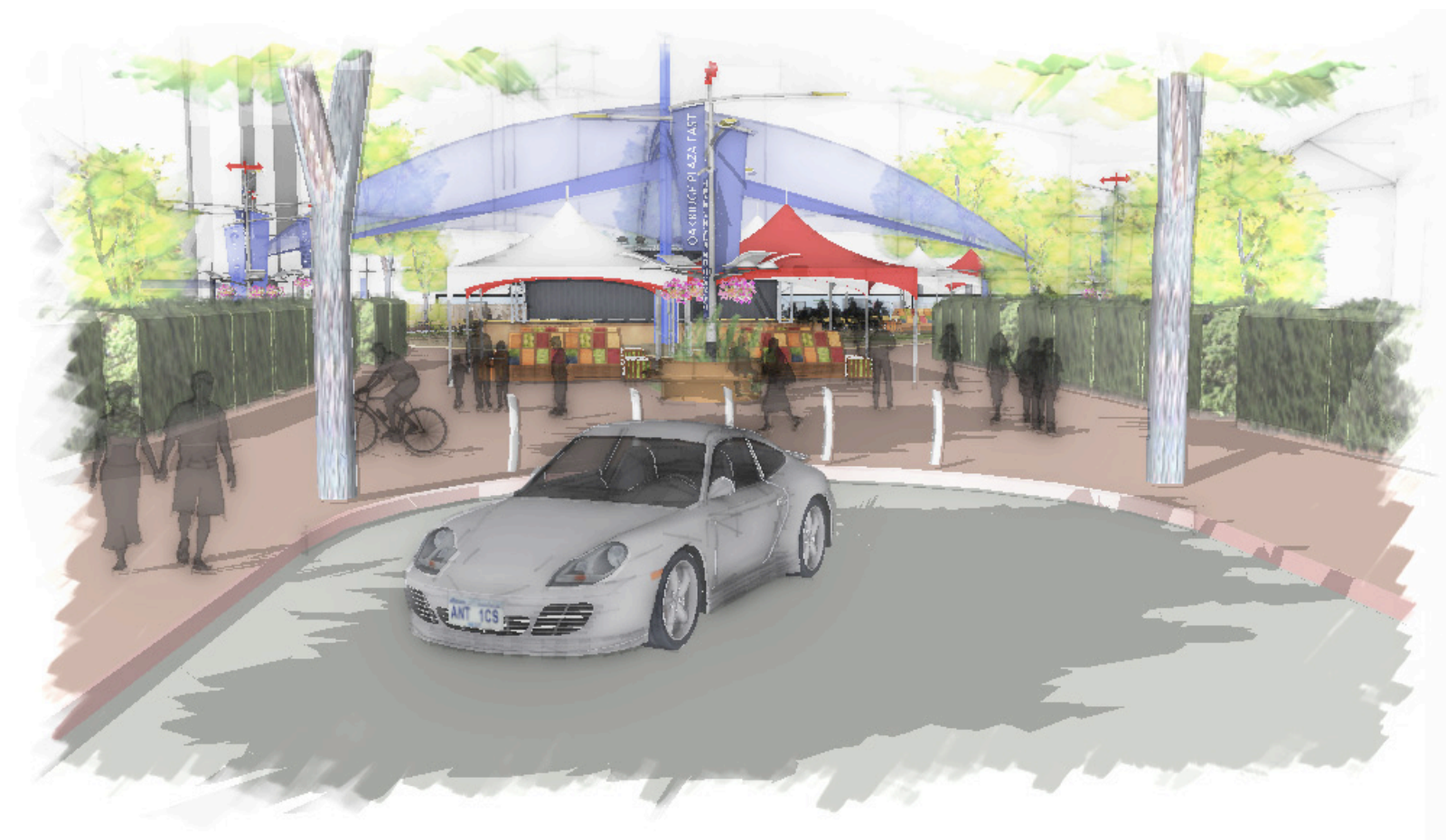


### Key Features

- Layout of primary and secondary wayfinding components
- The role of wayfinding components as lighting, seating, bicycle parking and aesthetic features
- Unique plaza structures which serve as informal seating, playing and place-making features

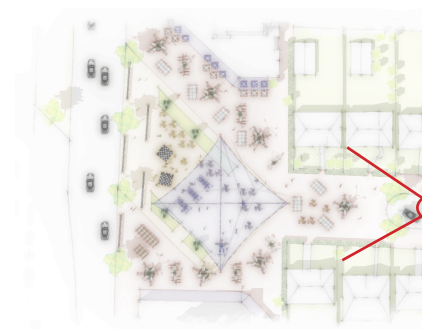


**Street-Level View: facing SE from sidewalk**



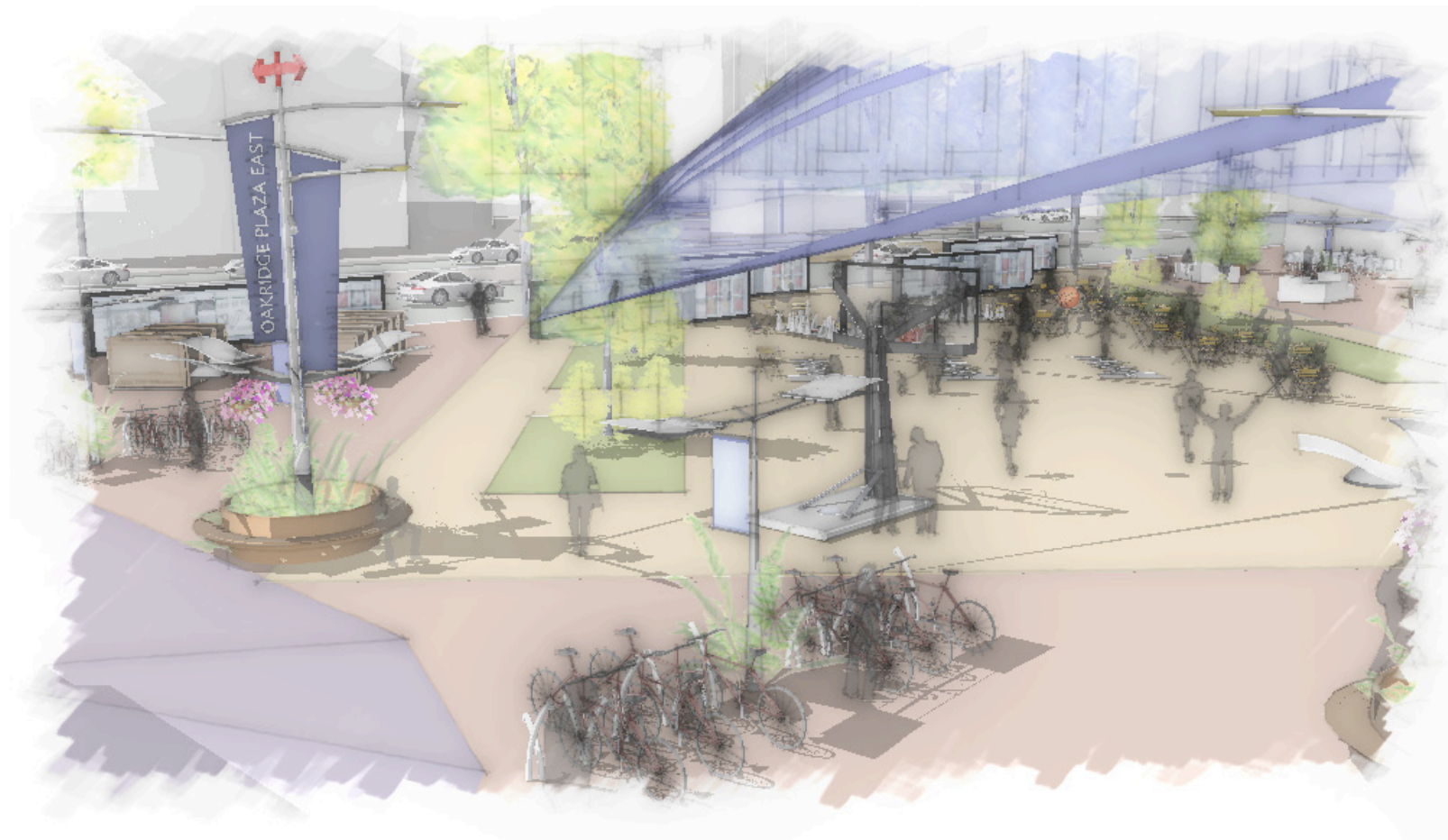
### Key Features

- Transition from 42nd Avenue to pedestrian plaza space
- Clear views of Oakridge Centre mall across Cambie Street
- Dominance of primary focal point
- Use of vegetation to enclose and define the boundaries of the plaza and street space
- Clear demarcation of public vs. private space through the use of hedges



**Street-Level View: facing west from 42nd Avenue**





### Key Features

- Formal and informal recreational opportunities
- Bicycle storage lockers located on southern tip of plaza
- The role of public art walls as an enclosing and place-making feature

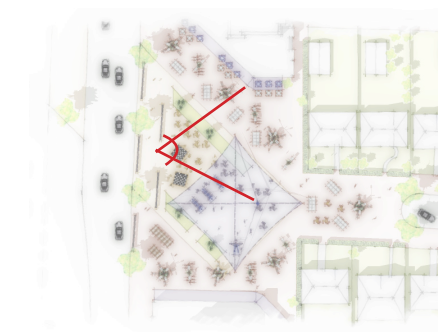


**Street-Level View: facing NW from plaza**



### Key Features

- Formal and informal recreational opportunities
- Moveable seating and rest/relaxation spaces
- Central canopy provides a covered activity and seating area
- Clear demarcation of public vs. private space through the use of hedges



**Street-Level View: facing east from sidewalk**

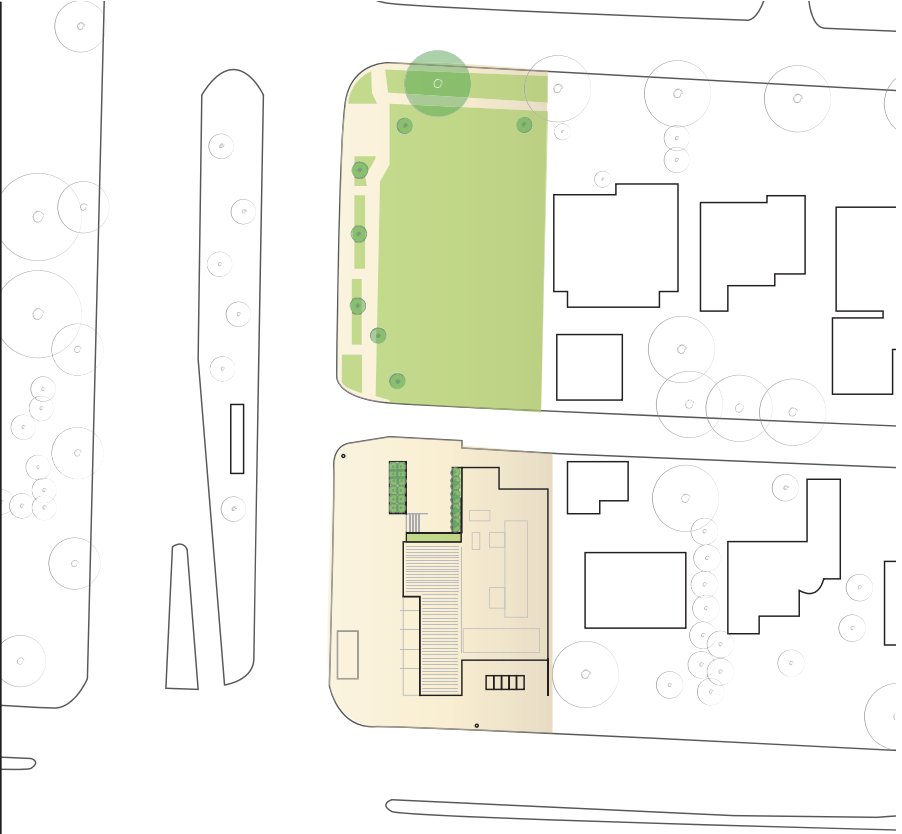
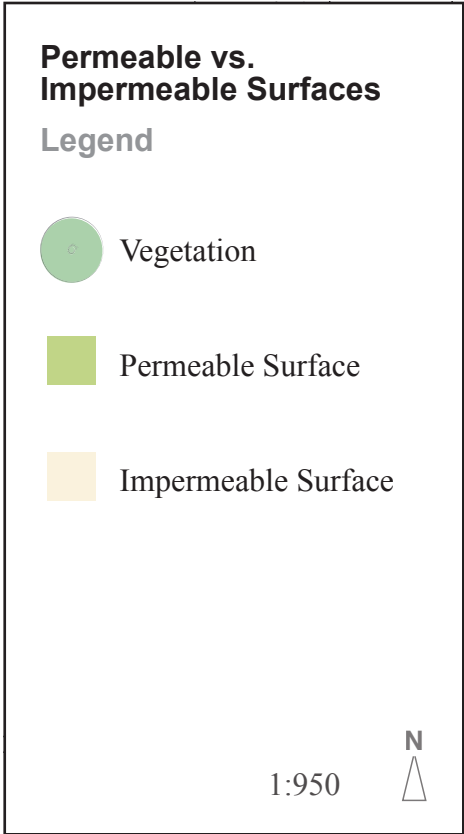
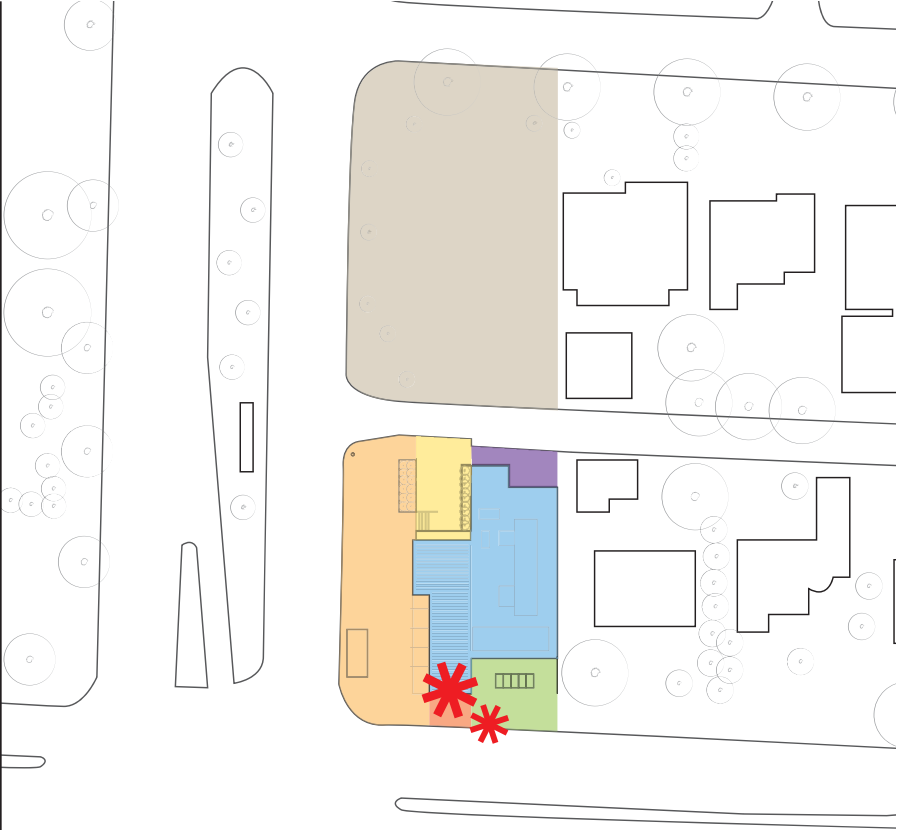
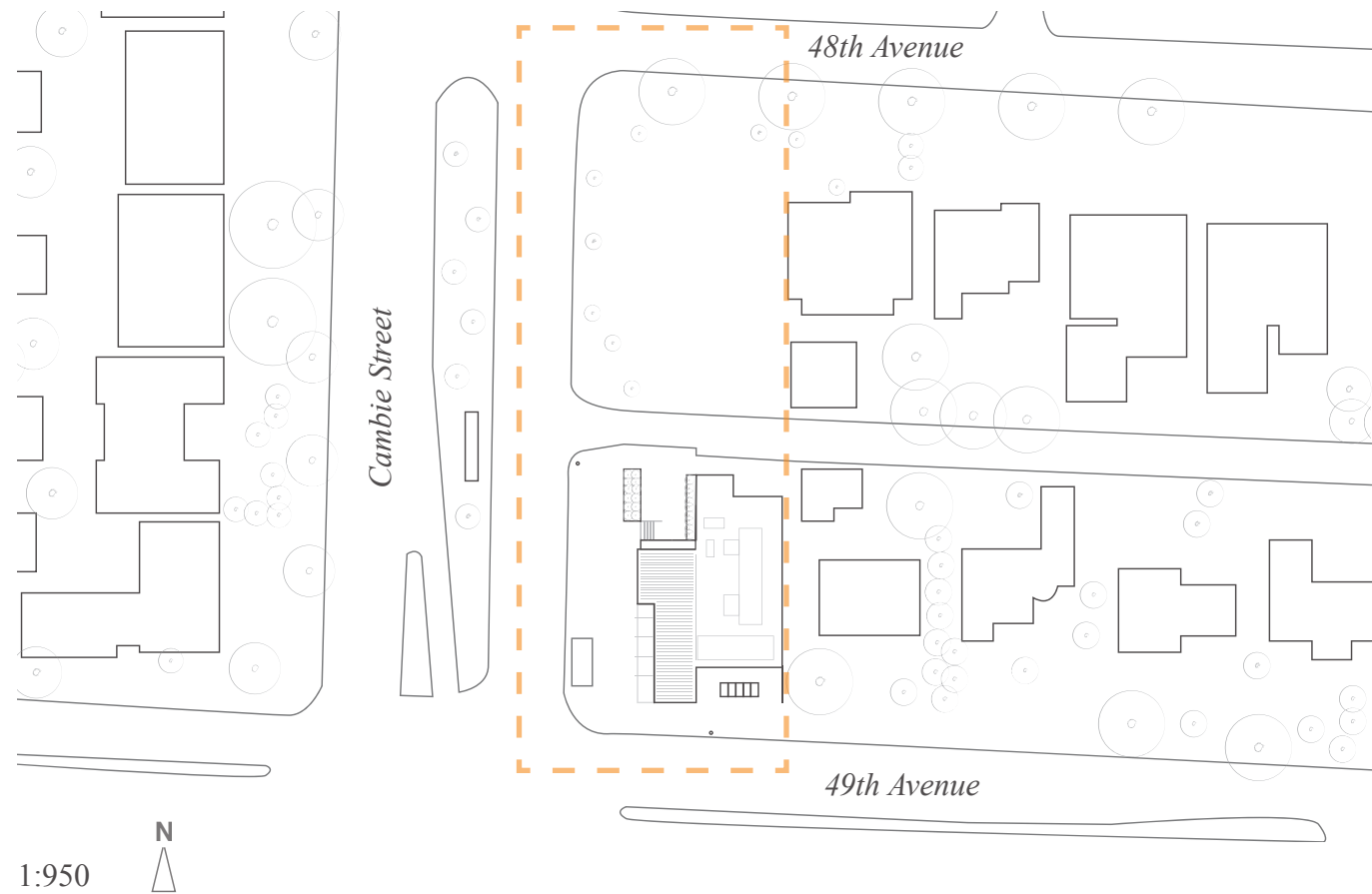
7.2 Case Study 2 - “Langara Station Square”: NE Corner of Cambie/49th Avenue



VISION

To develop a small plaza space that is directly integrated with the Langara-49th Ave. Station, possesses a unique identity and sense of place, and serves as a minor but distinct space of relaxation, activity and recreation for a variety of users. The design will be based on primary user groups (eg. students) which currently commonly travel through the area.

Site Inventory & Analysis:





## Accessibility

### Legend

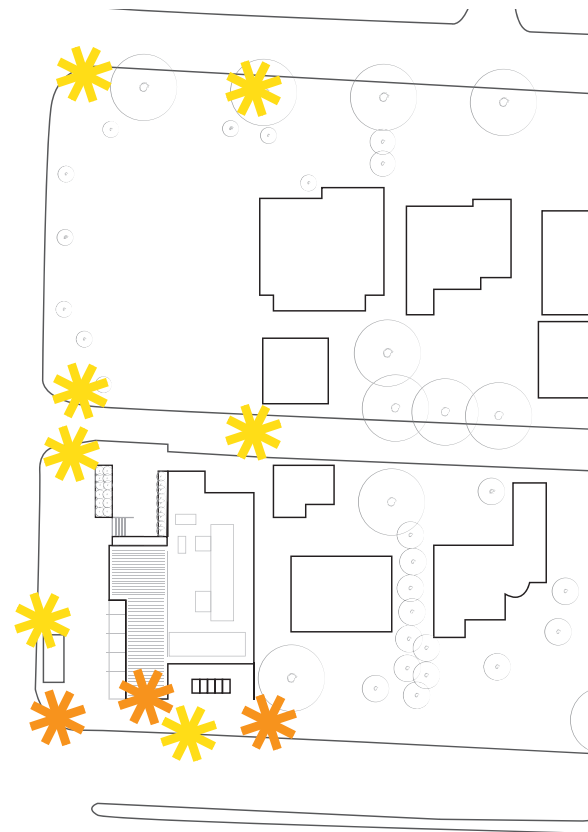


Points at which high volumes of pedestrian traffic enters or exits the area



Points at which low volumes of pedestrian traffic enters or exits the area

1:950



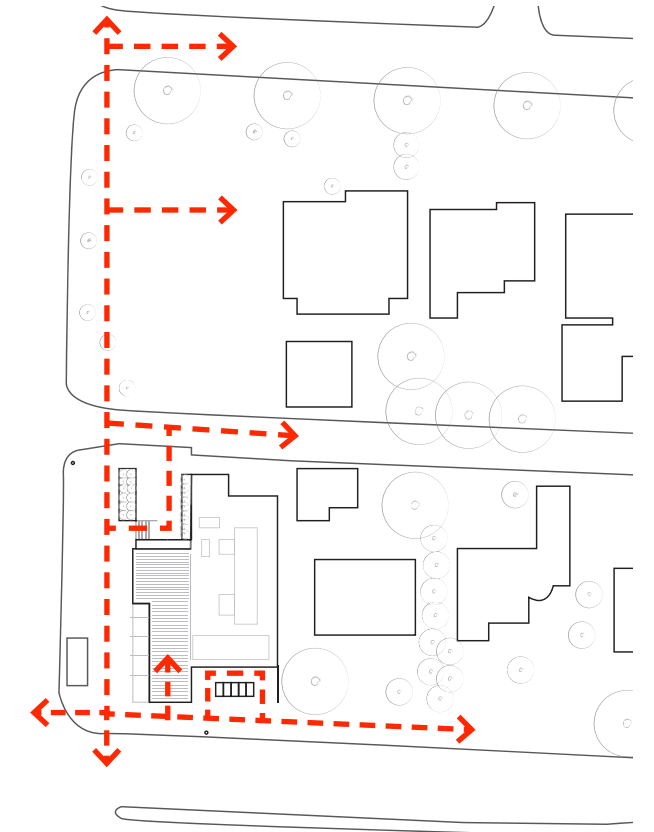
## Connectivity

### Legend



Most of the area is well-connected by pedestrian networks and infrastructure to major amenities such as the Canada Line Station. Notable barriers to connectivity include the east wall of the Canada Line Station, which is fenced off to prevent north-south access.

1:950



## Lighting

### Legend



1:950



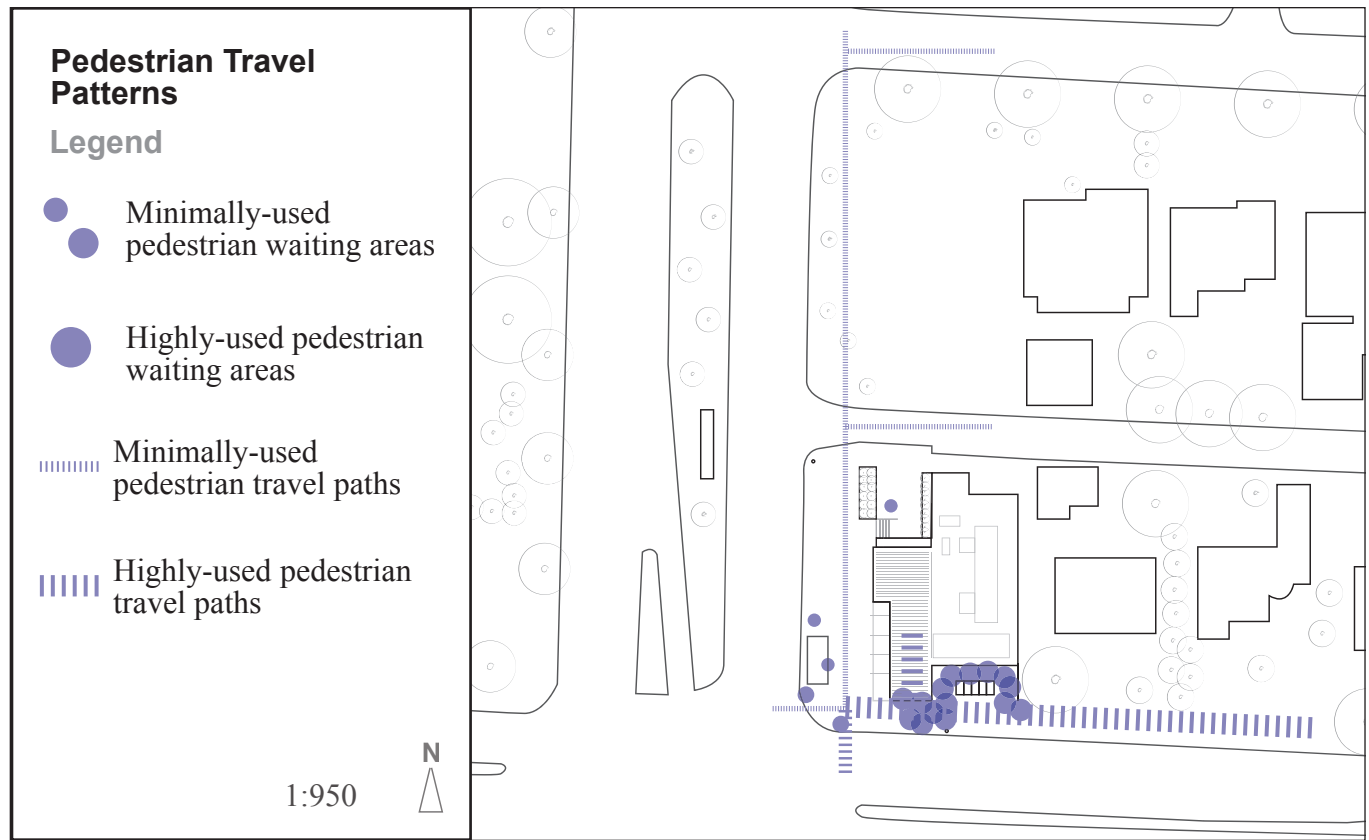
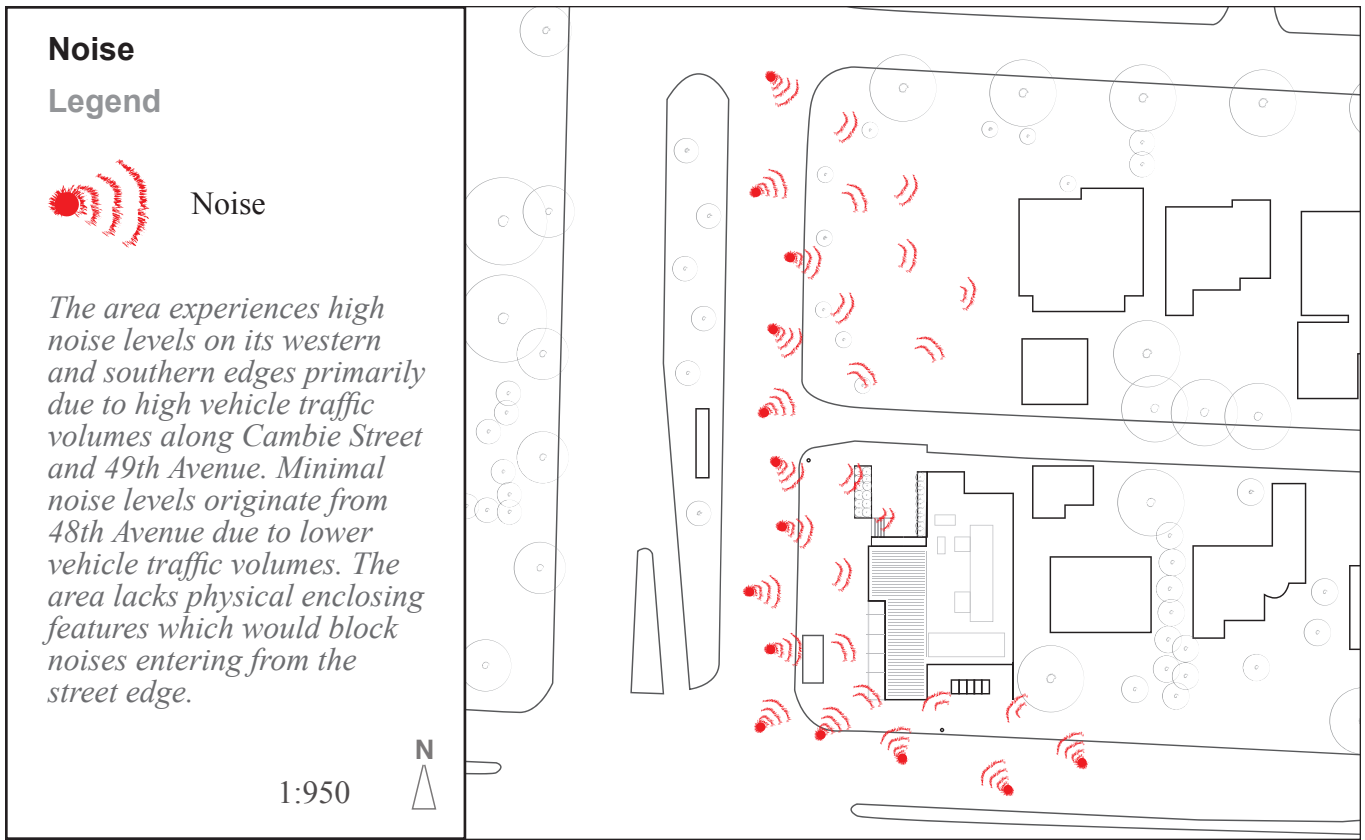
## Seating & Weather Protection

### Legend



1:950







## Summary of Key Points Drawn from Site Inventory & Analysis:

The Langara-49th Ave. Canada Line Station is an integral part of the current public realm that activates and connects the various spatial components of existing public spaces.

The vacant lot located north of the station provides much opportunity for integration into future public space development.

The site lacks a sense of interaction and connectivity with the land uses and buildings to its east. This is exacerbated by the blank wall on the eastern edge of the station and inaccessibility along the eastern edge of the site.

Although the overall site is well-connected and accessible, much of the current activity is concentrated at the entrance of the Station and the bus queueing/bike storage area to its east (especially during rush hours when Langara and UBC students are travelling to campus/waiting for the 049 bus, and other transit users are travelling to work and other daily activities). In contrast, the entire site north of the station entrance is minimally-utilized.



Source: VanMaps  
Scale = 1:3,000



The overall site currently lacks a strong activity centre which encourages pedestrians to stay. The site also lacks wayfinding features, a strong focal point, and lighting and seating features.

Similarly to the previous case study, this site currently lacks protection from noise generated from Cambie Street and 49th Avenue which diminishes the pedestrian experience.



**Precedent Study - (Simon & Helen) Director Park, Portland, Oregon, USA**

**Form & Location:**

Rectangular-shaped plaza bounded by SW Yamhill/Taylor Street and Ninth/Park Avenue in Portland, OR

**Size:**

0.46 acres / 0.19 hectares / 1862 square meters

**Date Opened:**

2009



Source: Google Maps



Source: Another Believer. Retrieved from [http://commons.wikimedia.org/wiki/File:Director\\_Park\\_chess.jpg](http://commons.wikimedia.org/wiki/File:Director_Park_chess.jpg)



Source: Tedder. Retrieved from [http://commons.wikimedia.org/wiki/File:Director\\_Park\\_people\\_20100228\\_-\\_Portland\\_Oregon.jpg](http://commons.wikimedia.org/wiki/File:Director_Park_people_20100228_-_Portland_Oregon.jpg)



Source: M.O Stevens. Retrieved from [http://commons.wikimedia.org/wiki/File:Simon\\_and\\_Helen\\_Director\\_Park\\_above\\_2\\_-\\_Portland,\\_Oregon.JPG](http://commons.wikimedia.org/wiki/File:Simon_and_Helen_Director_Park_above_2_-_Portland,_Oregon.JPG)

Director Park (see Figure 18) is a suitable precedent study for an exploration of a proposed plaza space on the NE Corner of 49th Avenue and Cambie Street because it is a major plaza space located in the high-density built form of the Portland CBD. It is also located in close proximity to a major transit station (although it is not located directly within the plaza as it will be in the proposed case study). Director Park serves primarily as a space of rest, relaxation and recreation amidst a busy environment, which are uses that the proposed plaza case study design will also strive to achieve. The park consists of numerous innovative architectural elements which satisfies these functions, including its glass canopy, interactive fountain, seating and cafe space.

Director Park offers valuable lessons for the case study, since despite the fact that it is a relatively “open” space which is bounded on all four edges by vehicular street activity, it utilizes architectural elements and takes advantage of its adjacent built form to provide the impression of a well-enclosed yet accessible public space. As a space that is located in a major intersection and bounded on three sides by vehicular street activity, the current proposed case study will also need to take into account issues of enclosure and access into its design and development.

Director Park is also similar in form and function to the proposed plaza case study in that it has successfully integrated ground-level functions with access to underground uses (a large parking structure). Although the Langara-49th Ave Canada Line Station provides effective underground access to transit from the street, numerous improvements may be implemented to better integrate the station access to its surrounding spaces.

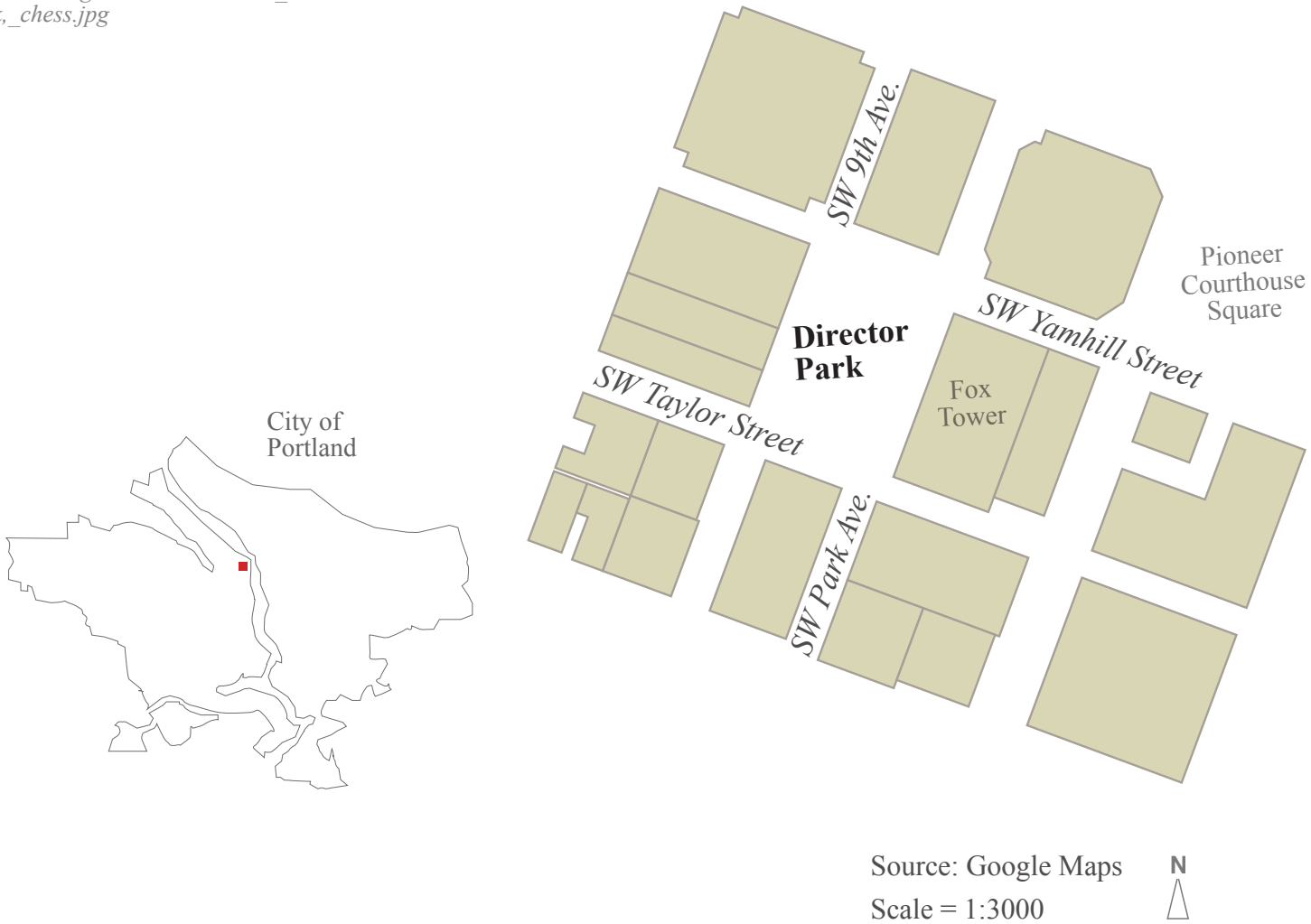
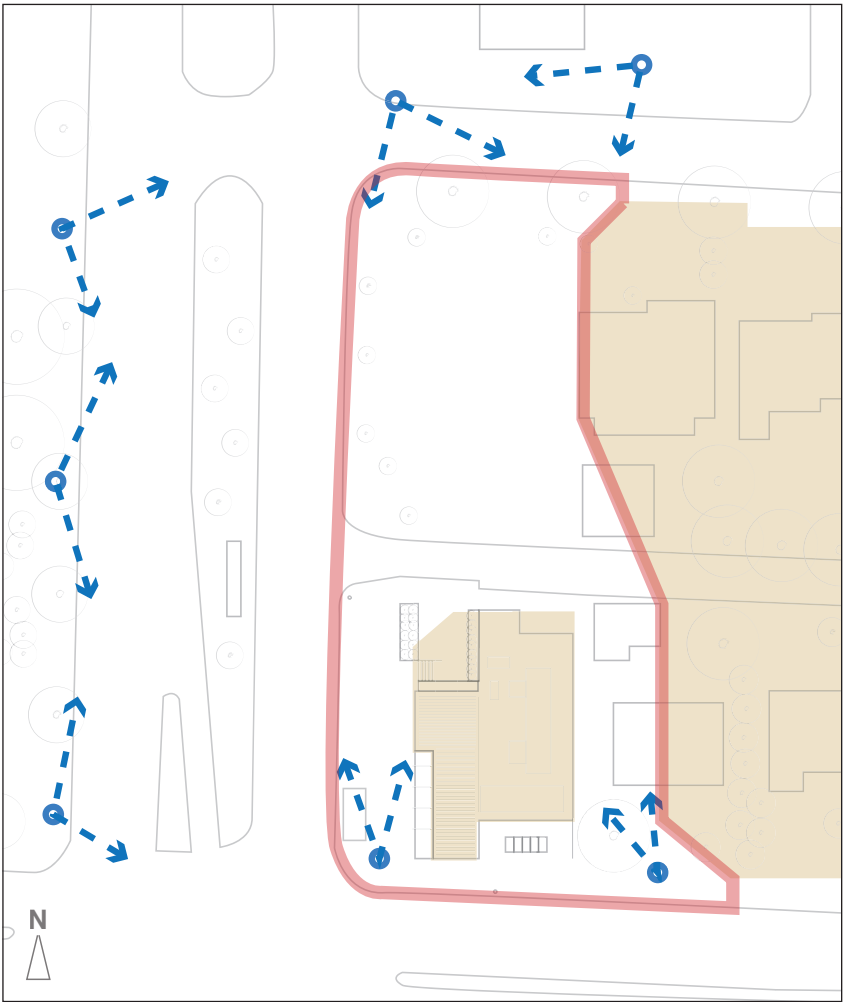


Figure 18: Director Park, Portland, OR





# GOAL 1


Integration & Connectivity  
Form, Enclosure & Identity



Legend

 Views

 Plaza Boundary


 Building Outline


Utilize the station and building edges of a new development to shape the form of the new plaza.

Ensure clear and deliberate view lines of the plaza from various points of origin.

Link the entrance and walls of the Langara-49th Ave. Station to other spatial components that coalesce to form a new plaza space which leads to the beginning of the mixed-use laneway network to the north, and Langara College to the east. Gear major activity centres (eg. main plaza) towards primary user groups such as students, while providing a range of options for other users as well.


Legend


 Building Outline

 Major Activity Centre


 Connectivity/Paths

Spatial Components


 Mixed-Use Laneway

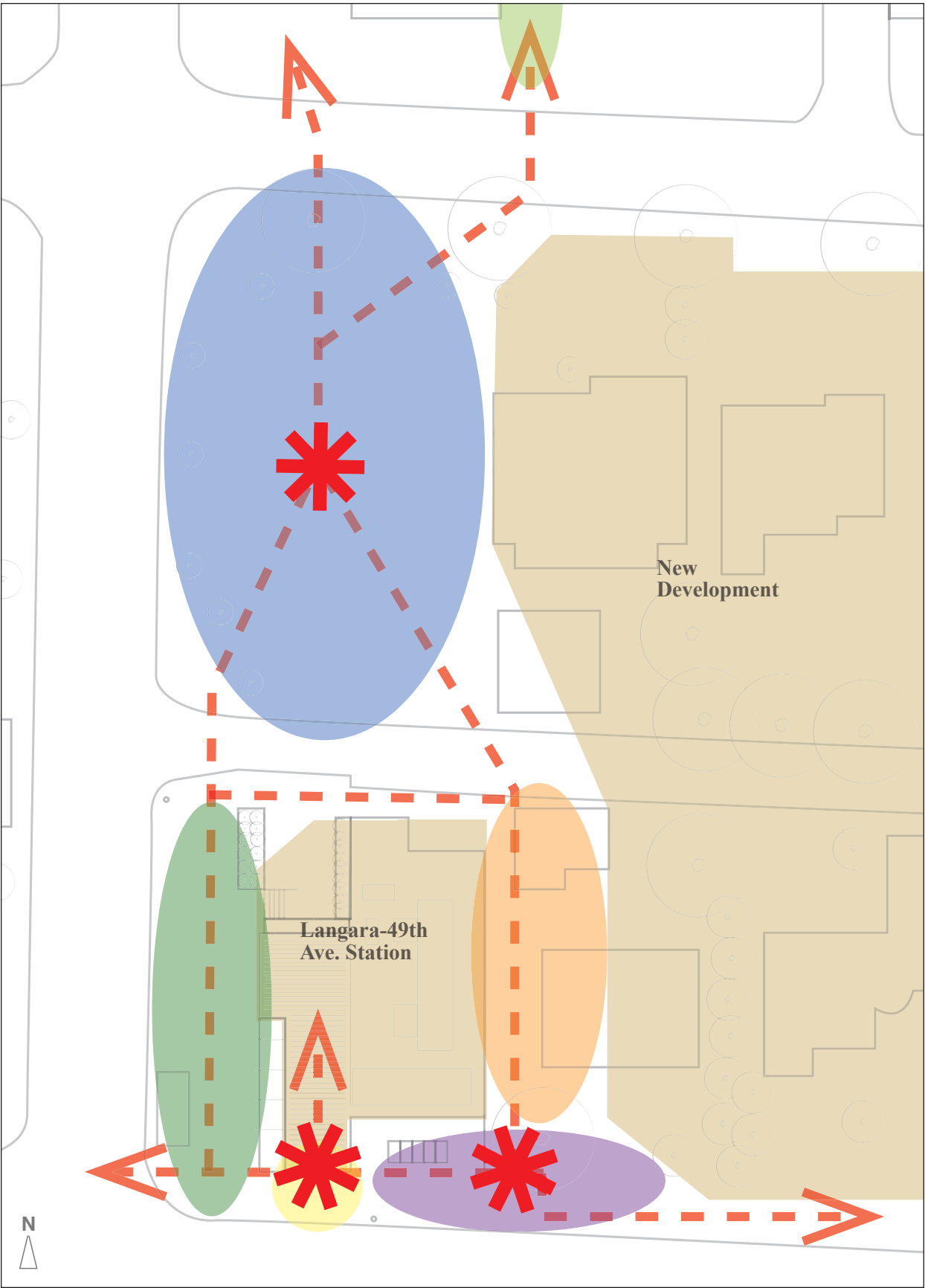
 Main Plaza

 Sidewalk

 New Thoroughfare

 Station Entrance

 Bike Storage / Bus Queuing Area

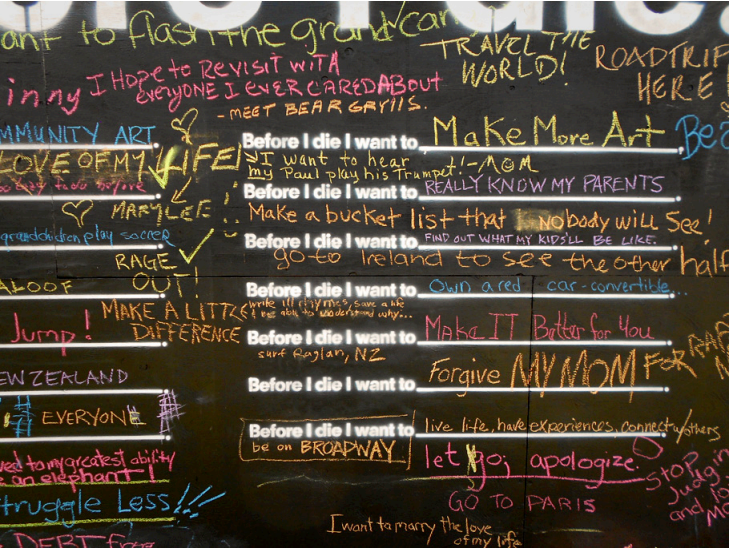


Use a vegetation scheme to create a sense of enclosure and protection within the plaza, particularly from Cambie Street, 49th Ave. and 48th Ave.

Reinforce the identity of the plaza through a strong retail edge concentrated on the eastern and northern edge of the station. Businesses /organizations may be associated with or geared towards the student population to attract student users in the plaza.

Create a stormwater feature along the north-western edge of the plaza which serves primarily as a central focal point as well as an enclosing/wind protection feature and a seating, lighting, aesthetic, activity and social gathering amenity.

Activate the east thoroughfare and the wall of the Station with an interactive public art project which allows the community to contribute to the identity and place-making process in the plaza.



**Before I Die Project:** An example of an interactive and engaging public art project by artist Candy Chang.  
Source: Before I Die Project. Retrieved from <http://beforeidie.cc/>

Legend

Building Outline

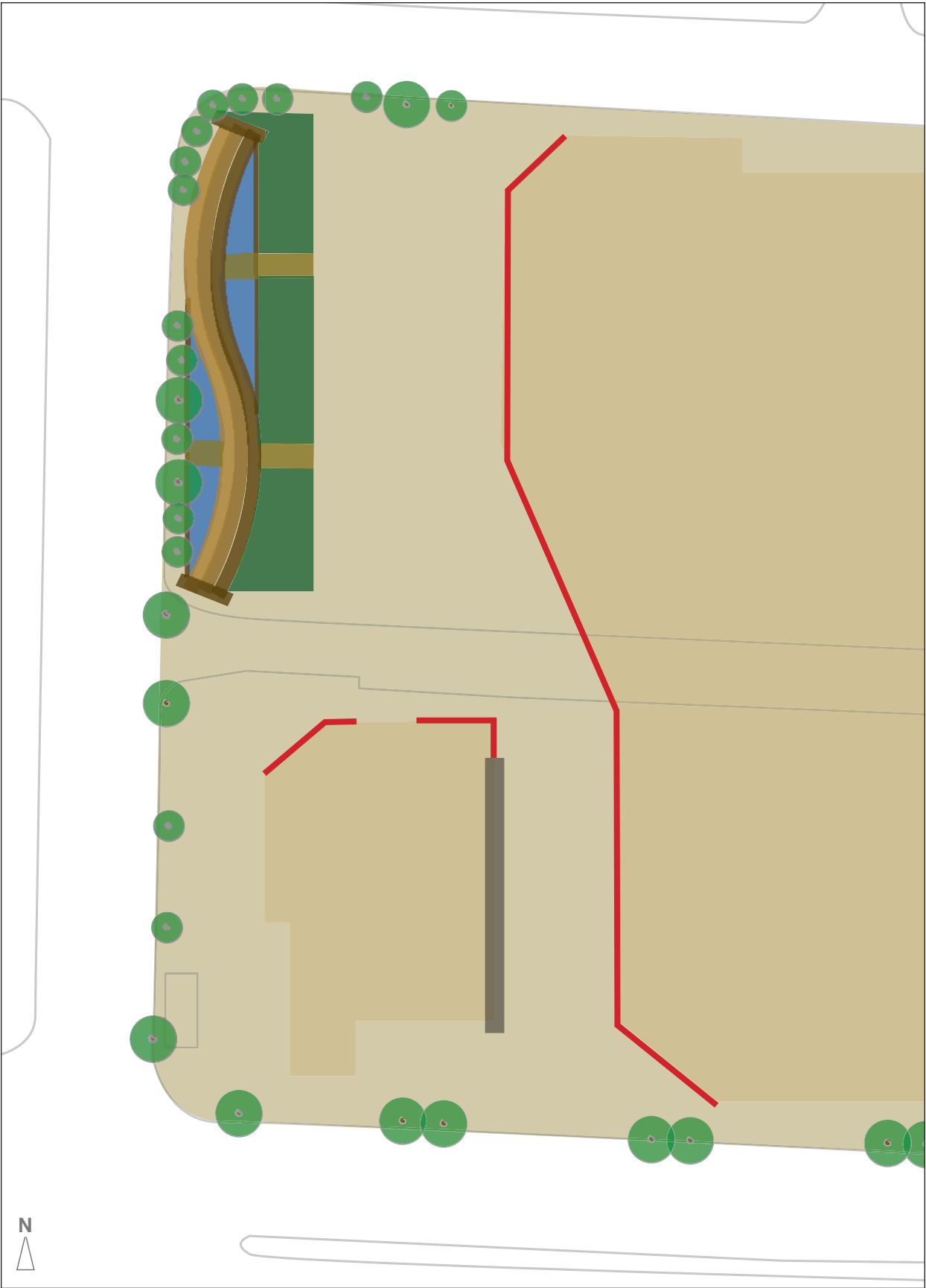
Paving Treatment

Vegetation

Stormwater Feature

Active Retail Edge

Public Art Wall





# GOAL 2







## Access & Wayfinding

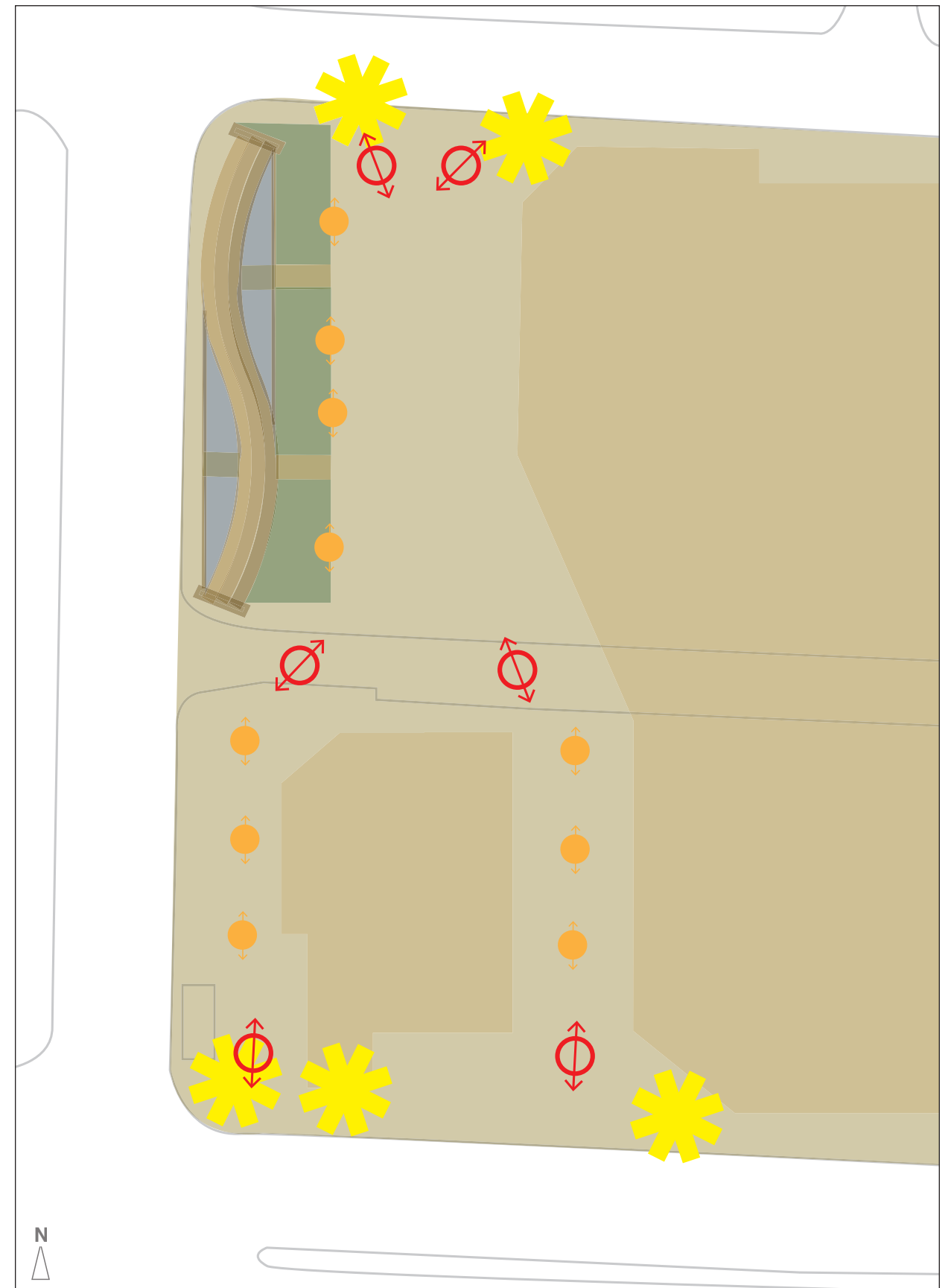


Maintain primary access points along the southern edge of the plaza, while adding other points to the north as the currently vacant lot is developed.

Establish a series of primary and secondary wayfinding components which serve as a place-making feature and to draw users into the plaza space. These components may be identical to those utilized in the previous case study in order to create a sense of consistency and place as a pedestrian travels along the Oakridge Town Centre.

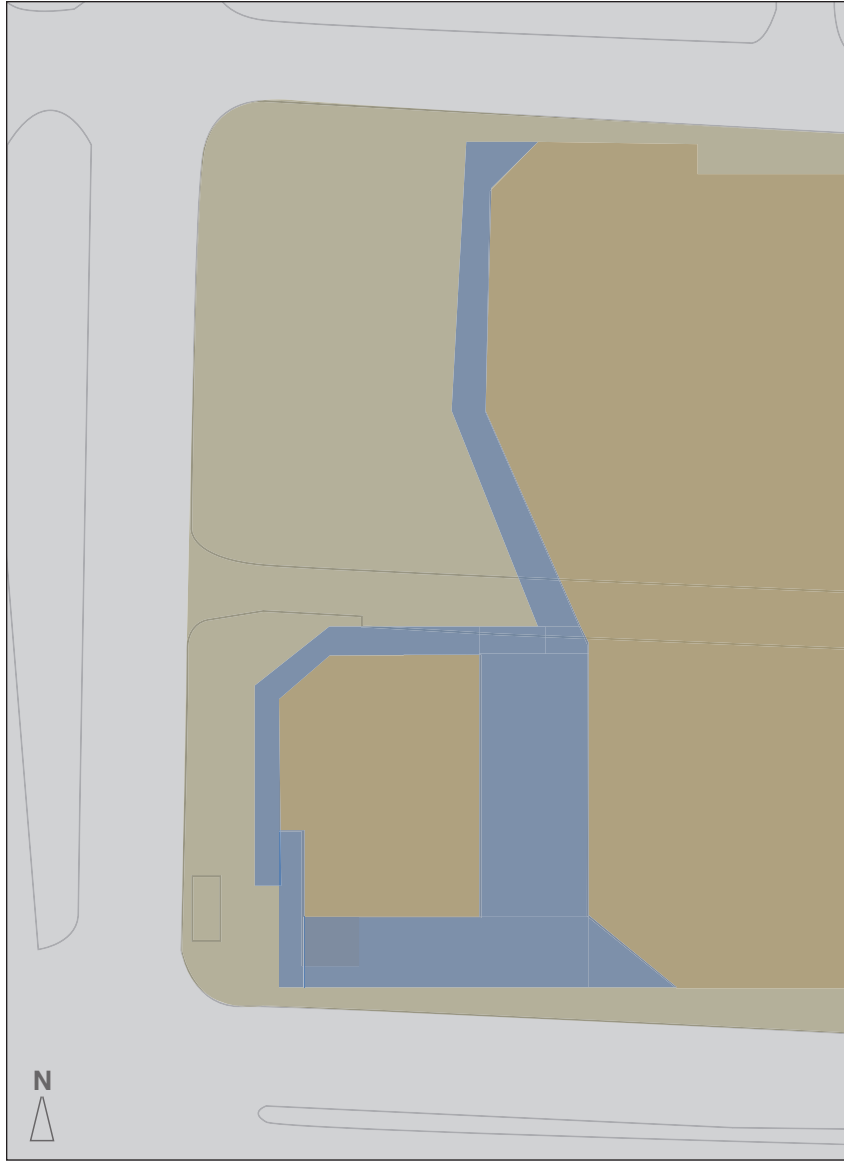
### Legend

-  Building Outline
-  Paving Treatment
-  Stormwater Feature
-  Primary Wayfinding Component
-  Secondary Wayfinding Component
-  Access Points



# GOAL 3

## Lighting & Weather Protection



Legend

Weather-Protected Areas

Concentrate weather protection features along the southern edge of the plaza where much of the pedestrian traffic is currently located. Weather protection may also extend north along both sides of the station in order to draw users to the northern part of the plaza.

Implement a lighting scheme that serves not only as a safety feature, but also as a wayfinding, aesthetic and place-making feature.

Legend

Lighting

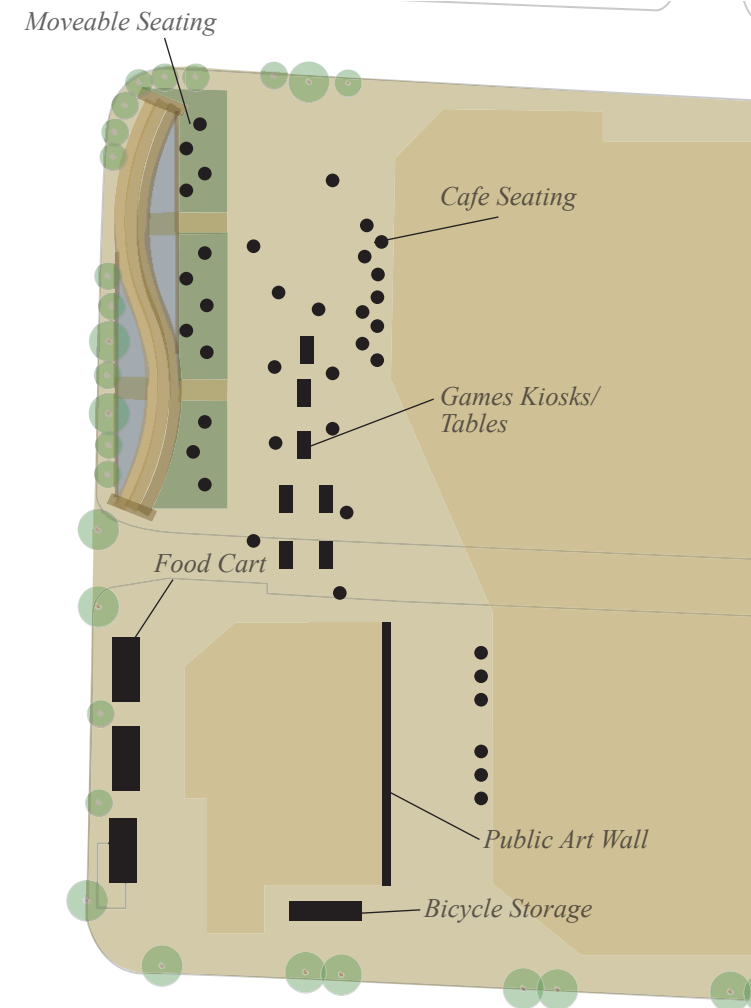




# GOAL 4

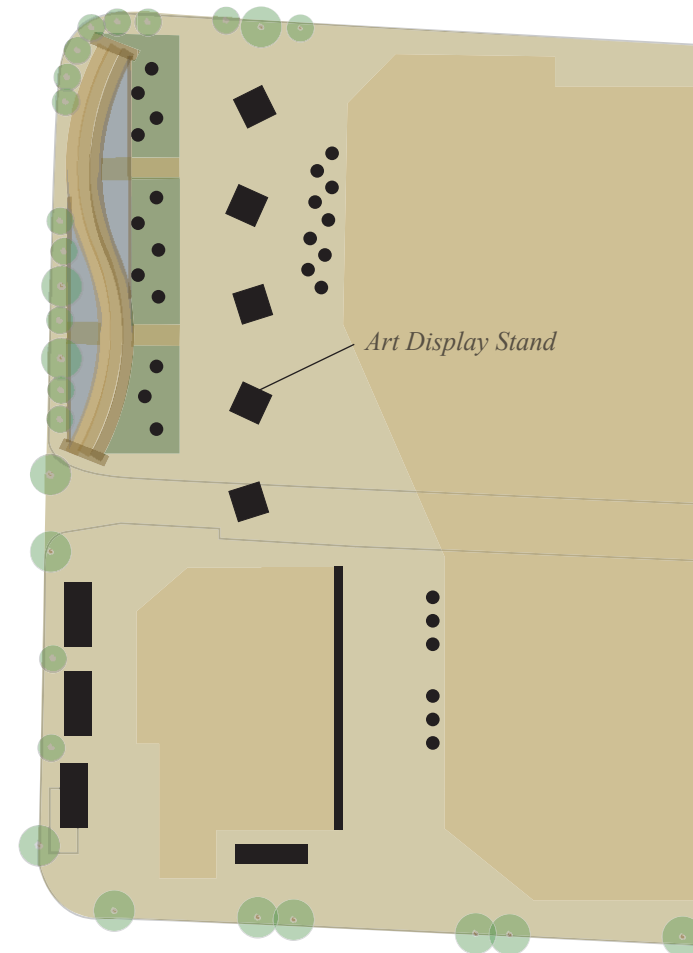
## Programming & Activity

### Scenario 1: Informal Activity Space



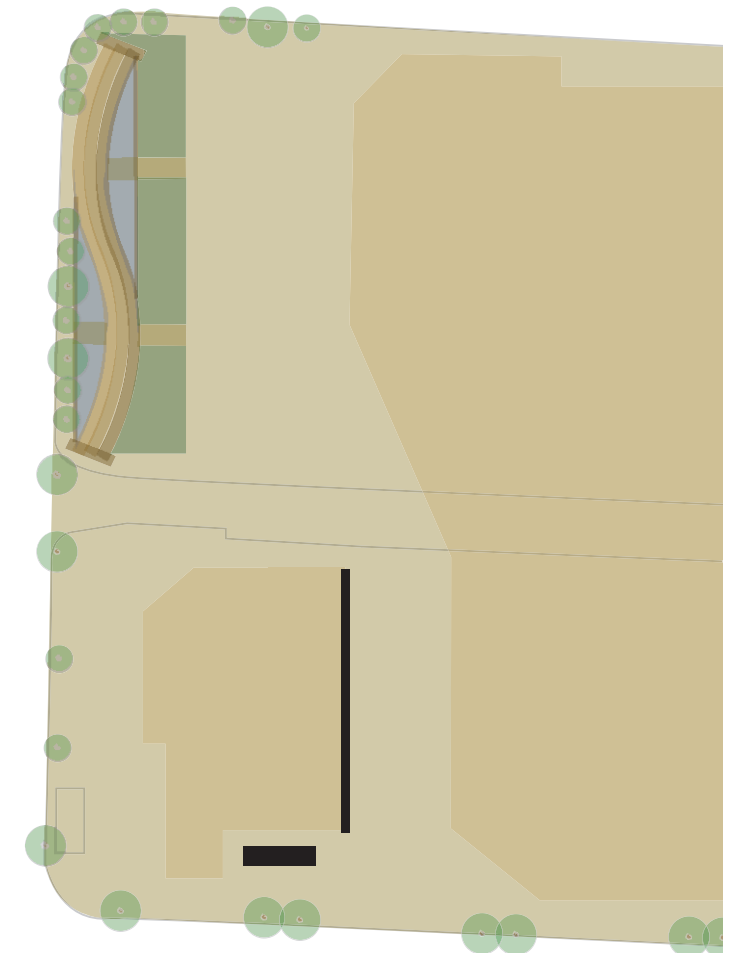
**Outdoor Table Tennis.**  
Source: alexanderljung. Retrieved from <http://www.flickr.com/photos/alexanderljung/1151543030/>

### Scenario 2: Public Art Display

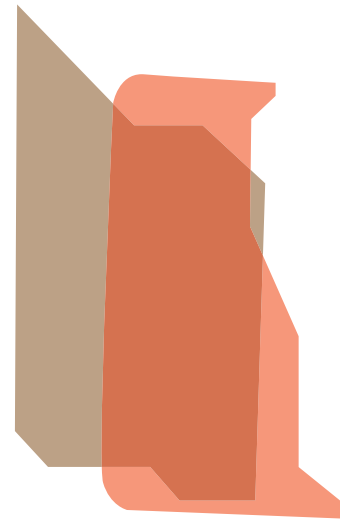


**Washington Square Outdoor Art Exhibit, NYC, New York.** Source: Rebecca M.B Pearson. Retrieved from <http://www.wsoae.org/photogallery.html>

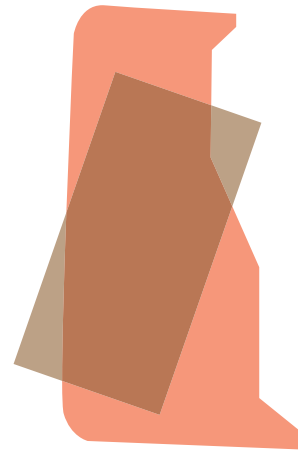
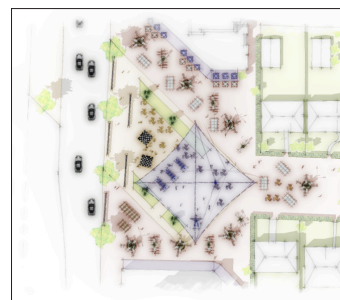
### Scenario 3: Early Morning Activity Space



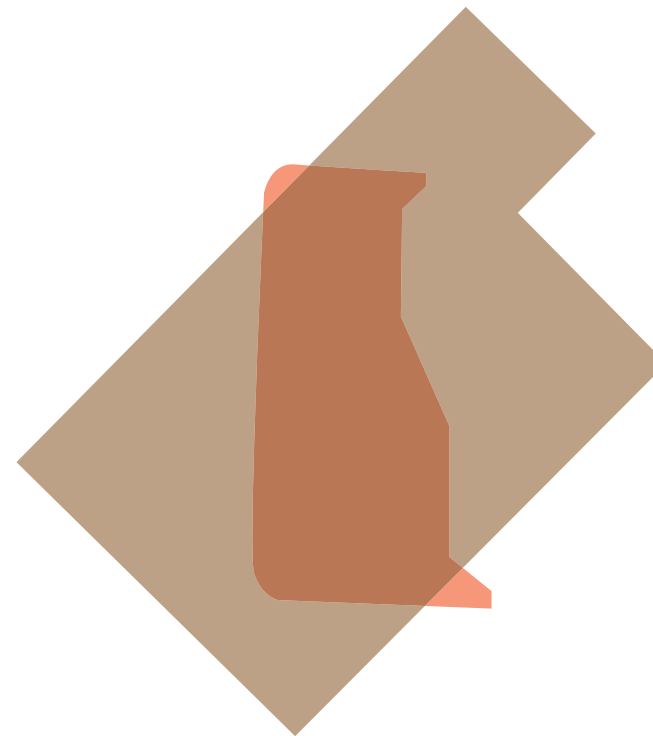
**Plaza space utilized for Tai Chi exercises in Beijing, China.**  
Source: Craig Nagy. Retrieved from [http://en.wikipedia.org/wiki/File:Tai\\_Chi1.jpg](http://en.wikipedia.org/wiki/File:Tai_Chi1.jpg)



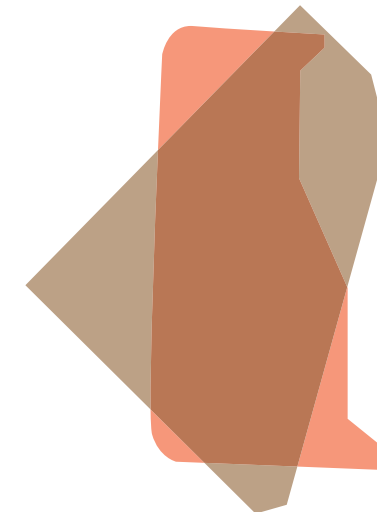
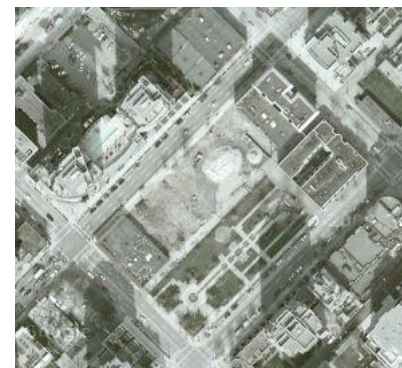
**Oakridge Plaza East  
(Case Study 1)**



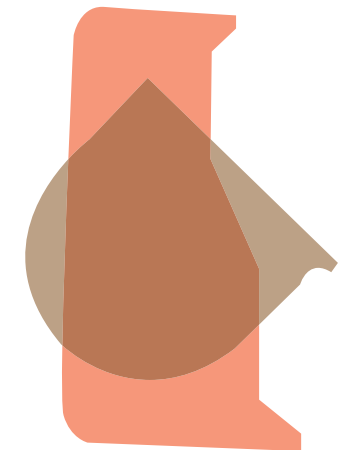
**Director Park  
Portland, OR**



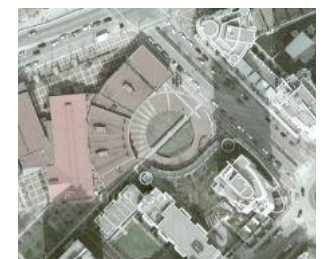
**Emery Barnes Park,  
Vancouver, BC**



**Victory Square,  
Vancouver, BC**



**Roundhouse Turntable Plaza,  
Vancouver, BC**



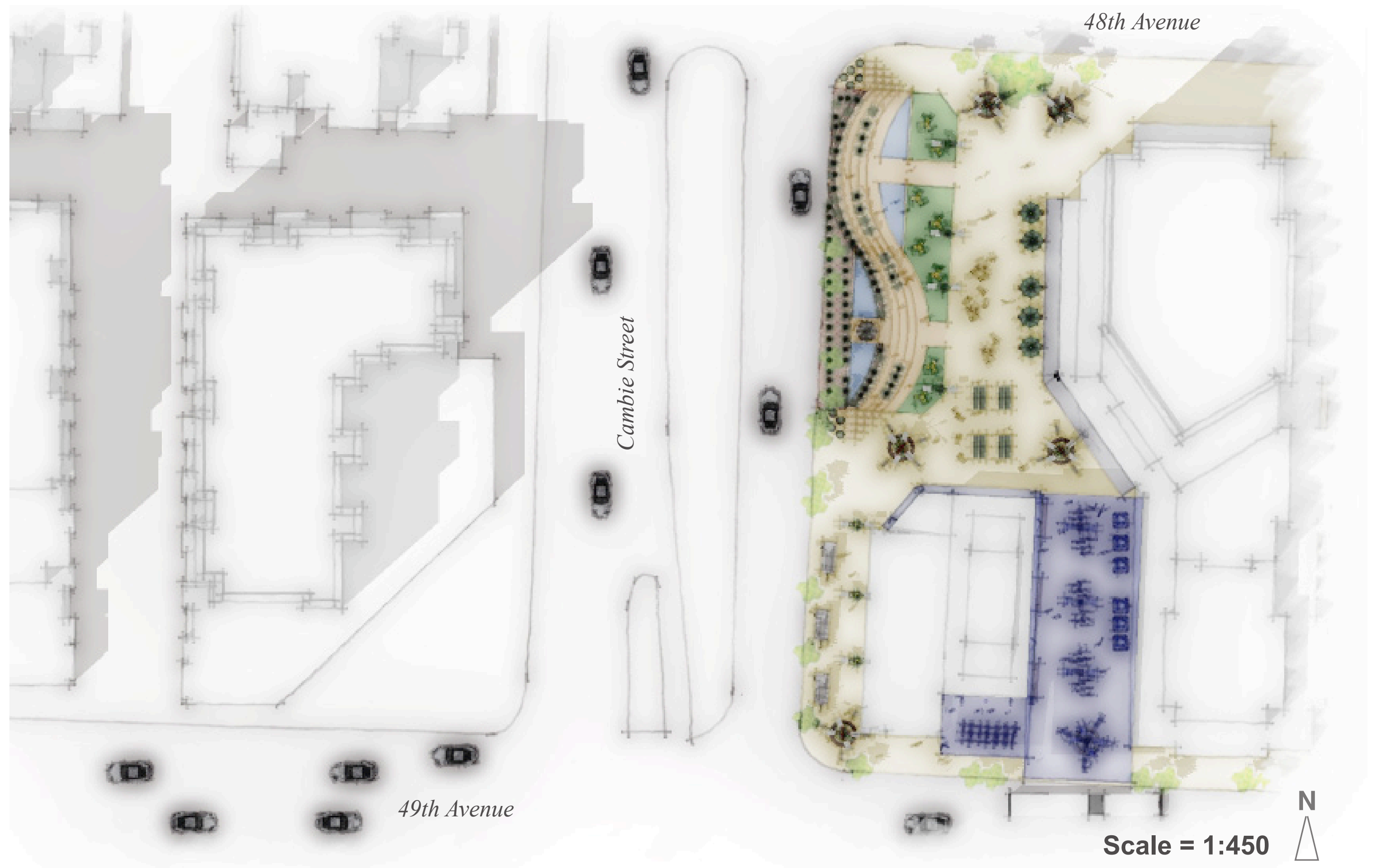
*Source: Google Maps*



Scale 1:1500

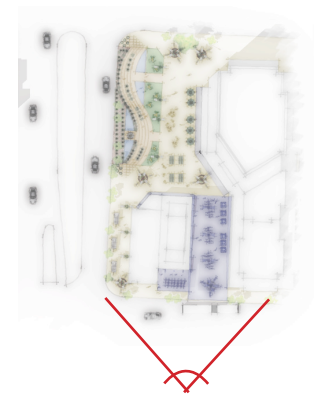
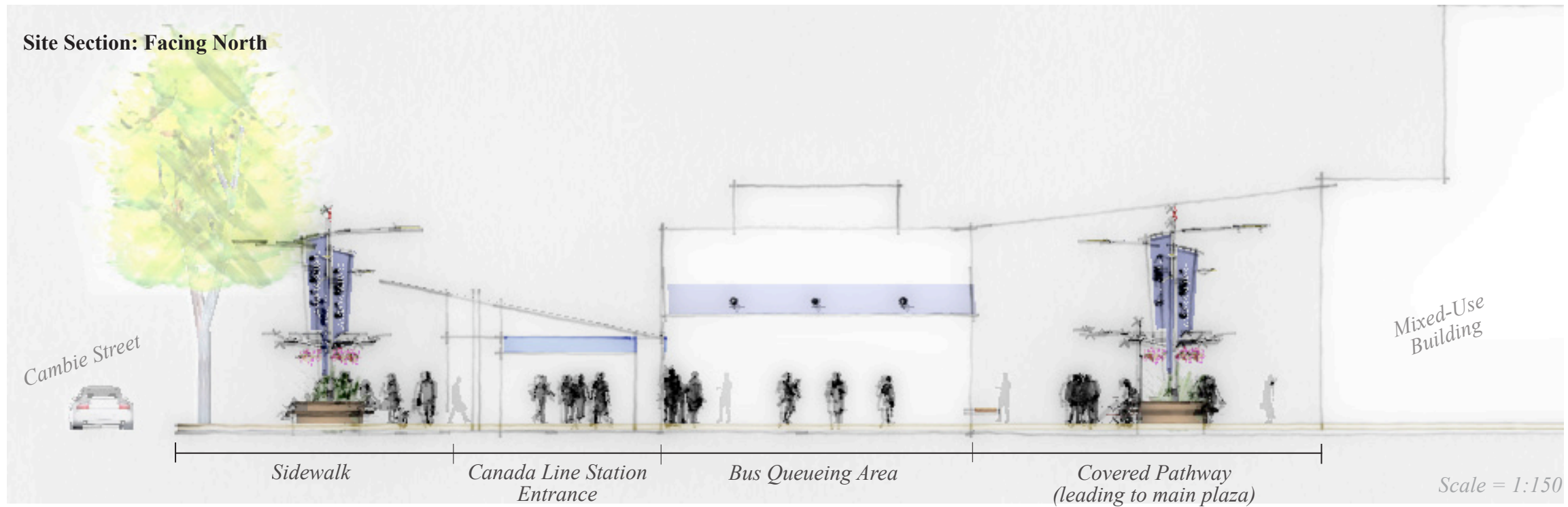


# SITE PLAN: LANGARA STATION SQUARE

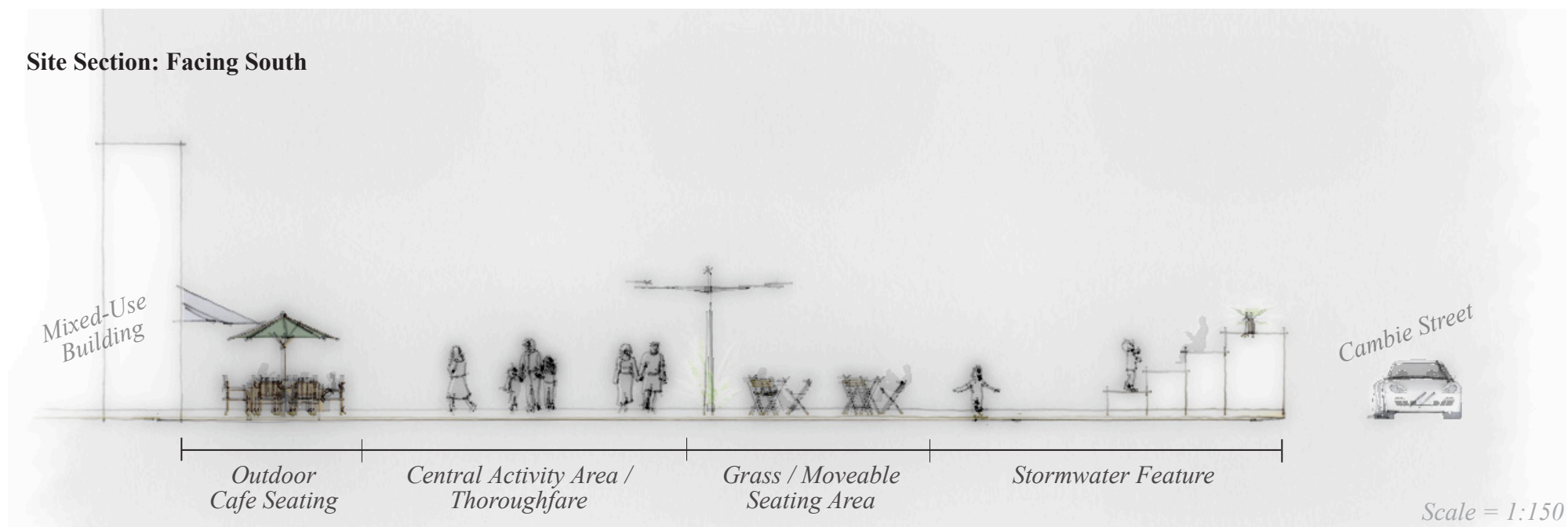


Various components downloaded from Google SketchUp 3-D Warehouse & Elements DB

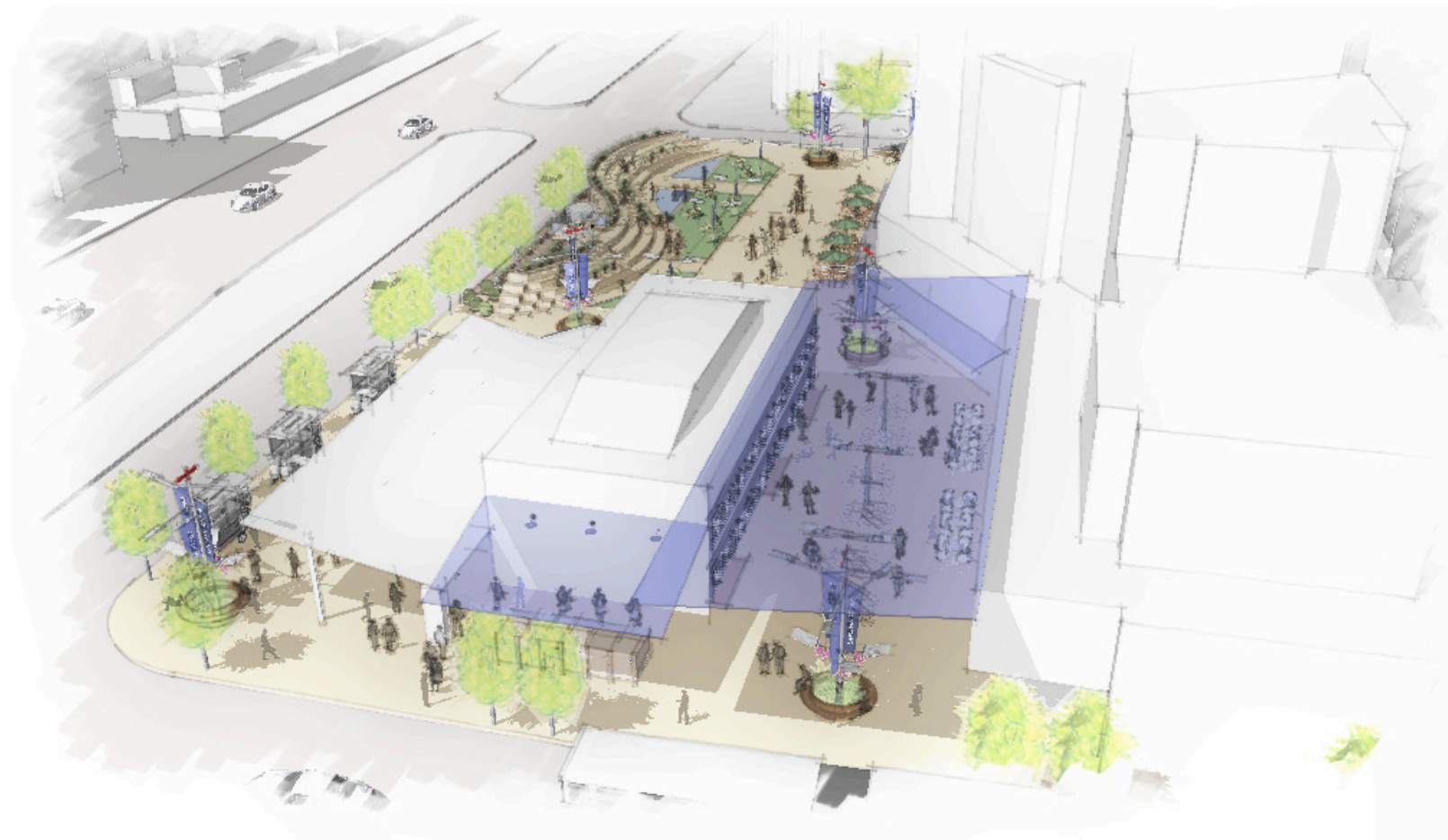
**Site Section: Facing North**



**Site Section: Facing South**







### Key Features

- Langara-49th Avenue Station remains as a dominant feature
- Entrance of station well-connected and integrated with other pedestrian paths and spaces
- New development used to shape and define the plaza space
- Weather protection concentrated near station entrance and leading to main plaza area

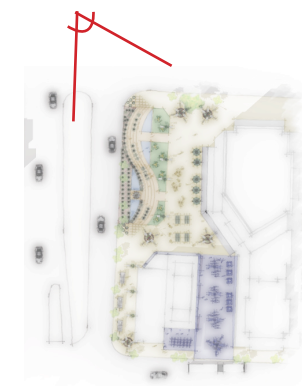


**Bird's Eye View: Facing NW**



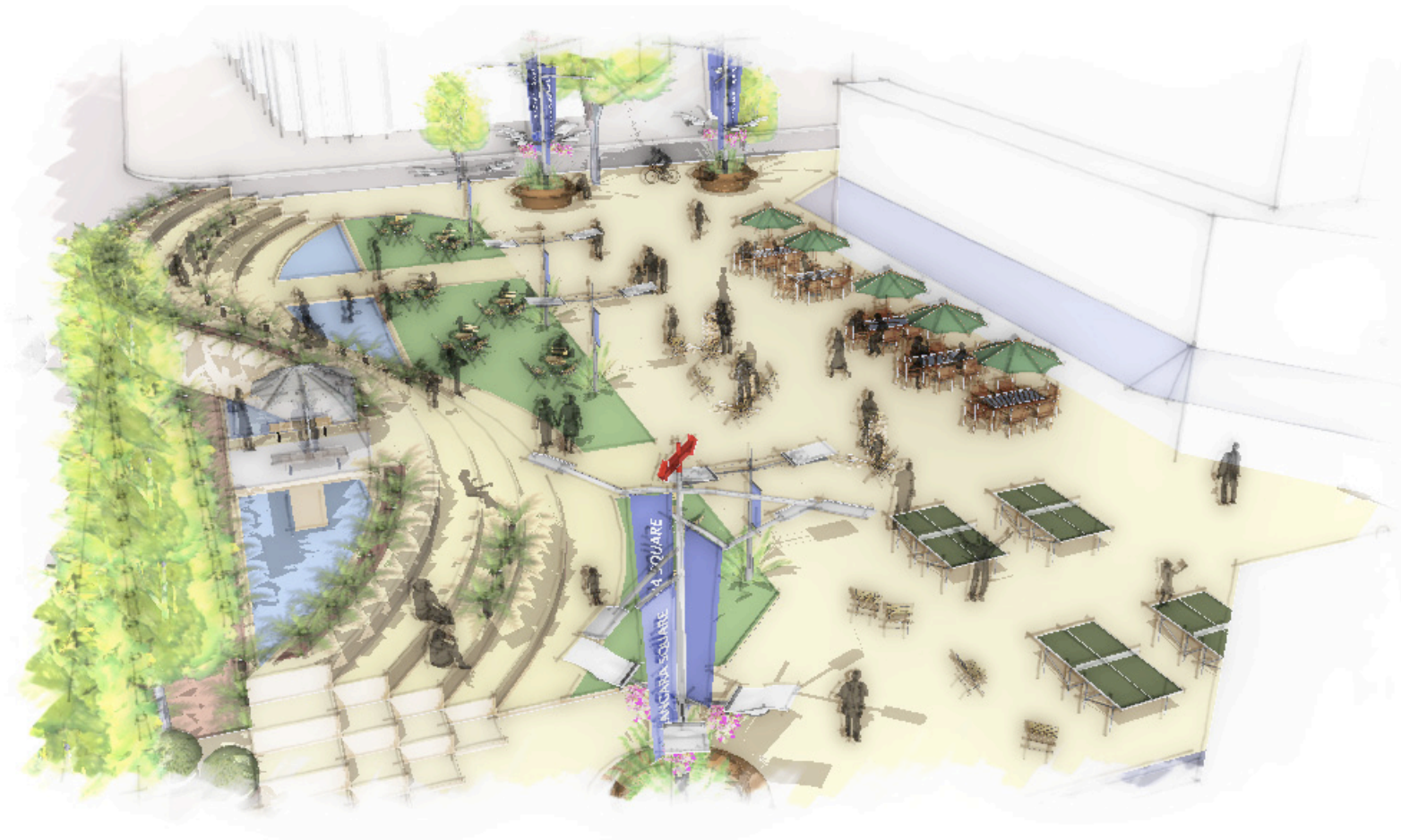
### Key Features

- Layout of primary and secondary wayfinding components
- Active retail edge
- Stormwater feature as a primary focal point and enclosing/aesthetic/activity feature
- Expansion of retail space along rear of station building
- Use of a vegetation scheme to enclose and define the space



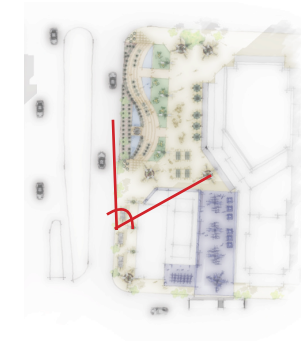
**Bird's Eye View: Facing SE**





### Key Features

- Formal and informal activity and recreational options
- Active retail edge
- Presence of moveable seating
- Role of the stormwater feature as a primary focal point as well as an informal seating/rest/activity area and aesthetic amenity
- Northern boundary of plaza leads into sidewalk (to the west) and mixed-use laneway (to the east)
- Layout of primary and secondary wayfinding components

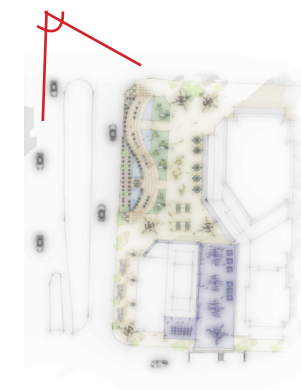


**Bird's Eye View: Facing NE**



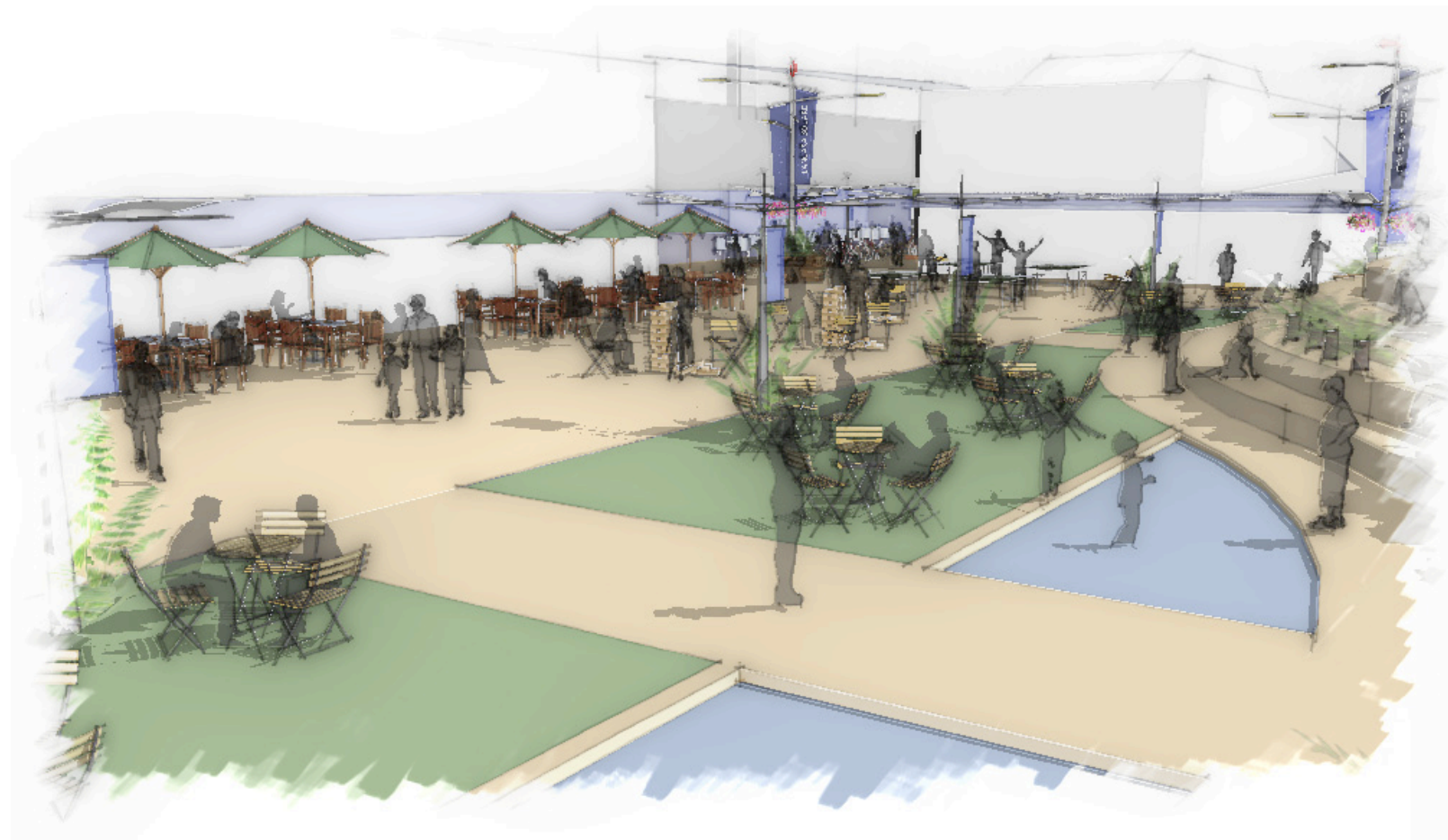
### Key Features

- Role of the stormwater feature in creating a sense of enclosure from Cambie Street
- Options for public art/aesthetic component on stormwater feature wall to be viewed from across Cambie Street
- Clear view of primary wayfinding components throughout plaza space between 48th and 49th Avenue



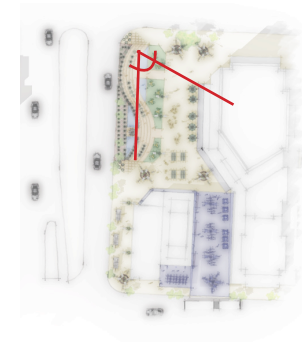
**Street-Level View: Facing SE**





### Key Features

- Sense of enclosure provided by stormwater feature and active retail edge
- Stormwater feature accommodates direct contact and interaction with water
- Primary wayfinding components directing users to Station entrance through east and west edges

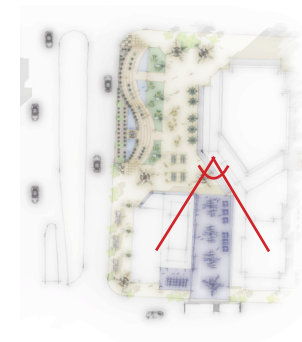


**Street-Level View: Facing SE from stormwater feature**



### Key Features

- Role of secondary wayfinding components as lighting and covered bicycle parking features
- Interactive public art wall which permits plaza users to express their thoughts and creativity while contributing to the place-making process of the plaza
- Covered cafe seating along the western edge of thoroughfare
- Clear view and access to bus stop on 49th Avenue



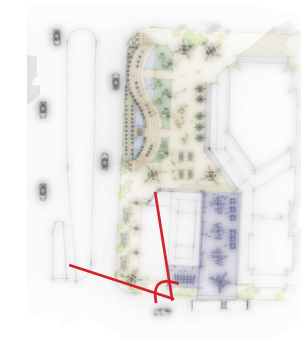
**Street-Level View: Facing South from New Thoroughfare**





### Key Features

- Transition between station entrance and sidewalk
- The role of food carts in activating the sidewalk space
- The role of primary wayfinding components as a seating and lighting area

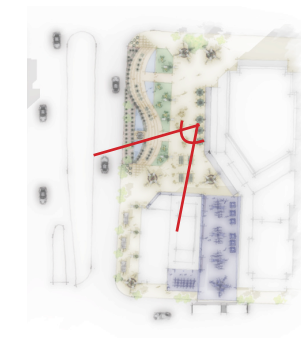


**Street-Level View: Facing NW from Canada Line Station Entrance**



### Key Features

- Formal and informal recreational opportunities
- Presence of moveable seating
- Stormwater feature provides a sense of enclosure in the plaza space
- Clear view of wayfinding components connecting main plaza space to sidewalk and station entrance



**Street-Level View: Facing SW from main plaza**



## 8.0 IMPLICATIONS: A FRAMEWORK FOR PUBLIC SPACE DESIGN ALONG THE OAKRIDGE TOWN CENTRE

The objective of this section is to formulate a framework for public space design along the Oakridge Town Centre of the Cambie Corridor through reflecting upon previous sections of the project. The framework will consist of a set of guidelines and implications for public space design that will be relevant for the Oakridge Town Centre and the Cambie Corridor, the entire City of Vancouver and Metro Vancouver region, and comparable cities and urban regions.

### 8.1 Design-Specific Guidelines

#### Guideline 1: Context & Relevance

As a new public realm is implemented along the Oakridge Town Centre, the ways in which the form, orientation and use of public spaces are shaped by their immediate context and location will need to be carefully considered. For example, in the first case study, the shape and orientation of the proposed plaza space was informed largely by an existing plaza space across Cambie Street. Similarly, the design of the proposed space in the second case study was partly influenced by the demographic characteristics of user groups which currently utilize the area.

#### Guideline 2: Connecting Public Spaces Within the Oakridge Town Centre

Although Section 5.0 briefly addressed the potential connections between the five proposed plaza locations and other components of the proposed public realm in the Oakridge Town Centre, more research and analysis will be required to achieve this plan as development progresses. The two case studies provide examples of how new plaza spaces may be designed so that they are directly integrated with other amenities (eg. mixed-use laneway network, parks), which may be helpful for future considerations for these and other proposed plaza locations.

Connections between public space components along the Oakridge Town Centre will also play a primary role in forming a stronger

visual and physical connection between the east and west edges of Cambie Street which is currently lacking. In particular, as the Oakridge Centre Redevelopment process begins, the City may need to consider ways in which the built form of the mall may be oriented towards an east-west connection on Cambie Street, and the ways in which public spaces which are developed as part of the mall may complement rather than dominate those located on the east side of Cambie Street.

#### Guideline 3: Achieving a Balance between Circulation and Rest/Activity Space

One of the greatest challenges in formulating proposals for both case studies was achieving an appropriate balance between circulation and rest/activity space. This challenge was a result of factors such as space restrictions, conflicting uses, and integration with other amenities. These issues will need to be considered as the City of Vancouver becomes involved in public space implementation projects throughout the Oakridge Town Centre.

#### Guideline 4: The Importance of Strong Focal Points

Many of the existing public spaces along the Oakridge Town Centre lack a prominent and identifiable focal point. Both case studies suggest the implementation of multi-purpose focal points which would serve to define, activate and enhance the plaza space.

#### Guideline 5: Addressing the Transit Station-Public Space Interface

In several locations along the Cambie Corridor such as the Langara-49th Ave. Station (Case Study 2), the direct integration of existing station entrances and walls with new ground-level public spaces will be a crucial task. Locations in which a station is proposed (57th Ave and 33rd Ave) present potential opportunities to simultaneously consider public space design and station construction, which would allow for a wider range of options for transit station - public space integration.

#### Guideline 6: Addressing the Plaza-Street Edge Relationship along Cambie Street

Both case studies directly address the necessity of providing a physical and psychological sense of enclosure between plaza spaces and heavy vehicular traffic primarily along Cambie Street which is currently lacking. This measure is necessary in order to enrich the pedestrian experience along the Oakridge Town Centre. Other proposed plaza locations in the study area may also need to address this issue.

#### Guideline 7: Addressing the Plaza-Building Edge Relationship

The ground-level building edge plays a primary role in activating and enclosing a public space. Since the Oakridge Town Centre is projected to become a high-density, high-amenity and mixed-use area, a strong retail edge will serve to define and determine the success of many of its public plaza spaces. The type, size and location of retail will need to be carefully considered by the City of Vancouver as new developments and public spaces are formulated along the Corridor.

#### Guideline 8: Consistency in Wayfinding and Place-Making Elements

The concepts of wayfinding and place-making are prominent in many sources of design literature, research and policy. In the context of this project, consistency and fluidity of wayfinding and place-making components (both physical and non-physical) along the public realm will play a crucial role not only in identifying the Oakridge Town Centre as a distinct and unique place, but also in distinguishing the area from other neighbourhoods along the Cambie Corridor. As demonstrated in both case studies, wayfinding and place-making features may adopt a variety of other uses such as lighting, seating and aesthetics.

### Guideline 9: The Role of Public Art

Many public spaces in North American cities are “over-designed” so as to limit or restrict the capacity of the community to play a role in the constant shaping and definition of the place as time progresses. Temporary and fixed public art features in spaces such as public plazas would play a crucial role in allowing individuals and groups in the community to directly engage in the ever-changing place-making processes of public spaces. As the City of Vancouver implements the Urban Systems and Public Realm Strategy, new public spaces may provide opportunities for the expansion and diversification of the City’s current public art initiatives which are currently lacking in areas such as the Oakridge Town Centre. Both case studies provide examples of how this may take shape in two distinct public plazas.

### Guideline 10: Addressing Seasonal Changes

Although Vancouver’s climate is relatively mild and temperate, designing for seasonal change is a crucial factor in public space design that the City could improve upon as it implements new public realm features along the Corridor. Both case studies depict examples of how features which are designed to adapt to seasonal change, such as weather protection and artificial heating, may be integrated into structures or components which also provide other uses such as seating, place-making, wayfinding and social gathering (eg. in the case of the central focal point structure of Oakridge Plaza East). These features may serve an aesthetic as well as functional purpose, and may range from being fixed to temporary.

### Guideline 11: The Role of Lighting

Many areas of the City of Vancouver lack an active night-life, partly due to a lack of activity options and uses during the night-time, as well as poorly-lighted public spaces. Both case studies attempted to utilize lighting not only as safety features, but also as wayfinding, place-making and aesthetic features that may serve to draw individuals and groups to use the space during the night-time, in correspondence to programmed and un-programmed night-time activity options.

### Guideline 12: The Role of Seating

A range of comfortable seating options, ranging from fixed and moveable as well as formal and informal, is crucial in activating and enhancing the use of public space, and currently lacking in many spaces along the Oakridge Town Centre. Both case studies explore possibilities to provide varied seating options that may also be relevant for other public spaces along the Corridor and throughout the city.

### Guideline 13: Attention to Building Materials & Environmentally-Sensitive Design

Many areas of the Oakridge Town Centre, particularly in the proximity of the Oakridge Centre mall, currently lack a variation of building and architectural materials and elements which would serve to add interest and detail to the pedestrian experience. As the public realm is transformed, detail and attention to building material variation in public space design will be crucial in order to serve a range of goals including place-making, walkability and wayfinding.

Although the plaza spaces in both case studies featured a hardscape character, considerations for utilizing environmentally-sensitive building materials and amenities, such as permeable surfaces, stormwater features and low-maintenance vegetation types, were briefly taken where possible. Further research will be required to determine the specific types of building materials and environmentally-sensitive design components which would be appropriate and desirable for the context of the public realm in the Oakridge Town Centre and the Cambie Corridor.

### Guideline 14: Transformation of Street Space into Pedestrian Space

Both case studies involve the transformation of vehicular space to pedestrian space that is directly integrated into the plaza. In the case of Oakridge Plaza East (Case Study 1), access to 42nd Ave from Cambie Street was removed, while maintaining access from Alberta Street mainly for local residential traffic. In the second case study, a mid-block laneway was removed and integrated into the plaza space. More research will be required to determine the feasibility and implications of these measures on factors including traffic, parking and circulation in these locations and others along the Oakridge Town Centre.

## 8.2 Process-Oriented Guidelines

### Guideline 15: Considering City-Wide & Regional Implications

Although both case studies focus on site-specific features of public plaza design, future analyses and studies may further explore the implications on the projected public realm along the Cambie Corridor on the various sustainability goals and initiatives undertaken by the City of Vancouver and Metro Vancouver. As the municipal and regional transit network continues to expand, other areas which begin to experience changes in urban form due to TOD may be able to learn valuable lessons from the Urban Systems and Public Realm Strategy implemented along the Cambie Corridor.

### Guideline 16: Public Participation

Due to the scope and timeframe of this project, processes of public participation were not included as part of the design proposal process. As the City of Vancouver continues to develop a new public realm network along the Cambie Corridor, numerous processes of direct engagement with the community will be a crucial step towards the successful design and implementation of public spaces such as plazas. Visual design tools which this project has heavily relied upon to suggest potential public space design strategies and examples would likely serve as useful mediums during public participation processes.

### Guideline 17: Lessons Learned from Other Cities

Many cities and urban regions throughout the world that are comparable to Vancouver (in terms of geographical location, demographics, built form, development history, etc.) provide numerous cases of successful public space design and implementation which Vancouver may adopt, refine and learn from as it continues the process of implementing new public spaces along the Corridor. Although Section 7.0 of this project presented precedent studies of public spaces for each of the case studies, many other relevant cases would be useful for the context of the Urban Systems and Public Realm Strategy. Aside from exploring the physical design and layout of other public spaces, it would also be useful to analyze



successful cases of programming, maintenance and ownership in public spaces which Vancouver may learn from.

#### **Guideline 18: Integration with Changes in the Built Form**

As the Oakridge Town Centre undergoes its projected major changes in built form, the size, orientation and use of potential public spaces will also be affected. Discussions of the interplay between public space design and factors such as shadowing, solar orientation, wind effects, building heights, setbacks, stepbacks and lot coverage will inevitably become a recurring process as the Urban Systems and Public Realm Strategy is implemented.

#### **Guideline 19: Public Space and the Implementation of Density**

As urban growth along the Cambie Corridor progresses, the balance of providing open public space for the appropriate amounts of density will prove to be a challenge for the City and the community. Considerations will need to include the ways in which the expansion or shrinking of open public spaces on a certain property will affect the density and height of a new building, as well as public perceptions of density and its effects on the neighbourhood. These issues will need to be addressed particularly as the City finalizes bylaw amendments (eg. in relation to zoning) along the Cambie Corridor, and begins to enter processes of negotiation with developers and landowners.

#### **Guideline 20: The Role of Public Space in Integrating Different Land Uses**

Both case studies involve public space design amidst the transition between high-density, mixed-use land uses and mid-to-low density residential uses. Future research on public space design along the Oakridge Town Centre will need to develop a more detailed strategy for using the public realm to effectively integrate varying land uses and built forms.

#### **Guideline 21: Multi-Agency Cooperation and Commitment**

As this project focuses primarily on design, it does not emphasize that the successful implementation of a public space network along the Cambie Corridor will also require a high degree of cooperation

and commitment from a wide range of political and development groups and agencies. The City of Vancouver will likely be required to play a key role in acquiring the necessary property to implement its public realm goals, as well as negotiate with developers and other groups in both the public and private sector who will play a role in shaping the future land uses, built form and public realm along the Corridor.

#### **Guideline 22: The Importance of Programming**

Many public spaces in Vancouver currently lack a strong programming structure which would serve to increase activity and a sense of place. Both case studies briefly address this issue by suggesting potential programming opportunities and spatial set-ups for different event types. As shown by the differences between them, public space programming would vary largely depending on qualities such as shape, size and orientation. The immediate context of the public space (ie. Location) will also play a role in determining the type and nature of programmed activities in spaces along the Oakridge Town Centre.

In the context of the two case studies, the importance of community gathering and identity was the main driver of suggested programming activities. These activities would likely depend upon commitment and successful strategies from the City as well as other supporting agencies and organizations. For example, the City may adopt a strategy which utilizes incentives to encourage organizations to rent plaza spaces to hold festivities, fundraisers and other programmed activities. Other strategies may focus on drawing individuals and small groups to enhance a space through performance (similar to Translink's Busker Program), as well as food and retail activity. Lastly, strategies to maximize the use of plaza space during holiday dates and seasons may also be useful for place-making and community-gathering initiatives.

#### **Guideline 23: Flexibility of Form and Use**

In order to ensure that public plaza spaces are successfully activated and programmed, considerations of flexibility and adaptability to different uses will become critical. This is particularly crucial in the Oakridge Town Centre, in which projected development and transit

options will draw a wide variety of individuals and groups into the area. A primary component of flexibility will involve formulating a balance between formal versus informal, as well as temporary versus fixed components in the public space. For example, elements in plaza space such as moveable seating and activity generators may play an important role in the place-making processes of the public space, and to ensure that it is accessible and useful for a variety of individuals and groups, and during different times of the day. The role of flexibility in public spaces along the Oakridge Town Centre may serve as a valuable example for other public spaces (both new and existing) throughout the city which remain under-utilized as a result of inflexibility and over-design.

#### **Guideline 24: Achieving a Balance & Hierarchy of Activity between Spaces**

According to the proposals of the Cambie Corridor Plan, five public plaza locations along the Oakridge Town Centre may be implemented in relatively close proximity to one another. If this proposal is realized, the City of Vancouver may need to develop programming strategies for creating an appropriate balance or hierarchy of use and activity amongst the five locations according to their objectives and location. This may be useful in ensuring that certain spaces are not consistently over-utilized while others are under-utilized. These considerations may also be useful for other areas of the Cambie Corridor, as well as other areas of the city in which there is a concentration of public spaces.

#### **Guideline 25: Considering Implications for the Future of TOD and Public Spaces**

As a large-scale and long-term TOD project which covers a substantial area of the city, the Cambie Corridor Planning Program will likely serve as a useful case study for other municipalities and regions around the world which are planning to implement similar initiatives. The methods and processes in which public spaces are designed and implemented along the Corridor will have numerous implications for research and precedent for TOD and public spaces in the field of urban planning and development.

### 8.3 Summary

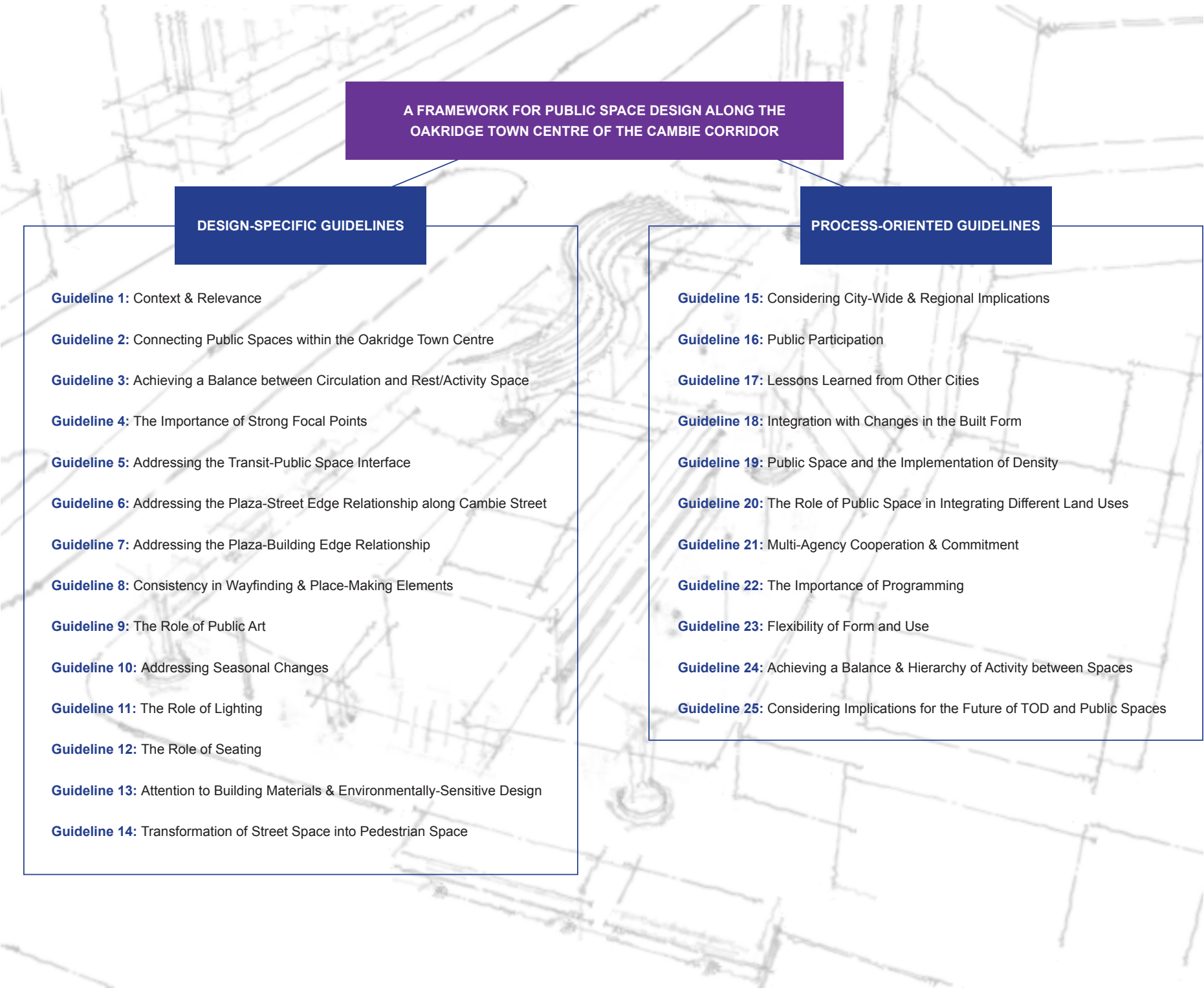
These 25 guidelines were drawn from an exploration of proposed plaza spaces (as identified in the Cambie Corridor Plan) and form a framework and a preliminary strategy for public space design along the Oakridge Town Centre and the entire Cambie Corridor.

The framework was formulated primarily for the City of Vancouver, which may find it useful as it progresses towards implementing the Urban Systems and Public Realm Strategy within the Oakridge Town Centre. The City may also find it useful as it develops a stronger public realm in other areas of the Cambie Corridor, such as Marine Landing, in which proposals for major changes in the built form and the public realm have already been formulated due to the projected development of the Marine Gateway Project. Finally, the future development of plazas and other types of public spaces throughout the City of Vancouver may benefit from many of the guidelines suggested in the framework.

As a rapidly-growing metropolitan region, the entire Metro Vancouver area will continue to face increasing demand in public transit services and infrastructure as well as housing, employment and amenities. As population and demographic shifts occur, other TOD initiatives aside from the Cambie Corridor Planning Program may begin to occur throughout the entire region in both new and existing transit station areas. Other growing municipalities which have or will be incorporated into the regional mass transit system, including Richmond, Surrey, Burnaby and Coquitlam, may find certain aspects of the framework useful as it continues to consider the ways in which a strong public realm may be incorporated into their TOD initiatives.

Finally, it is worth noting that TOD as a form of sustainable urban development is becoming increasingly recognized and considered by a wide range of urban municipalities and regions throughout the world. As an integral component of TOD, effective public space design and development strategies will need to be considered by municipalities and regions that are considering or implementing TOD projects. Aspects of the framework presented here, as well as

actual future public realm development initiatives in the Oakridge Town Centre, may serve as a valuable and useful case study for similar urban areas.





## 9.0 CONCLUSION

### 9.1 Limitations

The objective of this project was to provide a framework of strategies for public space design along the Oakridge Town Centre of the Cambie Corridor. This was completed by utilizing research and literature on public spaces and TOD to explore potential plaza design options for five specific locations, while using two of these locations for detailed case studies. As a document which focused primarily on design principles and guidelines, the project was unable to cover a wide range of issues which would need to be addressed as public spaces are implemented in the study area.

One of the major limitations of the project was that it was unable to include processes of public participation which would be a critical and detailed process in the implementation of public spaces along the Corridor. As a preliminary analysis of potential public space design opportunities, the project was limited to the use of document analysis and field observation methods, as well as consultation with staff from the City of Vancouver Planning Department. As urban development and growth progresses in the Oakridge Town Centre and demographic shifts occur, the scope of these public participation processes may become more apparent. During these processes, graphic materials such as those utilized in this project may become a useful tool.

Due to its scope, the project was also unable to address numerous issues related to urban development such as property acquisition, financial and market analyses, feasibility and negotiation processes which would be necessary to ensure that space for amenities such as plazas and parks are successfully secured.

Although the project briefly addressed the importance of programming in the proposed public spaces, much more research and analyses on programming strategies will need to be completed in order to ensure the success of public spaces along the Oakridge Town Centre. As public spaces are implemented along the Corridor,

it is likely that issues of programming, ownership and maintenance would be addressed simultaneously with design, as these concepts are interdependent and will continually interact throughout the lifespan of the plaza. It is likely that programming and related issues will serve to inform the final design specifics of public spaces in the area to a much higher degree than this project was able to cover.

### 9.2 Next Steps

In the field of urban planning and design, a substantial body of research and literature supports that open public spaces and a strong public realm play a crucial role in creating a livable, sustainable and attractive urban landscape. As urban density and options for transit and active transportation increase, the provision of appropriate public spaces becomes even more critical to the urban population.

As an area that will experience a diverse mix of development, density and growth in land uses, population, and transportation options, the Cambie Corridor will need to develop a strong, mixed-use public realm, and the City of Vancouver will likely play a primary role in achieving this priority. This project serves as a preliminary initiative to encourage further discussion regarding the importance and potential character of public spaces along the Cambie Corridor through the lens of urban design. It also serves as a tool for initiating further exploration of opportunities and options for public space design along the Oakridge Town Centre. Although design is a necessary component of developing a strong public realm along the Corridor, the involvement of numerous other fields and areas of study will be necessary. The following is a set of next steps that may be taken to further explore the topic of public space design along the Oakridge Town Centre:

- Explore the ways in which proposed public spaces in other areas of the Cambie Corridor (eg. Marine Landing) may inform public realm development along the Oakridge Town Centre
- Conduct further analysis on the ways in which the development and design of other proposed public realm components (eg. mixed-use laneway network) and the Oakridge Centre mall redevelopment initiative may inform plaza space development on both sides of Cambie Street in the Oakridge Town Centre
- Develop a strategy or structure for public participation and engagement which may be utilized to assist in the conception and formation of a detailed set of design principles for public spaces along the Oakridge Town Centre and Cambie Corridor
- Conduct further research on successful structures and strategies of public space programming, and determine how they may be useful for the programming of future public spaces along the Oakridge Town Centre, as well as other public spaces along the Cambie Corridor
- Conduct further research on successful strategies and models for multi-agency ownership and collaboration in public space design, implementation and programming that may be useful for future public spaces along the Cambie Corridor
- Explore in greater detail the ways in which potential development patterns, demographic shifts and changes in the built form may impact public space design along the Corridor

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